European Unemployment Revisited: Shocks, Institutions, Integration

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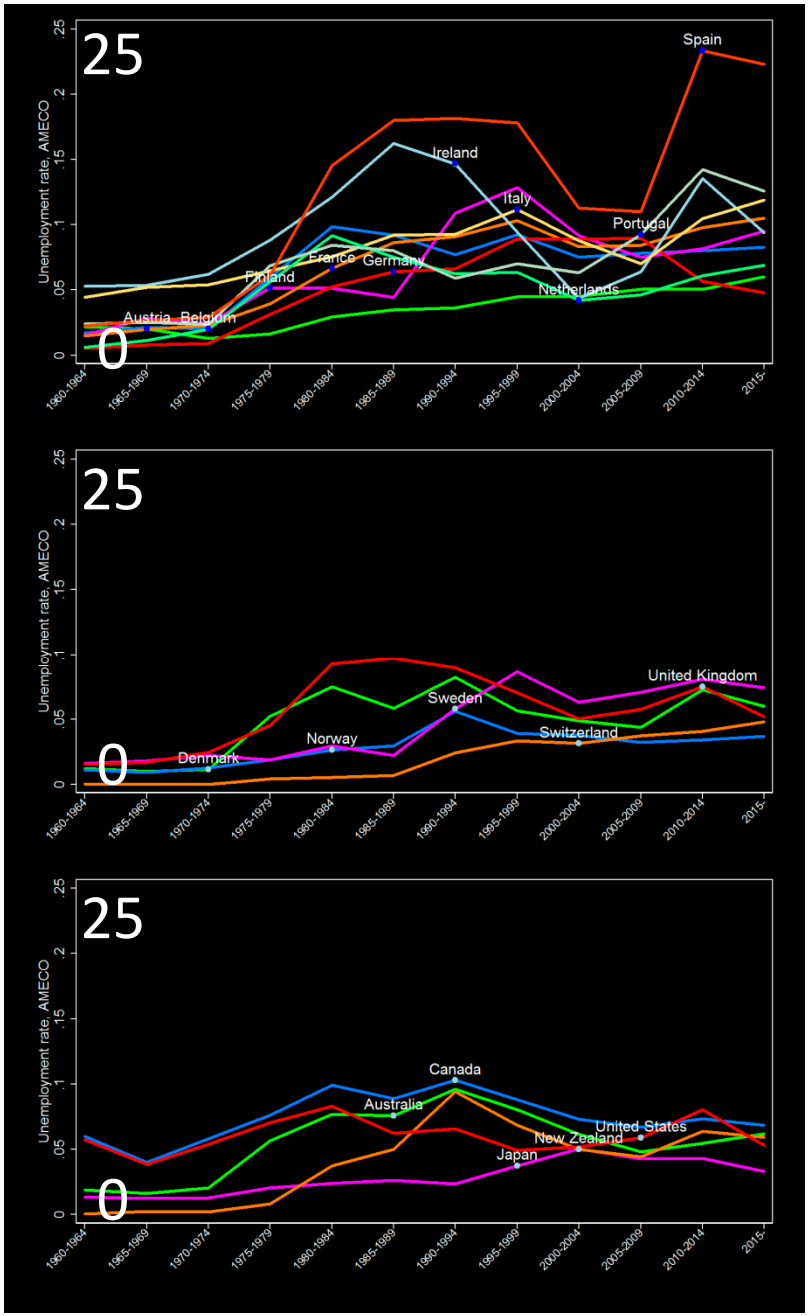


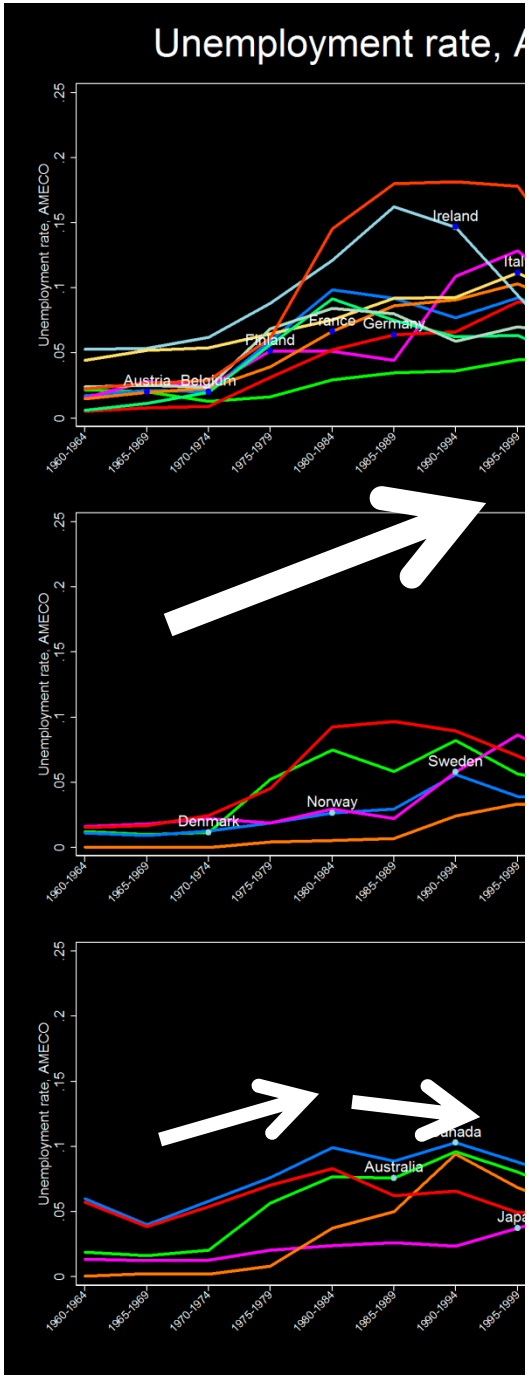
Unemployment.

Austria, Belgium, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain.

Denmark, Norway, Sweden, Switzerland, United Kingdom.

Australia, Canada, Japan, New Zealand, United States.

5-year periods, since 1960.
Empirics, with theory.



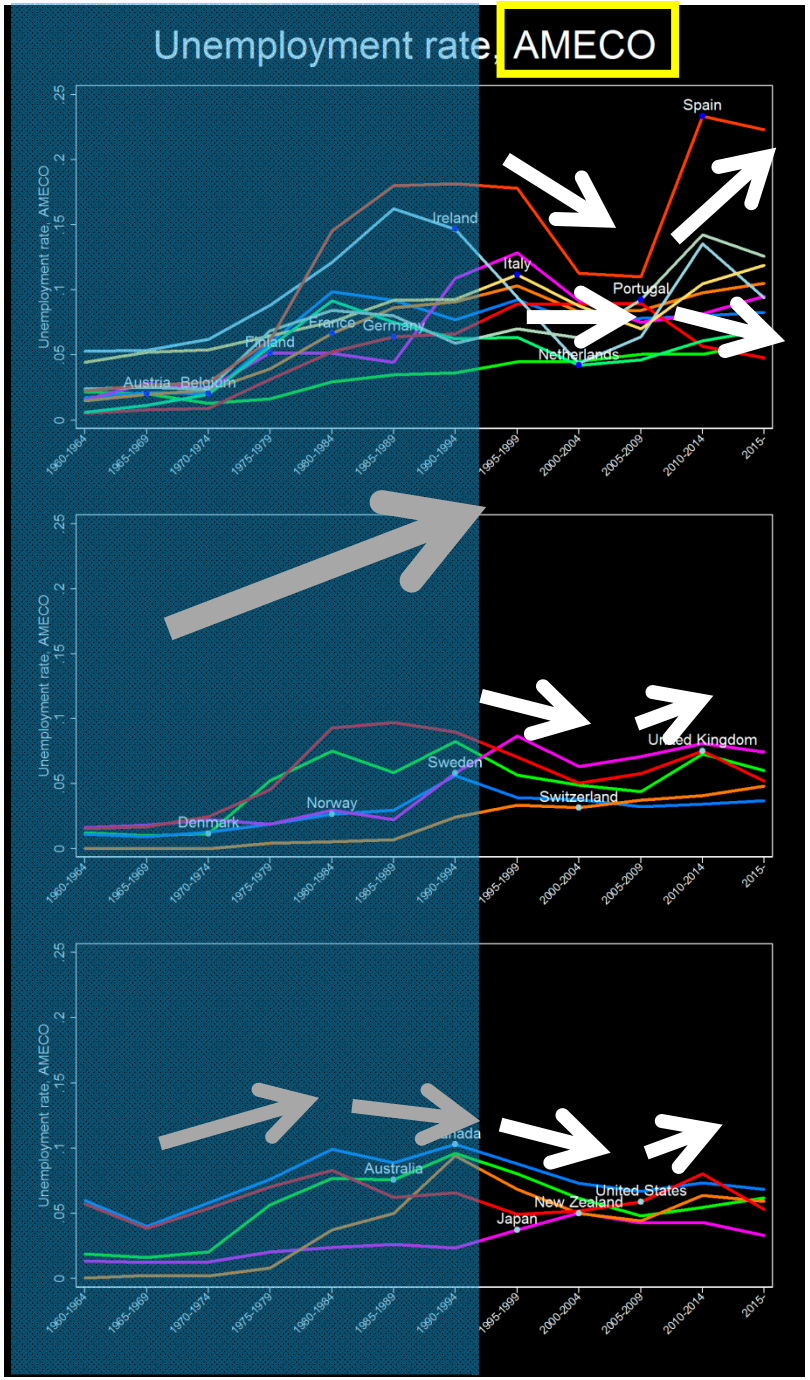
Blanchard and Wolfers (BW).

As of late 1990s,

Unemployment rise
stronger in Europe
than in comparison group of
advanced countries.

Why different consequences
of broadly similar events
for broadly similar countries?

«Labor market institutions».



New data.

Unemployment declines, diverges in Europe and elsewhere.

New decades of Labor market reforms, Globalization, EMU, Great recessions.

Same & new questions: Institutions? Shocks? Why? Which?

Do institutions matter differently at different times, in theoretically sensible ways?

Table 1: Replication and update of BW Table 1

	(1) u b/t	(2) u b/t	(3) u b/t
UI repl.rate	0.02***	0.02***	0.05***
	(4.7)	(4.3)	(2.7)
UI benef.length	0.21***	0.15***	0.02
	(5.3)	(3.3)	(0.1)
Active labor policy	0.02**	0.00	0.03
	(2.4)	(0.3)	(0.9)
Empl.protection	0.05***	0.05***	0.09
	(3.4)	(3.5)	(1.4)
Tax wedge	0.02***	0.01	-0.00
	(2.6)	(1.0)	(-0.1)
Union coverage	0.09	0.18	1.25
	(0.6)	(1.1)	(1.6)
Union density	0.01*	-0.00	0.03*
	(1.9)	(-0.1)	(1.7)
Coordination	0.30***	0.28***	1.52***
	(6.1)	(4.8)	(4.2)
r2	0.89	0.94	0.81
df_m	33	38	33
N	159	240	140

p-value *.1 **.05 ***.01 (robust t stats).
Column 1: original BW dataset.
Column 2: AMECO unemployment, BW institutions.
Column 3: only recent sample.

Using 1990s indicators,

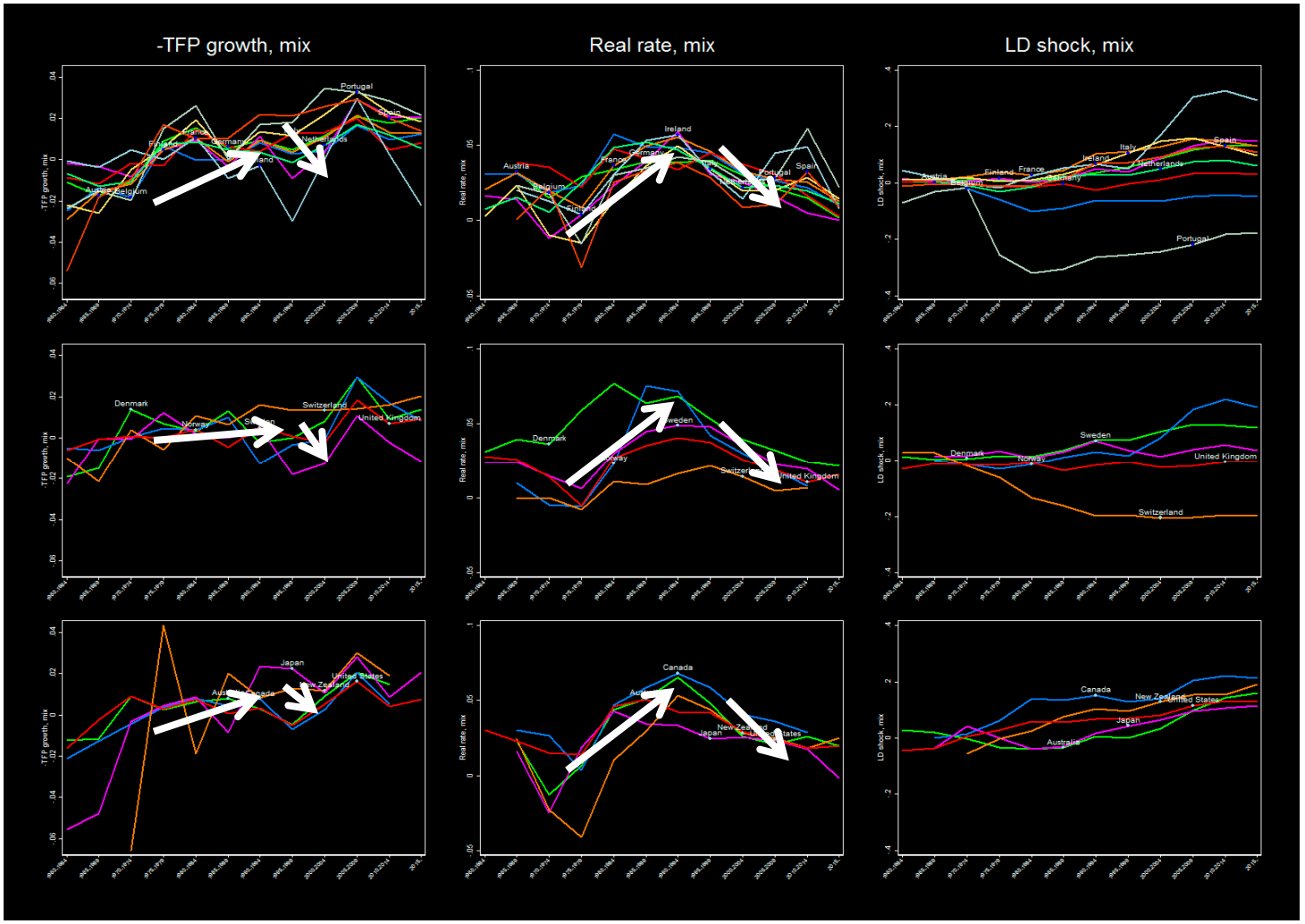
(1) BW: yes. Most time-interactions significant and correctly signed.

(2) Current complete sample: yes… weaker.

(3) Recent data: even weaker.

Institutions have changed. But similar message from time-varying indicators.

Histories of country-specific **SHOCKS**.



Total factor productivity: used to slow down.

Real interest rate: up in the 1980s, down to stagnation.

«labor demand» (share, ULC) indicator of wage misalignment.

Do shocks matter in theoretically sensible ways?

Table 5: Replication and update of BW Table 5, column 1

	(1) u b/t	(2) u b/t	(3) u b/t
-TFP growth	0.72***	0.68***	-0.37***
	(5.0)	(4.0)	(-2.9)
Real rate	0.47***	0.69***	0.49***
	(5.2)	(8.4)	(4.2)
LD shock	0.19**	0.10***	0.04*
	(2.1)	(2.7)	(1.7)
UI repl.rate	0.03***	0.01***	0.03*
	(5.0)	(3.0)	(1.8)
UI benef.length	0.27***	0.23***	0.16
	(4.4)	(3.7)	(0.8)
Active labor policy	0.03	0.03**	0.00
	(1.7)	(2.0)	(0.1)
Empl.protection	0.09***	0.04	0.05
	(3.3)	(1.4)	(0.8)
Tax wedge	0.03***	0.03**	-0.04
	(2.9)	(2.3)	(-1.6)
Union coverage	-0.50	-0.15	1.15
	(-1.6)	(-0.4)	(1.6)
Union density	0.03***	-0.01	0.02
	(3.7)	(-0.7)	(1.0)
Coordination	0.41***	0.07	0.93***
	(4.3)	(0.5)	(3.7)
r2	0.91	0.91	0.80
df_m	32	32	30
N	131	218	135

p-value *.1 **.05 ***.01 (robust t stats).
Column 1: BW dataset (with Port.rev.dummy).
Column 2: AMECO unemployment, spliced shocks.
Column 3: only recent sample.

(1) BW: yes. Significant and correctly signed.
(2) Current complete sample: yes…
(3) Recent data: No.

Worse fit.

Wrong sign for TFP growth.

Something else began to matter since BW.

Think…

relative non-labor income of decisive voter

$$\tilde{u} \approx \frac{\gamma}{\beta}(1 - x) + \frac{1-\gamma}{\gamma}\left(\log\left(a_0\right) - \log\left(a_1\right)\right)$$

Labor demand supply elasticity

distribution-motivated
:: institutions ::

(wage preset, misaligned)
:: shock ::

$$y(l) = (k_d)^{\gamma} (al)^{(1-\gamma)}$$

Theory….Empirics. What constant? **What varies?**

Financial integration

and institutions:
Reforms

Financial integration

and labor markets:
New shock type

Financial integration: new, matters NOW.

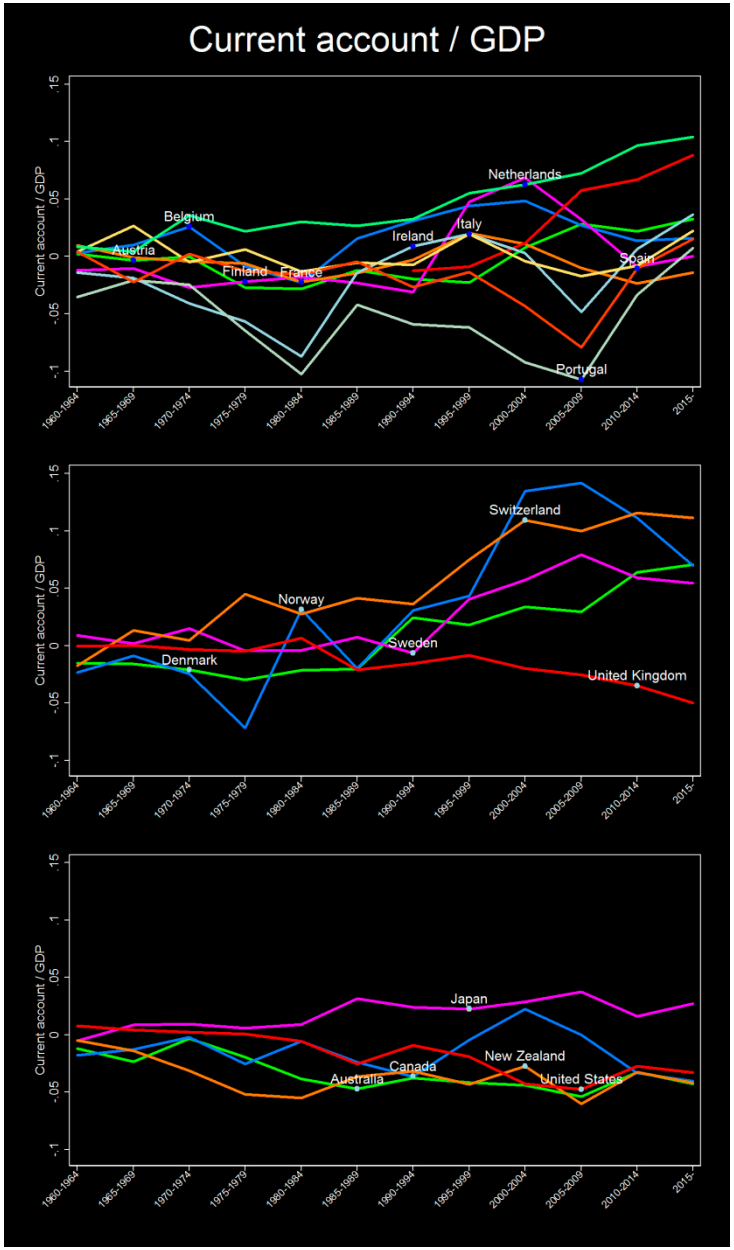


Table 8: Controlling for current account in BW Table 5, column 1

	(1) u b/t	(2) u b/t	(3) u b/t
-TFP growth	0.74***	0.77***	-0.07
	(4.9)	(4.6)	(-0.7)
Real rate	0.45***	0.77***	0.57***
	(5.0)	(9.0)	(5.1)
LD shock	0.17*	0.06*	0.02
	(1.7)	(1.8)	(0.8)
Current account / GDP	0.14	0.26***	0.26***
	(1.3)	(4.3)	(3.4)
UI repl.rate	0.03***	0.02***	0.03*
	(5.3)	(3.6)	(1.9)
UI benef length	0.26***	0.22***	0.02
	(4.1)	(3.6)	(0.1)
Active labor policies	0.01	0.01	-0.01
	(1.4)	(0.4)	(-0.4)
Empl.protection	0.10***	0.05*	0.01
	(3.5)	(1.8)	(0.1)
Tax wedge	-0.03	-0.05*	-0.02
	(-1.6)	(-1.8)	(-1.0)
Union coverage	-0.63*	-0.23	1.27
	(-1.8)	(-0.6)	(1.6)
Union density	-0.03**	-0.01	0.01
	(-4.1)	(-0.7)	(1.0)
Coordination	0.42***	0.17	0.33***
	(4.6)	(1.7)	(2.7)
r2	0.92	0.93	0.83
df_m	32	33	31
N	126	213	134

p-value *.1 **.05 ***.01 (robust t stats).
Column 1: BW dataset (with Port.rev.dummy).
Column 2: AMECO unemployment, spliced shocks.
Column 3: only recent sample.

(mid-90s institutions... constant??)

Institutions have changed,

Table 9: Capital flows and labor policy reforms

	(1) D TaxWedge b/t	(2) D UI repl.rate b/t	(3) D TaxWedge b/t	(4) D UI repl.rate b/t
Current account / GDP	-0.08**	-0.60***	-0.99**	-0.51
	(-2.1)	(-3.9)	(-2.0)	(-0.8)
Country fe	Yes	Yes	No	No
Period fe	Yes	Yes	No	No
df_m	30	29	1	1
N	215	195	140	140

p-value *.1 **.05 ***.01 (robust t stats).
Columns 3, 4: current account instrumented with gross capital flows and EMU dummy.

Current account surplus ↔ Labor market deregulation.

Maybe only some countries heed policy research, export more…

…maybe **both** triggered by financial integration:

- Common "race-to-bottom" *elasticity* effects, but also
- Policy incentives of decisive individual *x* depend on whether capital flows *in* or *out*.

Spain … Germany, in EMU

(Blanchard & Giavazzi)

Institutions vary and directly influence unemployment:

data and simple theory do not disagree.

Table 11: Linear regressions with EPL interaction on the updated BW sample

	(1) u b/t	(2) u b/t	(3) u b/t	(4) u b/t
Real rate	0.6693***	0.6907***	0.4279***	0.6387***
	(6.2)	(3.2)	(3.6)	(3.5)
Current account / GDP	0.1710**	0.1127*	0.0664	0.0679
	(2.6)	(1.7)	(1.0)	(1.2)
D Lab.dem. shock	0.0690	0.0163	0.1157	0.0961
	(0.5)	(0.1)	(0.9)	(1.0)
D Lab.dem. shock X Empl.protection	-0.0711	-0.0208	-0.0844**	-0.0498
	(-1.5)	(-0.5)	(-2.1)	(-1.4)
Empl.protection	-0.0063	-0.0069	-0.0020	-0.0023
	(-1.3)	(-1.5)	(-0.5)	(-0.7)
UI repl.rate	0.0008***	0.0001	0.0005**	0.0001
	(3.2)	(0.4)	(2.5)	(0.6)
Tax wedge	0.0016***	0.0014**	0.0010*	0.0010**
	(2.8)	(2.5)	(1.9)	(2.0)
Union density	-0.0000	0.0004*	0.0002	0.0003
	(-0.3)	(1.7)	(1.1)	(1.6)
L.u			0.4736***	0.4960***
			(4.6)	(5.3)
Country fe	Yes	Yes	Yes	Yes
Period fe	No	Yes	No	Yes
r2	0.71	0.80	0.78	0.85

EPL

EPL : dynamic shock interactions, insignificant on level

Wage-relevant institutions, OK sign when significant,

R^2 no institutions, -0.05 -0.03

R^2 no shocks, -0.12 -0.04

Institutions and shocks both (some) matter.

Portugal revolution dummy included in all columns.

Olivier Blanchard

"had entered the 1970s without a model of the natural rate, and had not anticipated stagflation"

To explain persistent unemployment,

"adverse shocks interacting with country-specific collective bargaining structures."

Still works in many respects. Not all.

Theory, **integration matters:**

(1) as a shock, (2) for policies when unemployment is a side effect of distribution tensions.

Empirics, **Macro matters.** Real interest rate robustly significant determinant of unemployment. **Policy matters:**

International spillovers, **endogenous reforms**.

Stabilize capital flows, but (like integration) unpopular.