DISCUSSION Expectations, Asset Prices and Monetary Policy: the Role of Learning Simon Gilchrist and Masashi Saito

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Narrowing down:

► Asset Prices: Equity prices.

Focus

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- ► Asset Prices: Equity prices.
- Credit Frictions: at Firms Level.

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- Credit Frictions: at Firms Level.
- ▶ No (direct) wealth effect on consumption.

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Relative Price Dispersion



Relative Price Dispersion \longrightarrow Consumption-Leisure Margin

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Relative Price Dispersion \longrightarrow Consumption-Leisure Margin

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Agency Costs

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Adj. Costs Investment

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Adj. Costs Investment $\longrightarrow Q_t \neq 1$

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- → Consumption-Investment Margin

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- On top of . . .

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- $\longrightarrow \ \ Consumption-Leisure \ Margin$
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On top of . . . \longrightarrow On top of . .

1. Borrowers (Impatient Entrepreneur) Net Worth N

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- 2. Distortion-2 \longrightarrow External Finance Premium $s \propto N^{-1}$.

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ASSET PRICES Q

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current N (state)

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s

\uparrow

Aggregate Demand: I

\uparrow

Y and \Pi
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if N



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if *N* **Procyclical** ↓

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if *N* Procyclical ↓↓ *s* is Countercyclical ↓

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ASSET PRICES Q

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Profits (Productivity)







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Stabilizing Q contributes to stabilizing I and Y ...

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Mechanism underlying Financial Accelerator - BG, Cecch et al. ...

 Bubble in itself not harmful (you know it is a bubble but you buy it)

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However It Magnifies accelerator

Mechanism underlying Financial Accelerator - BG, Cecch et al. ...

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- However It Magnifies accelerator
- Present Paper: Expectations for some periods systematically wrong

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Stabilizing & contributes to stabilizing I and Y

Separation Principle holds



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- the optimal policy under commitment given an estimate of the state of the economy is 1) independent of the degree of uncertainty and so 2) the same policy as under full information.

No substantial difference from having baseline setup (GL02) exogenous bubble (BG01) and learning.

A Quantitative Problem

No "Monotonic" Trade-off between Inflation and Financial Distortions ... No Perfect Coincidence

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3. How Reasonable is the Loss Function?

Table 3: Policy Rule with the Asset Price Gap
(Imperfect Information for the Private Sector)
$\ln R_{t+1}^n = \ln R^n + 2.0 \ln \pi_t + \phi_Q (\ln Q_t - \ln Q_t^*)$

	No Financ	ial Accelera	ator	Financial Accelerator		
	var(Y gap)	$var(\ln \pi)$	Loss	var(Y gap)	$var(\ln \pi)$	Loss
Full Informe	ation for the H	Policy Make	r		\land	
$\phi_Q = 0.1$	1.02	1.00	1.00	1.09	1.00	1.04
$\phi_Q = 0.5$	1.12	0.99	1.01	1.36	1.00	1.14
$\phi_Q = 1.0$	1.12	0.99	1.01	1.50	0.98	1.18
$\dot{\phi_Q} = 1.5$	1.06	0.99	1.00	1.51	0.93	1.16
$\dot{\phi_Q} = 2.0$	0.97	0.99	0.99	1.53	0.86	1.12
Imperfect In	formation for	the Policy	Maker		\bigcirc	
$\phi_{Q} = 0.1$	0.92	1.00	0.98	1.20	1.01	1.08
$\tilde{\phi_Q} = 0.5$	0.94	1.00	0.99	1.22	1.01	1.09
$\dot{\phi_Q} = 1.0$	0.96	1.00	0.99	1.38	0.97	1.12
$\tilde{\phi_{O}} = 1.5$	0.98	1.00	1.00	1.44	0.93	1.12
$\tilde{\phi_Q} = 2.0$	0.96	1.00	1.00	1.42	0.87	1.08

Notes:

1. Y gap $\equiv (\ln Y - \ln Y_{full}^*)$ where Y_{full}^* is the flexible-price equilibrium level of output in the absence of financial frictions and under full information. The loss is defined as $0.5var (Y \text{ gap}) + 0.5var (\ln \pi)$.

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Imperfect In	formation for	the Policy	Maker		0	
$\phi_Q = 0.1$	0.92	1.00	0.98	1.20	1.01	1.08
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$\phi_{O} = 0.1$	0.98	1.00	1.00	1.02	(.01)	1.01	
$\phi_Q = 0.5$	0.85	1.00	0.98	0.97	1.00	0.99	
$\phi_{Q} = 1.0$	0.59	0.99	0.94	0.93	0.98	0.97	
$\phi_Q = 1.5$	0.31	1.00	0.91	0.94	0.94	0.94	
$\phi_{Q}^{*} = 2.0$	0.21	1.00	0.90	0.79	0.88	0.85	

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- Arbitrary Loss Function Shifts in Policy Frontier

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- capital gain tax?
- Steady state distorted: incentive to stimulate economy (how big SS-distortion?)

Three Final Considerations





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- Banking sector
- Non-linear(ized) Framework

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- Banking sector
- Non-linear(ized) Framework
- Knightian uncertainty. Acting pre-emptively against worst scenario (Tetlow05)