

Job-rich Growth in the European Union: The Role of Labour Market Regulation

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Motivation

- Stylized facts on European growth late 90s:
 - ◆ Employment miracle in various countries
 - ◆ Widespread labour market reforms
 - ◆ Cyclical upswing
- Is the employment miracle structural or cyclical?

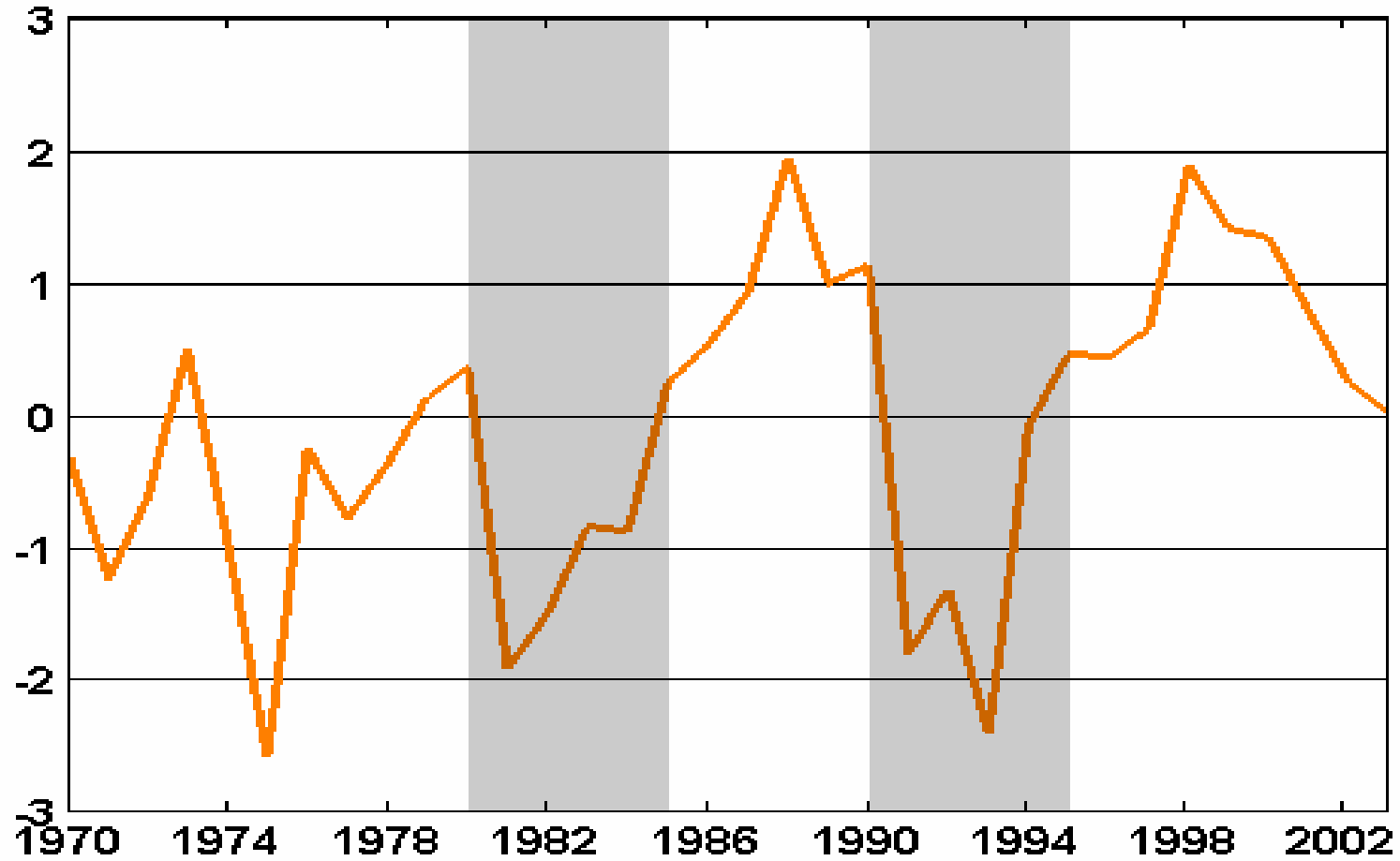
Garibaldi and Mauro, 2002, *Economic Policy*

- Explain cross-country differences in resurgence of employment growth.
- Cross country regressions and correlations
- Findings:
 - ◆ Employment gains structural, not cyclical
 - ◆ Related to acceleration of labour market reforms

Our contribution

- More attention to dating cycle
- Focus on market economy
- Full labour demand model
- Main finding: decreasing employment protection may have strengthened cyclical upswing

EU-15 growth in total hours worked



The exceptional late 1990s? (1)

- Garibaldi and Mauro (2002): acceleration after 1995 partly structural.
 1. How large is it?
 2. Is it structural or cyclical?
- Focus on total hours worked in the market economy

The exceptional late 1990s? (2)

- 1995-2001 compared to 1979-1995: +1.7 percent faster growth, acceleration in all 15 EU countries
- But: 1990-2001 compared to 1979-1990: +0.3, acceleration in 10 countries
- And: 1995-2001 compared to 1985-1990: +0.1, acceleration in 10 countries
- Who miss out? Austria, Germany, UK

The exceptional late 1990s? (3)

- Focus on total economy not full picture:

EU-15	1979-1990	1990-2001
Total economy	0.09	0.12
Market economy	-0.44	-0.11

- Large employment growth in health and education
- But: employment boom does not depend on periodisation or non-market economy

Labour demand model (1)

$$\Delta \log h_{i,j,t} = \mu_{i,j} + \alpha_j \Delta \log y_{i,j,t} + \beta_j \Delta \log (w/P)_{i,j,t} + \varepsilon_{i,j,t}$$

- Annual hours growth in market industries explained by output and real wage growth
- Hypothesis 1: $\alpha_j > 0$ and $\beta_j < 0$

Labour demand model (2)

$$\Delta \log h_{i,j,t} = \mu_{i,j} + \alpha \Delta \log y_{i,j,t} + \beta \Delta \log (w/P)_{i,j,t} \\ + \gamma I \Delta \log y_{i,j,t} + \delta I \Delta \log (w/P)_{i,j,t} + \varepsilon_{i,j,t}$$

- Hypothesis: labour market institutions (I) explain differences in wage and output elasticities across countries
- Explanation: elasticities also reflect hiring & firing costs

Data

- GGDC 60-industry database
- Data on value added, hours worked, wages
- 50 market industries
- 1979-2001
- Data for U.S., EU-15 and individual countries

Endogeneity

- Hours and output are jointly determined by optimizing firms: productivity shocks will influence both
- Instruments:
 - ◆ Downstream indicator
 - ◆ Oil prices
 - ◆ Real government expenditure
 - ◆ Aggregate real wages

Model (1): Country results

	<i>Real wages (β)</i>	<i>Output (α)</i>		<i>Real wages (β)</i>	<i>Output (α)</i>
Austria	-0.28*	0.34*	Italy	-0.06	0.13*
Belgium	-0.19*	0.59*	Luxembourg	-0.29*	0.72*
Denmark	0.02	0.12*	Netherlands	-0.14*	0.27*
Finland	-0.15*	0.48*	Portugal	-0.21*	0.37*
France	-0.13*	0.23*	Spain	-0.14*	0.35*
Germany	-0.09	0.35*	Sweden	-0.26*	0.41*
Greece	-0.06	0.07	United Kingdom	-0.25*	0.37*
Ireland	-0.27*	0.39*	United States	-0.40*	0.49*

* denotes significance at 5% level

- Nearly all wage coefficients negative, output coefficients positive and mostly significant
- U.S. shows (almost) largest elasticities

Institutions

- Which institutions affect hiring and firing costs?
- Employment protection legislation (EPL), possibly union density or product market regulation (PMR, rent distribution)
- Supply-side institutions not likely: replacement ratio, unemployment benefits duration, etc.

Model (2): Institutions

	<i>Base</i>	<i>EPL</i>	<i>Base</i>	<i>EPL</i>	<i>Union</i>	<i>PMR</i>
	(1)	(2)	(3)	(4)	(5)	(6)
Real wages			-0.19*	-0.29*	-0.22*	-0.28*
			(0.01)	(0.04)	(0.04)	(0.05)
Output	0.37*	0.37*	0.41*	0.48*	0.37*	0.33*
	(0.03)	(0.08)	(0.03)	(0.08)	(0.06)	(0.08)
Wages*Institution				0.04*	0.07	0.06
				(0.01)	(0.10)	(0.03)
Output*Institution		0.002		-0.03	0.09	0.05
		(0.02)		(0.03)	(0.12)	(0.05)

* denotes significance at 5% level

- Spec. (1): close to Garibaldi & Mauro => omits wages
- Spec. (4): more EPL leads to smaller elasticities

Conclusions

- European employment growth in late 1990s is less exceptional when compared to late 1980s
- But even for different periods and market economy, late 1990s saw improvement
- Less employment protection may have led to more responsive employment => gains may be mostly cyclical, not structural