

Contingent vs. Non-Contingent Unemployment Benefit Scheme for the EMU

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Aim of the study

Comparing 2 unemployment benefit schemes at the EMU level that differ because:

- in the first one, benefit payments are contingent to the macroeconomic situation of the country (contingent scheme)
- in the other, benefits payments are not contingent to the macroeconomic situation of the country (non contingent scheme)



Overview of the methodology

- Design of 2 schemes (identical in term of benefit payments except for the contingency)
- For each scheme, calculate the contribution rate
 (annual size of the scheme) that balances the scheme
 over the period 2000 2015
- Perform simulations on past data to measure the stabilization properties of the 2 schemes
- Build forward looking scenarios to study the long term financial sustainability of the 2 schemes



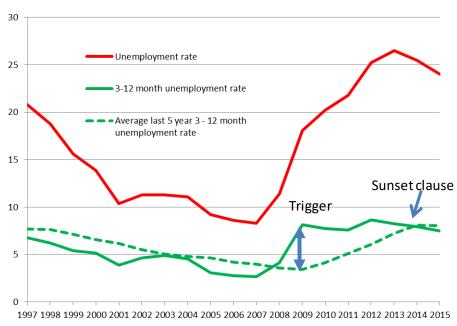
Designing the Contingent Unemployment Benefit Scheme

- An insurance against big negative shocks
- Workers pay an annual contribution to the scheme in exchange for :
 - The payment of part of their unemployment benefits when their country is hit by a massive shock (large increase in short term unemployment) Trigger
 - Example of trigger: 3-12 month unemployment rate <u>above its 5 year average + 1p.p.</u>
 - The level of 3 -12 month unemployment rate that triggers the payments of benefits is **country specific and time dependent**
 - Payments stop when the consequences of the shock start to vanish (or, alternatively, after a given number of years) Sunset Clause
 - Example of sunset clause: when the 3-12 month unemployment rate <u>less than 5 year average</u>
 - The level of 3-12 month unemployment rate that stops the payments of benefits is **country** specific and time dependent.
- European Unemployment Benefit paid to unemployed individuals after 3 months of unemployment and up to their 12nd month of unemployment
- Based on previous earnings
- The domestic unemployment benefit can top-up the EZ unemployment benefit

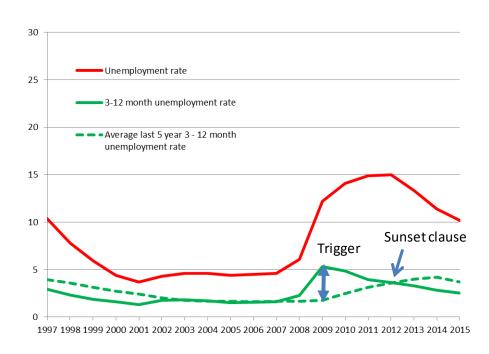


Triggers and sunset clauses for Spain and Ireland

Spain Ireland



997 1998 1999 2000 2001 2002 2003 2004 200	5 2006 2007 2008 2009 20:	10 2011 2012 2013 2014 20
	2008	2009
3-12 month unemployment rate	4.1%	8.1%
Average over the last 5 years	3.6%	3.5%
Rate – 5 year average	0.5 pp	4.6 pp



	2008	2009
3-12 month unemployment rate	2.3%	5.3%
Average over the last 5 years	1.7%	1.8%
Rate – 5 year average	0.6 pp	3.5 pp

Designing the Non Contingent Unemployment Benefit System

 Same as the contingent scheme except there is no trigger nor sunset clause



Simulation details

	Contingent Scheme	Non-Contingent Scheme			
Trigger	3-12 month unemployment rate > its 5 year moving average + 1 pp	No trigger			
Sunset Clause	3-12 month unemployment rate < its 5 year moving average	No sunset clause			
Amount of benefit paid	50% of past earnings (measured as 50% of medium wage in the country)				
Beneficiaries	80% of 3-12 month unemployed individuals				
Contribution to the scheme	Contribution based on wages. Rate to ensure an EMU wide zero balance over the period 2000-2015				
12 countries	Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxemburg, the Netherlands, Austria, Portugal, Finland.				



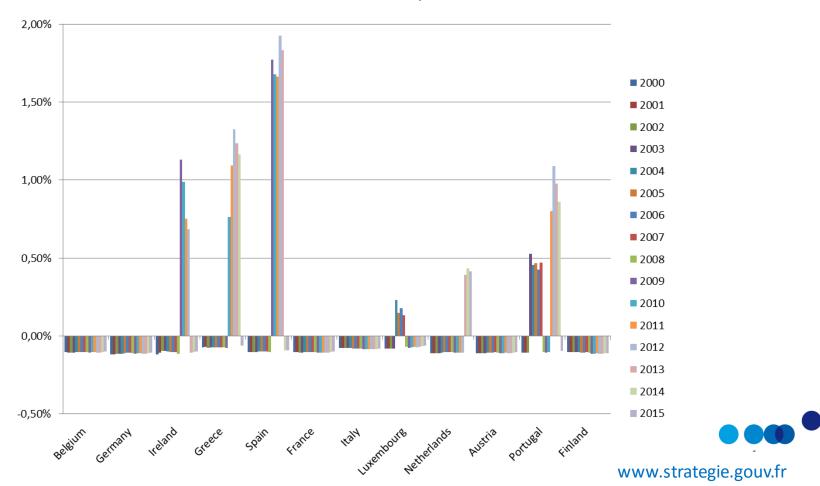
Contingent Scheme

Slightly less than 10 billions per year; contribution = 0.27% on wages

Large net beneficiaries

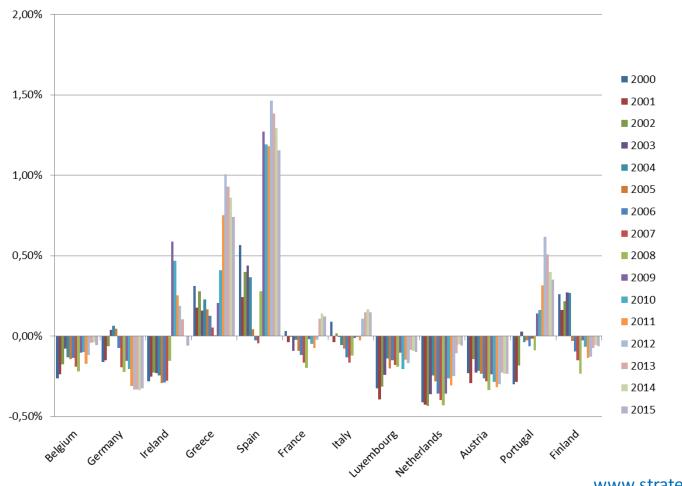
No permanent (positive) transfer to any country

Net payments to country per year 2000 – 2015, % of country GDP



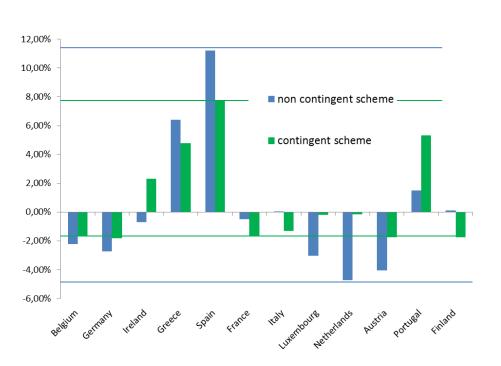
Non-Contingent Scheme Between 55 and 56 billions per year; contribution = 1.55% on wages Large net beneficiaries Some permanent (positive) transfers

Net payments to country per year 2000 – 2015, % of country GDP

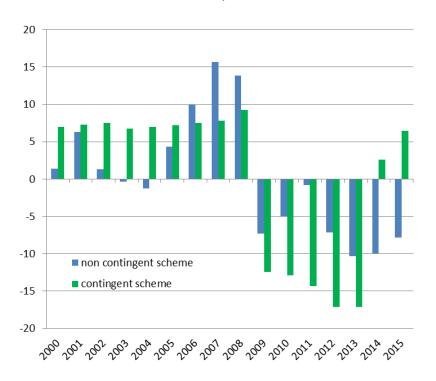


Under contingent scheme net payments to countries over 2000 - 2015 are significantly lower than under non-contingent scheme, but better concentrated on crises years.

Net payments to countries 2000 – 2015, % of country GDP



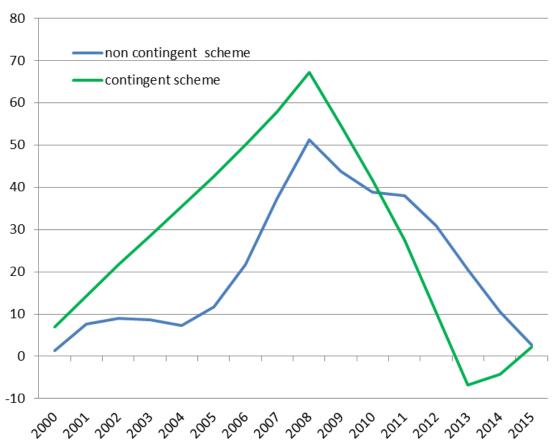
Surpluses and deficits of the scheme 2000 – 2015, billion of euros





To achieve a zero balance over the period 2000 – 2015, both schemes would have need to accumulate large surpluses before the crises

Accumulated surpluses and deficits 2000 – 2015, billion of euros (no interest payments or revenues)





Both schemes would have delivered a limited overall stabilization at the Euro Zone level

Eurozone	Standard deviation of	EZ annual growth rate (%) (2009 – 2011)			
growth rate (2000 – 2015)		2009	2010	2011	
Actual data	1.32%	-4.4%	2.0%	1.6%	
Non-contingent scheme	1.27%	-4.2%	1.9%	1.6%	
Contingent Scheme	1.30%	-4.2%	2.0%	1.6%	

Under the assumption of a fiscal multiplier equal to 1 and constant over time



Both schemes deliver large stabilization to net receiving countries after 2008

Stabilization is significantly higher for the contingent scheme the first year of the crisis, with a large reversal when the country exits from the scheme

SPAIN	Standard deviation	Annual Growth rate (in %) (2009 – 2014)					
	of growth rate (2000 – 2015)	2009	2010	2011	2012	2013	2014
Actual data	2.03%	-3.8	-0.2	0.1	-1.6	-1.2	1.1
Non contingent scheme	1.96%	-2.8	-0,3	0.0	-1.3	-1.3	1.1
Contingent Scheme	2.03%	-2.0	-0.3	0,0	-1.3	-1.3	-0.8

IRELAND	Standard deviation of growth rate	Annual Growth rate (in %) (2009– 2011)			
	(2000 – 2015)	2009	2010	2011	
Actual data	3.07%	-6.4	-1.1	2.2	
Non contingent scheme	3.03%	-5.6	-1.8	1.9	
Contingent Scheme	3.06%	-5.1	-1.2	1.1	

What would happen to the schemes under various scenarios over 2016 – 2035?

Forward looking scenarios:

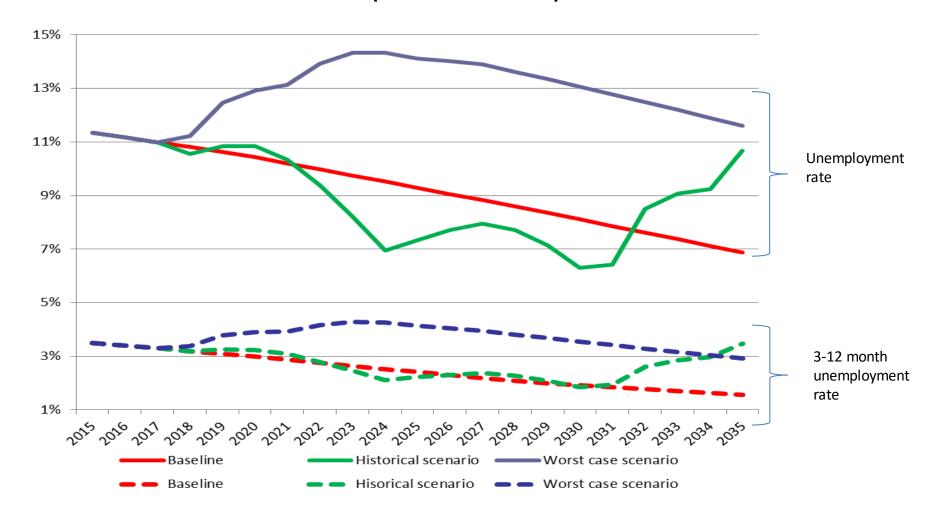
- Useful to gauge the overall financial sustainability of the schemes
- Not well suited to analysis country net payments and transfers, and stabilization impact
- Very fragile



3 Forward looking scenarios (2015-2035)

- 1. Baseline (based on country forecast of the Ageing Working Group (AWG) of the Economic Policy Committee)
 - Regular convergence toward the AWG unemployment rate for 2035
- 2. An "historical" scenario
 - The 2000 2017 changes in total unemployment rates are repeated in 2018 – 2035.
- A worst case scenario
 - Over the period 2018-2024, each country is getting half of the 2008 –
 2014 unemployment shocks of the country that is just below in term of size
 - German unemployment over 2018-2025 increases by half of the increase in French unemployment over the period 2008 – 2015
 - France unemployment over 2018-2025 increases by half of the increase of Italian unemployment over the period 2018 – 2025
 - Italian unemploymentSpanish
 - **–**
 - After 2025, unemployment declines at the same pace as in the baseline scenario after 2015.

Unemployment rates under the 3 scenarios (2015- 2035)





Common assumptions to simulate the financial situation of the schemes

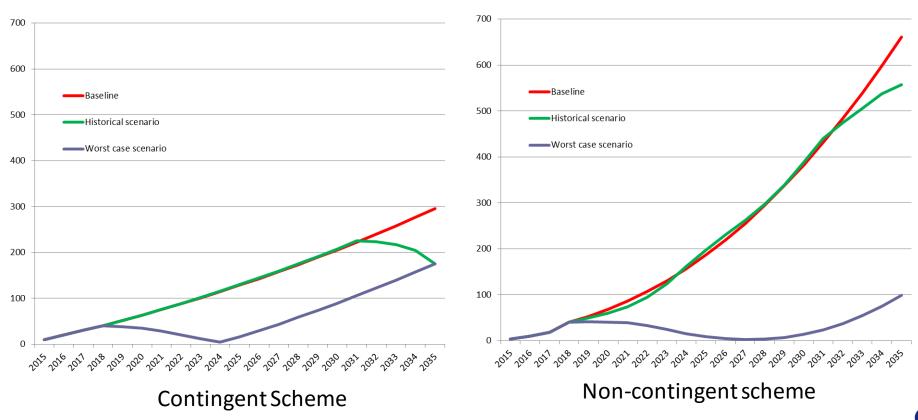
- Evolution of the 3-12 month unemployment rate linked to the evolution of total unemployment rate (based on rough econometric estimates)
- Inflation = 1.8% from 2016 onwards
- Labor productivity growth as in AWG.
- Real wages evolves in line with labor productivity.
- No interest payments / revenues from the scheme
- Contribution rate
 - Contingent scheme: 0.27%
 - Non-Contingent scheme: 1.55%



Both schemes appear financially sustainable under the 3 scenarios

The non-contingent scheme would accumulate a large wealth under the baseline and historical scenarios

Accumulated Surpluses and Deficits (billions of euros)



Summing up

- Both schemes
 - Good at smoothing out big fluctuations at the country level
 - Not good at smoothing big fluctuations at the EZ level (but this is not what they are for)
 - Look financially sustainable in forward looking scenarios
- Contingent scheme (annual size 10 billion, contribution rate 0.27% on wages)
 - Significantly smaller
 - Less likely to generate positive permanent transfers (thanks to sunset clause)
 - On average less expensive for "lucky" countries (i.e. never eligible to the scheme) (exceptions: France, Italy, Finland)
 - Better at smoothing out large fluctuations in short-term unemployment
- Non-contingent scheme (annual size 56 billion, contribution rate 1.55% on wages)
 - Better at smoothing small fluctuations in short term employment rate
 - No abrupt reversal (thanks to no sunset clause)



3 Ways forward

Option 1: implement the contingent scheme

Option 2: implement the non-contingent scheme immediately (probably requires different contribution rates across countries)

Option 3:

- Implement the contingent scheme.
- See how it works
 - No sign of "gaming" the system?
 - Convergence in short term unemployment rates?
- If it works:
 - reduce the trigger level by steps and increase the contribution rate accordingly
- Final step: non-contingent scheme

