

# Why Countries ‘Get Tough on the Work-Shy’: The role of adverse economic conditions

– Supplementary Materials –

## **An indicator for the strictness of benefit sanctions**

The following types of sanctions are considered:

- Sanctions for self-induced/voluntary unemployment,
- Sanctions for the first refusal of an offer of employment,
- Sanctions for repeated refusals of employment, and
- Sanctions for failures to comply with job-search requirements.

The indicator is constructed as follows. The strictness of each of these rules is rated on a scale from 0 to 6, based on the coding scheme presented in table A-I.

The overall indicator is then computed as follows: First, the scores assigned to each of the types of sanctions ( $s$ ) are summed up:

$$S = \sum s \quad (1)$$

The result is divided by the theoretical maximum to obtain an overall score of the strictness of sanctioning rules varying between 0 and 1:

$$S^* = \frac{\sum s}{S_{max}} \quad (2)$$

Table A-I: Coding scheme – sanctions indicator (S)

Item	Coding
(6) Voluntary unemployment	0: No sanction 1: less than 5 weeks 2: $\geq 5$ ; $< 9$ weeks 3: $\geq 9$ ; $< 12$ weeks 4: $\geq 12$ ; $< 26$ weeks 5: $\geq 26$ weeks 6: Loss of eligibility
(7) First refusal	0: No sanction 1: Undefined period: no payment until re-compliance 2: $> 0$ ; $\leq 4$ weeks 3: $> 4$ ; $\leq 9$ weeks 4: $> 8$ ; $\leq 13$ weeks 5: $> 13$ weeks 6: Loss of eligibility
(8) Repeated refusals	0: Milder sanctions for subsequent refusals 1: No specific rules defined or same penalty as for first refusal 2: $> 0$ ; $\leq 2$ additional weeks or disqualification until re-compliance 3: $> 2$ ; $< 10$ additional weeks 4: $\geq 10$ ; $< 18$ additional weeks 5: $\geq 18$ ; $\leq 169$ additional weeks 6: Loss of eligibility
(8) Failure to report/conduct job-search	0: Not defined or no sanction 1: disqualification until re-compliance 2: $> 0$ ; $< 42$ weeks 3: $\geq 4$ ; $\leq 6$ weeks 4: $> 6$ ; $\leq 8$ weeks 4: $> 8$ weeks 5: $> 8$ weeks 6: Loss of eligibility

*Note:* Based on Venn (2012, 11); see also Hasselpflug (2005) and Ministry of Finance Denmark (1998).

## Robustness checks

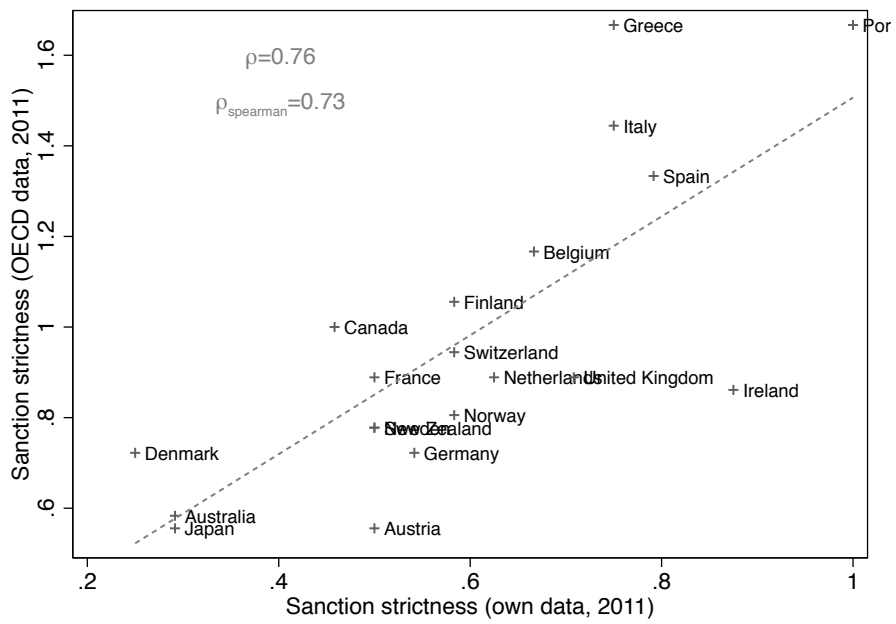


Figure A-I: Inter-indicator correlation

Notes: The 2011 OECD data are from Venn (2012).

Table A-II: Robustness checks – no controls for time

	(1)	(2)	(3)	(4)				
Sanctions <sub>t-1</sub>	-0.04*	(0.01)	-0.03*	(0.01)	-0.06*	(0.01)		
Δ Unemployment rate	0.06	(0.14)	-0.16	(0.15)	-0.16	(0.16)		
Unemployment rate <sub>t-1</sub>	0.16*	(0.04)	0.16*	(0.04)	0.21*	(0.05)		
Δ Budget balance		-0.16	(0.09)	-0.22*	(0.10)	-0.27*	(0.10)	
Budget balance <sub>t-1</sub>		-0.10*	(0.04)	-0.09	(0.05)	-0.14*	(0.05)	
Δ Dismissal rules					-0.97	(1.78)		
Dismissal rules <sub>t-1</sub>					0.27	(0.27)		
Δ Left cabinet share					0.01	(0.01)		
Left cabinet share <sub>t-1</sub>					0.00	(0.00)		
Δ Eff. No. Parties					-0.27	(0.48)		
Eff. No. Parties <sub>t-1</sub>					0.18*	(0.08)		
Bicameralism <sub>t-1</sub>					-0.72*	(0.31)		
Federalism <sub>t-1</sub>					-0.02	(0.31)		
Constant	1.46*	(0.41)	2.03*	(0.43)	1.41*	(0.37)	0.82	(0.71)
LRM Unemployment	3.89	(0.06)			4.02	(0.06)	3.82	(0.05)
LRM Budget balance			-3.63	(0.14)	-2.16	(0.29)	-2.50	(0.19)
Observations	619		605		605		517	
Countries	20		20		20		20	
R <sup>2</sup>	0.04		0.03		0.05		0.08	
p-value	0.00		0.00		0.00		0.00	

Panel-corrected standard errors in parentheses; \* p < 0.05

Table A-III: Robustness checks – period dummies

	(1)	(2)	(3)	(4)
Sanctions <sub><i>t</i>-1</sub>	-0.04* (0.01)	-0.03* (0.01)	-0.04* (0.01)	-0.05* (0.01)
Δ Unemployment rate	0.03 (0.16)		-0.09 (0.16)	-0.15 (0.16)
Unemployment rate <sub><i>t</i>-1</sub>	0.13* (0.04)		0.14* (0.04)	0.20* (0.05)
Δ Budget balance		-0.24* (0.10)	-0.26* (0.11)	-0.32* (0.12)
Budget balance <sub><i>t</i>-1</sub>		-0.09* (0.04)	-0.07 (0.04)	-0.12* (0.05)
Δ Dismissal rules				-1.08 (1.82)
Dismissal rules <sub><i>t</i>-1</sub>				0.26 (0.27)
Δ Left cabinet share				0.01 (0.01)
Left cabinet share <sub><i>t</i>-1</sub>				0.00 (0.00)
Δ Eff. No. Parties				-0.48 (0.50)
Eff. No. Parties <sub><i>t</i>-1</sub>				0.16 (0.09)
Bicameralism <sub><i>t</i>-1</sub>				-0.69* (0.31)
Federalism <sub><i>t</i>-1</sub>				-0.02 (0.32)
Constant	1.29* (0.42)	1.24* (0.45)	1.08* (0.44)	1.54* (0.72)
Year FE	Yes	Yes	Yes	Yes
LRM Unemployment	3.52 (0.08)		3.66 (0.07)	3.77 (0.06)
LRM Budget balance		-3.46 (0.16)	-1.86 (0.39)	-2.20 (0.25)
Observations	619	605	605	517
Countries	20	20	20	20
<i>R</i> <sup>2</sup>	0.10	0.11	0.12	0.15
p-value	0.00	0.00	0.00	0.00

Panel-corrected standard errors in parentheses; \* p &lt; 0.05

Table A-IV: Robustness checks – linear time trend

	(1)	(2)	(3)	(4)
Sanctions $_{t-1}$	-0.04*	(0.01)	-0.04*	(0.01)
$\Delta$ Unemployment rate	0.06	(0.14)	-0.16	(0.15)
Unemployment rate $_{t-1}$	0.16*	(0.04)	0.16*	(0.04)
$\Delta$ Budget balance		-0.16	(0.09)	-0.27*
Budget balance $_{t-1}$		-0.10*	(0.04)	-0.14*
$\Delta$ Dismissal rules				-0.99
Dismissal rules $_{t-1}$				(1.78)
$\Delta$ Left cabinet share				0.26
Left cabinet share $_{t-1}$				(0.27)
$\Delta$ Eff. No. Parties				0.01
Eff. No. Parties $_{t-1}$				(0.01)
Bicameralism $_{t-1}$				0.00
Federalism $_{t-1}$				(0.00)
Constant	1.42*	(0.42)	2.10*	(0.45)
Trend	Yes	Yes	Yes	Yes
LRM Unemployment	3.86	(0.06)	3.99	(0.06)
LRM Budget balance		-3.75	(0.14)	-2.59
Observations	619	605	605	517
Countries	20	20	20	20
$R^2$	0.04	0.03	0.05	0.08
p-value	0.00	0.00	0.00	0.00

Panel-corrected standard errors in parentheses; \*  $p < 0.05$

## References

- Hasselpflug, S. (2005), 'Availability criteria in 25 countries', *Ministry of Finance Denmark Working Paper*, 12/2005.
- Ministry of Finance Denmark (1998), 'Availability criteria in selected oecd countries', *Ministry of Finance Denmark Working Paper*, 06/1998.
- Venn, D. (2012), 'Eligibility criteria for unemployment benefits: Quantitative indicators for oecd and eu countries', *OECD Social, Employment and Migration Working Papers*, 131.