Two ways to reach European full employment using modes of soft macroeconomic policy coordination within the European Macroeconomic Dialogue

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Outline

1 The European Macroeconomic Dialogue

2 Cooperative gains in a Post Keynesian model

3 Central Bank takes lead

4 Trade Unions in the lead

5 European Trade Unions

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Orthodox macroeconomic assignment of 80s and 90s

3 independent actors of macroeconomic policy

- Central bank (CB): price level
- Fiscal policy: fiscal balances
- Trade unions (TU): employment level

Counter movements: Cooperative gains in ...

- Theory: Nordhaus (1994), Bofinger (2004), Akerlof (2007) ...
- Practice: New Macroeconomic Framework in UK, European Macroeconomic Dialogue (EMD)

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EMD seems not effective

A short glance on key economic data:

	Euro-Zone	USA	UK
Inflation rate (consumption deflator)	2.0	2.2	1.8
Real GDP growth rate	2.1	2.9	2.7
Unemployment	8.4	5.0	5.1

Table: Euro-Zone, US and UK; 1999 – 2006 (annual averages); Source: AMECO (2007)

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The underlying Post Keynesian model

Source: Setterfield (2006), Heise (2008)

$$
\begin{aligned}
D_t &= \alpha(w_t, \bar{m}, I_t, \bar{G}, L_t) && (1)\\
Z_t &= \beta(w_t, \bar{T}, L_t) && (2)\\
D_t &\equiv Z_t && (3)\\
p_t &= \gamma(\hat{w}_t, \bar{T}) && (4)\\
\hat{w}_t &= \delta(Y_t^{gap}, \bar{p}_e, \bar{IF}) && (5)\\
Y_t^{gap} &= Y_t - Y_{Trend} && (6)\\
Y_t &= \theta(\bar{K}, L_t, \bar{T}) && (7)\\
I_t &= \lambda(i_t, \bar{E}) && (8)\\
i_t &= \mu(i_t^{CB}, \bar{LP}) && (9)
\end{aligned}
$$

The model continued:

$$i_t^{CB} = \phi(p_t^{gap}, Y_t^{gap}) \quad (10)$$

$$p_t^{gap} = p_t - p^* \quad (11)$$

$$p_t \equiv \hat{P}_t \quad (12)$$

Utility functions of the actors considered:

$$U_{CB} = \psi(p_t, L_t) \quad (13)$$

$$U_{TU} = \phi(p_t, \hat{w}_t, L_t) \quad (14)$$

Trade Unions / TU: Schulten (2004), Heise (1996)
Central Bank / CB: Dullien (2004), Heine et al. (2006)

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The Central Bank in the lead

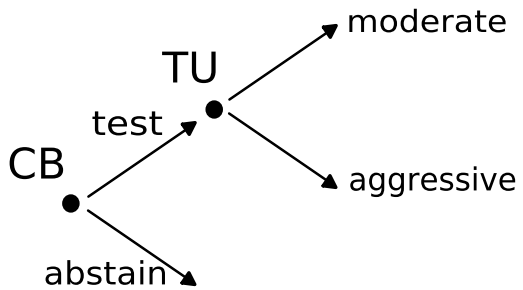

Figure: The single-stage game

Reasoning for the lead:

- Independence signal
- frequent decision – easy revision of action

Strategies of the actors

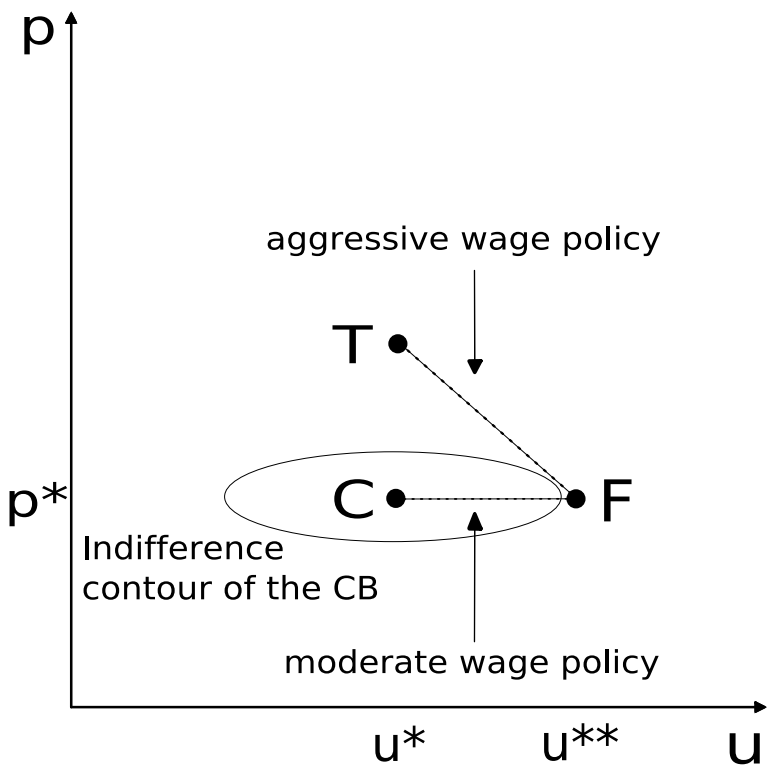

Figure: Preferences of an uncooperative TU

Trade Union (TU)	Central Bank (CB)	
	test	abstain
cooperative	C	F
uncooperative	T	F

Table: Different outcomes in a single-stage game

Payoffs

uncooperative TU	CB	
	test	abstain
moderate	(d ; 1)	(0 ; c)
aggressive	(1 ; 0)	(0 ; c)

Table: Payoff pairs (TU,CB)

cooperative TU	CB	
	test	abstain
moderate	(1 ; 1)	(0 ; c)
aggressive	(e ; 0)	(0 ; c)

Table: Payoff pairs (TU,CB)

Solution of the game:

... by considering indifference of the CB with respect to a probability assessment $\wp_1$ (cooperative TU). **The solution is**: CB tests if $\wp_1 > c$.

The idea of the reputation equilibrium

- Idea of Kreps and Wilson (1982): Weak sequential equilibrium
- n repetitions of the basic game
- adaptation of beliefs possible (probability assessment $\wp_i$ for existence of a cooperative union), according to Bayes' rule if possible
- actors maximize expected utility
- uncooperative TU mirrors the behaviour of a cooperative TU if it pays off

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The equilibrium

Strategy of the CB in period i:

- if $\wp_i > c^i$ then test
- if $\wp_i = c^i$ then test with probability $1 - d$
- if $\wp_i < c^i$ then abstain

Strategy of the uncooperative TU in period i:

- if $\wp_i > c^{i-1}$ then moderate
- if $\wp_i \leq c^{i-1}$ then moderate with probability $\frac{\wp_i \cdot (1-c^{i-1})}{(1-\wp_i) \cdot c^{i-1}}$

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Graphical exposition of equilibrium

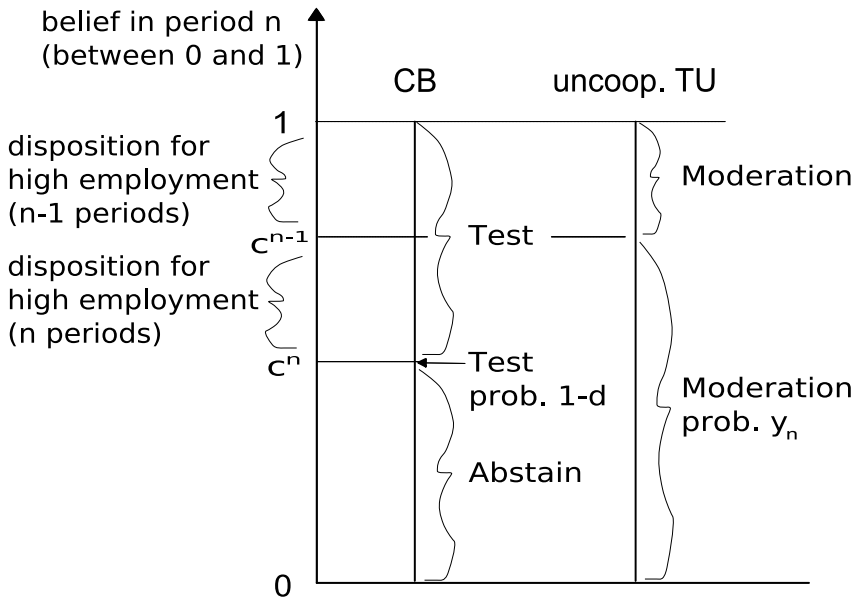

Figure: Optimal strategies in period n

Main results of the reputation equilibrium

Three main results of our analysis:

1. In a repeated game the probability of employment expansion increases with the number of repetitions.
2. For employment expansion to occur, the relative weighting of price stability in the CB's utility function must not be too high, given a certain initial value of the belief $\wp_n$ that the TU is cooperative.
3. For a given value of the CB's relative preference for price stability, the belief in the cooperativeness of the TU must not be too low for an employment expansion to occur.

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Proposal of

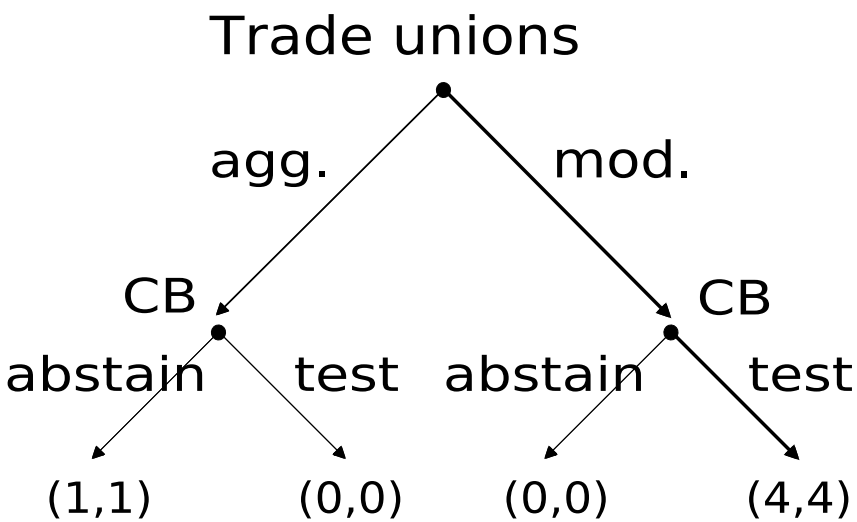

Figure: Cooperative game

How equilibrium looks like in Dullien (2004)

Interpretation

- cooperation is a win-win-situation
- TUs sign long lasting, moderate wage accords
- CB pushes up employment
- Stackelberg-leadership of TUs
- **risk aversion** of CB: different payoffs?

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European Trade Union Conference Resolution (2000):

- Wage bargaining [shall] **respond to the existing guidelines** coming from the Commission (Broad Economic Policy Guidelines) and the **ECB**, and in order to influence the **Macroeconomic Dialogue**.
- The Executive Committee notes that the guideline is built around a **flexible formula which encompasses inflation and productivity**, plus, if necessary other quantifiable determinants, that will allow for a common analysis and evaluation of the results of collective bargaining.

Traxler, Brandl (2009): Coord. seems effective in the Metal sector of D and nordic countries.

Thank you very much for your attention

- Questions
- Comments
- Discussion