Uneven Frictions, Uneven Households: The Inequality Trade-off of Monetary Policy*

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Abstract

Monetary tightening does not have a single distributional effect: the dimension of inequality it amplifies depends on where credit frictions bind. I embed a firm financial accelerator and an endogenous household borrowing spread in a heterogeneous-agent economy and analyze them separately. For comparable output contractions, firm-side frictions generate the larger increase in wealth inequality, whereas household-side frictions produce a much larger rise in consumption inequality. The difference is concentrated around zero liquid wealth. When household borrowing costs stay fixed, income-poor households use debt to smooth the downturn, widening negative-wealth positions. When the borrowing spread rises, fewer households move into debt, but more remain hand-to-mouth and cut consumption persistently. A consumption decomposition shows that the borrowing spread becomes a quantitatively important direct transmission channel, while indirect effects remain substantial.

Keywords: Heterogeneous agents, financial frictions, monetary policy, New Keynesian models, inequalities.

JEL codes: E12, E21, E44, E52, G51

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1 Introduction

This paper shows that the distributional effect of monetary tightening depends on where financial frictions operate. In a Heterogeneous Agent New Keynesian (HANK) economy, a firm-side financial accelerator produces the larger increase in wealth inequality, whereas an endogenous household borrowing spread produces the larger increase in consumption inequality. The difference is not simply that one friction generates a deeper recession. I normalize the policy shocks to obtain comparable output contractions, and the qualitative ranking survives when both economies receive the same nominal shock. The central result is therefore about the composition of monetary transmission: moving financial amplification from firms to households changes the form of inequality generated by a contraction.

The mechanism is concentrated around the zero-wealth threshold. A monetary contraction lowers labor income and pushes financially fragile households toward zero liquid wealth. When the friction operates on firms, the household borrowing spread remains fixed. Households can then use unsecured debt to smooth part of the income loss. More households move into negative asset positions, which widens the bottom of the wealth distribution, but their consumption falls relatively little. When the friction operates directly on household credit, the borrowing spread rises countercyclically. Entering debt becomes more expensive, fewer households move into negative wealth, and a larger mass remains hand-to-mouth. Wealth inequality therefore rises less, but consumption inequality rises much more because borrowers and near-borrowers lose an important smoothing margin.

This asymmetry gives the household borrowing spread a different role across the two inequality measures. The spread does not simply "amplify inequality." By discouraging movement into negative asset positions, it dampens the rise in wealth dispersion relative to the firm-friction economy. At the same time, it raises the cost of credit-based consumption smoothing and amplifies consumption dispersion. The consumption decomposition confirms that this direct borrowing-cost channel is quantitatively important, but it does not replace the HANK income channels: wage, profit, and risk-free-return effects remain sizeable. The result is a rebalancing of monetary transmission across direct and indirect channels.

I isolate this mechanism in one quantitative environment rather than by comparing unrelated models. The economy contains two spread-generating blocks. Corporate borrowing follows the costly-state-verification financial accelerator of Bernanke et al. (1999); household unsecured borrowing follows Cúrdia and Woodford (2010), with the borrowing spread increasing in aggregate household debt. In the main counterfactuals, I allow one spread to respond endogenously to aggregate conditions while holding the other at its steady-state value. The household problem, steady-state distribution, production structure, and policy rules are otherwise common across the two cases. This design makes the location of financial amplification the object of comparison.

Related literature. The paper builds on incomplete-markets models of household heterogeneity (Imrohoroğlu, 1989; Huggett, 1993; Aiyagari, 1994) and on numerical methods that make aggregate transition dynamics tractable in HANK economies (Reiter, 2009; Bayer and Luetticke, 2020; Auclert et al., 2021). For monetary transmission, the closest organizing framework is the direct–indirect decomposition of Kaplan et al. (2018) and Auclert (2019). HANK models emphasize general-equilibrium income effects. The results here show how endogenous household borrowing costs restore a quantitatively important direct channel without eliminating the wage and profit channels.

The paper also connects HANK models to the literature on financial frictions. On the firm side, costly external finance and intermediary constraints amplify aggregate shocks (Bernanke et al., 1999; Gertler and Karadi, 2011); recent heterogeneous-agent applications study how corporate constraints affect aggregate demand and wealth (Fernández-Villaverde et al., 2023; Chiang and Żoch, 2022; Ferlaino, 2026). On the household side, endogenous borrowing spreads and banking constraints shape redistribution and consumption (Ferrante and Gornemann, 2025; Nord et al., 2024). Faccini et al. (2026) are especially close in emphasizing consumer-credit spreads and heterogeneous consumption responses. My comparison differs by placing firm-side and household-side accelerators in a common steady state and asking which dimension of inequality each friction amplifies after the same type of monetary tightening. Related work by Lee (2020) and Lee (2024) studies profit dynamics and quantitative easing; the mechanism here instead centers on the location of credit-market stress and households' ability to smooth near zero liquid wealth.

The remainder of this paper is organized as follows. Section 2 outlines the model. Section 3 explains the calibration strategy. Section 4 reports the main results, and Section 5 relates these findings to the existing empirical literature. Finally, Section 6 summarises the main conclusions.

2 A HANK model with sector-specific financial frictions

The model is designed to separate the location of financial amplification from the rest of the economic environment. A single HANK economy contains both a household-credit spread and a corporate external-finance premium. In each simulation, one spread moves endogenously with aggregate conditions while the other remains at its steady-state value.[1] Because the simulations share the same steady state and household structure, differences in the distributional response can be traced to the credit market in which the friction operates.

Households consume, supply labor, and hold a single liquid asset that can be positive or negative. Negative positions are unsecured household debt and carry the household borrowing spread. Commercial banks intermediate this debt, while investment banks finance entrepreneurs' capital purchases and generate the corporate financial accelerator. The remaining blocks are standard: firms produce and set prices, capital producers transform investment into capital, the central bank follows a Taylor rule, and the fiscal authority finances public spending.

2.1 Households

A unit mass of infinitely lived households, indexed by $i \in [0, 1]$, faces idiosyncratic income risk and incomplete asset markets. The discount factor is β.

Households have Greenwood–Hercowitz–Huffman (GHH) preferences, following Bayer et al. (2019) and Bayer et al. (2024).[2] Their problem is

[1] I call a friction "active" when its spread responds endogenously to aggregate conditions. The "inactive" spread remains fixed at its steady-state level.

[2] GHH preferences limit wealth effects on labor supply. They can also amplify fiscal and monetary multipliers in heterogeneous-agent models (Auclert et al., 2023); because the preference specification is common to both counterfactuals, this feature does not drive the comparison.

$$V = E_0 \max_{\{c_{it}, l_{it}\}} \sum_{t=0}^{\infty} \beta^t u\left(c_{it} - G(h_{it}, l_{it})\right) \ . \tag{1}$$

where c_{it} is household i's goods consumption and $G(h_{it}, l_{it})$ is the disutility from supplying labor l_{it} at idiosyncratic productivity h_{it}.

Composite consumption $x_{it} \equiv c_{it} - G(h_{it}, l_{it})$ has constant-relative-risk-aversion utility:

$$u(x_{it}) = \frac{x_{it}^{1-\xi}}{1-\xi} \ , \tag{2}$$

where $\xi \geq 0$ is relative risk aversion.

Goods consumption is a Dixit–Stiglitz aggregate of differentiated varieties j:

$$c_{it} = \left(\int c_{ijt}^{\frac{\eta-1}{\eta}} dj \right)^{\frac{\eta}{\eta-1}} \ . \tag{3}$$

where η is the elasticity of substitution between goods varieties.

With price index $P_t = \left(\int p_{jt}^{1-\eta} dj \right)^{\frac{1}{1-\eta}}$, demand for variety j is

$$c_{ijt} = \left(\frac{p_{jt}}{P_t} \right)^{-\eta} c_{it} \ . \tag{4}$$

The labor-supply condition equates marginal disutility to the after-tax return to effective labor:

$$\frac{\partial G(h_{it}, l_{it})}{\partial l_{it}} = (1-\tau) W_t h_{it} \ . \tag{5}$$

given the aggregate wage rate, W_t , and a proportional labor income tax, τ.

A constant Frisch elasticity implies

$$\frac{\partial G(h_{it}, l_{it})}{\partial l_{it}} = (1+\gamma) \frac{G(h_{it}, l_{it})}{l_{it}} \ , \tag{6}$$

where $\gamma > 0$ is the Frisch elasticity. Combining (5) and (6) gives

$$x_{it} = c_{it} - G(h_{it}, l_{it}) = c_{it} - \frac{(1-\tau) W_t h_{it} l_{it}}{1+\gamma} \ . \tag{7}$$

I use $G(h_{it}, l_{it}) = h_{it} l_{it}^{1+\gamma}/(1+\gamma)$, as in Bayer et al. (2019). With this specification, labor disutility is a constant fraction of labor income and idiosyncratic productivity drops out of the labor-supply first-order condition. All workers therefore choose the same hours,

$l_{it} = L(W_t)$, while productivity determines their effective labor income. Normalizing $\int h_{it} di = 1$ implies aggregate effective labor input $L(W_t)$.[3]

Households alternate between worker and rentier states. Workers have $h_{it} > 0$, supply labor, and earn $W_t h_{it} L_t$. Rentiers have $h_{it} = 0$ and receive a proportional share of aggregate profits, Π_t. Worker productivity follows an AR(1), while fixed transition probabilities move households between the worker and rentier states:

$$h_{it} = \begin{cases} \exp(\rho_h \log(h_{it-1}) + \epsilon^h_{it}) & \text{with probability } 1-\zeta \text{ if } h_{it-1} \neq 0 \\ 1 & \text{with probability } \iota \text{ if } h_{it-1} = 0 \\ 0 & \text{else} \end{cases} \tag{8}$$

with $\epsilon^h_{it} \sim N(0, \sigma_h)$. A worker becomes a rentier with probability ζ, and a rentier returns to work with probability ι at median productivity, $h = 1$.[4] Both income sources face the tax rate τ.

Households self-insure with one non-state-contingent liquid asset, a_{it}, subject to the borrowing limit $\underline{a}$. Negative positions represent unsecured debt.[5] The budget constraint is

$$c_{it} + a_{it+1} = \left(\frac{R^I_t}{\pi_t}\right) a_{it} + (1-\tau)(W_t h_{it} L_t + \mathbf{I}_{h_{it}=0}\Pi_t) \,, \qquad a_{it} \geq \underline{a} \,, \tag{9}$$

where $\mathbf{I}_{h_{it}=0}$ identifies rentiers, π_t is gross inflation, and R^I_t is the nominal return on the liquid position. Savers earn the policy rate. Borrowers pay an additional unsecured-credit spread, ω^H_t, so the return relevant for the household problem is

$$R^I_t = \begin{cases} R_t & \text{if } a_{it} \geq 0 \\ R_t(1+\omega^H_t) & \text{if } a_{it} < 0 \end{cases} \tag{10}$$

Using (7), the budget constraint can be written directly in terms of composite consumption:

[3] Combining the labor first-order condition with this functional form yields $l_{it} = [(1-\tau)W_t]^{1/\gamma} = L_t$.

[4] Appendix A reports the transition matrix.

[5] The debt in question is lacking any collateral, and can be thought of as analogous to credit card debt.

$$x_{it} + a_{it+1} = \left(\frac{R^I_t}{\pi_t}\right) a_{it} + (1-\tau)\left(\frac{\gamma}{1+\gamma} W_t h_{it} L_t + \mathbf{I}_{h_{it}=0}\Pi_t\right) , \qquad a_{it} \geq \underline{a} . \tag{11}$$

Equation (11) is the key household equation for the distributional analysis: the prices that move with monetary policy—liquid returns, wages, profits, and the borrowing spread embedded in R^I_t—shift the intertemporal allocation of composite consumption.

The one-asset structure records net household financial positions. Aggregate liquidity, $A_t = \int a_{it} di$, nets household borrowing B_t against three saving instruments that all pay the same rate: deposits funding household credit, D^H_t; deposits funding firms, D^F_t; and government bonds, D^G_t. Hence

$$A_t = D^H_t + D^F_t + D^G_t - B_t . \tag{12}$$

Because the three saving instruments have the same return, their composition is irrelevant for the household problem.[6]

2.2 Financial intermediaries

Two intermediary blocks generate the paper's counterfactuals. "Commercial banks" intermediate household credit, while "investment banks" fund productive capital.[7] The first block determines the unsecured household spread; the second determines the corporate external-finance premium.

2.2.1 Household credit: endogenous unsecured borrowing spread

Competitive household-credit intermediaries fund loans with deposits. Their balance sheet implies

$$R_t(1+\omega^H_t)B_t = R_t D^H_t . \tag{13}$$

Following Cúrdia and Woodford (2010), I represent the resources required to originate household credit through the weakly convex loan-origination technology $\Xi_t(B_t)$. Therefore, end-of-the-period profits for commercial banks are

[6] I assign savers the aggregate portfolio shares across the three instruments.
[7] The labels are mnemonic rather than literal institutional definitions.

$$\Pi_t^{com} = D_t^H - B_t - \Xi_t(B_t) \ . \tag{14}$$

Using (13), (14) can be rewritten as:

$$\Pi_t^{com} = \omega_t^H B_t - \Xi_t(B_t) \ . \tag{15}$$

Perfect competition then pins down the household borrowing spread from

$$\omega_t^H = \Xi_t'(B_t) \ , \tag{16}$$

where $\Xi_t(B_t) = \tilde{\Xi} B_t^{\eta^{FF}}$, with $\tilde{\Xi}$ and η^{FF} being calibrated parameters discussed in Section 3.

Equation (16) is the household financial accelerator. The loan-origination technology should be interpreted as a reduced-form representation of the marginal cost of expanding credit supply rather than literally as a technological transaction cost. Cúrdia and Woodford (2010) motivate convexity by finite intermediary lending capacity arising, for example, from scarce intermediary capital or expertise. Their broader framework also shows that similar movements in credit spreads can arise from expected loan losses, which may themselves increase with lending. The present model abstracts from these additional microeconomic sources of the spread and summarizes the household credit-supply margin through $\Xi_t'(B_t)$. Hence, higher aggregate debt raises the marginal cost of intermediation and the spread paid by borrowers. This feedback is the direct credit-cost channel that is active only in the household-friction counterfactual.

2.2.2 Corporate credit: costly state verification

The corporate block follows Bernanke et al. (1999). A continuum of risk-neutral entrepreneurs, indexed by j, buys capital at the end of period t for production at $t+1$. Entrepreneurs finance the purchase with internal equity, N_j, and debt from investment banks, D_j^F. The entrepreneurs are a mass-zero group and rebate production profits to rentier households; investment banks fund corporate loans with household deposits and require the real risk-free return.

Entrepreneur j's balance sheet at period $t+1$ is:

$$q_t K_{jt+1} = N_{jt+1} + D^F_{jt+1} \ , \tag{17}$$

where q is the price of capital during the purchasing period.

External finance is costly because lenders observe entrepreneurial returns only after paying a monitoring cost, as in the costly-state-verification problem of Townsend (1979). Greater leverage therefore raises the external-finance premium and feeds back into capital accumulation.

Entrepreneur j receives the idiosyncratic return shock ω^F_j on aggregate capital returns, R^K. The shock is lognormal, i.i.d. across entrepreneurs and time, and normalized so that $E(\omega^F) = 1$.[8] Entrepreneurs absorb aggregate risk in the loan contract.

The optimal contract for investment banks is:

$$\bar{\omega}^F_{jt+1} R^K_{t+1} q_t K_{jt+1} = Z_{jt+1} D^F_{jt+1} \ , \tag{18}$$

Here Z_j is the gross loan rate conditional on repayment and $\bar{\omega}^F_j$ is the default cutoff. Entrepreneurs with $\omega^F_{jt+1} \geq \bar{\omega}^F_{jt+1}$ repay in full; those below the cutoff default. Because lenders must verify realized returns after default, they recover only $(1-\mu)\omega^F_{jt+1} R^K_{t+1} q_t K_{jt+1}$, with μ representing a proportional auditing cost.

Competition requires the expected return on a diversified loan portfolio to equal the real risk-free rate. The lender participation constraint is

$$[1 - F(\bar{\omega}^F_{jt+1})] Z_{jt+1} D_{jt+1} + (1-\mu) \int_0^{\bar{\omega}^F_{jt+1}} \omega^F_j dF(\omega^F_j) R^K_{t+1} q_t K_{jt+1} \geq \frac{R_{t+1}}{\pi_{t+1}} D_{jt+1} \ , \tag{19}$$

where $F(\bar{\omega}^F_j)$ is the default probability. Under perfect competition the constraint binds: the first term on the left-hand side of (19) represents repayment by non-defaulting entrepreneurs and the second is recovery from defaulting entrepreneurs net of monitoring costs.

Combining the entrepreneur balance sheet, the debt contract, and lender participation gives the external-finance-premium schedule

$$EFP_{jt+1} = f\left(\bar{\omega}^F_{jt+1}, LEV_{jt+1}\right) \ , \ \text{with} \ f'(LEV_{jt+1}) > 0 \ . \tag{20}$$

[8] Section B.1 gives the distributional formulas used below.

where $EFP \equiv R^K/(R/\pi)$ and $LEV \equiv qK/N$. Higher leverage raises the premium on external funds. The pairs $(\bar{\omega}^F_{jt+1}, LEV_{jt+1})$ satisfying (20) define the state-contingent debt contracts available to entrepreneur j.

The entrepreneur problem, derived in Section B.2, delivers three properties used in the aggregate model: the external-finance premium increases with leverage; the default cutoff is endogenous to the premium; and the cutoff depends only on aggregate prices. Entrepreneurs therefore choose the same leverage and default threshold: this allow us to drop superscript j in the notation and consider a representative entrepreneur.

Entrepreneurial net worth evolves according to

$$N_{t+1} = \gamma^F \left[q_{t-1} R^K_t K_t - \frac{R_t}{\pi_t} D_t - \mu G(\bar{\omega}^F_t) q_{t-1} R^K_t K_t \right] . \tag{21}$$

Net worth equals capital income net of debt repayment and monitoring losses. A fraction γ^F of entrepreneurs survives and carries net worth into the next period; the remaining entrepreneurs exit and consume their equity. This assumption prevents complete long-run self-financing (Carlstrom et al., 2016).

Alternatively, (21) can be written in a more compact form as:

$$N_{t+1} = \gamma^F \left[1 - \Gamma(\bar{\omega}^F_t) \right] R^K_t q_{t-1} K_t , \tag{22}$$

where $1 - \Gamma(\bar{\omega}^F_t)$ is the share of capital returns retained by non-defaulting entrepreneurs.[9] Equations (20) and (22) generate the corporate accelerator: higher leverage raises the external-finance premium and the default cutoff, which lowers next-period net worth and feeds back into leverage.

2.3 Intermediate-goods producers

Competitive intermediate-goods firms combine entrepreneurial capital and household labor with a constant-returns Cobb–Douglas technology:

$$Y_t = z_t L^\alpha_t K^{1-\alpha}_t , \tag{23}$$

where z is the Total Factor Productivity (TFP).

[9] See Section B.2.

Total factor productivity follows

$$\log(z_t) = \rho_z \log(z_{t-1}) + \epsilon_t^z \ , \tag{24}$$

with ϵ_t^z following a normal distribution with mean 0 and variance σ^z.

Intermediate-goods firms sell output to resellers at relative price MC_t. Their profits are

$$\Pi_t^{IG} = MC_t z_t L_t^{\alpha} K_t^{1-\alpha} - w_t L_t - r_t^K K_t \ . \tag{25}$$

Profit maximization yields the wage and rental rate of capital:

$$W_t = \alpha MC_t z_t \left(\frac{K_t}{L_t}\right)^{(1-\alpha)} \ , \tag{26}$$

$$r_t^K = (1-\alpha)\, MC_t z_t \left(\frac{L_t}{K_t}\right)^{\alpha} \ . \tag{27}$$

2.4 Resellers

Monopolistically competitive resellers differentiate intermediate goods and set prices subject to Rotemberg adjustment costs (Rotemberg, 1982).[10] The demand for the differentiated good g is:

$$y_{gt} = \left(\frac{p_{gt}}{P_t}\right)^{-\eta} Y_t \ , \tag{28}$$

where $\eta > 1$ is the elasticity of substitution and p_g is the price at which good g is purchased.

Given demand (28), resellers choose prices to maximize

$$E_0 \sum_{t=0}^{\infty} \beta^t Y_t \left\{ \left(\frac{p_{gt}}{P_t} - MC_t\right) \left(\frac{p_{gt}}{P_t}\right)^{-\eta} - \frac{\eta}{2\kappa} \left(\log \frac{p_{gt}}{p_{gt-1}}\right)^2 \right\} \ , \tag{29}$$

with a constant discount factor.[11]

[10] Bayer et al. (2019) delegate price setting to a mass-zero group of risk-neutral managers. Here entrepreneurs already play that role and receive production profits, so a separate manager group is unnecessary.

[11] With a zero-inflation steady state, a common steady-state discount factor, and first-order aggregate dynamics, fluctuations in the resellers' stochastic discount factor are immaterial for the linearized system; see Bayer et al. (2019).

The price-setting first-order condition gives the New Keynesian Phillips curve

$$log(\pi_t) = \beta E_t \left[\log(\pi_{t+1}) \frac{Y_{t+1}}{Y_t} \right] + \kappa \left(MC_t - \frac{\eta - 1}{\eta} \right) , \tag{30}$$

where π_t is the gross inflation rate defined as $\frac{P_t}{P_{t-1}}$.

2.5 Capital producers

After production at time t, entrepreneurs sell depreciated capital to capital producers at price q_t. Capital producers use investment goods, I_t, to replace depreciated capital and create new capital, $\Delta K_{t+1} = K_{t+1} - K_t$, subject to quadratic adjustment costs.[12] They resell the resulting capital to entrepreneurs at the same end-of-period price q_t. The investment technology is

$$I_t = \Delta K_{t+1} + \frac{\phi}{2} \left(\frac{\Delta K_{t+1}}{K_t} \right)^2 K_t + \delta K_t . \tag{31}$$

where δ is the depreciation rate for capital.

Maximizing $q_t \Delta K_{t+1} - I_t$ with respect to new capital gives

$$q_t = 1 + \phi \frac{\Delta K_{t+1}}{K_t} . \tag{32}$$

Equation (32) makes the price of installed capital rise with net investment.

Entrepreneurial returns therefore combine the rental return with capital gains or losses. The gross return on capital used at time t satisfies

$$R_t^K q_{t-1} K_t = r_t^K K_t + q_t K_t (1 - \delta) , \tag{33}$$

The first term is the rental return and the second is the resale value of undepreciated capital. Hence the gross return is

$$R_t^K = \frac{r_t^K + q_t(1 - \delta)}{q_{t-1}} . \tag{34}$$

[12] Replacement is not resource-free: in steady state, where $\Delta K = 0$, investment equals depreciation, $I = \delta K$. The assumption only rules out an additional refurbishment cost beyond the investment goods required for replacement.

2.6 Final-goods producers

Competitive final-goods producers aggregate differentiated varieties into the homogeneous good used for consumption, public spending, and investment. They solve

$$\max_{\{Y_t, y_{gt} \in [0,1]\}} P_t Y_t - \int_0^1 p_{gt} y_{gt} dg \ , \tag{35}$$

subject to the CES aggregator

$$Y_t = \left(\int_0^1 (y_{gt})^{\left(\frac{\eta-1}{\eta}\right)} dg \right)^{\left(\frac{\eta}{\eta-1}\right)} \ . \tag{36}$$

Zero profits imply the price index

$$P_t = \left(\int_0^1 (p_{gt})^{(1-\eta)} \right)^{\left(\frac{1}{1-\eta}\right)} \ . \tag{37}$$

2.7 Central bank

The central bank sets the gross nominal risk-free rate with a smoothed Taylor rule:

$$\frac{R_{t+1}}{\bar{R}} = \left(\frac{R_t}{\bar{R}} \right)^{\rho_R} \left(\frac{\pi_t}{\bar{\pi}} \right)^{(1-\rho_R)\rho_\pi} \epsilon_t^R \ , \tag{38}$$

where $\log \epsilon_t^R \sim N(0, \sigma_R)$. The parameter ρ_R controls interest-rate smoothing and ρ_π the response to inflation.

2.8 Government

The fiscal authority finances public spending, G_t, with tax revenue, T_t, and government debt, D_{t+1}^G. Its budget constraint is

$$D_{t+1}^G = \left(\frac{R_t}{\pi_t} \right) D_t^G + G_t - T_t \ , \tag{39}$$

Tax revenue comes from aggregate labor and profit income:

$$T_t = \tau \left(W_t L_t + \Pi_t \right) \ , \tag{40}$$

Debt evolves according to

$$\frac{D^G_{t+1}}{\bar{D}^G} = \left(\frac{D^G_t \frac{R_t}{\pi_t}}{\bar{D}^G \frac{\bar{R}}{\bar{\pi}}}\right)^{\rho_{gov}} \left(\frac{T_t}{\bar{T}}\right)^{\rho_T} . \tag{41}$$

The parameter ρ_{gov} controls debt persistence: lower values shift adjustment toward current spending, while values near one roll over most outstanding debt. The parameter ρ_T governs the fiscal response to tax-revenue fluctuations. This equation implicitly sets the equilibrium level of public spending, G_t

2.9 Market clearing

The liquid-asset market clears when

$$\int a^*(a,h)\Theta_t(a,h)dadh = A_t \ , \tag{42}$$

where $a^*(a,h)$ is the household saving policy.

Capital-market clearing is summarized by (31) and (32); labor-market clearing is summarized by (26).

Walras' law then gives goods-market clearing:

$$Y_t\left(1 - \frac{\eta}{2\kappa}\left(\log(\pi_t)\right)^2\right) = C_t + G_t + I_t + C^E_t + \mu G(\bar{\omega}^F_t)R^K_t q_{t-1}K_t + \Upsilon_t \ , \tag{43}$$

The left-hand side is output net of price-adjustment costs. Absorption consists of household consumption, public spending, investment, entrepreneurial consumption C^E_t, corporate monitoring losses, and household-credit intermediation costs $\Upsilon_t = \Xi_t(B_t)$.[13]

2.10 Numerical implementation

To solve the model, I follow the solution proposed in Bayer and Luetticke (2020). Since the joint distribution, Θ_t, is an infinite-dimensional object (and therefore not computable), it is discretized and represented by its histogram, a finite-dimensional object. I solve the household's policy function using the Endogenous Grid-point Method (EGM) developed by Carroll (2006), iterating over the first-order condition and approximating

[13] As in Kaplan et al. (2018), the monitoring and intermediation terms can be interpreted as expenditures on financial services.

the idiosyncratic productivity process using a discrete Markov chain using the Tauchen (1986) method. I solve for aggregate dynamics by first-order perturbation around the steady-state, as in Reiter (2009). Because aggregate dynamics are solved to first order, households do not adjust their borrowing decisions in response to the risk of future aggregate fluctuations in borrowing spreads. The model therefore abstracts from an additional precautionary motive to avoid debt that could arise from aggregate interest-rate risk, and the quantitative strength of the household-credit channel should be interpreted subject to this limitation.

3 Calibration

I calibrate the model to quarterly U.S. data. The targets that matter most for the paper's mechanism are the wealth distribution, the share of borrowers, the steady-state household and corporate credit spreads, and the relative amplification generated by the two financial blocks. Table 1 reports the full parameterization, while Table D.1 displays selected steady-state moments. Values are quarterly unless stated otherwise.

3.1 Households

Household preferences use relative risk aversion $\xi = 4$ (Bayer et al., 2019) and Frisch elasticity $\gamma = 1$ (Chetty et al., 2011). I set $\beta = 0.985$ so that steady-state entrepreneurial leverage equals 2, as in Bernanke et al. (1999). The borrowing limit $\underline{a}$ targets an 11% share of households with negative net liquid wealth, matching Survey of Consumer Finances (SCF) evidence reported by Nakajima and Ríos-Rull (2019).

The worker–rentier transition process is calibrated to reproduce the concentration of wealth. As in Luetticke (2021), the probability of entering the rentier state does not depend on a worker's current productivity, and returning rentiers re-enter at median productivity. I set $\iota = 0.0625$ from the exit rate from the top 1% of the U.S. income distribution in Guvenen et al. (2014), and choose $\zeta = 0.001$ to match a wealth Gini of 78%, in line with evidence from the SCF. Worker productivity has persistence $\rho_h = 0.98$ and innovation standard deviation $\sigma_h = 0.06$ (Bayer et al., 2019). The resulting richest-10% wealth share is 66%, close to the 67% estimate in Lee et al. (2020).

Table 1: Calibrated parameters

Description	Param.	Value	Source/target
Discount factor	β	0.985	$LEV = 2$
Relative risk aversion	ξ	4	Bayer et al. (2019)
Frisch elasticity of labor	γ	1	Chetty et al. (2011)
Borrowing constraint	$\underline{a}$	-10	borrowing HHs share = 11%
Probability of leaving the rentier state	ι	0.0625	Guvenen et al. (2014)
Prob. become rentier	ζ	0.001	Gini wealth = 78%
Persistence of idio. prod. shock	ρ_h	0.98	Bayer et al. (2019)
SD of idio. prod. shock	σ_h	0.06	Bayer et al. (2019)
Labor share of production	α	0.7	standard value
Depreciation rate	δ	1.35%	standard value
Elasticity of substitution	η	20	mark-up = 5%
Price stickiness	κ	0.09	average price duration = 4 quarters
Adjustment cost of capital	ϕ	5	I/Y volatility =3
Entr. surviving rate	γ^F	0.985	internally calibrated
TFP shock persistence	ρ_z	0.95	standard value
TFP shock SD	σ_z	1%	standard value
Nominal int. rate	R	1.0063	2.5% p.a.
Int. rate smoothing	ρ^R	0.8	Clarida et al. (2000)
Reaction to inflation	ρ^π	1.5	standard value
Monetary shock SD for FFs on HHs	σ_R	0.25%	1% p.a.
Monetary shock SD for FFs on firms	σ_R	0.14%	Y response on impact
Tax rate	τ	0.3	$G/Y \approx 20\%$
Reaction to debt	ρ_{gov}	0.86	Bayer et al. (2019)
Reaction to tax rev.	ρ_T	0.01	I/Y volatility =3
Convex technology for HHs loans	η^{FF}	5	Cúrdia and Woodford (2010)
Comm. bank loans parameter	$\tilde{\Xi}$	2.55	$\omega^H = 10\%$ p.a.
Auditing costs	μ	0.12	Bernanke et al. (1999)
SD of the id. shock on entr.	σ_ω	0.27	$EFP = 2\%$ p.a.

3.2 Financial intermediaries

The steady-state household borrowing spread is 10% annually, consistent with credit-card interest-rate wedges in Maxted et al. (2025). This target matches the interpretation of negative liquid positions as unsecured household debt.

For the household loan-cost function, I set $\eta^{FF} = 5$, so the marginal cost of loan supply has elasticity 4. This is also the baseline curvature used by Cúrdia and Woodford (2010) and Klein and Krause (2020) to capture limited intermediary lending capacity. Together with the 10% annual spread target, this implies $\tilde{\Xi} = 2.55$.

The corporate financial accelerator follows the benchmark calibration in Bernanke et al. (1999): monitoring costs are $\mu = 0.12$, the idiosyncratic return shock has standard deviation $\sigma_\omega = 0.27$, and entrepreneurial survival is $\gamma^F = 0.985$. These values imply a 2% annual external-finance premium for a leverage value of 2, as in the calibration adopted by Bernanke et al. (1999).

3.3 Production sector

The production block uses standard values from the literature: $\alpha = 0.7$, quarterly depreciation $\delta = 1.35\%$, and a 5% steady-state markup, which implies $\eta = 20$. I set $\kappa = 0.09$ to match the slope associated with roughly four-quarter price duration in a Calvo model. Capital adjustment costs are $\phi = 5$, which delivers an investment-to-output volatility ratio of about 3 after a TFP shock when both financial spreads are held fixed, a standard value for U.S. data.[14]

3.4 Central bank and government

Steady-state inflation is zero and the annualized nominal risk-free rate is 2.5%. All positive liquid positions earn this common return. The Taylor rule uses interest-rate smoothing $\rho_R = 0.8$ (Clarida et al., 2000) and inflation coefficient $\rho_\pi = 1.5$, a common value in the macroeconomic literature.

The baseline comparison scales the monetary shocks so that the two economies experience similar peak output contractions. The household-friction economy receives a

[14]For this calibration exercise, I consider a standard deviation of $\sigma_z = 0.01$ and a persistence parameter of $\rho_z = 0.95$.

0.25% innovation and the firm-friction economy a 0.14% innovation. The shocks are one-time innovations. This normalization prevents the stronger aggregate amplification of the corporate accelerator from mechanically driving the inequality comparison; Appendix E reports the same exercise with identical nominal shocks.

The tax rate is $\tau = 0.3$, which delivers government spending near 20% of output, a standard value in the New Keynesian literature. Following Bayer et al. (2019), debt persistence is $\rho_{gov} = 0.86$, so fiscal adjustment occurs mainly through debt in the short run.[15] I set $\rho_T = 0.01$; this parameter has little effect on the paper's inequality mechanism but helps match investment volatility together with ϕ.

4 Results

The main result is a change in the type of inequality generated by monetary tightening, not simply a change in its magnitude. I present that result first, then trace it to households around zero liquid wealth and quantify the borrowing-spread channel. Aggregate responses and robustness checks follow after the distributional mechanism is established.

4.1 Wealth and consumption inequality

Figure 1 contains the paper's central result. Monetary tightening raises both Gini indices in every economy, but the active credit friction determines which dimension of inequality responds most. On impact, the wealth Gini rises by 22.55 basis points under firm-side frictions and by 21.14 basis points under household-side frictions. Because the wealth response is hump-shaped, however, the difference widens over time: the increase peaks at about 34 basis points under firm frictions, compared with about 28 basis points under household frictions. Consumption inequality displays the opposite ranking and peaks on impact: the consumption Gini rises by 41.79 basis points under household frictions, more than twice the 17.98-basis-point increase under firm frictions. The difference is therefore not simply one of aggregate amplification; the location of the financial friction changes the composition of the distributional response. I also report a fixed-spread benchmark with a comparable output contraction to assess whether each accelerator amplifies or dampens the corresponding distributional response.

[15] The value is based on U.S. government-debt persistence.

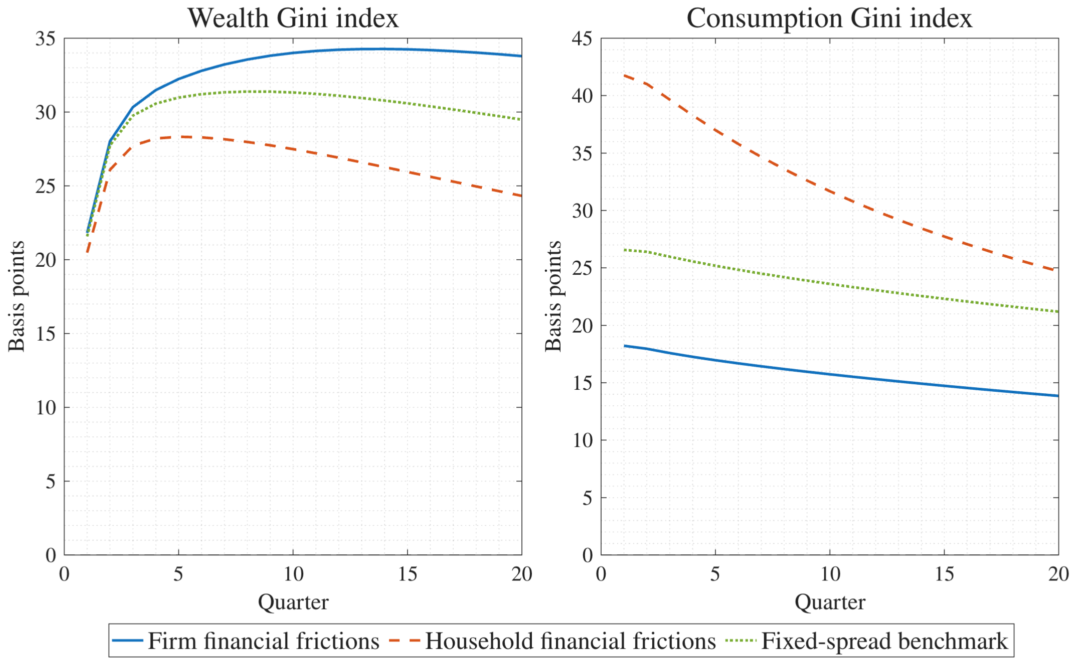

Figure 1: Wealth and consumption inequality after monetary tightening across credit regimes

Notes: The monetary policy shock is set to $\epsilon^R = 0.0025$ when household borrowing frictions are active and in the economy with fixed spreads. When firm financial frictions are active, the shock is set to $\epsilon^R = 0.0014$. The solid blue line represents the economy with active firm financial frictions; the dashed red line represents the economy with active household borrowing frictions; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

Under the baseline output-matched normalization, the comparison with the fixed-spread economy sharpens the result. Firm-side amplification raises the wealth Gini more but attenuates the consumption-Gini response. Household-side amplification does the opposite: it restrains the increase in wealth dispersion while magnifying consumption dispersion. The two frictions therefore do not merely scale a common inequality response; they rotate the distributional adjustment across wealth and consumption. Wealth inequality is hump-shaped in all cases, while consumption inequality starts reverting immediately but remains persistent.

The firm-versus-fixed ordering for consumption depends on the shock normalization: with equal monetary-policy innovations, the firm-friction consumption Gini lies above the fixed-spread response (Appendix E). The central cross-regime ranking, however, is unchanged across normalizations: firm-side frictions generate the larger wealth-inequality response, whereas household-side frictions generate the larger consumption-inequality response.

The aggregate Gini indices do not reveal which households generate this rotation.

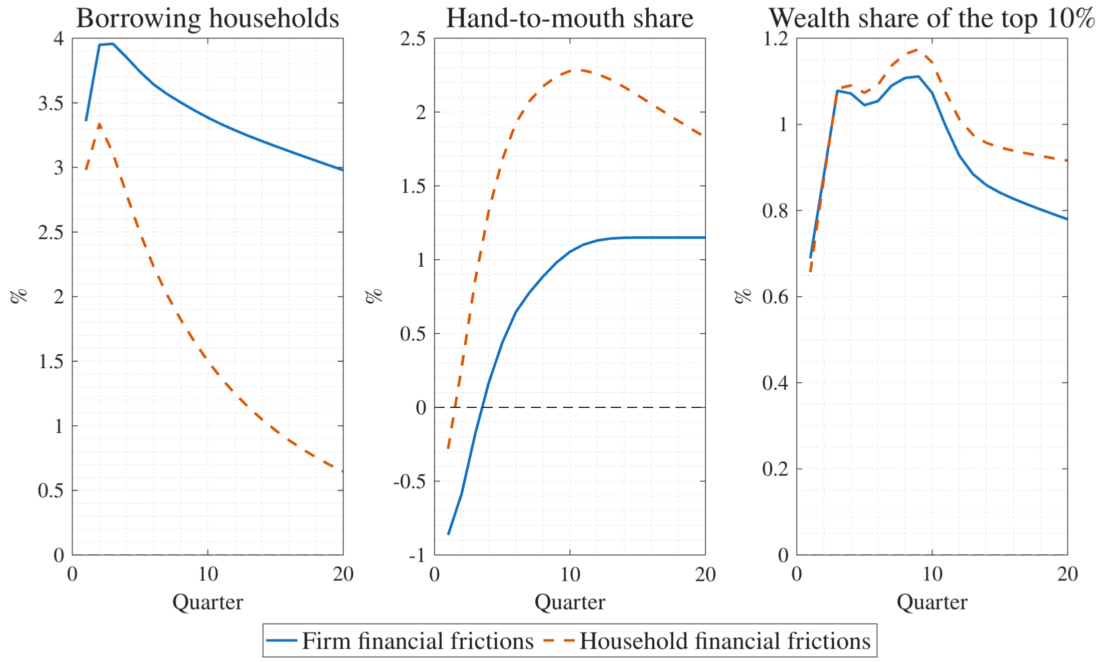

Figure 2: Households around zero wealth: borrower share, hand-to-mouth share, and top-10% wealth share

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The blue line refers to an economy with financial frictions on firms, the red one when frictions are on households. Responses plotted in percentage deviations from the steady state.

The next two subsections show that the answer lies around the zero-wealth threshold: the two credit regimes change whether vulnerable households cross into debt or remain near zero liquidity, and that choice has opposite implications for wealth and consumption inequality.

4.2 Wealth dynamics

To locate the households behind the wealth-Gini response, I track three objects: the share with negative liquid wealth, the share classified as hand-to-mouth (HtM), and the wealth share of the richest 10%. Appendix C defines the HtM threshold.

Figure 2 immediately rules out a simple "rich get richer" explanation for the higher wealth Gini under firm frictions. The top-10% wealth share eventually rises more in the household-friction economy, even though that economy has the lower wealth Gini. The decisive movement must therefore come from the bottom of the distribution.

The top of the distribution behaves differently because wealth is fully liquid in the model and the richest 10% hold roughly two-thirds of it. They supply most credit and benefit from the larger real-rate increase in the household-friction calibration. At the same time, the corporate spread is fixed in that economy, so firms' demand for external finance remains more resilient after impact. These forces support saving by wealthy households, but they do not explain why the wealth Gini rises less.

At the bottom, the two regimes separate sharply. The borrower share rises in both economies but much more under firm-side frictions. The HtM share moves in the opposite direction: across both specifications, it experiences an initial reduction followed by an overshooting phase, though the upward jump is markedly stronger under household borrowing frictions. This reallocation around zero wealth is what reconciles a higher top wealth share with a lower aggregate wealth Gini in the household-friction economy.

The mechanism is the price of crossing the zero-wealth threshold. The monetary contraction reduces labor income for households that rely most heavily on wages. With firm-side frictions, ω^H is fixed, so households can finance part of the income loss with unsecured debt. More of them cross from zero wealth into negative positions. That movement widens the lower tail of net wealth and raises wealth inequality, but it preserves a consumption-smoothing margin.

When household credit is frictional, ω^H rises countercyclically. Borrowing still rises, but the higher spread makes crossing into debt more costly. Fewer households move into negative wealth and more remain clustered near zero. The same friction that dampens the wealth-Gini response therefore removes part of the consumption-smoothing margin. This is the first half of the paper's inequality trade-off.

4.3 Consumption dynamics

The consumption side of the trade-off is visible within the wealth distribution. Figure 3 reports average consumption responses for selected wealth groups under the two credit regimes.[16]

The top of the distribution is relatively insulated when household borrowing frictions are active. Because wealthy households hold most interest-bearing assets, the larger real-rate increase in this calibration supports their asset income and buffers the contraction in consumption. This resilience at the top contributes to the larger consumption-Gini response.

[16]Group averages make responses comparable across groups of different size; the aggregate is the corresponding population average.

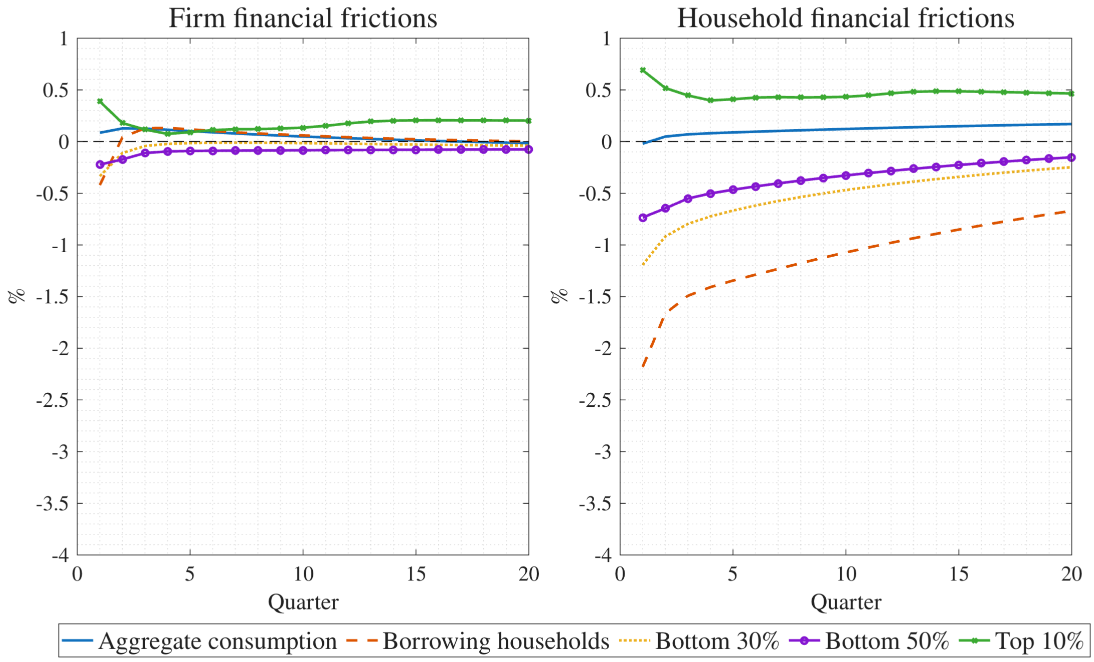

Figure 3: Consumption responses across the wealth distribution

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. Responses plotted in percentage deviations from the steady state.

The quantitative separation comes from borrowers and low-wealth households. On impact, borrower consumption falls by about 0.4% with firm-side frictions but by about 2.2% with household-side frictions, a response more than five times as large. For the bottom half of the wealth distribution, the decline is roughly three times larger under household frictions.[17] The stronger response among financially fragile households accounts for much of the larger increase in consumption inequality.

The difference is also persistent. Borrower consumption rebounds almost immediately when the household spread is fixed, but remains below steady state throughout the five-year horizon when the spread responds endogenously.

This persistence identifies the role of the household spread. With firm-side frictions, ω^H stays fixed and debt absorbs part of the labor-income shock. With household-side frictions, the countercyclical spread raises the marginal cost of that insurance exactly when low-wealth households want to use it. Borrowing does not disappear, but it expands less and at a higher price. The result is a persistent consumption loss among borrowers and a much larger increase in consumption inequality. This is the second half of the inequality trade-off.

[17]The groups are cumulative: the bottom 50% contains the bottom 30%, which contains borrowers.

Table 2: On-impact decomposition of aggregate consumption

Scenario	Measure	**Aggregate**	**Liquid returns**	**Wage**	**Profit**	**HHs spread**
FFs on firms	IRF (%)	0.08	0.14	-0.21	0.15	-
	% imp.	-	28.80	41.44	29.76	-
FFs on HHs	IRF (%)	-0.02	-0.02	-0.15	0.15	-
	% imp.	-	5.21	47.73	47.06	-
FFs on HHs isolated spread	IRF (%)	-0.02	0.13	-0.15	0.15	-0.15
	% imp.	-	23.28	25.51	25.16	26.06

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The row "IRF (%)" reports percentage deviations from the steady state. The row "% imp." reports each component as a share of the absolute on-impact aggregate-consumption decomposition.

4.4 Consumption decomposition

The distributional evidence points to the borrowing spread, but the spread moves together with wages, profits, and the risk-free rate. To separate these forces, I decompose aggregate consumption into partial-equilibrium responses to each household price, following Kaplan et al. (2018) and Luetticke (2021).

From (11), aggregate consumption is a function of the sequence $\Omega_t = \{R_t^I/\pi_t, W_t, \Pi_t\}$:

$$X_t\left(\{\Omega_t\}_{t\geq 0}\right) = \int x_t\left(a, h; \{\Omega_t\}_{t\geq 0}\right) d\Theta_t, \tag{44}$$

where $\Theta_t\left(da, dh; \{\Omega_t\}_{t\geq 0}\right)$ is the joint distribution of wealth and idiosyncratic productivity. By totally differentiating (44), I isolate the contribution of each price variable to the aggregate response.

Table 2 reports the on-impact decomposition. The "% imp." row divides the absolute contribution of each price by the sum of absolute contributions, so the shares sum to one.[18] Under firm-side frictions, the decomposition is dominated by the indirect labor-income channel. Wages reduce consumption by 0.21% and account for 41.44% of the absolute response, the largest component in that economy.

[18]The percentage contribution is calculated as the absolute impact of variable j divided by the sum of absolute impacts of all variables: $contr_j(\%) = |contr_j| / \sum_i |contr_i|$. These sum to 1 by construction.

Household frictions substantially change the composition of monetary transmission. The combined liquid-return contribution is only -0.02%, but this net effect masks two opposing forces. The higher risk-free rate raises consumption by 0.13%, whereas the endogenous borrowing spread lowers it by 0.15%. The spread alone accounts for 26.06% of the absolute on-impact decomposition, making it the largest individual component. Its magnitude is nevertheless similar to the wage and profit contributions. Household credit frictions therefore introduce an important direct borrowing-cost channel without displacing the indirect income channels emphasized in HANK models.

Direct versus indirect transmission. In the terminology of Kaplan et al. (2018), firm-side frictions put more weight on indirect income transmission, especially wages. Household-side frictions add a quantitatively important direct cost-of-credit channel without eliminating wage and profit effects. The location of the financial friction therefore changes the mix of monetary transmission rather than replacing one channel with another.

4.5 Aggregate dynamics and shock normalization

The baseline shocks are scaled to make the peak output contraction comparable across the two credit regimes. The corporate accelerator amplifies a given nominal shock more strongly, so using the same innovation in the baseline would mix the location of the friction with the size of the recession. The normalization isolates the distributional composition of transmission. Appendix E shows that identical nominal shocks preserve the qualitative inequality ranking.

Figure 4 shows why this normalization is useful. Output contracts by nearly the same amount over the first year, but the recovery differs: the household-friction economy rebounds quickly and slightly overshoots, whereas the firm-friction economy remains below steady state. Investment also falls more under firm frictions and recovers more slowly. The corporate accelerator therefore leaves a more persistent capital-accumulation response even when the initial output loss is matched.[19]

Figure 5 shows a second difference hidden by the similar output paths. Goods consumption falls more on impact with household frictions and then recovers faster. Labor responses are almost identical, so the contrast is concentrated in composite consumption, X, the object entering household utility. Composite consumption rises on impact under

[19] Section D.2 reports additional aggregate responses.

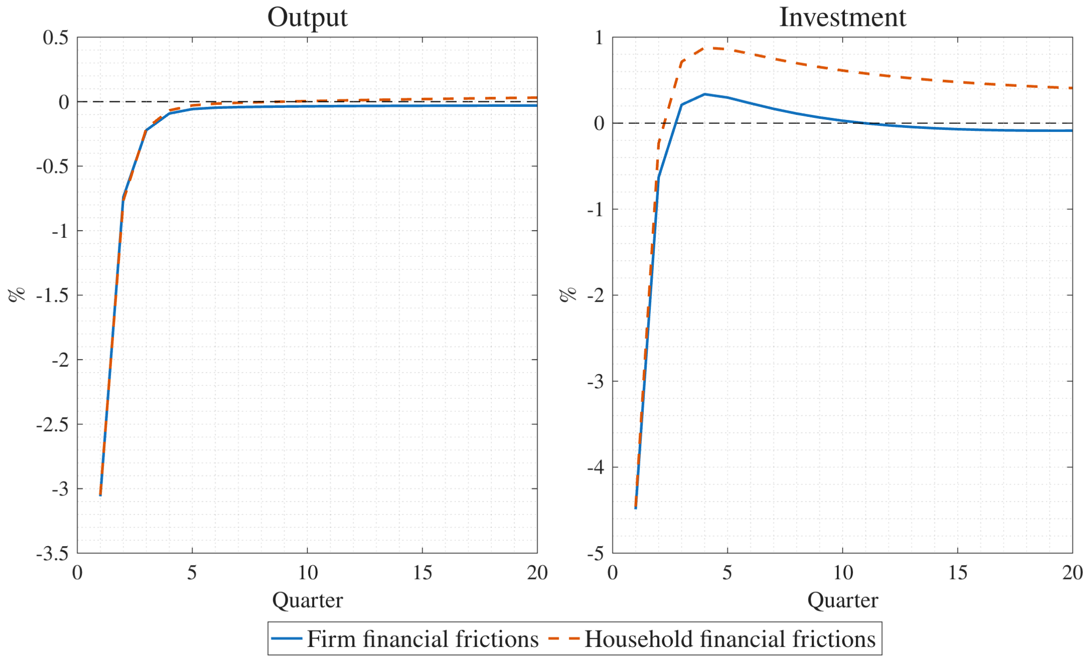

Figure 4: Output and investment after monetary tightening under the two credit regimes.

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The blue line refers to an economy with financial frictions on firms, the red dashed one when frictions are on households. Responses plotted in percentage deviations from the steady state.

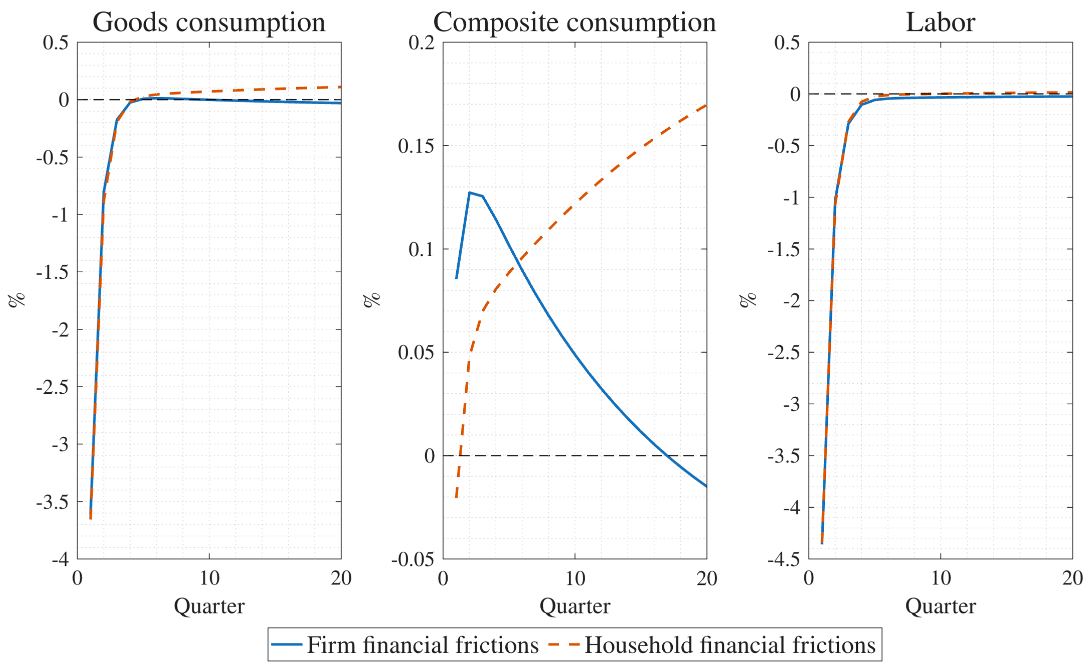

Figure 5: Goods consumption, composite consumption, and labor after monetary tightening.

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The blue line refers to an economy with financial frictions on firms, the red dashed one when frictions are on households. Responses plotted in percentage deviations from the steady state.

firm frictions but falls under household frictions. I therefore use X for the distributional consumption analysis. Appendix F shows that the same qualitative inequality result holds for goods consumption.

4.6 Robustness analysis

The inequality ranking survives a lower risk-aversion coefficient, $\xi = 2$. In Figure G.4, firm-side frictions still generate the larger wealth-Gini response and household-side frictions the larger consumption-Gini response.

Appendix G also varies fiscal policy and capital adjustment costs. I set $\phi = 0$, $\rho_{gov} = 0$, and, separately, $\rho_T = 1$. The main inequality ranking is unchanged.

I also vary the curvature of the household loan-origination technology. The alternatives $\eta^{FF} = 2$ and $\eta^{FF} = 16$ span a much flatter and a much steeper spread–debt relationship, following calibrations discussed by Cúrdia and Woodford (2010) and Cúrdia and Woodford (2016). Section G.3 shows that both alternatives preserve the main result.

Finally, Appendix H applies the same price decomposition to the wealth and consumption Ginis. That exercise clarifies why the household spread raises consumption inequality while modestly dampening wealth inequality.

5 Comparison with empirical evidence

The empirical literature supports the main transmission mechanisms behind both credit regimes, although it does not provide a direct test of their relative effects on wealth and consumption inequality.[20] On the firm side, monetary tightening weakens balance sheets, raises external financing costs, and depresses investment and labor demand. On the household side, it raises borrowing costs and produces larger consumption losses among indebted households with limited liquid wealth. The evidence is therefore informative about the individual links that generate the model's distributional results, rather than about the model's comparison between the two frictions.

For firms, the evidence closely matches the balance-sheet mechanism of the corporate accelerator. Gertler and Karadi (2015) show that monetary-policy surprises generate

[20] This gap partly reflects data limitations: high-frequency household data that jointly measure wealth, consumption, and exposure to credit conditions remain scarce.

movements in corporate financing costs through credit spreads and term premia, while Caldara and Herbst (2019) find that tighter financial conditions accompany a persistent contraction in real activity. The amplification is stronger for firms with weaker balance sheets: Anderson and Cesa-Bianchi (2024) find larger spread increases among highly leveraged firms after monetary tightening. At the firm level, Cloyne et al. (2023) document declines in net worth, borrowing, and capital expenditure, with stronger responses among firms whose access to external finance is more sensitive to collateral values. The associated employment responses documented by Cloyne et al. (2023) and Bahaj et al. (2022) also support the indirect labor-income channel that transmits corporate financial stress to households in the model.

The household mechanism is supported by evidence that monetary tightening worsens consumer credit conditions and concentrates consumption losses among financially fragile borrowers. The countercyclical household spread in the model is consistent with Nakajima and Ríos-Rull (2019). Using Danish administrative data, Faccini et al. (2026) show that consumer-credit spreads generate heterogeneous consumption and asset-accumulation responses across the wealth distribution. This evidence maps directly into the model's central household channel: a higher borrowing spread makes credit-based consumption smoothing more costly precisely for households close to the zero-wealth threshold.

Evidence on the quantity of household borrowing is less uniform. Piffer (2018) estimates a decline in aggregate borrowing after monetary tightening, whereas Zhou et al. (2026) finds that higher interest rates increase consumer debt over longer horizons, especially among financially constrained households whose labor income deteriorates. The latter mechanism is close to the one operating here: lower income raises households' demand for credit even as higher borrowing costs limit their ability to expand debt. Differences across empirical estimates may therefore reflect the horizon considered, the measure of credit, and whether the outcome captures new borrowing or outstanding debt balances. The model speaks more directly to the latter.

The model does not include household delinquency or default and therefore cannot reproduce these margins directly. Nevertheless, Piffer (2018) finds that contractionary monetary policy raises consumer-credit delinquency, consistent with a deterioration in household repayment capacity. This evidence supports the general implication that borrowing conditions worsen after monetary tightening.

The clearest empirical counterpart to the household-friction result concerns consumption. Flodén et al. (2021) find that indebted households reduce consumption more strongly following an interest-rate increase, especially when they have little liquid wealth and their borrowing rates are sensitive to short-term interest rates. Cloyne et al. (2020) similarly show that indebted households account for a large share of the consumption response to monetary policy in the United States and the United Kingdom. Although these studies mainly concern mortgage debt rather than unsecured credit, their incidence is consistent with the mechanism in the model: households with debt and weak liquid balance sheets have the smallest capacity to absorb tighter financial conditions without cutting consumption.

Existing evidence also supports the broader distributional direction of these mechanisms. Coibion et al. (2017) find that contractionary monetary-policy shocks increase inequality in earnings, income, consumption, and expenditure, while Faccini et al. (2026) show that consumer-credit spreads generate heterogeneous consumption responses across wealth groups. The evidence is less direct for the paper's comparison of wealth inequality across credit regimes.[21] Empirical work supports the sequence from monetary tightening to weaker firm balance sheets, wider corporate spreads, lower investment, and weaker labor demand, but does not establish whether this channel raises household wealth inequality more than a tightening in household credit conditions.

The empirical evidence therefore validates the building blocks of the comparison rather than its final ranking. Corporate financial stress is transmitted through financing costs, investment, and labor income; household financial stress operates more directly through the cost of borrowing and the ability to smooth consumption. Placing these two empirically supported mechanisms in the same heterogeneous-agent environment reveals their different distributional implications.

6 Concluding remarks

The main result is that monetary tightening has no unique "inequality cost." Its distributional form depends on the credit market in which financial amplification occurs.

[21] Short-run changes in household wealth inequality are difficult to identify empirically because detailed household-level balance-sheet data are typically available only at low frequency and wealth is subject to substantial measurement challenges.

Firm-side frictions generate the larger increase in wealth inequality. Household-side borrowing frictions generate the larger increase in consumption inequality. In the model, this contrast comes from households near zero liquid wealth: with a fixed household spread, they can borrow to smooth income losses and move further into negative wealth; with an endogenous countercyclical spread, they borrow less, remain closer to zero wealth, and cut consumption more sharply.

The borrowing spread therefore has an asymmetric distributional role. It dampens wealth dispersion by limiting movement into debt, but it amplifies consumption dispersion by making the smoothing margin more expensive. The decomposition shows that this direct credit-cost channel is quantitatively important without displacing the wage, profit, and risk-free-return channels emphasized in HANK models. The policy implication is diagnostic rather than mechanical: two monetary contractions with similar aggregate output effects can have different distributional footprints when stress is concentrated in different credit markets. A richer portfolio structure or heterogeneous firms may change the magnitudes, but the mechanism identified here turns on the marginal cost of liquidity faced by households around the borrowing margin.

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Appendix

A Idiosyncratic productivity process and the joint distribution

Households are either workers with $h > 0$ or rentiers with $h = 0$. Workers occupy productivity states, and the Markov process has transition matrix

$$
\begin{array}{ccc}
 & & h_{t+1} \\
 & & \begin{array}{cccccccc} h^1 & \dots & h_{m-1} & h_m = 1 & h_{m+1} & \dots & h_n & 0 \end{array} \\
h_t & \begin{array}{c} h_1 \\ \vdots \\ h_m = 1 \\ \vdots \\ h_n \\ 0 \end{array} & \begin{bmatrix}
p_{1,1}(1-\zeta) & \dots & p_{1,m-1}(1-\zeta) & p_{1,m}(1-\zeta) & p_{1,m+1}(1-\zeta) & \dots & p_{1,n}(1-\zeta) & \zeta \\
\vdots & \ddots & \vdots & \vdots & \vdots & \ddots & \vdots & \vdots \\
p_{m,1}(1-\zeta) & \dots & p_{m,m-1}(1-\zeta) & p_{m,m}(1-\zeta) & p_{m,m+1}(1-\zeta) & \dots & p_{m,n}(1-\zeta) & \zeta \\
\vdots & \ddots & \vdots & \vdots & \vdots & \ddots & \vdots & \vdots \\
p_{n,1}(1-\zeta) & \dots & p_{n,m-1}(1-\zeta) & p_{n,m}(1-\zeta) & p_{n,m+1}(1-\zeta) & \dots & p_{n,n}(1-\zeta) & \zeta \\
0 & \dots & 0 & \iota & 0 & \dots & 0 & 1-\iota
\end{bmatrix}
\end{array}
$$

The worker-to-worker probabilities p come from the Tauchen discretization. Following Bayer et al. (2019) and Luetticke (2021), rentiers who return to work enter at median productivity, normalized to $h = 1$.

The steady state is a joint distribution over liquid wealth a and productivity state h. On the numerical grid, I represent it as

$$
\begin{array}{ccc}
\text{prod. } h & \begin{array}{c} h_m \\ \dots \\ h_2 \\ h_1 \end{array} & \begin{bmatrix}
H_{m,1} & H_{m,2} & \cdots & H_{m,n} \\
\dots & \dots & \dots & \dots \\
H_{2,1} & H_{2,2} & \cdots & H_{2,n} \\
H_{1,1} & H_{1,2} & \cdots & H_{1,n}
\end{bmatrix} \\
 & & \begin{array}{cccc} a_1 & a_2 & \cdots & a_n \end{array} \\
 & & \\
 & & \text{wealth } a
\end{array}
$$

where each $H_{m,n}$ is the mass at a productivity–wealth grid point and the distribution integrates to one.

B Investment-bank contract

B.1 Idiosyncratic return shock

Following Bernanke et al. (1999), the idiosyncratic entrepreneurial return shock ω^F is lognormal on $[0,\infty)$. The analytical expressions for $F(\omega^F)$, $\Gamma(\omega^F)$, and $G(\omega^F)$ used in the solution are

$$F(\omega^F) = \Phi\left[\left(\log(\bar{\omega}^F) + \frac{1}{2}\sigma^2_{\omega^F}\right)/\sigma_{\omega^F}\right], \tag{A1}$$

$$\Gamma(\omega^F) = \Phi\left[\left(\log(\bar{\omega}^F) - \frac{1}{2}\sigma^2_{\omega^F}\right)/\sigma_{\omega^F}\right] + \bar{\omega}^F\left\{1 - \Phi\left[\left(\log(\bar{\omega}^F) + \frac{1}{2}\sigma^2_{\omega^F}\right)/\sigma_{\omega^F}\right]\right\}, \tag{A2}$$

$$G(\omega^F) = \Phi\left[\left(\log(\bar{\omega}^F) + \frac{1}{2}\sigma^2_{\omega^F}\right)/\sigma_{\omega^F} - \sigma_{\omega^F}\right], \tag{A3}$$

where $\Phi(\cdot)$ is the standard normal c.d.f. and σ_{ω^F} is the standard deviation of the entrepreneurial return shock.

B.2 Lender participation and the entrepreneur's problem

Substituting (18) and (17) into the lender participation constraint (19) gives

$$[1-F(\bar{\omega}^F_{jt+1})]\bar{\omega}^F_{jt+1}R^K_{t+1}q_tK_{jt+1} + (1-\mu)\int_0^{\bar{\omega}^F_{jt+1}} \omega^F_j \, dF(\omega^F_j)R^K_{t+1}q_tK_{jt+1} = \frac{R_{t+1}}{\pi_{t+1}}(q_tK_{jt+1} - N_{jt+1}). \tag{A4}$$

Dividing by the value of financed capital yields

$$\frac{R^K_{t+1}}{\frac{R_{t+1}}{\pi_{t+1}}}\left([1-F(\bar{\omega}^F_{jt+1})]\bar{\omega}^F_{jt+1} + (1-\mu)\int_0^{\bar{\omega}^F_{jt+1}} \omega^F_j \, dF(\omega^F_j)\right) = \left(1 - \frac{N_{jt+1}}{q_tK_{jt+1}}\right). \tag{A5}$$

Using the notation of Bernanke et al. (1999) and Christiano et al. (2014),

$$\Gamma(\bar{\omega}_j^F) \equiv \int_0^{\bar{\omega}_j^F} \omega_j^F dF(\omega_j^F) + \bar{\omega}_j^F \int_{\bar{\omega}_j^F}^{\infty} dF(\omega_j^F) \,, \qquad \mu G(\bar{\omega}_j^F) \equiv \mu \int_0^{\bar{\omega}_j^F} \omega_j^F dF(\omega_j^F) \,, \tag{A6}$$

where $\Gamma(\bar{\omega}_j^F)$ is the lender's expected gross revenue share and $\mu G(\bar{\omega}_j^F)$ is expected monitoring cost. The revenue share can also be written as

$$\Gamma(\bar{\omega}_j^F) = G(\bar{\omega}_j^F) + \bar{\omega}_j^F \left[1 - F(\bar{\omega}_j^F)\right] \,. \tag{A7}$$

Substituting these expressions into (A5) gives

$$\frac{R_{t+1}^K}{\left(\dfrac{R_{t+1}}{\pi_{t+1}}\right)} = \frac{1}{\Gamma(\bar{\omega}_{jt+1}^F) - \mu G(\bar{\omega}_{jt+1}^F)} \left(1 - \frac{N_{jt+1}}{q_t K_{jt+1}}\right) \,, \tag{A8}$$

where $\Gamma(\bar{\omega}_{jt+1}^F) - \mu G(\bar{\omega}_{jt+1}^F)$ is the lender's expected repayment share net of auditing costs.

Equation (A8) makes explicit the function summarized by (20). Higher leverage requires a larger external-finance premium and raises the default cutoff, increasing the expected repayment needed to compensate lenders. The entrepreneur chooses capital and the cutoff subject to this financing schedule.

Under the optimal contract, entrepreneur j's expected payoff is

$$E_t \left\{ \int_{\bar{\omega}_{jt+1}^F}^{\infty} \omega_j^F dF(\omega_j^F) R_{t+1}^K q_t K_{jt+1} - (1 - F(\bar{\omega}_j^F)) R_{t+1}^K q_t K_{jt+1} \right\} \,, \tag{A9}$$

where expectations are over R_{t+1}^K. The first term is the entrepreneur's return in non-default states and the second is repayment to the lender. Using the notation above, the contracting problem is

$$\begin{aligned} &\max_{\{K_{jt+1}, \bar{\omega}_{jt+1}^F\}} E_t \left\{ \left[1 - \Gamma(\bar{\omega}_{jt+1}^F)\right] R_{t+1}^K q_t K_{jt+1} \right\} \,, \\ &s.t. \quad \frac{R_{t+1}}{\pi_{t+1}} (q_t K_{jt+1} - N_{jt+1}) = \left[\Gamma(\bar{\omega}_{jt+1}^F) - \mu G(\bar{\omega}_{jt+1}^F)\right] R_{t+1}^K q_t K_{jt+1} \,. \end{aligned} \tag{A10}$$

The first-order conditions are

$$w.r.t.\ \omega^F_{jt+1}: \quad -\Gamma'(\bar{\omega}^F_{jt+1}) + \lambda_{jt+1}\left[\Gamma'(\bar{\omega}^F_{jt+1}) - \mu G'(\bar{\omega}^F_{jt+1})\right] = 0\ , \tag{A11}$$

$$w.r.t.\ K_{jt+1}: \quad E_t\left\{\left[1-\Gamma(\bar{\omega}^F_{jt+1})\right]R^K_{t+1} - \lambda_{jt+1}\left[\frac{R_{t+1}}{\pi_{t+1}} - \left(\Gamma(\bar{\omega}^F_{jt+1}) - \mu G(\bar{\omega}^F_{jt+1})R^K_{t+1}\right)\right]\right\} = 0\ , \tag{A12}$$

$$w.r.t.\ \lambda_{jt+1}: \quad E_t\left\{\frac{R_{t+1}}{\pi_{t+1}}(q_t K_{jt+1} - N_{jt+1}) - \left[\Gamma(\bar{\omega}^F_{jt+1}) - \mu G(\bar{\omega}^F_{jt+1})\right]R^K_{t+1}q_t K_{jt+1}\right\} = 0\ , \tag{A13}$$

where λ_j is the Lagrange multiplier. Equation (A11) expresses λ_{jt+1} as a function of the default cutoff. Rearranging (A12) gives

$$E_t\left\{\frac{R^K_{t+1}}{\frac{R_{t+1}}{\pi_{t+1}}}\right\} = \frac{\lambda_{jt+1}}{\left[1-\Gamma(\bar{\omega}^F_{jt+1}) + \lambda_{jt+1}\left(\Gamma(\bar{\omega}^F_{jt+1}) - \mu G(\bar{\omega}^F_{jt+1})\right)\right]}\ . \tag{A14}$$

The external-finance premium increases monotonically with the default cutoff and, through (A8), with leverage. More leveraged entrepreneurs therefore face a larger premium.[22]

Equation (A14) also implies that the default cutoff depends only on aggregate prices. Entrepreneurs therefore choose a common cutoff and leverage ratio, which allows the corporate block to be written in aggregate form.

C Definition of hand-to-mouth households

In TANK models, the share of HtM households is imposed exogenously. In a HANK model, by contrast, it emerges endogenously from households' saving decisions and can therefore vary in response to an aggregate shock. Following Kaplan and Violante (2014), I classify households as HtM if they hold zero liquid wealth or are at the borrowing limit. Among non-borrowers, I classify as HtM those households with zero or near-zero wealth, where "near zero" denotes positive wealth no greater than one-half of the minimum quarterly labor-income realization. This threshold is consistent with the liquid-wealth

[22] See Appendix A.1 of Bernanke et al. (1999).

criterion adopted in Kaplan and Violante (2014).

D Additional moments and IRFs for the baseline model

D.1 Steady-state moments

Table D.1: Selected steady-state moments

Moment	Value
Financial conditions	
Net nominal risk-free rate (annual, %)	2.50
Borrower spread (annual, %)	10.00
External-finance premium (annual p.p.)	2.00
Entrepreneur leverage	2.00
Entrepreneur failure probability (annual, %)	2.91
Aggregates	
Output	3.84
Capital	45.89
Labor supply	1.34
Consumption	1.19
Real wage	1.91
Household debt / output (%)	5.43
Household income and Distributional moments	
Mean gross earnings	2.75
Median gross earnings	2.51
Median net liquid assets	6.73
Households with negative liquid wealth (%)	11.43
Median debt among borrowers	1.46
Households with zero/near-zero liquidity (%)	6.34
Wealth Gini (%)	78.00
Top 10% liquid wealth share (%)	66.03
Consumption Gini (%)	22.31

Notes: Values are quarterly unless otherwise stated.

D.2 Additional aggregate responses

Figure D.1 reports the additional aggregate impulse responses that complement Figure 4 and Figure 5 in the main text.

D.3 Consumption decomposition for relevant prices

Figure D.2 extends the on-impact decomposition in Table 2 over the full response horizon.

The pure liquidity-return contribution has similar impact magnitudes across regimes but different persistence. It is slightly larger on impact under firm-side frictions.

Both liquidity-return contributions peak within the first year, but the firm-friction response reverts much faster. Under household frictions, the contribution remains persistent well beyond the horizon shown.[23]

The persistence comes from the funding side of the model. The richest households supply most corporate credit and, because they are savers, do not pay the household borrowing spread.[24]

Corporate debt demand then diverges across regimes. When the firm accelerator is active, the higher external-finance premium induces faster deleveraging after the initial response. When the household spread is active and the corporate spread is fixed, firms maintain stronger debt demand. The resulting persistence in savers' liquid returns feeds into aggregate consumption.

E Equal-size monetary shocks

This section applies the same nominal monetary-policy innovation to both credit regimes rather than matching their output contractions. The central distributional ranking is unchanged.

The main difference from the baseline normalization is that the firm-friction consumption Gini now lies above the fixed-spread benchmark response. It nevertheless remains well below the household-friction response, while firm-side frictions continue to generate the larger wealth-inequality response.

[23]With a longer horizon, the firm-friction contribution undershoots after roughly 24 quarters, whereas the household-friction response remains above its impact value even after 100 periods.

[24]Household wealth is a net liquid position in this one-asset model.

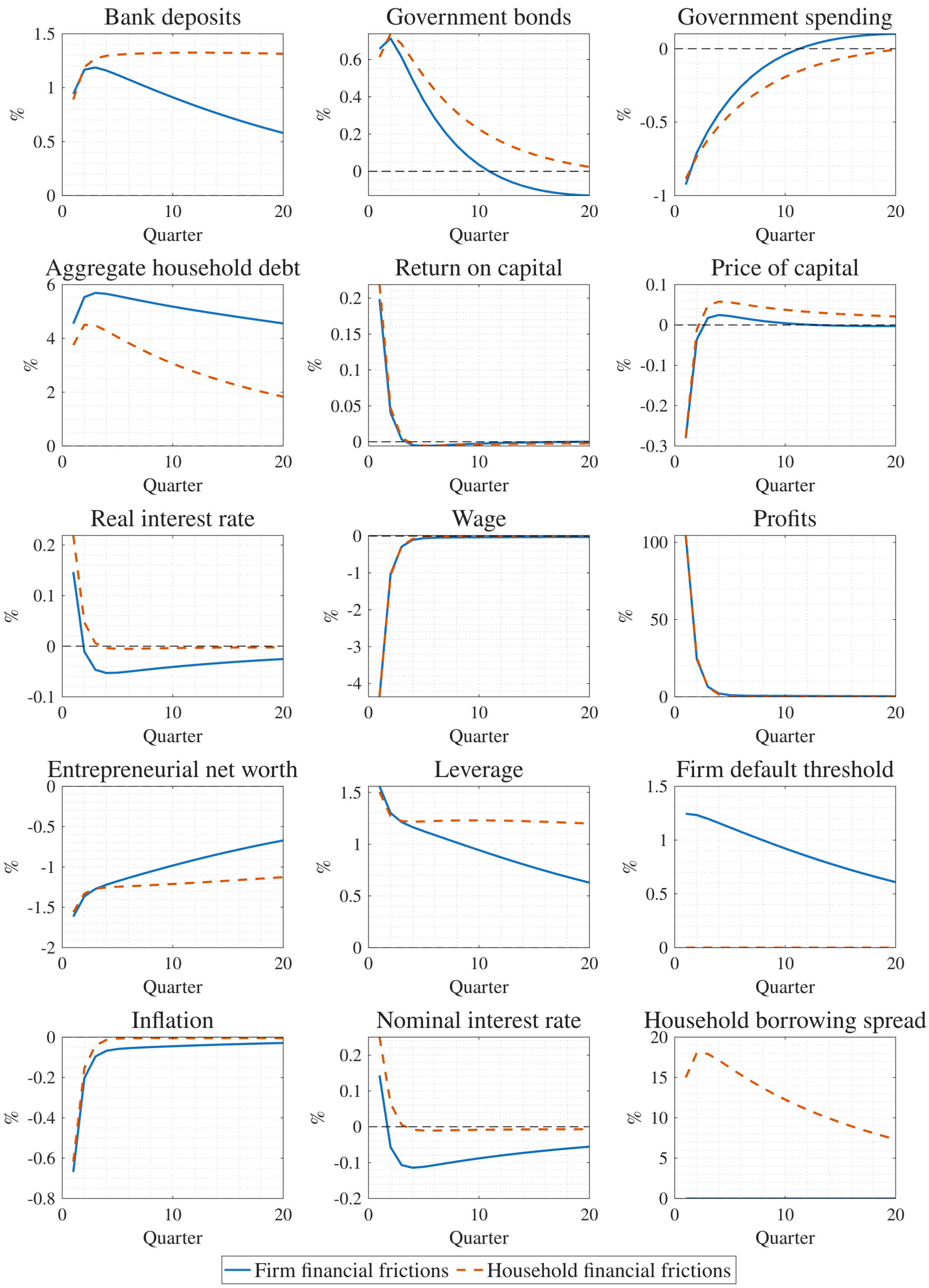

Figure D.1: Additional aggregate responses to monetary tightening

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The blue line refers to an economy with financial frictions on firms, the red one when frictions are on households. Responses plotted in percentage deviations from the steady state.

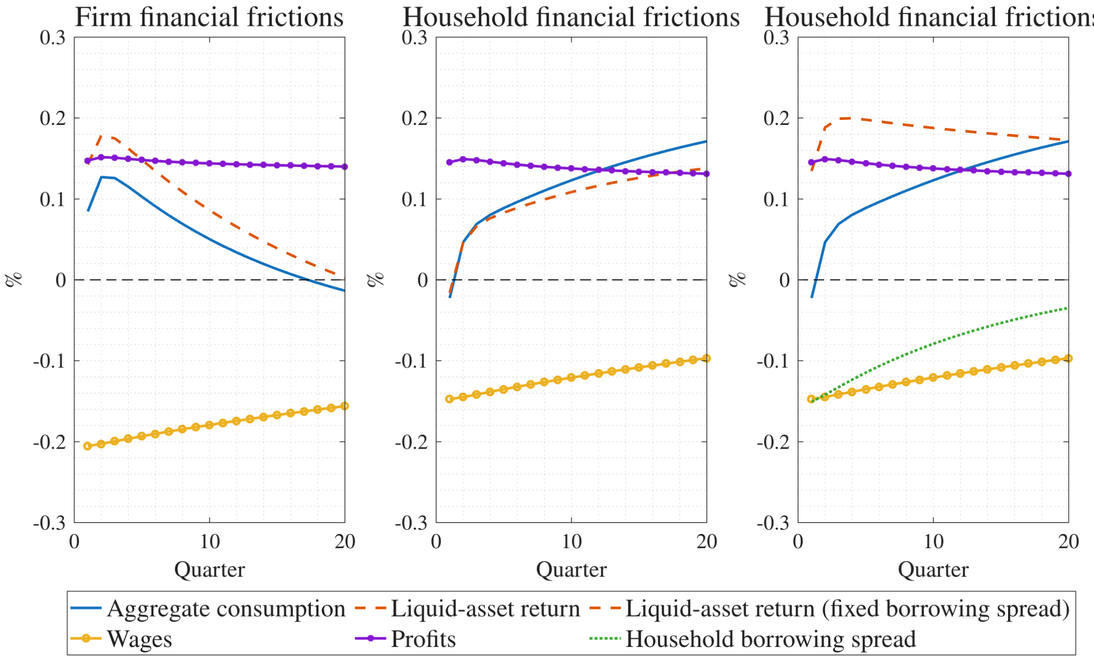

Figure D.2: Consumption decomposition for relevant prices

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The graph on the left-hand side represents the decomposition for the case of frictions on firms and the other two represent the case of frictions on household borrowing. In the graph on the right-hand side, I consider the borrowing penalty ω_t^H as an individual variable. Responses plotted in percentage deviations from the steady state.

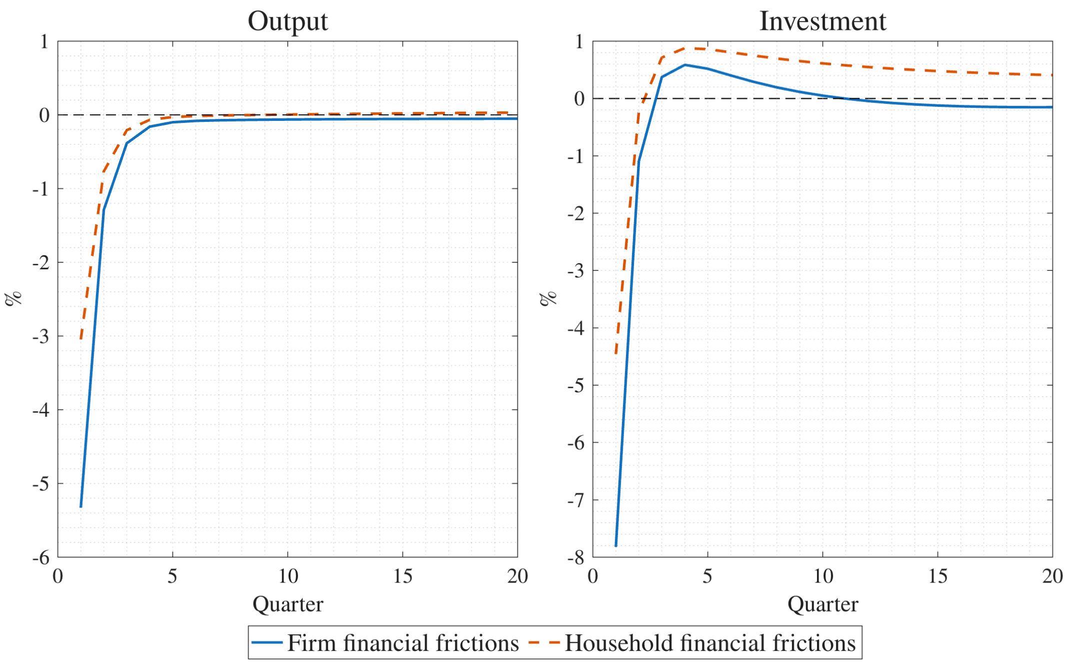

Figure E.1: Additional aggregate responses to monetary tightening

Notes: monetary shock is $\epsilon^R = 0.0025$ in both the scenarios. The blue line refers to an economy with financial frictions on firms, the red one when frictions are on households. Responses plotted in percentage deviations from the steady state.

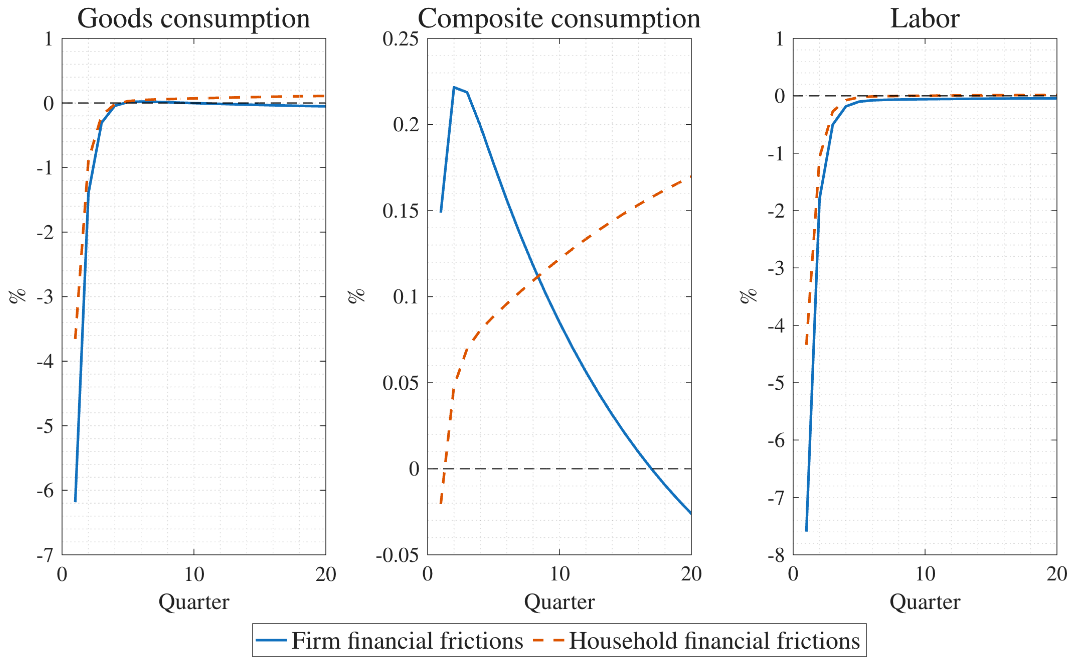

Figure E.2: Additional aggregate responses to monetary tightening

Notes: monetary shock is $\epsilon^R = 0.0025$ in both the scenarios. The blue line refers to an economy with financial frictions on firms, the red one when frictions are on households. Responses plotted in percentage deviations from the steady state.

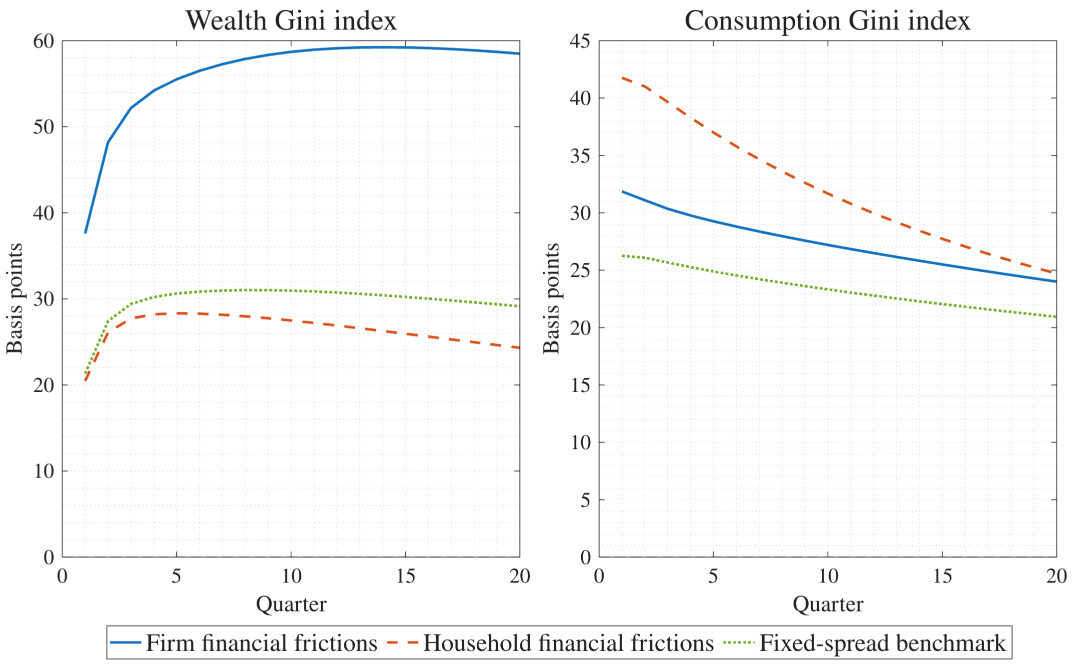

Figure E.3: Impulse responses to a monetary contraction for wealth and consumption inequality.

Notes: monetary shock $\epsilon^R = 0.0025$. The solid blue line represents the economy with active firm financial frictions; the dashed red line represents the economy with active household borrowing frictions; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

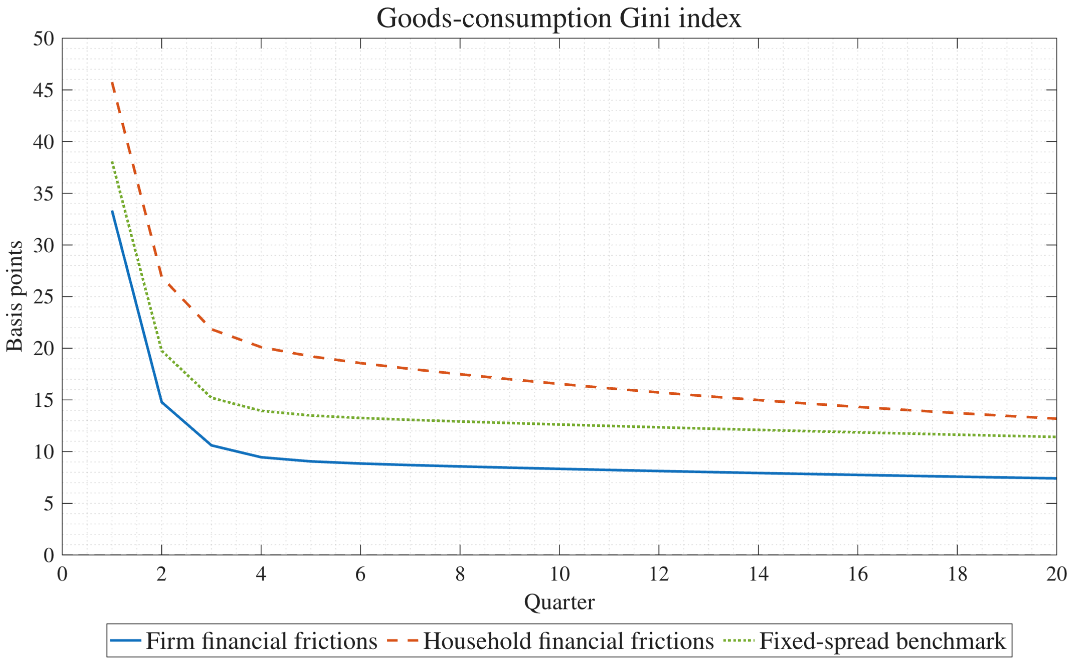

Figure F.1: Impulse responses to a monetary contraction for consumption inequality.

Notes: monetary shock set to $\epsilon^R = 0.0025$ in cases where financial frictions on household borrowing are active, as well as in the fixed-spread scenario. For active frictions on firms, it is set to $\epsilon^R = 0.0014$. The solid blue line represents the economy with active firm financial frictions; the dashed red line represents the economy with active household borrowing frictions; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

F Inequality in goods consumption C

The main text uses composite consumption because it enters household utility directly. The same ranking holds for goods consumption, C. Figure F.1 shows a larger rise in the goods-consumption Gini under household borrowing frictions. Figure F.2 shows why: aggregate goods-consumption responses are similar across regimes, but the responses of high- and low-wealth households are much farther apart when the household spread is endogenous.

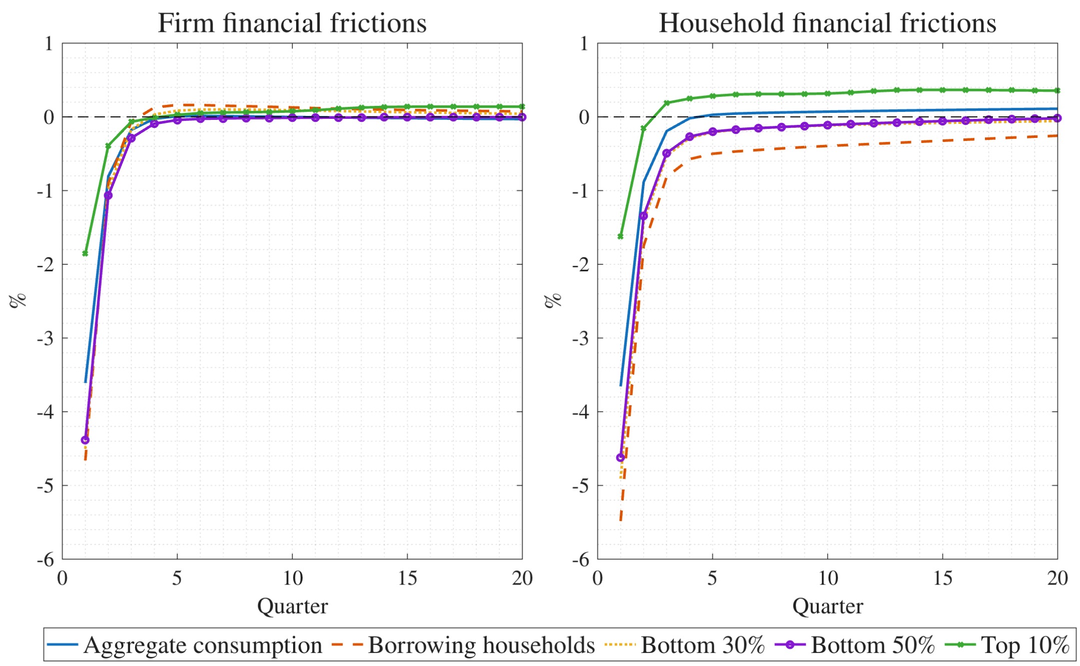

Figure F.2: Average consumption fluctuation for different shares of households.

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. Responses plotted in percentage deviations from the steady state.

G Robustness checks

G.1 Fiscal policy and capital adjustment costs

I first vary fiscal adjustment and capital-adjustment costs. Figure G.1 sets $\rho_{gov} = 0$, while Figure G.2 removes quadratic capital-adjustment costs by setting $\phi = 0$. In both cases, the wealth–consumption inequality ranking is unchanged.

I also set $\rho_T = 1$, so debt issuance responds fully to tax-revenue fluctuations. This specification gives fiscal policy a stronger short-run role in the heterogeneous-agent economy. Figure G.3 again preserves the main distributional ordering.

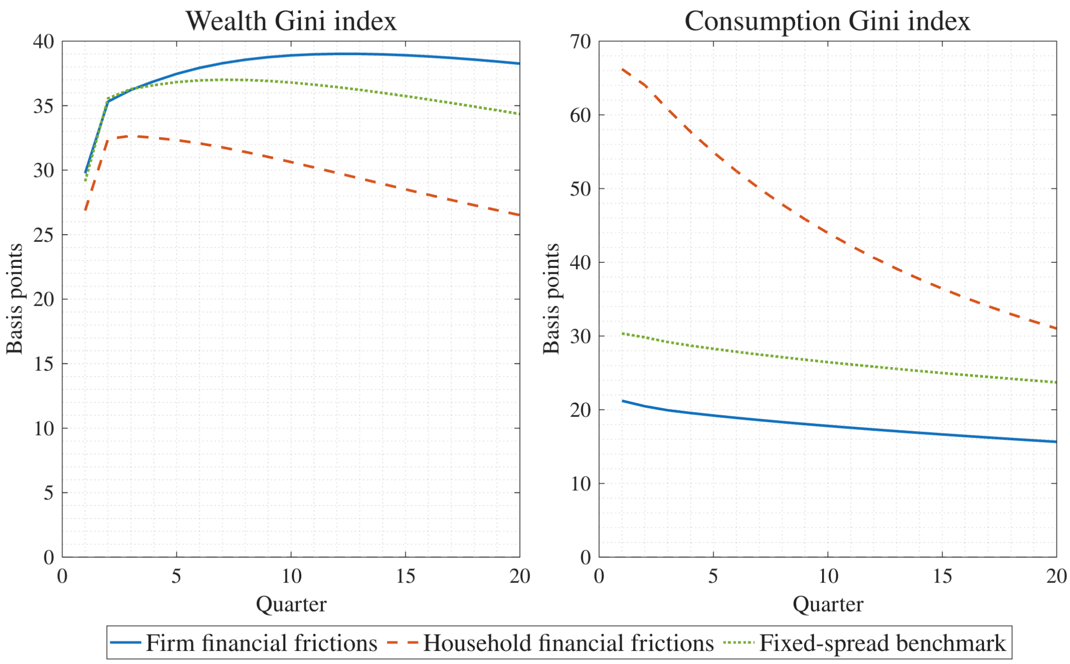

Figure G.1: Impulse responses to a monetary contraction for wealth and consumption inequality, $\rho_{gov} = 0$.

Notes: monetary shock set to $\epsilon^R = 0.0025$ in cases where financial frictions on household borrowing are active, as well as in the fixed-spread scenario. For active frictions on firms, it is set to $\epsilon^R = 0.0013$. The solid blue line represents the economy with active firm financial frictions; the dashed red line represents the economy with active household borrowing frictions; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

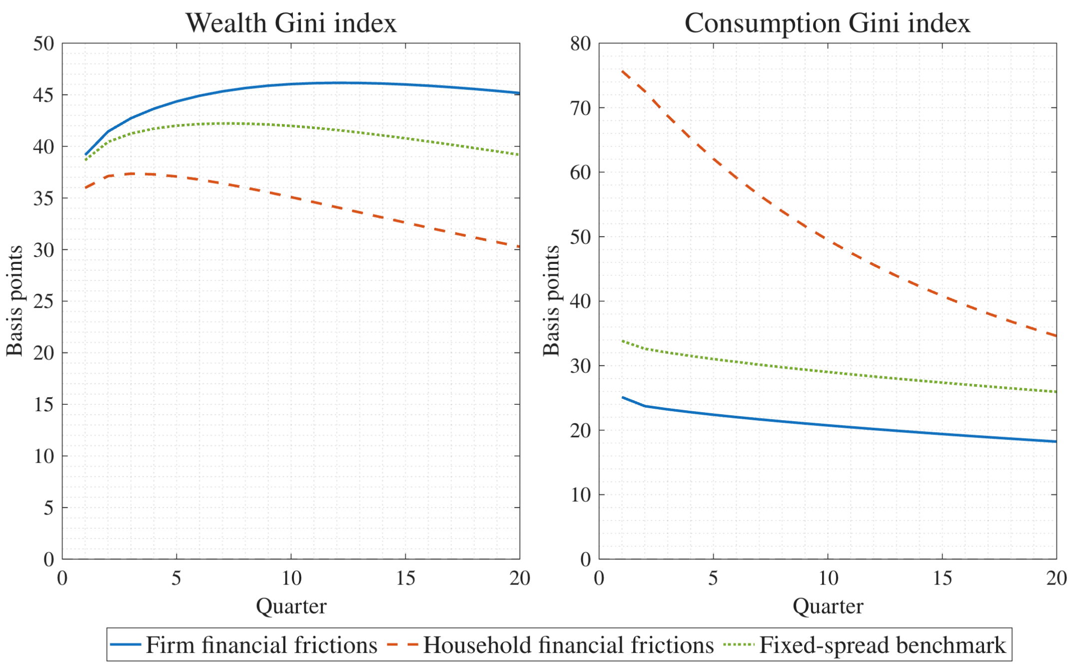

Figure G.2: Impulse responses to a monetary contraction for wealth and consumption inequality, $\phi = 0$.

Notes: monetary shock set to $\epsilon^R = 0.0025$ in cases where financial frictions on household borrowing are active, as well as in the fixed-spread scenario. For active frictions on firms, it is set to $\epsilon^R = 0.0014$. The solid blue line represents the economy with active firm financial frictions; the dashed red line represents the economy with active household borrowing frictions; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

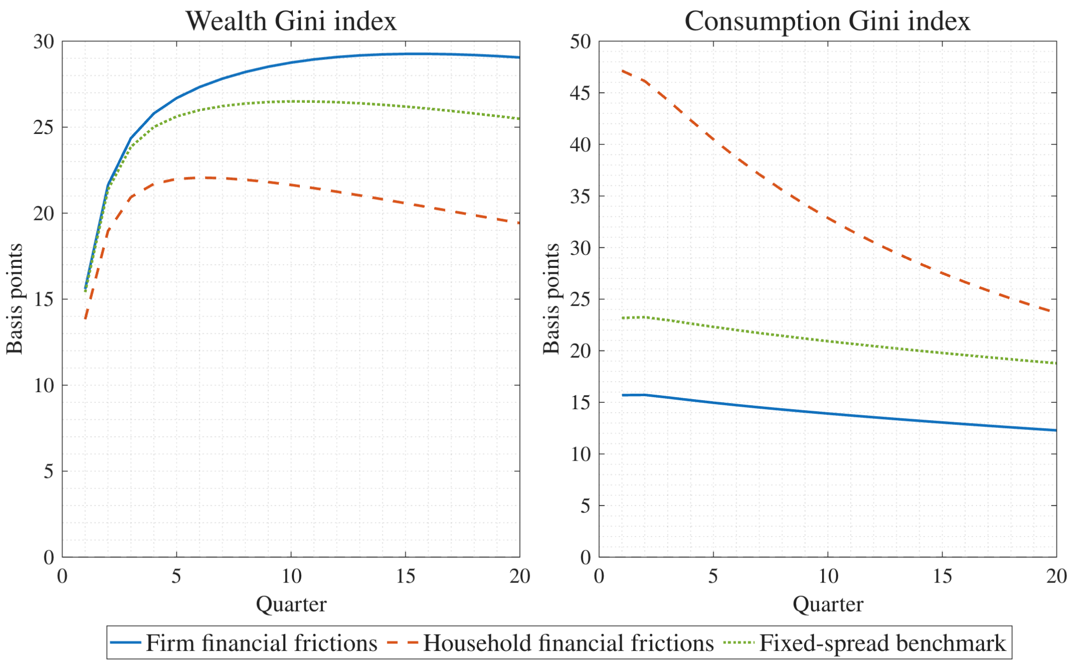

Figure G.3: Impulse responses to a monetary contraction for wealth and consumption inequality, government reacts to tax revenues.

Notes: monetary shock set to $\epsilon^R = 0.0025$ in cases where financial frictions on household borrowing are active, as well as in the fixed-spread scenario. For active frictions on firms, it is set to $\epsilon^R = 0.0015$. The solid blue line represents the economy with active firm financial frictions; the dashed red line represents the economy with active household borrowing frictions; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

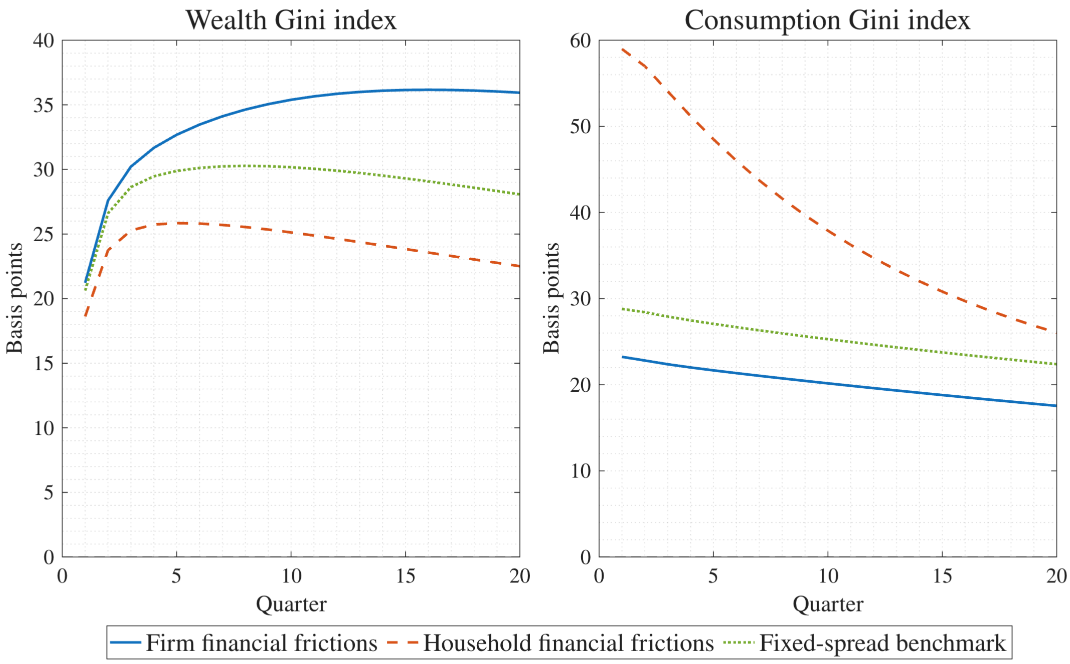

Figure G.4: Impulse responses to a monetary contraction for wealth and consumption inequality, $\xi = 2$.

Notes: monetary shock set to $\epsilon^R = 0.0025$ in cases where financial frictions on household borrowing are active, as well as in the fixed-spread scenario. For active frictions on firms, it is set to $\epsilon^R = 0.0015$. The solid blue line represents the economy with active firm financial frictions; the dashed red line represents the economy with active household borrowing frictions; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

G.2 Households' risk aversion

The baseline uses risk aversion $\xi = 4$ (Bayer et al., 2019). I also solve the model with $\xi = 2$, a value used in other HANK applications such as Auclert et al. (2021). Because this change shifts the steady state, I recalibrate β, ζ, and $\underline{a}$ to preserve the empirical wealth-distribution targets. Figure G.4 reports the resulting inequality responses.

The lower-risk-aversion calibration preserves all three central features: firm-side frictions generate the larger wealth-inequality response, household-side frictions generate the larger consumption-inequality response, and the household borrowing spread remains an important part of the consumption mechanism.

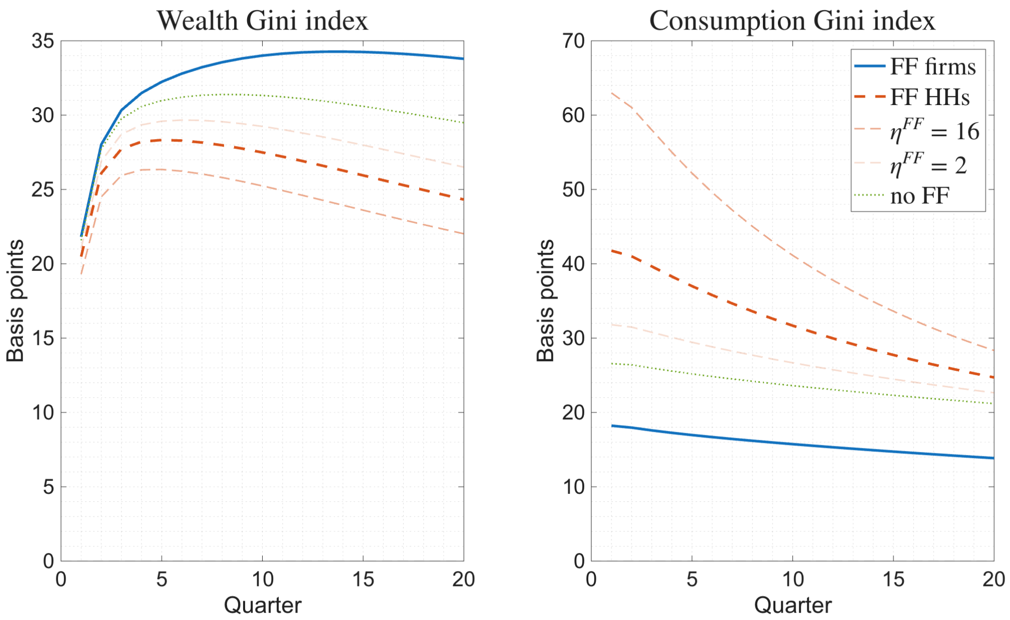

Figure G.5: Impulse responses to a monetary contraction for wealth and consumption inequality.

Notes: The monetary policy shock is set to $\epsilon^R = 0.0025$ when household borrowing frictions are active and in the economy with fixed spreads. When firm financial frictions are active, the shock is set to $\epsilon^R = 0.0014$. The blue solid line represents an economy with financial frictions on firms; the red dashed lines (with different degrees of transparency) correspond to frictions on households; and the dotted green line represents the economy with fixed spreads. Responses are plotted in absolute basis point changes.

G.3 Borrowing-cost function calibration

The baseline household loan-cost schedule follows Cúrdia and Woodford (2010): setting $\eta^{FF} = 5$ implies an elasticity of the marginal cost of loan supply equal to 4, a calibration also adopted by Klein and Krause (2020).

Because my steady-state spread target is higher than the 2-percentage-point target in Cúrdia and Woodford (2010), the baseline schedule also implies a stronger level response of the spread to lending. For comparison, Cúrdia and Woodford (2016) use a much steeper benchmark in which a 1% increase in aggregate loans raises the annual spread by about 1 percentage point.

I therefore consider $\eta^{FF} = 2$, which reduces the spread–debt elasticity from 4 to 1 and gives a spread response close to Cúrdia and Woodford (2010), and $\eta^{FF} = 16$, which approaches the steep calibration in Cúrdia and Woodford (2016).

Figure G.5 shows that changing η^{FF} affects magnitudes but not the inequality ranking. A flatter schedule moves the household-friction economy closer to the fixed-spread benchmark, as expected, yet consumption inequality remains higher than under firm-side frictions and the wealth response remains lower.

Table H.1: On-impact decomposition IRF of Gini Wealth

Scenario	Measure	**Aggregate**	**Liquid returns**	**Wage**	**Profit**	**HHs spread**
FFs on firms	IRF (b.p.)	22.55	0.14	20.54	1.87	-
	% imp.	-	0.63	91.07	8.30	-
FFs on HHs	IRF (b.p.)	21.14	-1.34	20.62	1.87	-
	% imp.	-	5.62	86.55	7.83	-
FFs on HHs isolated spread	IRF (b.p.)	21.14	-0.28	20.62	1.87	-1.06
	% imp.	-	1.17	86.55	7.83	4.45

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The row "IRF (b.p.)" reports absolute basis points changes. The row "% imp." reports each component as a share of the absolute on-impact Gini index decomposition.

H Gini-index decomposition

I apply the price decomposition from Section 4.4 directly to the on-impact changes in the wealth and consumption Gini indices. Each Gini response is decomposed into liquid-return, wage, and profit contributions; in the household-friction economy I further split liquid returns into the risk-free component and the borrowing spread, ω^H. Percentage shares use absolute contributions, as in the aggregate-consumption decomposition.

Table H.1 shows that wages dominate the on-impact wealth-Gini response in both economies. The wage channel contributes 20.54 basis points under firm frictions and 20.62 basis points under household frictions, about 91% and 87% of the respective absolute decompositions. Profit effects are smaller, and liquid returns are negligible under firm frictions.

The higher wealth-Gini response under firm frictions is therefore not driven by a larger wage effect on impact. The difference comes from liquid returns in the household-friction economy. Their combined contribution is -1.34 basis points; isolating the components assigns -1.06 basis points to the borrowing spread and -0.28 to the risk-free return. The endogenous spread thus dampens, rather than amplifies, the on-impact rise in wealth inequality.

This sign is exactly what the zero-wealth mechanism predicts. A fixed household

Table H.2: On-impact decomposition of Gini Consumption

Scenario	Measure	**Aggregate**	**Liquid returns**	**Wage**	**Profit**	**HHs spread**
FFs on firms	IRF (b.p.)	17.98	-0.83	9.01	9.80	-
	% imp.	-	4.23	45.87	49.90	-
FFs on HHs	IRF (b.p.)	41.79	23.64	8.46	9.69	-
	% imp.	-	56.57	20.25	23.18	-
FFs on HHs isolated spread	IRF (b.p.)	41.79	8.12	8.46	9.69	15.52
	% imp.	-	19.43	20.25	23.18	37.14

Notes: monetary shock $\epsilon^R = 0.0025$ for active financial frictions on household borrowing, $\epsilon^R = 0.0014$ otherwise. The row "IRF (b.p.)" reports absolute basis points changes. The row "% imp." reports each component as a share of the absolute on-impact Gini index decomposition.

spread lets low-income households cross into negative wealth to smooth consumption, widening the lower tail. An endogenous spread makes that move more expensive and keeps more households near zero. The spread therefore offsets part of the wealth-Gini increase even though wage losses remain the main force raising wealth inequality overall.

The consumption-Gini decomposition in Table H.2 is very different. Under firm-side frictions, wage and profit effects contribute 9.01 and 9.80 basis points and together account for about 96% of the absolute response; liquid returns contribute only -0.83 basis points. Consumption inequality is therefore transmitted mainly through income when the financial accelerator sits in the production sector.

With household borrowing frictions, liquid returns contribute 23.64 basis points to the 41.79-basis-point increase in the consumption Gini, or 56.57% of the absolute decomposition. Isolating the household spread assigns 15.52 basis points, 37.14% of the response, to ω^H, making it the largest individual component. The pure risk-free-return contribution is 8.12 basis points.

The spread is important but not sufficient by itself. Wages contribute 8.46 basis points, profits 9.69, and the risk-free return remains sizeable. Household credit frictions therefore add a direct cost-of-borrowing channel to the usual indirect income effects rather than replacing them.

Taken together, the two Gini decompositions expose the asymmetry at the center of the paper. The household spread discourages movement into negative asset positions and therefore dampens wealth dispersion, but the same spread makes debt-based consumption smoothing more expensive and therefore amplifies consumption dispersion. This is why shifting the financial friction from firms to households changes the dimension of inequality that responds most strongly to monetary tightening.