# Discussion of "Fiscal Policy with Credit Constrained Households" by W. Roeger and J. in't Veld

Alessandro Notarpietro Banca d'Italia

2nd Bank of Italy Conference on Macro Modeling in the Policy Environment Rome, 30 June - 1 July 2009



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- 1. What are the effects of fiscal policy expansions when households are credit-constrained?
- 2. **Does monetary policy matter?** More specifically, does monetary **accommodation** make fiscal policy more effective?
- 3. Should governments cooperate (i.e.: is a global fiscal stimulus desirable?)

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- 2. Tax shocks more effective when households are **credit constrained**
- 3. **Monetary policy** accommodation reinforces fiscal stimulus (CC households highly sensitive to variations in real interest rate)
- 4. Positive **spillover** effects of fiscal shocks, **global** fiscal stimulus more effective than uncoordinated policy actions

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- Novelty: combining RIC + ROT + CC to analyze fiscal policy issues
- Focus on accommodative monetary policy and global fiscal stimulus
- Main argument: CC households consume an increase in net income (as ROT) and are highly sensitive to variations in real interest rates

Model mechanics

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- Model mechanics
- Quantitative exercise: methods, results

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- Modeling strategy
- Policy implications

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Overall effect:  $\uparrow C^c$ . However, ROT crucial to generate  $\uparrow C^{AGG}$  under sticky wages  $RF_{S}$ 

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Government consumption with monetary accommodation EU GDP RoW GDP	1.23 0.04	0.08 1.48	1.40 1.52
Labour tax EU GDP RoW GDP	0.41 0.04	0.12 0.52	0.53 0.56
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- 4. Global fiscal stimulus, monetary accommodation: largest gains: EA double, US almost double

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- ► Caveat # 2: model cannot generate ↑ C<sup>c</sup><sub>t</sub> and ↓ B<sup>c</sup><sub>t</sub> at the same time. Hence may overestimate aggregate effects on C by construction (esp. under monetary accommodation!)
  Data

Production function

$$Y_t^j (\mathit{ucap}_t^j K_t^j)^{1-lpha} (L_t^j - LO_t^j)^{lpha} U_t^{\gamma lpha} K_t^{G(1-lpha_G)}$$

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- What does such assumption capture? How does it affect overall dynamics?
- How would results change under more traditional labor market structure?

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- Model assumes all public debt held by *domestic* households
- Maybe realistic for EA, much less so for US
- Recent research (Pesenti (2008), Laxton and Pesenti (2007), Coenen et al. (2008)) has focused on effects of foreign detention of government debt

 Temporary fiscal expansions likely to be more effective against current crisis, due to credit-constrained households and monetary accommodation

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- Temporary fiscal expansions likely to be more effective against current crisis, due to credit-constrained households and monetary accommodation
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- 2. Fiscal cooperation: incentives depend on effects on trade balance: if TB deteriorates, each country has incentive to **wait** for other to move and benefit from trade channel
- Paper suggests that once (1) is achieved, countries have incentive to use fiscal policy, which in turn generates positive spillovers implementability of (2) made easier

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# Effects of a US G shock: a two-country model with hh credit frictions

 Darracq-Pariès and Notarpietro (ECB wp # 972, 2008): two-country model with housing collateral, stylized fiscal policy





## US 2008 tax cut: empirical evidence

Shapiro-Slamrod (2009): 2008 tax cut: U of Michigan Survey: "Thinking about your (family's) financial situation this year, will the tax rebate lead you mostly to increase spending, mostly to increase saving, or mostly to pay off debt?"

Table 1. Responses to 2008 Rebate Survey		
	Number of Responses	Percent
Mostly Spend	447	19.9%
Mostly Save	715	31.8%
Mostly Pay Off Debt	1,083	48.2%
Will Not Get Rebate	212	
Don't Know, Refused	61	
Total	2,518	100%

Source: Survey of Consumers, February 2008 through June 2008.



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 Broda and Parker (2009): expenditure data for hh's who did receive the rebate: spending increase by twice as much among "mostly spent" vs "mostly save" or "mostly pay off debt"



# Identifying the share of credit-constrained hh's (Darracq-Pariès and Notarpietro (2008))

Benchmark prior distribution (mean = 0.3)





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Higher prior mean (= 0.5)



