IMF-OCP-Brunel Workshop on Global Labor Markets: What to do with Okun's law?

Ekkehard Ernst

Job-friendly Macroeconomic Policies Unit
Research Department
International Labour Organization (ILO)

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What to do with Okun's law?

Short-term co-variations of (un-)employment and growth

- Gap version disregards long-term shifts in potential
- Employment-GDP version an accounting equation in the short-run
- Labour force-GDP version mostly relevant for emerging/developing countries

Cross-country differences

- Large variations of measured Okun's elasticities across countries
- What are they related to?
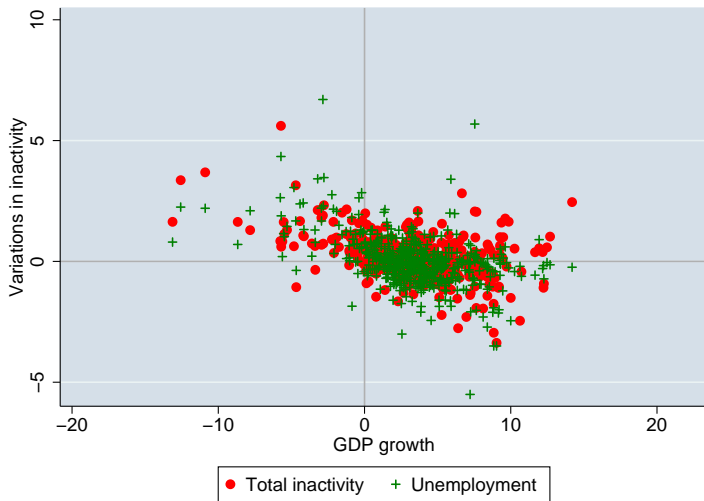
Okun's law: Fit at 50 - Fit for what?

Stability over time?

- ▶ Time variation seems only minor issue, especially when looking at annual data
- ▶ Broad long-term stability
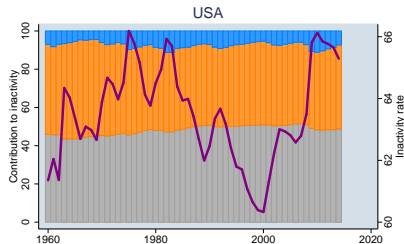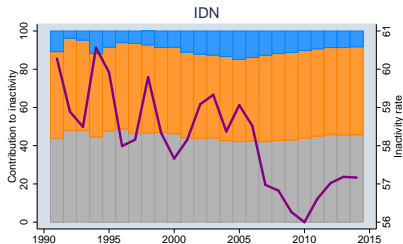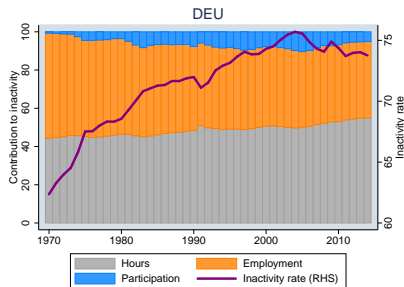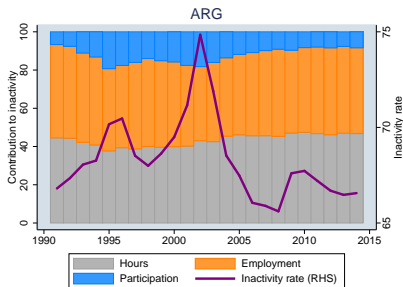- ▶ But: How then to explain cross-country differences?

Okun's law - Still useful?

- ▶ Forecasting: e.g. ILO's Global Employment Trends model
- ▶ But can it explain:
  - ▶ Long-run differences in unemployment/employment growth?
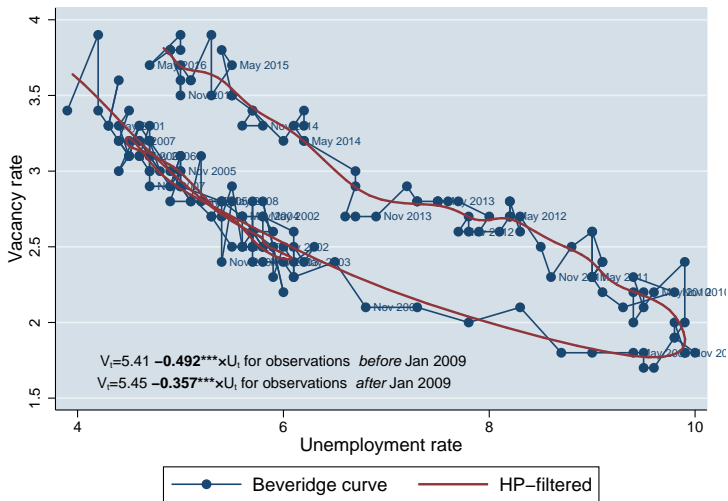 - ▶ job creation in crisis times?

Okun's law reflects broad labour demand...

...as changes in hours are more secular

Shifts in the Beveridge curve...

V_t=5.41 **−0.492***** ×U_t for observations *before* Jan 2009
V_t=5.45 **−0.357***** ×U_t for observations *after* Jan 2009

Legend: Beveridge curve — HP−filtered

...match those of Okun's law
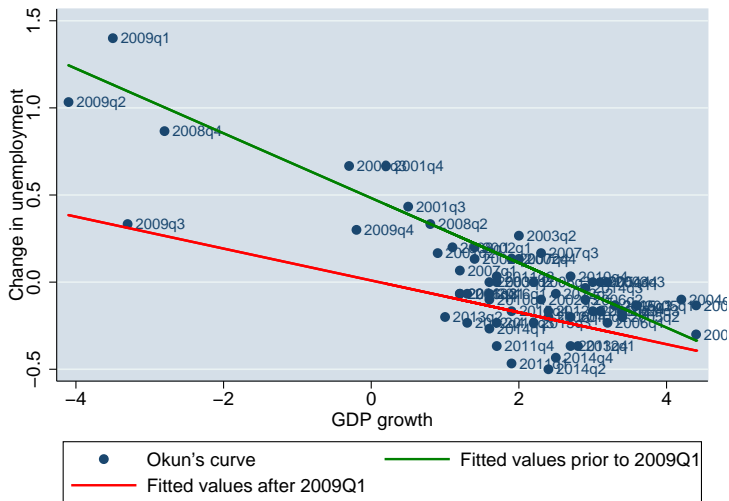
Unemployment flows differ across countries and over time
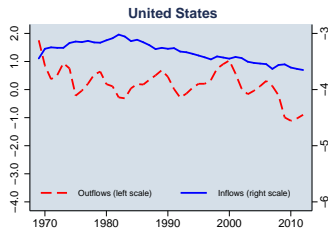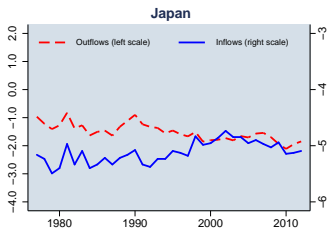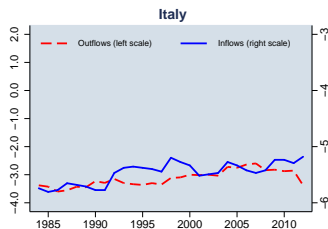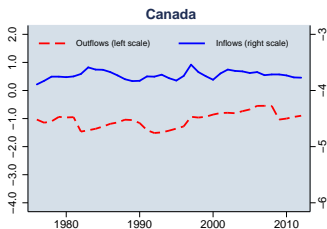
Labour flows and Okun's law II

Cross-country variations of outflow elasticities are large

Outflow elasticity
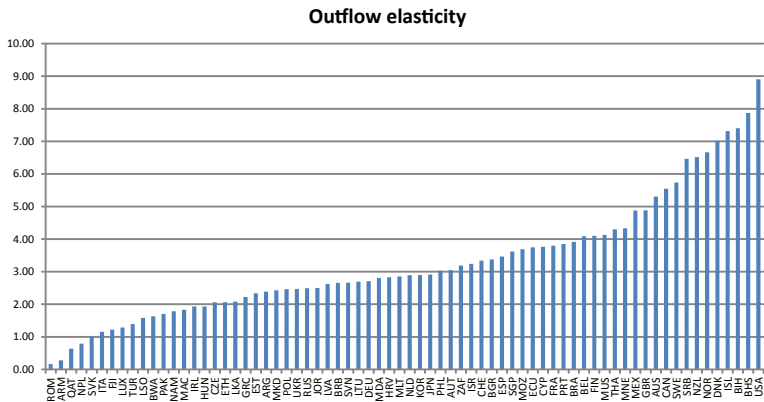
Labour flows and Okun's law III

The ranking of inflow elasticities is very different
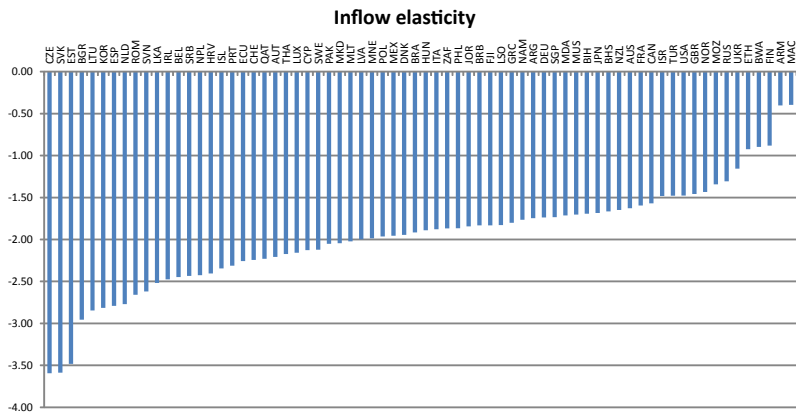
Inflow elasticity

Labour flows and Okun's law IV
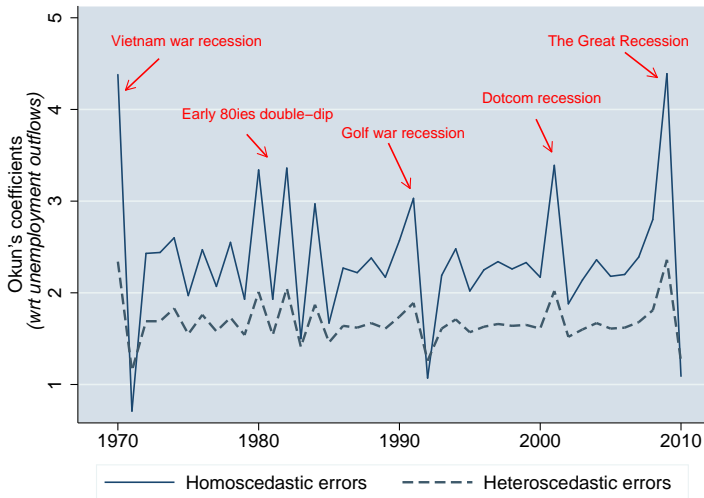
The financial cycle and job creation elasticities

Banking-related crises have strong effects on job creation elasticities

Note: The figure displays the effect of downturns and recoveries on the responsiveness of job creation to changes in GDP. The chart distinguishes between recessions and recoveries unrelated to financial sector difficulties and those that have been induced by a banking sector crisis.

Source: ILO, *Trends Econometric Models*, October 2012; see Appendix 2 for methodological details.

Determinants of outflow elasticities

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Advance notice (maximum, in months)	-0.004 (0.004)								
Severance pay (maximum, in months)		-0.012*** (0.003)							
Maximum severance pay and advance notice period			-0.012*** (0.003)						
Regulation of credit, labour, and business				0.165*** (0.029)					
Legal structure and security of property rights					0.068*** (0.016)				
Ratio of minimum wage to mean wage						-0.026 (0.146)			
Ratio of minimum wage to median wage							1.118*** (0.258)		
Gross replacement rate (average over 2 years)								0.489*** (0.105)	
Unemployment benefits coverage									0.185*** (0.052)
Constant	1.578*** (0.031)	1.624*** (0.027)	1.666*** (0.036)	0.417** (0.195)	1.048*** (0.116)	1.610*** (0.068)	1.141*** (0.123)	1.431*** (0.041)	1.466*** (0.039)
Observations	572	572	572	542	542	417	319	572	526
R^2	0.001	0.022	0.025	0.062	0.035	0.000	0.045	0.027	0.018
Number of countries	38	38	38	59	59	30	19	38	37

Determinants of inflow elasticities

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Advance notice	-0.009***								
(maximum, in months)	(0.003)								
Severance pay		-0.004**							
(maximum, in months)		(0.002)							
Maximum severance pay			-0.006***						
and advance notice period			(0.002)						
Regulation of credit,				0.061***					
labour, and business				(0.015)					
Legal structure and					0.028***				
security of property rights					(0.008)				
Ratio of minimum wage						0.266**			
to mean wage						(0.108)			
Ratio of minimum wage							0.517***		
to median wage							(0.162)		
Gross replacement rate								-0.189**	
(average over 2 years)								(0.077)	
Unemployment benefits									0.063**
coverage									(0.027)
Constant	-0.801***	-0.810***	-0.777***	-1.295***	-1.080***	-0.958***	-1.042***	-0.781***	-0.869***
	(0.019)	(0.017)	(0.019)	(0.101)	(0.062)	(0.050)	(0.072)	(0.022)	(0.023)
Observations	570	570	570	541	541	415	319	570	524
R^2	0.010	0.007	0.017	0.022	0.015	0.014	0.027	0.010	0.005
Number of countries	38	38	38	59	59	30	19	38	37

Okun's law: Useful for forecasting?
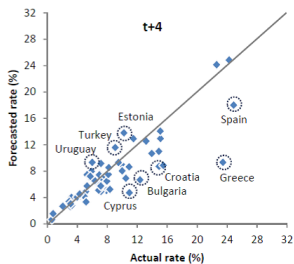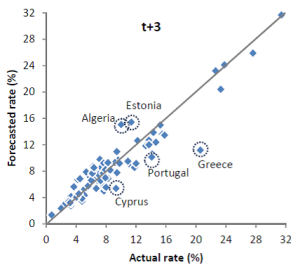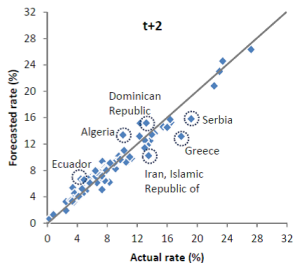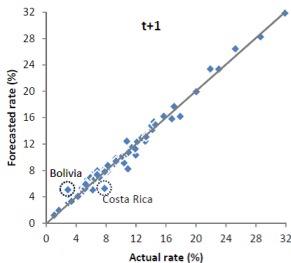
The bottom line

- Okun's law catches well short-run links between jobs and growth....
- ...but gives only broad indications to differences in labour market behaviour
- Misses out on long-term trends in labour market developments
- Misses out business cycle differences (finance vs. real cycle)
- Misses out important policy-relevant aspects
- Useful for forecasting, but only in the short-run