

Discussion of Cacciatore, Fiori and Ghironi's “Market Deregulation and Optimal Monetary Policy in a Monetary Union”

Andrea Ferrero

University of Oxford

European Central Bank Conference on
“Heterogeneity in Currency Areas and Macroeconomic Policies”

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The Call for Structural Reforms

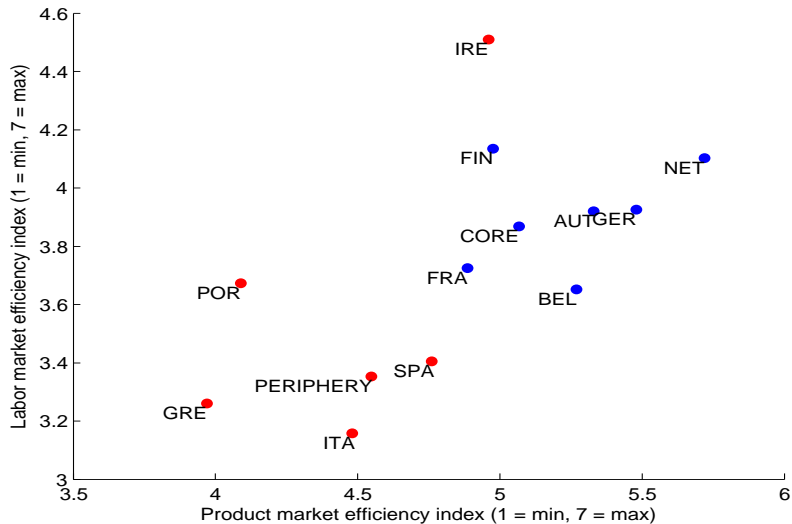
- **Very timely paper!**

*“...the biggest problem we have for growth in Europe is the problem of **lack of competitiveness** that has been accumulated in some of our Member States, and we need to make the reforms for that competitiveness.*

*...to get out of this situation requires...**structural reforms**, because there is an underlying problem of lack of competitiveness in some of our Member States.”*

José Manuel Durão Barroso
President of the European Commission
Closing Remarks following the State of the Union 2012
Strasbourg, September 12, 2012

Lack of Competitiveness



Source: World Economic Forum (2011)

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 - ▶ Optimal (Ramsey)
 - ▶ Historical (Taylor) rule

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- Study monetary policy in deregulation scenario
 - ▶ Optimal (Ramsey)
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- Results: **Optimality** entails
 - 1 Inflation target > 0 and departure from Taylor rule with high regulation
 - 2 Response to deregulation more expansionary than implied by Taylor rule
 - 3 Gains from international reform coordination

Outline

- ① Perspective
- ② Model
- ③ Current account effects
- ④ Monetary policy

1. Perspective: Crisis or No Crisis?

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- Eggertsson, Ferrero and Raffo (2013): Reforms in a crisis can be bad
 - ▶ Limitation: Dixit-Stiglitz monopolistic competition in goods and labor markets

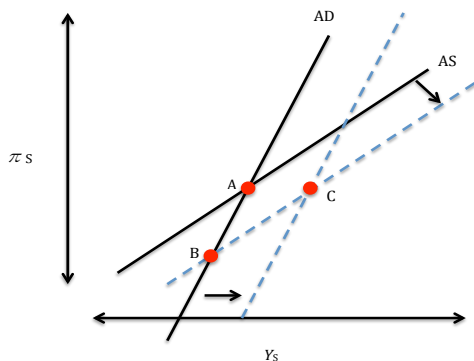
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- Our view: Entry likely to play major role in medium/long run
 - ▶ Short-run effects likely to impact primarily incumbents
 - ▶ **But long-run income effects play a role for short-run response**

Long-Run Income Effect and Short-Run Adjustment

$$\text{AD: } \hat{Y}_S = \underbrace{\hat{Y}_L}_{=-\psi\omega_L} + \frac{\sigma^{-1}\mu}{1-\mu}\pi_S + \frac{\sigma^{-1}}{1-\mu}r_S^e$$

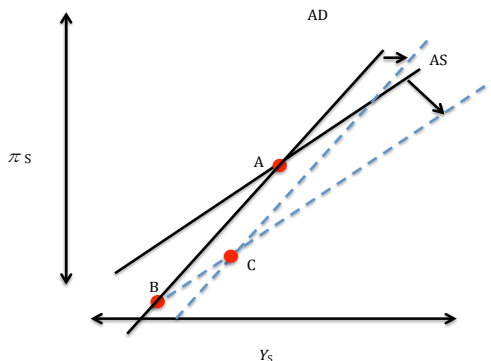
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- Estimates of product market markups (OECD, 2005)

Markup Estimates		
	Italy and Spain	France and Germany
Aggregate	1.36	1.25
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- ▶ Periphery not much less competitive in tradable sector
- ▶ Competitiveness gap in non-tradable sector
- Policy recommendation:
 - ▶ For given entry, switch resources to tradable sector
 - ▶ And/or lower barriers to entry in non-tradable sector

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 - ★ What happens to exporting firms?
 - ★ What else?

Product Market Deregulation in Ghironi and Melitz (2005)

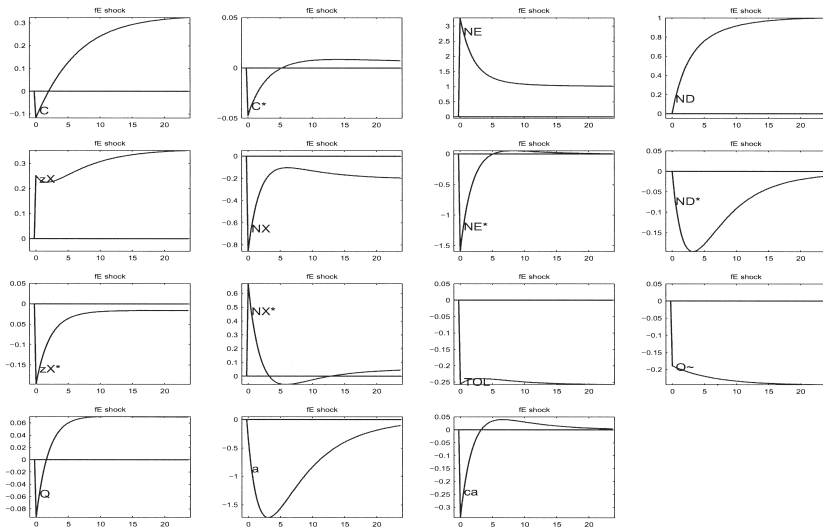


FIGURE V
Response to Permanent f_E Shock (International Bond Trading)

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- Reform labor markets in countries with 20% unemployment rates
 - ▶ Employment is a state variable
 - ▶ "Flexsecurity:" Deregulation on firing side in exchange for more generous unemployment benefits (e.g. Boeri and Garibaldi, 2008, for Italy)

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 - ▶ Log-linear approximation
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- Non-linear equilibrium:

	Rotemberg (1982)	Calvo (1983)
Production function	$Y_t = Z_t L_t$	$Y_t = \frac{Z_t L_t}{\Delta_t^c}$
Resource constraint	$Y_t = \frac{C_t + G_t}{1 - \Delta_t^c}$	$Y_t = C_t + G_t$
Wedge	$\Delta^r = \frac{\alpha_c}{2} (\Pi_t - 1)^2$	$\Delta_t^c = \alpha_c \Delta_{t-1}^c \Pi_t^\theta + (1 - \alpha_c) \left(\frac{1 - \alpha_c \Pi_t^{\theta-1}}{1 - \alpha_c} \right)^{\frac{\theta}{\theta-1}}$

2. Model: Nominal Rigidities

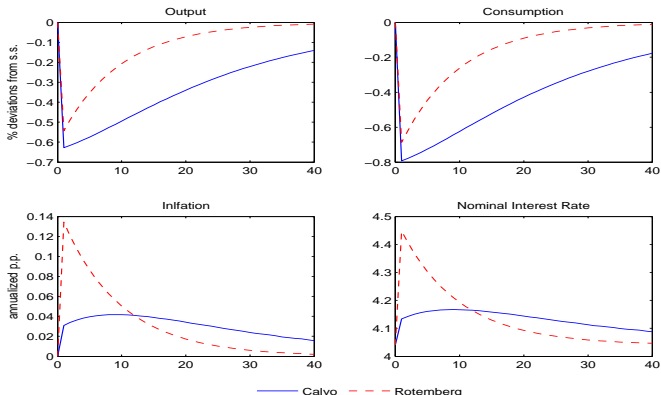
- Ascari and Rossi (2012): Rotemberg \equiv Calvo only if
 - ▶ Log-linear approximation
 - ▶ No trend inflation
- Non-linear (partial) equilibrium: Shock that increases inflation
 - ▶ Calvo: Increases $\Delta^c \Rightarrow \equiv$ Negative productivity shock
 - ▶ Rotemberg: Increases $\Delta^r \Rightarrow \equiv$ Positive government spending shock

2. Model: Nominal Rigidities

- Calibrate α_r such that same slope of linearized Phillips curve as in Calvo

$$\frac{\theta - 1}{\alpha_r} = \frac{(1 - \alpha_c)(1 - \alpha_c \beta)}{\alpha_c} \Rightarrow \alpha_r = 116.5$$

Response to a 1 percentage point increase in product markup

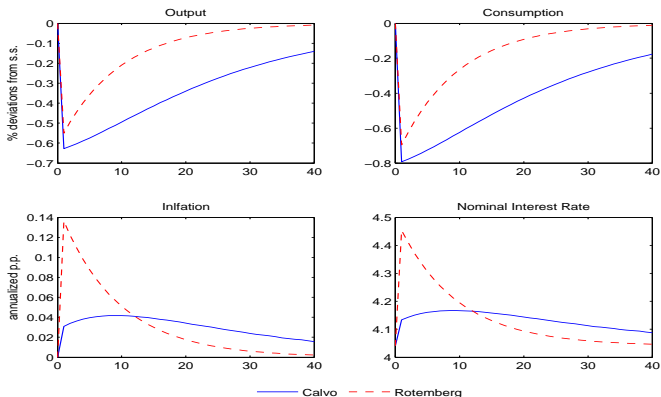


2. Model: Nominal Rigidities

- Calibrate α_r as in CFG (from Bilbiie, Ghironi and Melitz, 2008)

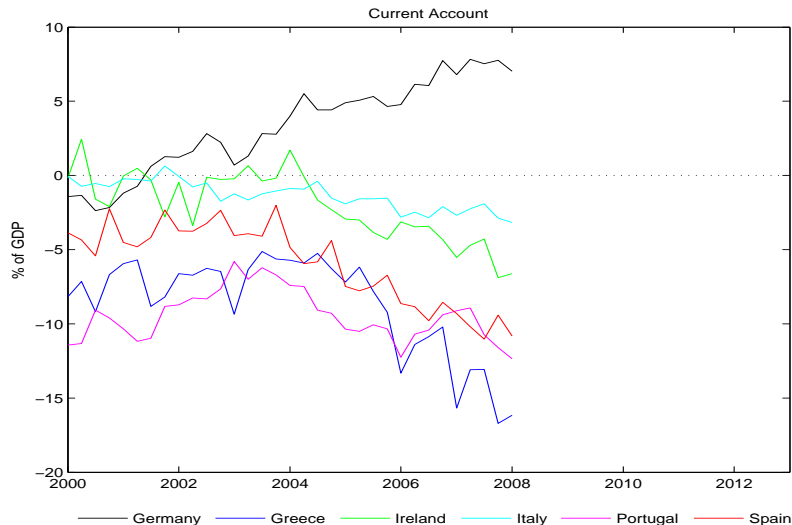
$$\alpha_r = 80$$

Response to a 1 percentage point increase in product markup



3. Current Account Effects

- Structural reforms as tool to correct external imbalances



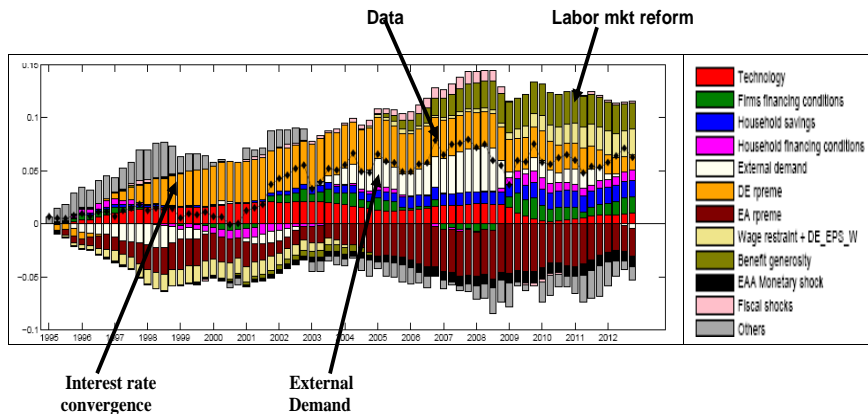
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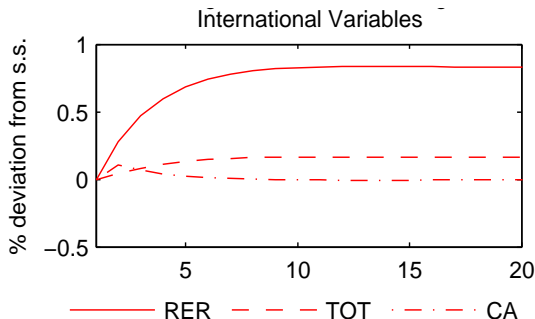
Historical Decomposition of German Trade Balance % of GDP (Kollmann et al., 2013)



3. Current Account Effects

- Structural reforms as tool to correct external imbalances
 - ▶ Result sensitive to exact formulation of reforms

Eggertsson, Ferrero and Raffo (2013): 1 p.p. reduction in goods and labor markups



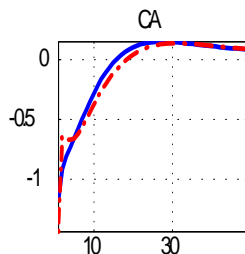
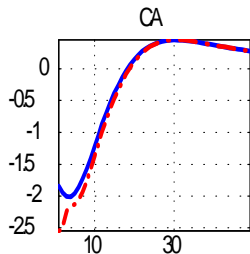
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Cacciatore, Fiori and Ghironi (2013):

Product Market Deregulation

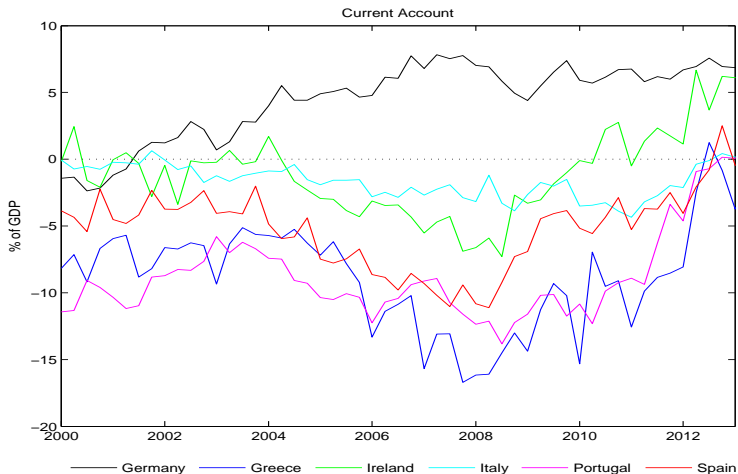
Labor Market Deregulation



3. Current Account Effects

- Structural reforms as tool to correct external imbalances

▶ **Problem solved?** Probably not because of structural reforms...



4. Monetary Policy: A Comparison with EFR

- **EFR's main point:** Reforms can be contractionary in a crisis
 - ▶ Reforms are deflationary
 - ▶ Real rate increases
 - ▶ No monetary accommodation because nominal rate at ZLB

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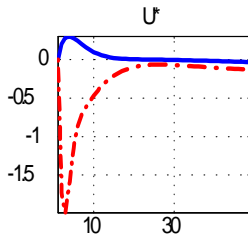
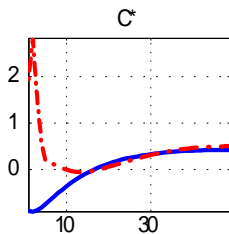
- **EFR's main point:** Reforms can be contractionary in a crisis
 - ▶ Reforms are deflationary
 - ▶ Real rate increases
 - ▶ No monetary accommodation because nominal rate at ZLB
- **CFG's result:** Reforms are inflationary
 - ▶ More entry, higher labor demand
 - ▶ Real wage (marginal cost) increases

4. Monetary Policy: Questions

- 1 What happens to output and interest rates?

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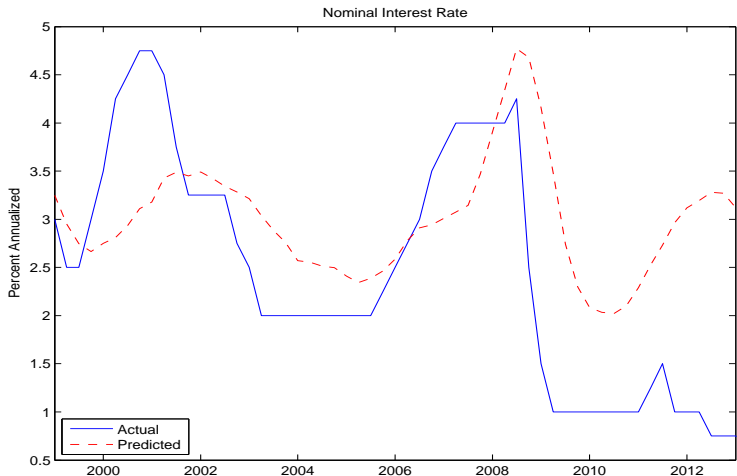
- 1 What happens to output and interest rates?
- 2 Foreign likes Home reforms under optimal policy but not under Taylor rule
 - ▶ How to represent optimal policy? ECB needs to know!
 - ▶ Again, ZLB important in current context



4. Monetary Policy

- **Be careful with Taylor:** Gerdesmeier and Roffia (2003) from 1999 to 2013

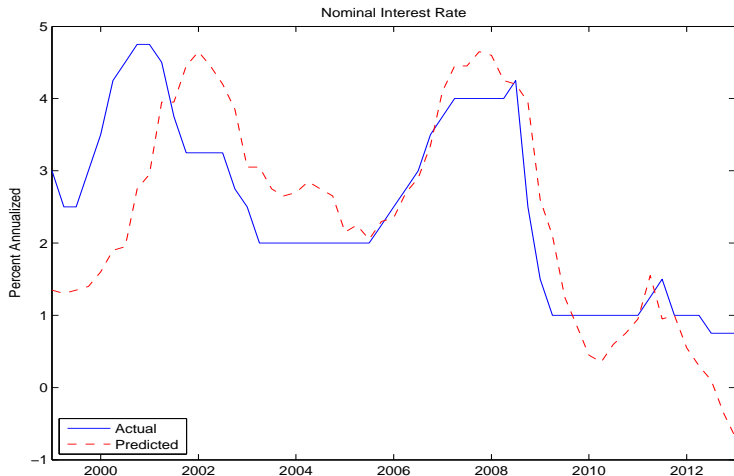
$$i_t = 0.87 * i_{t-1} + 0.13 * [1.8 + 1.93 * (\pi_t^{HICP} - 1.5) + 0.28 * (y_t - y_t^{trend^2})]$$



4. Monetary Policy

- **Be careful with Taylor:** Rudebusch (2010) fits better recently (Nechio, 2011)

$$i_t = 3.25 + 1.5 * (\pi_t^{core} - 1.5) + 1 * (u_t - 8.2)$$



Conclusions

- Very nice paper
- Two main suggestions:
 - ① Introduce heterogeneous productivity (endogenous tradability)
 - ② Crisis experiment