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 **above its 5 year average + 1p.p.**
    - 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 **less than 5 year average**
    - 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

<table>
<thead>
<tr>
<th>Triggers and sunset clauses</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-12 month unemployment rate</td>
<td>4.1%</td>
<td>8.1%</td>
</tr>
<tr>
<td>Average over the last 5 years</td>
<td>3.6%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Rate – 5 year average</td>
<td>0.5 pp</td>
<td>4.6 pp</td>
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</tbody>
</table>

Ireland

<table>
<thead>
<tr>
<th>Triggers and sunset clauses</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-12 month unemployment rate</td>
<td>2.3%</td>
<td>5.3%</td>
</tr>
<tr>
<td>Average over the last 5 years</td>
<td>1.7%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Rate – 5 year average</td>
<td>0.6 pp</td>
<td>3.5 pp</td>
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Designing the Non Contingent Unemployment Benefit System

– Same as the contingent scheme except there is no trigger nor sunset clause
## Simulation details

<table>
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<tr>
<th></th>
<th>Contingent Scheme</th>
<th>Non-Contingent Scheme</th>
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</thead>
<tbody>
<tr>
<td><strong>Trigger</strong></td>
<td>3-12 month unemployment rate &gt; its 5 year moving average + 1</td>
<td>No trigger</td>
</tr>
<tr>
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<tr>
<td><strong>Sunset Clause</strong></td>
<td>3-12 month unemployment rate &lt; its 5 year moving average</td>
<td>No sunset clause</td>
</tr>
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<tr>
<td><strong>Amount of benefit paid</strong></td>
<td>50% of past earnings (measured as 50% of medium wage in the country)</td>
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<tr>
<td><strong>Beneficiaries</strong></td>
<td>80% of 3-12 month unemployed individuals</td>
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<tr>
<td><strong>Contribution to the scheme</strong></td>
<td>Contribution based on wages. Rate to ensure an EMU wide zero balance over the period 2000-2015</td>
<td></td>
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<tr>
<td><strong>12 countries</strong></td>
<td>Belgium, Germany, Ireland, Greece, Spain, France, Italy, Luxemburg, the Netherlands, Austria, Portugal, Finland.</td>
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</table>
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
Accumulated surpluses and deficits
2000 – 2015, billion of euros
(no interest payments or revenues)

To achieve a zero balance over the period 2000 – 2015, both schemes would have needed to accumulate large surpluses before the crises
Both schemes would have delivered a limited overall stabilization at the Euro Zone level

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<tbody>
<tr>
<td></td>
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<td>2009</td>
</tr>
<tr>
<td>Actual data</td>
<td>1.32%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Non-contingent scheme</td>
<td>1.27%</td>
<td>-4.2%</td>
</tr>
<tr>
<td>Contingent Scheme</td>
<td>1.30%</td>
<td>-4.2%</td>
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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.

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<tbody>
<tr>
<td>Actual data</td>
<td>2.03%</td>
<td>-3.8</td>
<td>-0.2</td>
<td>0.1</td>
<td>-1.6</td>
<td>-1.2</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Non contingent scheme</td>
<td>1.96%</td>
<td>-2.8</td>
<td>-0.3</td>
<td>0.0</td>
<td>-1.3</td>
<td>-1.3</td>
<td>1.1</td>
<td></td>
</tr>
<tr>
<td>Contingent Scheme</td>
<td>2.03%</td>
<td>-2.0</td>
<td>-0.3</td>
<td>0.0</td>
<td>-1.3</td>
<td>-1.3</td>
<td>-0.8</td>
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</thead>
<tbody>
<tr>
<td>Actual data</td>
<td>3.07%</td>
<td>-6.4</td>
<td>-1.1</td>
<td>2.2</td>
<td></td>
</tr>
<tr>
<td>Non contingent scheme</td>
<td>3.03%</td>
<td>-5.6</td>
<td>-1.8</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Contingent Scheme</td>
<td>3.06%</td>
<td>-5.1</td>
<td>-1.2</td>
<td>1.1</td>
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</tbody>
</table>
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.

3. 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 unemployment .........................Spanish
     - ...........
   - 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