#### Box 10

## ESTIMATE OF POTENTIAL FUTURE WRITE-DOWNS ON SECURITIES AND LOANS FACING THE EURO AREA BANKING SECTOR

An estimate of potential write-downs for the period from the beginning of 2007 until end-2010 related to the financial market turmoil for euro area banks was published in the June 2009 FSR, along with the methodology that was used to make the calculations. Using the same methodology and with the benefit of more granular data on loan and securities exposures of euro area banks, this box presents an update of the estimate and assesses, based on new macroeconomic forecasts, the magnitude of potential future write-downs that may be suffered by the euro area banking sector by the end of 2010.

In order to assess the magnitude and the detailed composition of euro area banks' credit exposures, the national central banks of euro area countries, with the coordination of the ECB, conducted two data collection exercises. The information collected facilitated greater granularity on euro area banking sector exposures, so that loss rates could be computed in a way that better account is taken of the type of assets, the underlying collateral and the geographical area of origination. The new estimates have also been enhanced with the inclusion of an estimate of potential write-downs on euro area banking sector exposures to securities originated in central, eastern and south-eastern Europe (CESEE).<sup>3</sup> The estimate of write-downs on securities published in the June 2009 FSR was based only on securities originated in mature Europe and in the United States. The loss rate applied to CESEE securities in the new estimates was approximated on the basis of changes in the Emerging Market Bond Index (EMBI).

Regarding the granularity of the data on exposures used to make the new estimate of potential writedowns on loans, exposures to residents of the United States, the euro area and CESEE countries were all modelled separately. While the models used to produce forecasts of write-off rates were

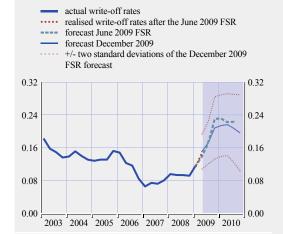
<sup>1</sup> See Box 14, entitled "Estimating potential write-downs confronting the euro area banking sector as a result of the financial market turmoil", in ECB, Financial Stability Review, June 2009

<sup>2</sup> The reader should be aware of caveats and the uncertainties surrounding the estimates that were described in the box in the June 2009 FSR (see previous footnote for reference) before interpreting the magnitude of the estimate of potential losses.

<sup>3</sup> The figure includes exposures to the ten new Member States and to Croatia, Serbia, Russia, Turkey and Ukraine.

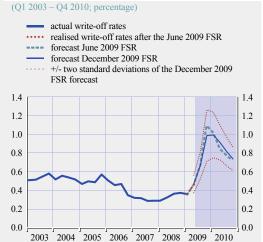
### Chart A Write-off rates on household mortgages extended by euro area banks

(Q1 2003 – Q4 2010; percentage)



Sources: ECB and ECB calculations.

#### Chart B Write-off rates on loans extended to corporates by euro area banks



Sources: ECB and ECB calculations.

the same as those used to prepare the estimates that were published in the June 2009 FSR, the paths predicted for GDP growth and the unemployment rate were both updated in accordance with the latest European Commission macroeconomic forecast published in November 2009. Since the European Commission forecast for the euro area did not change materially when compared with the figures published in May, this meant that the predicted write-off rates on loans changed little in comparison with those used in the June 2009 computations (see Charts A and B). Nevertheless, compared with the estimates published in June, the new loan loss estimates have increased for two main reasons. First, because provisions were made in 2008 for potential losses on some loans that had not so far been written off, an upward adjustment was made to the relevant write-off rate to account for the fact that some of these loans may eventually be written off. Second, the new estimates cover a broader range of exposures than was the case in June. In particular, they take better account of the magnitude of potential write-downs on euro area banking system exposures to collateralised debt obligations (CDOs) and residential mortgage-backed securities (RMBSs).

The new estimates show that the total (i.e. already reported and yet to come) write-downs for the euro area banking system are likely to amount to around €553 billion for the period 2007-10. Of this total, cumulative total write-downs on exposures to securities are likely to amount to around €198 billion, while the predicted figure for total loan-losses is around €355 billion (see the table). According to the consolidated banking statistics, euro area banks made provisions of €121 billion in view of the deterioration in the quality of their loan exposures between 2007 and 2008. In addition, figures reported by a sample of LCBGs for loan-loss provisions in the first half of 2009 show an acceleration when compared with 2008. An estimate for the entire euro area banking sector based on these provisioning patterns suggests that the total could amount to around €65 billion. At the same time, write-downs on securities reported by banks up to the end of October 2009 amounted to about €180 billion. Splitting the total loss figures into what has already been reported and what

<sup>4</sup> The proportionality factor used to adjust for this was based on the average ratio of write-offs to provisions in the period from 2006 to 2008. The increase of this proportion in 2008 may be an indication that relatively more loans, most likely collateralised with mortgages, were being kept on banks' balance sheets after provisioning had been made, possibly with the expectation that some of these loans might start performing again once the economy starts to recover.

# Potential write-downs on securities and loans for the euro area banking sector over the period from 2007 to 2010

	Cumulative implied write-downs			
	Estimated exposure	June 2009 FSR	December 2009 FSR	Estimated loss rate (%)
Cash and synthetic structured credit securities				
Residential mortgage-backed securities (RMBSs)	444	46.6	55.7	12.5
Asset-backed securities (ABSs)	191	4.5	3.6	1.9
Collateralised debt obligation (CDOs) backed by ABSs/RMBSs	145	68.4	83.6	57.7
Commercial mortgage-backed securities (CMBSs)	79	14.3	20.2	25.6
Collateralised loan obligations (CLOs)	231	8.3	5.7	2.5
Asset-backed commercial paper (ABCP)	12	-	0.2	1.7
Corporate CDOs	20	-	0.3	1.7
Total for cash and synthetic structured credit securities	1,122	142	169	15.1
Other security holdings				
Corporate debt securities	255	-	6.2	2.4
Covered bonds	150	-	0.0	0.0
Bank bonds	660	-	0.0	0.0
Equity holdings	157	-	3.8	2.4
Securities issued in central, eastern and south-eastern Europe	263	-	12.8	4.9
Other securities	231	-	5.6	2.4
Reconciliation item <sup>1)</sup>		21.8		
Total for other security holdings	1,717	22	28	1.6
Total for all securities	2,839	164	198	7.0
Loans to non-financial customers				
Residential mortgages	3,683	33.1	44.3	1.2
Consumer loans	1,481	46.6	63.8	4.3
Commercial property mortgages	781	-	37.7	4.8
Corporate loans	5,125	172.9	193.5	3.8
Syndicated loans	354	-	15.7	4.5
Reconciliation item <sup>1)</sup>	-	71.4	-	
Total for all loans	11,424	324	355	3.1
Total potential write-downs on securities and loans	14,263	488	553	3.9
Write-downs reported to end-May 2009 (June 2009 FSR) and				
end-October 2009 (December 2009 FSR)		162	180	
Loan loss provisions 2007-2008 <sup>2)</sup>		113	121	
Estimate of loan loss provisions in H1 2009		-	65	
Potential further write-downs on securities and loans		214	187	

Sources: Association for Financial Markets in Europe, Banking Supervision Committee, national central banks, ECB and ECB calculations.

is yet to come by the end of 2010, there is a potential for euro area banks to suffer an additional €187 billion in losses, mainly as a result of their loan exposures.

The new estimate of the total write-downs facing the euro area banking sector is higher than the amount of €488 billion (or USD 649 billion) published in the June 2009 FSR.<sup>5</sup> In this issue of the FSR, loss estimates are denominated in euro and the increase, expressed in euro terms, in comparison with the June FSR is €65 billion. Apart from the wider

<sup>1)</sup> Reconciliation items appear in this table to facilitate comparisons between the June 2009 FSR estimates of potential future write-downs and the latest estimates. This item is added to take account of the fact that a less granular breakdown of exposures by type was provided in the June FSR. For instance, the residual loan category labelled "other loans", shown in the June 2009 FSR, included some exposures that have now been split up and reallocated among the main loan categories shown here. Because of differences in the magnitude of exposures, the figures for predicted write-downs shown here are not fully comparable with the June 2009 estimates for some asset types.

2) Loan loss provisions made by banks in 2007-2008 are somewhat higher than those published in the June 2009 FSR due to revisions to the consolidated banking statistics that were made after the finalisation of the June 2009 FSR.

<sup>5</sup> In the April 2009 IMF Global Financial Stability Report, a loss estimate of USD 904 billion (€695 billion) was published for the euro area banking sector. Since then, the IMF has revised its estimate considerably downwards, to USD 814 billion (€581 billion). The main reason for the downward revision was a change in the methodology for computing loan loss estimates and a refinement of the estimate of euro area banking sector securities exposures. Since the IMF figures are published in US dollars, exchange rate assumptions must be taken into account when making comparisons between these and ECB loss estimates.

III THE EURO AREA FINANCIAL SYSTEM

variety of assets included in the latest exercise, an important reason behind the rise is the further deterioration in commercial property market conditions. This has contributed to an upward revision to the estimate of potential write-downs on banks' exposures to commercial property mortgages and commercial mortgage-backed securities. Some caution is warranted in making direct comparisons between the figure for potential write-downs published in the June FSR, €214 billion, and the new estimate of €187 billion. The main reason is that both estimates looked at potential write-downs up to the end of 2010.<sup>6</sup> With the passage of time, the reference period for the latest exercise is six months shorter than the last one, which, ceteris paribus and assuming a steady flow of provisioning, should mean a lowering of the figure for potential future write-downs. In the meantime, banks have, as expected, reported additional loan-loss provisions which are now included in the figures for already reported losses. Since there has been only a small decrease in the figure for write-downs in the pipeline until the end of 2010, this means that the remaining losses will have to be buffered with banks' core earnings over a relatively shorter period of time.<sup>7</sup>

- 6 In the June 2009 FSR, the figure for potential future write-downs related to the period from end-May 2009 until end-December 2010 for securities and from the beginning of 2008 until end-2010 for loans. In this issue of the FSR, the figure for potential future write-downs relates to the period from end-October 2009 until end-December 2010 for securities and from end-June 2009 until end-2010 for loans.
- 7 The increased intensity of losses for the remainder of the period until end-2010, which had already manifested itself in the acceleration of provisioning in 2009, is mainly related to higher loss rates on loans in 2009. These loss rates are expected to remain at elevated levels in 2010 (see Charts A and B).