AGGREGATE REPORT ON THE COMPREHENSIVE ASSESSMENT

Summary

October 2014
The document at hand constitutes an analysis of the disclosure data (comprehensive assessment disclosure template / EBA transparency template) published on 26 October 2014 conducted by the ECB. In case of discrepancies, the disclosure data, as agreed with the national competent authorities, supersedes this report.
FOREWORD

The completion of the comprehensive assessment is a major milestone towards the operational start of the Single Supervisory Mechanism (SSM) in November 2014. It constitutes an exercise of unprecedented scope, and the publication of its outcomes provides a significant improvement in the depth and comparability of the information available on the condition of the participating banks. We are convinced that this substantial increase in transparency will benefit all stakeholders and are therefore glad to present the Aggregate Report on the comprehensive assessment, which complements the bank-level disclosure templates.

The execution of the comprehensive assessment required extraordinary efforts and the mobilisation of substantial resources by all parties involved, including the national competent authorities of the participating Member States, the European Banking Authority, the ECB and the participating banks. Thanks to their professionalism, continuous hard work, and strong spirit of cooperation, this exercise was concluded successfully within a very demanding time frame.

The SSM has shown its ability to mobilise resources to work together on a common project. At the ECB, experts from both the supervisory and central banking sides have cooperated extensively, especially on the stress test side of the exercise. Regarding the stress test, the ECB Directorate General of Macro-Prudential Policy and Financial Stability was particularly responsible, as in previous EBA stress tests. We are most grateful to everyone involved for their dedication and extremely hard work in finalising the exercise on time and with excellent quality.

The completion of the comprehensive assessment marks the start of a new supervisory regime in the euro area, and the SSM will follow up on the results of the comprehensive assessment when taking up its day-to-day supervisory activities as of 4 November 2014. The exercise constitutes an important starting point for a process in which the SSM will use all instruments available within its mandate to foster harmonisation in key areas of banks' supervisory and regulatory treatment across the euro area. These efforts will contribute to achieving the SSM's overall objective of making a substantial contribution to the safety and soundness of the euro area banking system, and thus ultimately benefiting the economies and citizens of the participating Member States.

Frankfurt am Main, 26 October 2014

Vítor Constâncio                                  Danièle Nouy
Vice-President of the ECB                   Chair of the Supervisory Board

Aggregate report on the comprehensive assessment, October 2014
1 EXECUTIVE SUMMARY

The ECB conducted the comprehensive assessment to prepare for assuming banking supervision tasks in November 2014. This resulted in aggregate adjustments of €48 billion to participating banks’ asset carrying values which will be reflected in their accounts or in supervisory capital requirements. Overall, the exercise has identified capital shortfalls for 25 banks, totalling €25 billion.

1.1 COMPREHENSIVE ASSESSMENT

The European Central Bank (ECB) will assume banking supervision tasks in November 2014 in its role within the Single Supervisory Mechanism (SSM). In preparation, the ECB has conducted a comprehensive assessment of 130 banks. The stated objectives of this exercise were to:

- Strengthen banks’ balance sheets by repairing the problems identified through the necessary remedial actions.
- Enhance transparency by improving the quality of information available on the condition of the banks.
- Build confidence by assuring all stakeholders that, on completion of the identified remedial actions, banks will be soundly capitalised.

This report provides an overview of the approach taken and presents the results of the exercise.

The comprehensive assessment was broad in scope. The 130 credit institutions included in the exercise (i.e. "the participating banks") had total assets of €22.0 trillion, which accounts for 81.6% of total banking assets in the SSM.

The comprehensive assessment consisted of two components.

1) The asset quality review (AQR) was a point-in-time assessment of the accuracy of the carrying value of banks’ assets as of 31 December 2013 and provided a starting point for the stress test. The AQR was undertaken by the ECB and national competent authorities (NCAs), and was based on a uniform methodology and harmonised definitions. The scale of the exercise was unprecedented; it provided a thorough health check of the banks that will be subject to direct supervision by the ECB.

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1 The difference between this number and the initially reported figure of 128 is explained in Section 3.1.
2 Not all banks that took part in the comprehensive assessment will be supervised by the ECB directly. This is explained in further detail in Appendix 9.1.
3 As of 31 December 2013.
The exercise was based on the Capital Requirements Regulation and Directive (CRR/CRD IV), on the definition of regulatory capital as of 1 January 2014. Under the AQR, banks were required to have a minimum Common Equity Tier 1 (CET1) ratio of 8%.

2) The stress test provided a forward-looking examination of the resilience of banks’ solvency to two hypothetical scenarios, also reflecting new information arising from the AQR. The stress test was undertaken by the participating banks, the ECB, and NCAs, in cooperation with the European Banking Authority (EBA), which also designed the methodology along with the ECB and the European Systemic Risk Board (ESRB). Under the baseline scenario, banks were required to maintain a minimum CET1 ratio of 8%; under the adverse scenario, they were required to maintain a minimum CET1 ratio of 5.5%.

The AQR respected current accounting and prudential regulation, including the CRR/CRD IV capital rules. In some areas the ECB’s methodology involved additional prudential prescription to accounting concepts in order to achieve consistency and adequate conservatism. The results are of a prudential nature. AQR-adjustments were made, often in cases where banks were not breaching accounting rules. However, it is expected that many banks will likely choose to reflect many of these changes in their accounts. Examples of areas in which additional prescription was provided include impairment triggers, the calculation of individual specific provisions, and collateral valuations.

The stress test is not a forecast of future events, but a prudential exercise to address banks’ ability to withstand weaker economic conditions. In the stress test, banks’ projections were subject to centrally defined requirements in order to ensure appropriate conservatism and high-quality output. For example, balance sheets were assumed to remain constant over the stress test horizon in terms of total exposure volume, maturity and product mix (i.e. the static balance sheet assumption).

Within both components, the approach taken aimed for a rigorous and consistent exercise, emphasising a "level playing field" between banks.

Within the AQR, a detailed asset-level review was performed for over 800 specific portfolios making up 57% of the banks' risk-weighted assets. This resulted in the detailed analysis of more than 119,000 borrowers; the assessment of the valuation of about 170,000 collateral items; the building of 765 models to "challenge" the banks' own estimates of collectively assessed provisions and over 100 models to assess their CVA calculation; the revaluation of over 5,000

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4 See Appendix 9.4 for further details.
5 See Section 3.3.2 for a more detailed discussion.
of the most complex fair value exposures; and the review of over 100 complex valuation models. This in-depth review employed over 6,000 experts at its height.

In order to maintain consistency and equal treatment across both the AQR and stress test, central ECB teams independently performed quality assurance on the work of the banks and NCAs. The ECB was in close contact with NCAs, responding to over 8,000 methodology and process questions. The ECB reviewed and challenged outcomes from an SSM-wide perspective using comparative benchmarking, as well as engaged with NCAs to investigate specific issues that arose. Over 100 experts from the ECB along with external support professionals were involved in this quality assurance activity.

1.2 OUTCOMES OF THE COMPREHENSIVE ASSESSMENT

The AQR resulted in aggregate adjustments of €47.5 billion to participating banks' asset carrying values as of 31 December 2013. These adjustments originated primarily from accrual accounted assets, particularly adjustments to specific provisions on non-retail exposures. Additionally, non-performing exposure (NPE) stocks were increased by €135.9 billion across the in-scope institutions, as NPE definitions were moved onto a harmonised and comparable basis, including the examination of forbearance as a trigger of NPE status.

The prudential and accounting implications will be assessed by the SSM's new Joint Supervisory Teams (JSTs) along with the qualitative conclusions of the exercise regarding, for example, the soundness of banks' internal processes. This will mean that even where banks do not reflect adjustments in their accounts all conclusions will be captured in ongoing supervision and in supervisory capital requirements. As Figure 1 shows, the AQR adjustments differ by jurisdiction as consistent standards have been applied where previous approaches may have diverged.
In addition to adjustments made directly to current carrying values, the AQR result was also reflected in the projection of banks' capital adequacy under hypothetical scenarios performed in the stress test.

**Under the adverse scenario**, the banks' aggregate available capital is projected to be depleted by €215.5 billion (22% of capital held by participating banks) and risk weighted assets (RWA) to increase by about €860 billion by 2016; including this as a capital requirement at the threshold level brings the total capital impact to €262.7 billion in the adverse scenario.

This capital impact leads to a decrease of the CET1 ratio for the median participating bank by 4.0 percentage points from 12.4% to 8.3% in 2016. The reduction in the median CET1 ratio projected for banks in each country is shown in Figure 2.
Although not fully comparable, the median projected CET1 ratio reduction in the Comprehensive Capital Analysis and Review (CCAR) carried out in the United States in 2014 was 2.9%\(^6\); it was 3.9% in the AQR and stress test carried out in Spain in 2012\(^7\), and 2.1% in the EBA stress test carried out in 2011\(^8\).

**Overall, the comprehensive assessment identified a capital shortfall of €24.6 billion across 25 participating banks after comparing these projected solvency ratios against the thresholds defined for the exercise.\(^9\)**

The €24.6 billion shortfall can be disaggregated into three components. The amount of shortfall that arose from the stress test conducted by the banks and quality assured by the ECB was €11.2 billion before making any adjustments due to AQR results and after accounting for all existing capital buffers as of 31 December 2013. The inclusion of the reduction in starting-point available capital due to AQR adjustments increases this shortfall to €21.9 billion. Finally, the reflection of the new information on asset performance learned through the AQR in the stress test projections resulted in the full shortfall of €24.6 billion. These impacts are illustrated in Figure 3.

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\(^6\) Dodd Frank Act Stress Test severely adverse scenario. The median CET1 ratio reduction of the 2013 exercise was 2.9%.

\(^7\) Due to low number of participating banks this figure is a weighted average.

\(^8\) Exercise occurred on the basis of a lower initial capital base than the current exercise.

\(^9\) 8% of CET1 in the baseline scenario and AQR, 5.5% of CET1 in the adverse scenario.
The overall comprehensive assessment shortfall is shown again in Figure 4, split by country of participating bank. It is presented in terms of country-level RWA, i.e. reflecting the significance of the shortfall relative to the size of the banks included in the exercise and showing the direct impact on banks' CET1 ratio.
This capital shortfall identified by the comprehensive assessment can be placed in the context of capital recently raised by the participating banks. Between the onset of the financial crisis in 2008 and 31 December 2013, capital in excess of €200 billion has been raised by banks participating in the exercise. Since 1 January 2014, a further €57.1 billion has been raised which is not counted in the results above, but which will be considered as mitigation of the shortfalls found.

On a bank level, the capital needs identified are presented below, along with the capital raised by each institution since 31 December 2013\(^\text{10}\) and the remaining capital shortfall. For each of the 25 institutions identified in Table 1, a capital plan will be submitted to the respective JST within two weeks of the publication of this document, detailing how the capital shortfall will be

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\(^\text{10}\) To 30 September 2014.
filled. The JSTs will check that any such plans are sound and include the capital raising already undertaken by the participating banks with shortfalls.\footnote{Banca Piccolo Credito Valtellinese, Società Cooperativa (‘Credito Valtellinese’) is considered a less significant institution and will be indirectly supervised by the ECB under the SSM. Further information on less significant institutions can be found in Section 3.1.1 and in Appendix 9.1.}

When all of the capital that has been raised already (net of capital instrument buyback) is offset against the shortfalls, €9.5 billion\footnote{Note that some banks have raised more than their identified capital shortfall, explaining the divergence between the delta in shortfalls pre and post capital raising and the total capital raised by shortfall banks since January 2014 which is €18.6 billion.} remain to be filled, distributed across 13 banks. Two banks within this list that have a shortfall on a static balance sheet projection\footnote{Eurobank has practically no shortfall and National Bank of Greece has no shortfall.} will have dynamic balance sheet projections (which have been performed alongside the static balance sheet assessment as restructuring plans were agreed with DG-COMP after 1 January 2014) taken into account by the JSTs in determining their final capital requirements. Under the dynamic balance sheet assumption, one bank has no shortfall and one bank has practically no shortfall.
## Table 1  Participating banks with a shortfall

<table>
<thead>
<tr>
<th>Bank Name</th>
<th>CETI ratio starting point</th>
<th>CETI ratio post AQR</th>
<th>CETI ratio baseline scenario</th>
<th>CETI ratio adverse scenario</th>
<th>Capital shortfall (€billion)</th>
<th>Net eligible capital raised (€billion)</th>
<th>Capital shortfall post net capital raised (€billion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurobank¹</td>
<td>10.6%</td>
<td>7.8%</td>
<td>2.0%</td>
<td>-6.4%</td>
<td>4.63</td>
<td>2.86</td>
<td>1.76</td>
</tr>
<tr>
<td>Monte dei Paschi di Siena</td>
<td>10.2%</td>
<td>7.0%</td>
<td>6.0%</td>
<td>-0.1%</td>
<td>4.25</td>
<td>2.14</td>
<td>2.11</td>
</tr>
<tr>
<td>National Bank of Greece¹</td>
<td>10.7%</td>
<td>7.5%</td>
<td>5.7%</td>
<td>-0.4%</td>
<td>3.43</td>
<td>2.50</td>
<td>0.93</td>
</tr>
<tr>
<td>Banca Carige</td>
<td>5.2%</td>
<td>3.9%</td>
<td>2.3%</td>
<td>-2.4%</td>
<td>1.83</td>
<td>1.02</td>
<td>0.81</td>
</tr>
<tr>
<td>Cooperative Central Bank</td>
<td>-3.7%</td>
<td>-3.7%</td>
<td>-3.2%</td>
<td>-8.0%</td>
<td>1.17</td>
<td>1.50</td>
<td>0.00</td>
</tr>
<tr>
<td>Banco Comercial Português</td>
<td>12.2%</td>
<td>10.3%</td>
<td>8.8%</td>
<td>3.0%</td>
<td>1.14</td>
<td>-0.01</td>
<td>1.15</td>
</tr>
<tr>
<td>Bank of Cyprus</td>
<td>10.4%</td>
<td>7.3%</td>
<td>7.7%</td>
<td>1.5%</td>
<td>0.92</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Oesterreichischer Volksbanken-Verbund</td>
<td>11.5%</td>
<td>10.3%</td>
<td>7.2%</td>
<td>2.1%</td>
<td>0.86</td>
<td>0.00</td>
<td>0.86</td>
</tr>
<tr>
<td>permanent tsb</td>
<td>13.1%</td>
<td>12.8%</td>
<td>8.8%</td>
<td>1.0%</td>
<td>0.85</td>
<td>0.00</td>
<td>0.85</td>
</tr>
<tr>
<td>Veneto Banca</td>
<td>7.3%</td>
<td>5.7%</td>
<td>5.8%</td>
<td>2.7%</td>
<td>0.71</td>
<td>0.74</td>
<td>0.00</td>
</tr>
<tr>
<td>Banco Popolare</td>
<td>10.1%</td>
<td>7.9%</td>
<td>6.7%</td>
<td>4.7%</td>
<td>0.69</td>
<td>1.76</td>
<td>0.00</td>
</tr>
<tr>
<td>Banca Popolare di Milano</td>
<td>7.3%</td>
<td>6.9%</td>
<td>6.5%</td>
<td>4.0%</td>
<td>0.68</td>
<td>0.52</td>
<td>0.17</td>
</tr>
<tr>
<td>Banca Popolare di Vicenza</td>
<td>9.4%</td>
<td>7.6%</td>
<td>7.5%</td>
<td>3.2%</td>
<td>0.68</td>
<td>0.46</td>
<td>0.22</td>
</tr>
<tr>
<td>Piraeus Bank</td>
<td>13.7%</td>
<td>10.0%</td>
<td>9.0%</td>
<td>4.4%</td>
<td>0.66</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Credito Valtellinese</td>
<td>8.8%</td>
<td>7.5%</td>
<td>6.9%</td>
<td>3.5%</td>
<td>0.38</td>
<td>0.42</td>
<td>0.00</td>
</tr>
<tr>
<td>Dexia²</td>
<td>16.4%</td>
<td>15.8%</td>
<td>10.8%</td>
<td>5.0%</td>
<td>0.34</td>
<td>0.00</td>
<td>0.34</td>
</tr>
<tr>
<td>Banca Popolare di Sondrio</td>
<td>8.2%</td>
<td>7.4%</td>
<td>7.2%</td>
<td>4.2%</td>
<td>0.32</td>
<td>0.34</td>
<td>0.00</td>
</tr>
<tr>
<td>Hellenic Bank</td>
<td>7.6%</td>
<td>5.2%</td>
<td>6.2%</td>
<td>-0.5%</td>
<td>0.28</td>
<td>0.10</td>
<td>0.18</td>
</tr>
<tr>
<td>Münchener Hypotheekbank</td>
<td>6.9%</td>
<td>6.9%</td>
<td>5.8%</td>
<td>2.9%</td>
<td>0.23</td>
<td>0.41</td>
<td>0.00</td>
</tr>
<tr>
<td>AXA Bank Europe</td>
<td>15.2%</td>
<td>14.7%</td>
<td>12.7%</td>
<td>3.4%</td>
<td>0.20</td>
<td>0.20</td>
<td>0.00</td>
</tr>
<tr>
<td>C.R.H. - Caisse de Refinancement de l’Habitat</td>
<td>5.7%</td>
<td>5.7%</td>
<td>5.7%</td>
<td>5.5%</td>
<td>0.13</td>
<td>0.25</td>
<td>0.00</td>
</tr>
<tr>
<td>Banca Popolare dell’Emilia Romagna</td>
<td>9.2%</td>
<td>8.4%</td>
<td>8.3%</td>
<td>5.2%</td>
<td>0.13</td>
<td>0.76</td>
<td>0.00</td>
</tr>
<tr>
<td>Nova Ljubljanska banka³</td>
<td>16.1%</td>
<td>14.6%</td>
<td>12.8%</td>
<td>5.0%</td>
<td>0.03</td>
<td>0.00</td>
<td>0.03</td>
</tr>
<tr>
<td>Liberbank</td>
<td>8.7%</td>
<td>7.8%</td>
<td>8.5%</td>
<td>5.6%</td>
<td>0.03</td>
<td>0.64</td>
<td>0.00</td>
</tr>
<tr>
<td>Nova Kreditna Banka Maribor³</td>
<td>19.6%</td>
<td>15.7%</td>
<td>12.8%</td>
<td>4.4%</td>
<td>0.03</td>
<td>0.00</td>
<td>0.03</td>
</tr>
<tr>
<td>Total</td>
<td>10.0%</td>
<td>8.4%</td>
<td>7.2%</td>
<td>2.1%</td>
<td>24.62</td>
<td>18.59</td>
<td>9.47</td>
</tr>
</tbody>
</table>

¹ These banks have a shortfall on a static balance sheet projection, but will have dynamic balance sheet projections (which have been performed alongside the static balance sheet assessment as restructuring plans were agreed with DG-COMP after 1 January 2014) taken into account in determining their final capital requirements. Under the dynamic balance sheet assumption, these banks have no or practically no shortfall taking into account net capital already raised.

² Taking into account the orderly resolution plan of this institution, which benefits from a State guarantee, there is no need to proceed with capital raising following comprehensive assessment results.

³ The impact on 2014 of the restructuring measures already taken to improve structural profitability and the maintenance of retained earnings in banks will cover the shortfalls identified.

The calculation of CETI used within the comprehensive assessment and reflected above has been performed based on the existing legal requirements and national transitional arrangements, with the notable exception of the removal of the prudential filter on unrealised gains and losses on sovereign exposures in available-for-sale (AFS), for which an EBA-defined harmonised
These national discretions over transitional arrangements introduce variation in the current definition of capital used across banks and countries. The resulting divergences will gradually diminish over the coming years as transitional arrangements are phased out. In the meantime, the ECB recognises the need to improve the consistency of the definition of capital and the related quality of CET1 capital. This will be an issue for the SSM to address as a matter of priority. The disclosure of the impact of the transitional provisions on CET1 allows for an objective comparison, where the impact of the national options is neutralised.

1.3 STRUCTURE OF THIS REPORT
The remainder of this report is structured as follows:

- Context of the exercise: objectives, guiding principles and how to interpret results.
- Scope of the exercise and methodological overview: the banks subject to the exercise; what it does and does not aim to address; a high-level view of its approach.
- Quality assurance: process and analysis performed to ensure consistent and accurate results.
- Aggregate outcomes of the comprehensive assessment.
- Outcomes of the AQR and further analysis: review of the detailed drivers of the AQR results.
- Outcomes of the stress test and further analysis: review of the detailed drivers of the stress test results.
- Capital measures taken by participating banks: capital quantity and composition of participating banks’ capital, including the treatment of the deductions and the related quality of CET1 capital.

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14 EBA harmonised approach for the phase-in is 2014-20%, 2015-40%, 2016-60%.
1.4  COMPREHENSIVE ASSESSMENT IN NUMBERS

The exercise was comprehensive in scope:

- 19 participating countries.
- 130 participating banks.
- 81.6% of total SSM banking assets covered.
- More than 6,000 experts involved in ECB and NCA bank teams.

The exercise was comprehensive in nature:

- Over 800 individual portfolios examined.
- Over 119,000 debtors analysed in detail.
- Over 170,000 collateral items revalued.
- Over 850 provisioning and CVA models challenged.
- Over 5,000 securities revalued.