STATE AID TO BANKS AND CREDIT FOR SMES:
IS THERE A NEED FOR CONDITIONALITY?

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Research Question

Whether and how conditionality linked to State aid decisions was used or could be used effectively to support lending to SMEs?

- Lending to SMEs in the European economy: importance, obstacles, bank lending to SMEs
- EU banking sector restructuring after the financial and sovereign crises
- Transmission channels of State aid to lending to SMEs
- State aid, conditionality and lending to SMEs
- Legal justification of conditionality linked to lending to SMEs in State aid decisions
- Economic justifications of conditionality linked to lending to SMEs
- Conclusions and policy recommendations
Importance of SMEs for the EU Economy

- There are more than 20 million SMEs in the EU that provide employment to 80 million persons and add a value of EUR 2.4 trillion to the economy.

<table>
<thead>
<tr>
<th>Company category</th>
<th>Number of enterprises (thousand)</th>
<th>Turnover or gross premiums written (EUR billion)</th>
<th>Value added at factor cost (EUR billion)</th>
<th>Number of persons employed (Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>19,310</td>
<td>4,244</td>
<td>986</td>
<td>32.5</td>
</tr>
<tr>
<td>Small</td>
<td>1,318</td>
<td>4,395</td>
<td>792</td>
<td>16</td>
</tr>
<tr>
<td>Medium</td>
<td>218</td>
<td>4,470</td>
<td>718</td>
<td>16.6</td>
</tr>
<tr>
<td>SME</td>
<td>20,673</td>
<td>12,697</td>
<td>2,409</td>
<td>81.5</td>
</tr>
<tr>
<td>Large</td>
<td>43</td>
<td>10,124</td>
<td>1,710</td>
<td>40.9</td>
</tr>
<tr>
<td>Total</td>
<td>20,909</td>
<td>24,570</td>
<td>6,077</td>
<td>130.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>%</th>
<th>%</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>92.4%</td>
<td>18.3%</td>
<td>23.1%</td>
<td>31.6%</td>
</tr>
<tr>
<td>Small</td>
<td>6.4%</td>
<td>18.1%</td>
<td>17.7%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Medium</td>
<td>1.1%</td>
<td>19.6%</td>
<td>17.4%</td>
<td>16.4%</td>
</tr>
<tr>
<td>SME</td>
<td>99.8%</td>
<td>55.6%</td>
<td>58.5%</td>
<td>66.6%</td>
</tr>
<tr>
<td>Large</td>
<td>0.2%</td>
<td>44.4%</td>
<td>41.5%</td>
<td>33.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Eurostat (2013)
SMEs Main Obstacles

- Access to finance has been one of the most pressing problems for SMEs in the EU in the aftermath of the burst of the financial crisis.

<table>
<thead>
<tr>
<th>Obstacle</th>
<th>2009</th>
<th>2011</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finding customers</td>
<td>30.4%</td>
<td>24.8%</td>
<td>22.4%</td>
</tr>
<tr>
<td>Competition</td>
<td>13.4%</td>
<td>15.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td>Access to finance</td>
<td>16.8%</td>
<td>15.6%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Production costs</td>
<td>8.0%</td>
<td>12.6%</td>
<td>12.9%</td>
</tr>
<tr>
<td>Skilled staff</td>
<td>8.2%</td>
<td>14.0%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Regulation</td>
<td>7.5%</td>
<td>7.9%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Other</td>
<td>15.7%</td>
<td>10.0%</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

Source: European Commission  SAFE-surveys (2009-2013)

Note: The 2009 figures also included large enterprises. Moreover, the 2009 and 2011 figures have been adjusted for “don’t know” and no answers.
SMEs access to finance: most pressing problem

• Most SMEs in Cyprus, Greece, Spain, Croatia, Slovenia, Italy, Ireland and Portugal consider access to finance (2013) their most pressing problem.

Note: The 2009 figures also included large enterprises. Moreover, the 2009 and 2011 figures have been adjusted for “don’t know” and no answers.
SMEs sources of funding

SMEs use primarily banks as source for external funding

Source: European Commission  SAFE-survey (2013)

Note: The percentage included the percentage of SMEs that have used the source of financing in the past six months (new or renewal) or have had experience with this source of financing before. Moreover, “don’t know” and no answers have been omitted from the analysis.
Size of the EU banking sector

- There are large differences in the size of national banking sectors in the EU ranging from 17 times of GDP in LU to 0.6 of GDP in RO.
- The total assets of the EU banking sector are over 300% of EU GDP.
- The size of the EU banking sector has declined 20% of GDP since the fall of Lehman Brothers in 2008.

Source: European Central Bank (2013)
Restructuring of the EU banking sector

- Between 2008 and 2012 the tangible equity (as % of tangible assets) of EU banks has increased (40 %) from 3.4 % to 4.8 %.
- Tangible equity ratio only decreased in Greece, Finland, Cyprus and Spain.

Source: European Central Bank (2013)
## Restructuring of the EU banking sector

### Capital measures

<table>
<thead>
<tr>
<th>In EUR billion (% of EU 2012 GDP)</th>
<th>Committed aid</th>
<th>Effectively used</th>
<th>Committed aid Effectively used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-capitalisation</td>
<td>777.3 (6.01 %)</td>
<td>413.2 (3.20 %)</td>
<td>53.16 %</td>
</tr>
<tr>
<td>Support for bad asset schemes</td>
<td>445.7 (3.45 %)</td>
<td>178.7 (1.38 %)</td>
<td>40.10 %</td>
</tr>
</tbody>
</table>

### Liquidity measures

<table>
<thead>
<tr>
<th>In EUR billion (% of EU 2012 GDP)</th>
<th>Committed aid</th>
<th>Effectively used</th>
<th>Committed aid Effectively used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt guarantee schemes</td>
<td>3,646.6 (28.21 %)</td>
<td>835.8 (7.08 %)</td>
<td>22.92 %</td>
</tr>
<tr>
<td>Liquidity support other than guarantees</td>
<td>216.3 (1.67 %)</td>
<td>70.1 (0.59 %)</td>
<td>32.41 %</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,085.9 (39.34 %)</strong></td>
<td><strong>1,497.8 (12.25 %)</strong></td>
<td><strong>29.45 %</strong></td>
</tr>
</tbody>
</table>

Notes: For country specific data, see European Commission State aid Scoreboard 2013. The liquidity measures used are for 2009, the year in which most liquidity support was tapped. The figures do not include the revenues obtained by governments from these support schemes.

Source: European Commission (2013)
State Aid, conditionality and SME lending

State aid
- Recapitalisation
- Asset relief
- Liability guarantees
- Other liquidity measures

Conditions
- Restructuring/liquidation
- Lending targets
- Price leadership ban

Bank lending to SMEs
- Lending costs
- Lending volume
Legal justification

• Lending to SMEs could be legally justified as a condition to State aid, without a change in the current SA legislation.

• The assessment of the compatibility of the State aid with the internal market under Article 107 (3)b of the Treaty on the Functioning of the European Union (TFEU) provides the European Commission with sufficient discretion to approve SME lending targets to prevent a so called “credit crunch” and hence disturbance to the real economy.

• Such a condition may be either annexed to an approval decision or provided for in the national aid scheme with a notification to the Commission.
Economic justification

Two–staged methodology:

• Bank level quantitative analysis
• Qualitative assessment

Additional analysis – impact of bank business models on the real economy
Economic justification
Bank level quantitative analysis – Methodology

• 444 observations on 111 large banking groups from 21 EU Member States for the period between 2006 and 2012
• Sources: Bank-Balance sheets, European Banking Federation, NCBs, AMECO and European Commission DG Comp
• Generalised Method of Moments (GMM)
• Dependent variable: Customer loans growth as a proxy of SMEs loans
• Independent variables: Loan growth in the past year, macroeconomic- (real economic growth, change in Euribor and central bank assets) and bank specific- (bank assets, liquid assets, regulatory capital and market funding)
• State aid independent variables: Capital support, nationalisation, liquidation, general minimum lending target, SME minimum lending target, general price leadership ban and specific price leadership ban
# Economic justification

SMEs-related restructuring conditions (for EBA and SSM banks*)

<table>
<thead>
<tr>
<th>Variable</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banks that obtained State aid (recapitalisation and/or asset relief measures) (base for RESTRUCT)</td>
<td>0</td>
<td>1</td>
<td>11</td>
<td>18</td>
<td>7</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Banks nationalised (base for NATIONAL)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Aided banks in liquidation or resolution (LIQUIDATION)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Aided banks with general lending target following restructuring plan or national scheme (GENLOANTGT)</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Aided banks with SME lending target following restructuring plan or national scheme (SMELOANTGT)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Aided banks with general price leadership ban following restructuring plan (GENPRIBAN)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Aided banks with price leadership ban on SME products following restructuring plan (SMEPRIBAN)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

**Nr of banks**

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>108</strong></td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>112</td>
<td>118</td>
<td>119</td>
<td>117</td>
</tr>
</tbody>
</table>

Source: European Commission (2013). Analysis Ayadi et al, CEPS (2014); *large EU banking groups that have been subject to at least one of the EBA stress tests, capital exercise or transparency exercises (2010-2013) and/or are subject to the ECB’s asset quality review prior to the SSM establishment
Economic justification

Bank level quantitative analysis – Findings (1)

• Loan growth of aided banks is significantly lower than of banks that did not receive capital support.
• Loan growth of nationalised banks is relatively lower.
• Liquidation has the largest negative significant impact on loan growth.
• General minimum loan targets have an ambiguous and no significant impact on loan growth, while targets for SME lending have a negative impact on loan growth (part. sign.).
• Both general and SME price leadership bans have respectively negative and ambiguous impact on loan growth, though not significant.
Economic justification

Bank level quantitative analysis – Findings (2)

• Loan growth of banks with more liquid funds, regulatory capital and less market funding is higher during crises, though not significant. Loan growth of larger banks is significantly lower during crises.

• Higher economic growth and liquidity provisioning by central banks contributes to higher loan growth. An increase in funding costs leads to lower not significant loan growth.
Economic justification

Qualitative framework to assess the impact of State aid conditionality on lending to SMEs - Methodology

Selection
- Capital support
- Decision published
- SME activities
- Geographical coverage

State aid
- Recapitalisation
- Asset relief
- Liability guarantees
- Other liquidity measures

Restructuring
- Assessment of restructuring measures

Conditions
- Restructuring/liquidation
- Lending targets
- Price leadership ban

Bank lending to SMEs
- Lending costs
- Lending volume
Economic justification

Qualitative framework to assess the impact of State aid conditionality on SMEs lending- Findings

- **46 cases** in the EU divided across Member States as follows: Austria (4 cases), Belgium (3), Cyprus (1), Denmark (1), France (1), Germany (6), Greece (2), Hungary (1), Ireland (5), Italy (1), Latvia (1), Netherlands (3), Portugal (1), Spain (12) and the United Kingdom (4)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Nr of banks</th>
<th>Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain lending to the real economy</td>
<td>13</td>
<td>Bradford &amp; Bingley (UK), Bank of Ireland (IE), Bayerische Landesbank (DE), Cyprus Popular Bank (CY), Dunfermline (UK), FIH (DK), ING (NL), KBC (BE), Landesbank Baden-Württemberg (DE), LBG (UK), RBS(UK), Sparkasse KölnBonn (DE), and The Mortgage and Land Bank of Latvia (LV)</td>
</tr>
<tr>
<td>SME lending targets</td>
<td>3</td>
<td>Bank of Ireland (IE), BPCE (FR), Irish Life &amp; Permanent Group (IE)</td>
</tr>
</tbody>
</table>
Policy recommendations

• Close monitoring on whether conditions in restructuring plans following State aid decisions are fulfilled and whether they would lead to the expected effect.

• Improve the disclosure requirements on SMEs exposures by banks.

• Enhance the understanding of the role of SMEs loan guarantee measures during economic cycle.

• Understand better the role of credit mediators (e.g. Belgium, France and Ireland) and allow SMEs which are clients of aided banks to obtain their own credit history to ease switching to another bank.

• Improve the risk absorption capacity of banks in good times, to reduce the need for drastic restructuring in bad times.

• Better coordinated macro-prudential supervision as well as banking structures monitoring.
Additional Analysis: Monitoring bank business models and lending to the real economy

Bank business models in Europe (2015)

5 distinct banking models:
- Focused retail
- Diversified retail (Type 1)
- Diversified retail (Type 2)
- Wholesale
- Investment

Notes: Indicators marked with an asterisk (*) were used as instruments in the cluster analysis. The figures represent the number of standard deviations from the sample mean, implying that any observation above (below) the zero-axis is above (below) the sample mean.
Support to the real economy

Growth in outstanding customer loans (median values)

- Slowing loan growth during fin.- and econ. crises
- Substantial for investment banks during fin. crisis
- STV banks (e.g. cooperatives and public banks) continued to lend at lower levels to the economy
- Nationalised banks did not contribute to the real economy
Return on assets (RoA)(weighted average)

- Profits declined for all banks
- Wholesale and investment banks took severe hit in 2007/08
- Retail focused and diversified (Type 1) took hit during econ. crisis
- STV and SHV banks (e.g. cooperatives) continued to be profitable, except for the public (2007)
- Nationalised banks remained non profitable till 2014
Resilience – Provisions for loan losses

Risk costs and depreciations
(% of gross customer loans, weighted average)

- Provisions for loan losses increased substantially during crises
- Retail banks suffered especially during fin. and econ. crisis, while wholesale and investment banks increased provisions relatively more during fin. crisis
- SHV- and nationalised banks suffered more during crises as compared to STV banks
- Provisions for loan losses higher for nationalised banks and converged to average levels in 2014
Resilience - Tail losses

Return on RWA, tail loss estimates, 2005-14 (obs)

- Losses are high for:
  - Nationalised and commercial banks
  - For all models, except cooperative/savings banks, high losses under rarer events!

Notes: Figures provide the Harrell-Davis percentile estimates for the distribution of return on RWA. CET1 (i.e. 4.5%) and Tier-1 (i.e. 6.0%) stand for CRD IV minimum requirements for common equity and Tier-1 ratios.
Robustness – Distance to default

Distance to default estimates (Z-score, weighted average)

- Distance to default stakeholder-value (STV) clearly above shareholder-value banks (SHV)
- Nationalised banks closest to default, i.e. due to lower volatility in earnings

Note: A greater score implies greater distance to default and thus a lower default probability.