# Comments on Monetary Union and Risk Sharing

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# **OUTLINE**

Idea of the paper

Quantitative results

Some preliminary evidence

Concluding comments

## BACKGROUND MODEL (Neumeyer '98)

2 periods, 2 countries, 2 currencies, 2 nominal bonds (one for each currency)

 $Incomplete\ Markets$ 

### 2 shocks

- Real Shocks s, determine distribution of world endowment (i.e. Italy is a recession and Germany is in a boom)
- Country specific political shocks  $\theta$  (i.e. Berlusconi wins the elections)

Monetary policy (the price level realized in the second period) before the union is *independent* and can depend on both shocks

Consumption in the second period is given by

$$x_i(s,\theta) = \omega_i(s) + \frac{b}{p(s,\theta)} + \frac{b^*}{p^*(s,\theta^*)}$$

Key features of pre-union economy

• p and  $p^*$  are independent functions of s. This is a good thing because it increases the spanning (insurance) possibilities

(IM geometry)

• p and  $p^*$  depend on idiosyncratic political shocks. This is a bad thing because it introduces unnecessary consumption volatility

A monetary union eliminates both features

The question is then is it good or bad?

Contribution of this paper Calibrate this model to the the EMU and provide an answer to the question Hard task but very interesting and relevant!

# **Findings**

Huge and asymmetric welfare costs of joining the union

- Italy -17.3% of consumption
- Germany +24% of consumption

Why are they so large?

In this model the cost of monetary unions are reduction in insurance of country specific risk

Cole and Obstfeld (1991)

How much do financial markets matter?

Similar Model, Calibrated to US-Japan

Find that the costs of losing ALL insurance are very small

	With	w/out
Risk Aversion	commodity trade	commodity trade
2	0.005%	0.17%
6	0.016%	0.3%
10	0.019%	0.38%
30	0.02%	0.48%

Why costs of losing ALL international financial markets are so small?

- In a world with commodity trade terms of trade movements provide automatic insurance
- Aggregate shocks are small (same finding of Lucas on the costs of business cycles)

These findings suggest that the welfare losses of Italy cannot simply be explained with loss of insurance

Authors have in the model also some redistributive effect of monetary unions

This role is potentially important but needs to be clearly spelled out

Maybe better to consider a symmetric model

less realistic but cleaner results

A more direct approach

What is happening to risk sharing since the creation of the EMU?

A Risk Sharing test (Cochrane, Mace, Lewis)

Regress

$$g_{c,t}^i = \gamma_i + \alpha g_{y,t} + \beta g_{y,t}^i + \varepsilon_{i,t}$$

Under perfect risk sharing  $\beta = 0$ ,

(Can add employment to control for non separabilities)

Lower  $\beta$  is associated with greater risk sharing

Do this test for Germany and Italy before and after the monetary Union (use also Germany and UK as control group to measure changes international financial integration)

Results (25 quarters windows)

	GER-ITA	GER-UK
1991.2-1997.2	0.54	0.45
	(0.18)	(0.18)
1996.2-2002.2	0.48	0.61
	(0.16)	(0.20)

Not much changes in risk sharing patterns, if anything risk sharing within the union increases

### **Conclusions**

Monetary Union can impact risk sharing

How quantitatively important is this effect?

First step in answering this question

Suggestion

Look at more direct measure of risk sharing

Consider other event happening together with the monetary union

(maybe EMU not the cleanest experiment)