27 July 2011 | 12 pages

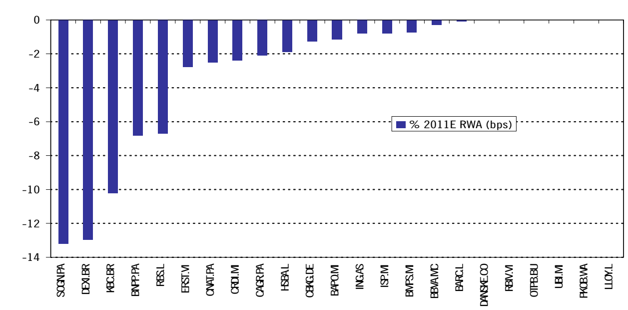
European Banks

Greek Sovereign Debt Impairments in 2Q11*

- Industry Overview

- **Time to Impair** — In our The Standards report (8 July), we presented our view that there were strong accounting arguments for European banks to take impairment charges on their Greek government bonds with the 2Q11 results. We believe Deutsche Bank's 2Q11 AFS impairment was based on a mark-to-market impairment approach across its entire portfolio of Greek sovereign debt, regardless of duration (we estimate c30% markdown including Postbank-related fair value adjustment). Others are likely to follow, although approaches could vary.
- **The Alternative View** — Unlike Deutsche Bank, we assume that some banks may argue that for bonds maturing in 2020 and beyond (i.e. outside the Greek Private Sector Initiative or PSI) would be repaid in full, so our calculations of impairments only include bonds maturing through 2019. Moreover, we assume that for Held to Maturity (HTM) assets, the exchange of bonds may not be treated as a 'derecognition' event by some banks and our calculations assume a write-down would be based on 21% impairment. We have estimated AFS impairments based on a full market value write-down, but we think that some banks may instead use a smaller 21% haircut.
- **3% off Earnings, 3 bps off Capital** — Ex-Hellenic banks, we estimate that 2Q11 impairments could total €2.4bn, which equates to 3% off 2011E profit, or 3 bps off 2011E core Tier 1 capital, based on a universe of 34 banks. Using a more onerous Deutsche Bank approach across the entire maturity spectrum of Greek sovereign bond exposure (i.e. beyond 2019), the impairments would be a substantially higher €10bn, or 13bps off 2011E core Tier 1 capital.
- **Most Affected** — Under our central scenario, SocGen, Dexia and KBC would experience a 10-13 bps capital impact. BNP Paribas and RBS would see a 7-8 bps impact to capital. An across-the-maturity-spectrum scenario would incrementally impact Dexia, BNP Paribas and Commerzbank to the greatest extent.

Figure 1. European Banks – Potential 2Q11 Impairments on Greek Sov Debt, bps 2011E RWA *



Source: Citi Investment Research and Analysis
* Impairments on bonds maturing through 2019; HTM at 21%; AFS marked to market as of 30 June 2011

European Banks

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*We have excluded Espirito Santo (BES) from our analysis due to maturity of their 3M Greek T-bills.

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Greek Sovereign Debt Impairments in 2Q11

3% off Earnings, 3 bps off Capital

35 banks would see €2.5bn of impairments…

In the figure below (Figure 2), we show the result of our calculations for the potential impairments on Greek sovereign debt for 35 of our coverage banks under what we believe is a realistic scenario. We use the latest available Greek sovereign debt exposure data (either from EBA or as disclosed by the banks) broken down by maturity and accounting category. We exclude Hellenic banks from our analysis as our focus is on the *pan-European* implications of Greek sovereign debt impairments.

We assume that only bonds maturing through 2019 would be impaired…

We have assumed that only bonds maturing through to 2019 would be impaired, as per the terms of the IIF proposal, even though we believe there are valid technical arguments for treating all Greek sovereign debt as impaired (and we note that Deutsche Bank impaired all Greek sovereign exposures).

AFS impairments to market levels as of 30 June 2011…

We have assumed that all Greek debt classified AFS and maturing by 2019 is written down in Q2 results to market value at 30 June 2011, as we believe price changes after 30 June 2011 are not adjusting events (see page 6). This is consistent with Deutsche Bank's 2Q11 treatment. However, we anticipate that some banks will argue for a write-down, which reflects the IIF's calculation of a 21% haircut.

HTM impairments at 21% haircut

For HTM assets, we assume that the exchange of bonds is not treated as a derecognition event and therefore the writedown of HTM bonds is based on a discounted cash flow calculation and not based on the fair value of the new instrument received in the exchange (even though in our view the technical arguments for treating the exchange as a derecognition event are strong). As a result of this assumption, we are estimating HTM impairment at a 21% haircut.

SocGen, Dexia, KBC and Deutsche most affected

- For the 35 banks, impairments could total €2.5bn, which equates to 3% off 2011E attributable profit, or 3 bps off 2011E core Tier 1 capital, which in itself appears manageable. Unsurprisingly, the banks with the largest exposure to Greek debt in the 3M-9Y maturity segment are most affected.
  - SocGen, Dexia and KBC would have a 10-13 bps capital impact.
  - BNP Paribas and RBS would see a 7-8 bps impact to capital.
- Using a more onerous Deutsche Bank approach across the entire maturity spectrum of Greek sovereign bond exposure (i.e. beyond 2019), the impairments would be a substantially higher €10bn, or 13bps off 2011E core Tier 1 capital.

Figure 2. European Banks – Potential 2Q11 Impairments on Greek Sovereign Debt *

Name	RIC	Potential Impairment, €m	% 2011E RWA, bps	%2011E Att Profit
Due to Report 2Q11:				
Societe Generale	SOGN.PA	-451	-13	-12.1%
Dexia	DEXI.BR	-153	-13	5.0%
KBC	KBC.BR	-123	-10	-4.3%
BNP Paribas	BNPP.PA	-445	-7	-5.4%
RBS	RBS.L	-330	-7	126.8%
Erste Bank	ERST.VI	-30	-3	-2.7%
Natixis	CNAT.PA	-39	-3	-3.3%
UniCredit	CRDI.MI	-100	-2	-3.2%
Credit Agricole	CAGR.PA	-66	-2	-1.9%
HSBC	HSBA.L	-153	-2	-1.4%
Commerzbank	CBKG.DE	-31	-1	-1.9%
Banco Popolare	BAPO.MI	-11	-1	-5.5%
ING	ING.AS	-27	-1	-0.4%
Intesa Sanpaolo	ISP.MI	-27	-1	-1.0%
Monte dei Paschi	BMPS.MI	-8	-1	-1.6%
BBVA	BBVA.MC	-10	0	-0.2%
Barclays	BARC.L	-3	0	-0.1%
Danske Bank	DANSKE.CO	0	0	0.0%
Raiffeisen Bank Intl	RBIV.VI	0	0	0.0%
OTP Bank	OTPB.BU	0	0	0.0%
UBI Banca	UBI.MI	0	0	0.0%
PKO BP	PKOB.WA	0	0	0.0%
Lloyds Banking Group	LLOY.L	0	0	0.0%
23 Banks		**-2,009**	**-3**	**-3.9%**
Already Reported 2Q11 (theoretical impact had the bank followed our impairment methodology):				
Deutsche Bank	DBKGn.DE	-324	-10	-5.6%
SE Banken AB	SEBa.ST	-26	-3	-1.9%
Banco Santander	SAN.MC	-40	-1	-0.5%
DNB NOR	DNBNOR.OL	0	0	0.0%
Banco BPI	BBPI.LS	0	0	0.0%
SHB	SHBa.ST	0	0	0.0%
Swedbank	SWEDa.ST	0	0	0.0%
Nordea	NDA1V.HE	0	0	0.0%
Bankinter	BKT.MC	0	0	0.0%
Banco Popular	POP.MC	0	0	0.0%
Bco de Sabadell	SABE.MC	0	0	0.0%
11 Banks		**-390**	**-2**	**-1.6%**
34 Banks		**-2,399**	**-3**	**-3.1%**

Source: Citi Investment Research and Analysis

* Notes: Deutsche Bank disclosed a €132m impairment on its AFS Greek sovereign debt holdings with its 2Q11 results (pre-tax, after minorities). This is in addition to an earlier MTM through goodwill/capital as part of the Postbank acquisition. The cumulative "haircut" taken amounts to c.30%.

Methodology: assume only bonds maturing through 2019 are subject to impairment; exchange does not trigger derecognition; 21% haircut for HTM debt; mark-to-market as of 30 June 2011 for AFS debt.

The Accounting View

There are strong arguments for European banks to take impairment charges on their Greek government bonds in 2Q11 results

We wrote on 8 July, *The Standards: Sovereign Debt Update - French plan for Greek debt may not solve accounting problem,* that there were strong arguments for European banks to take impairment charges on their Greek government bond holdings in 2Q11 results, whether or not a solution was agreed. In our view, it would be quite difficult for a bank to argue that Greece was not in significant financial difficulty (indicating impairment of Greek government debt) at 30 June 2011.

Subsequent events, in particular the financing offer to Greece from the Institute of International Finance (IIF) dated 21 July, supported by 30 financial institutions, further confirm our view. We believe there is objective evidence of impairment at 30 June as per IAS 39 paragraph 59, which means that IFRS reporting banks should calculate impairment losses on Greek sovereign debt holdings in Q2 2011 results.

This is also consistent with the view published by the Institut der Wirtschaftsprüfer in Deutschland (IDW, German auditors' body) in its statement of 20 July, that:

"an auditor would only be able to regard those [Q2] interim financial statements as meeting legal requirements if those interim financial statements adequately reflect…a write down or an impairment" [on Greek government debt].

Deutsche Bank impaired all its AFS Greek sovereign debt to market value at 30 June 2011

Deutsche Bank, in Q2 2011 results published yesterday (26 July 2011) impaired all its AFS Greek sovereign debt to market value at 30 June 2011, in accordance with the IDW statement. Interestingly, Deutsche Bank highlighted in its 2Q11 Interim Report that it was currently assessing the potential consequence of the July 21 Greek Private Sector Initiative, suggesting that its impairment was regardless of this.

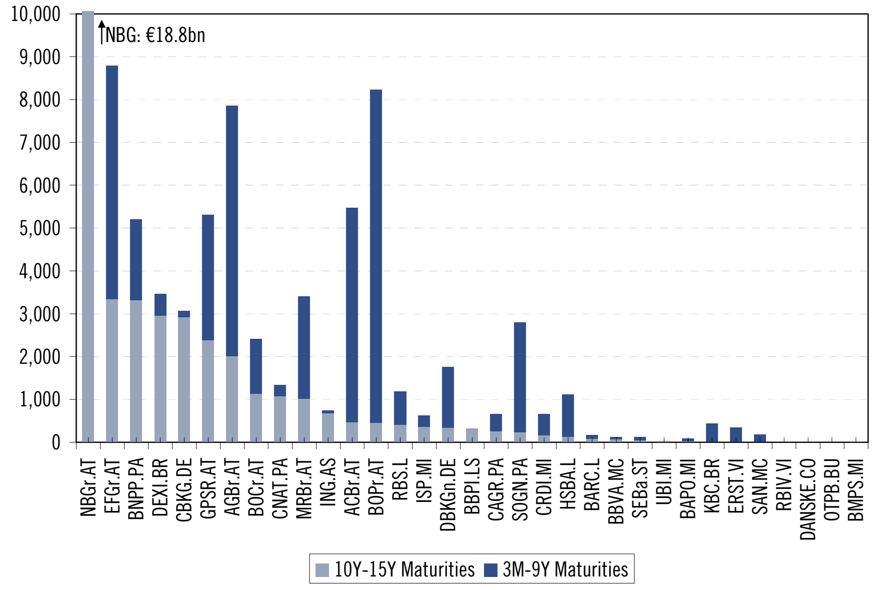
It is possible that some European banks may query whether all Greek government debt should be impaired in Q2 results, since

- The IIF offer only covers debt maturing over the next 9 years, therefore it could be argued that debt maturing in 2020 and beyond is not impaired (if a bank still expects to recover all contractual cash flows on those debt instruments).
- Not all banks have signed up to the IIF proposal (possibly a bank could argue that it is not intending to participate in the IIF offer and therefore it still expects to recover all the contractual cash flows).

In our view there is an impairment trigger for all Greek government bonds

In our view, there is an impairment trigger for all Greek government bonds, although we think that some banks may argue that debt maturing post 2020 is not impaired. Naturally, banks with longer-duration exposure would benefit relatively more from such a treatment. Banks with significant exposure to Greek sovereign debt maturing post 2020 include BNP Paribas, Dexia, Commerzbank, and the Greek banks (Figure 3).

Figure 3. European Banks – Split of Greek Sovereign Debt by Maturities, 4Q10 *



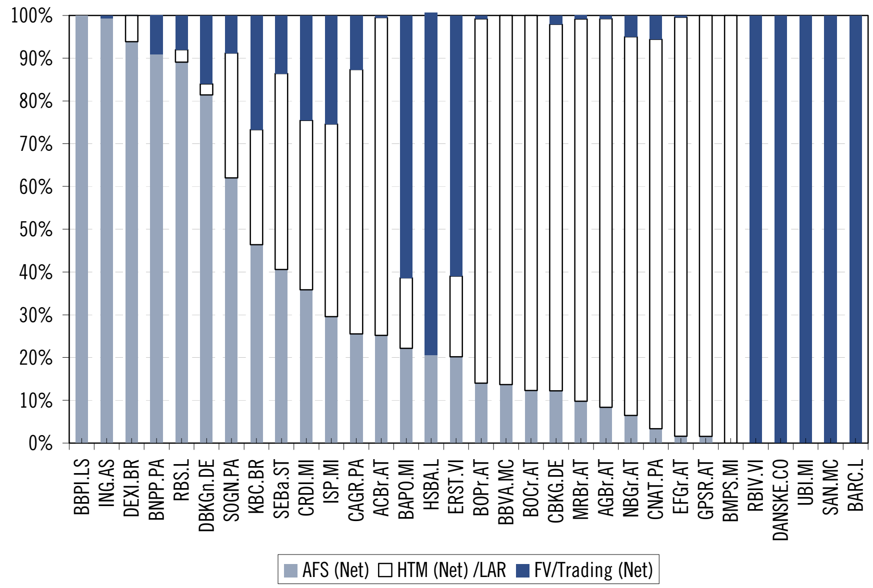
Source: EBA, Citi Investment Research and Analysis

We note that the IDW statement indicated that all Greek debt was impaired, without excluding post 2020 maturities, and consistent with this Deutsche Bank wrote down all its AFS Greek sovereign debt including post 2020 maturities, so we think it somewhat less likely Commerzbank will argue this debt is not impaired.

How to Quantify the Impairment Charges

As we have discussed in previous notes, the calculation of impairment charges differs between debt instruments, which are classified in the Available for Sale (AFS) category and debt, which is classified in the Held to Maturity (HTM) or Loans & Receivables (L&R). There is no question of impairment on Greek sovereign debt classified in the Fair Value through Profit or Loss category (e.g. trading book assets or derivative exposures) because these are marked-to-market.

Figure 4. European Banks – Split of Greek Sovereign Debt by Accounting Classification Category, 4Q10



Source: EBA, Citi Investment Research and Analysis

1. AFS

For Greek government debt classified as AFS the calculation of the impairment should be straightforward

For Greek government debt which is classified as AFS, we believe the calculation of the impairment should be straightforward: **it is the accumulated loss to 30 June 2011, i.e. a write-down to market value at 30 June 2011**. IAS 39 specifies the loss is the difference between the acquisition cost (net of principal repayment and amortisation) and fair value (i.e. market value). The best evidence of fair value is quoted prices in an active market. Therefore (assuming a market price is available) we do not think that any estimate of the present value of the new instruments mentioned in the IIF offer is relevant. **We also do not think that the market value of the bonds after 30 June should be treated as an "adjusting event" as per IAS 10 (Events after the Reporting Period).**

The French CNCC believes the IIF proposal should impact impairments of Greek government bonds as of 30 June 2011

The French Compagnie Nationale des commissaires aux comptes (CNCC, organisation of external auditors) believes that the IIF proposal should impact the potential impairments of Greek government bonds as of 30 June 2011, adapted to the circumstances of each company. CNCC has also requested complete information on sovereign exposure risks, as well as estimates used for valuing assets. Our interpretation of the CNCC statement is that they believe that impairments at 30 June 2011 should reflect the terms of the IIF proposal; this could suggest that write-downs could be based on the 21%.haircut.

Our credit analysts calculate that the four replacement bond types investors can choose, according to the IIF announcement, have values between 51 and 59 cents on the euro (*European Credit Weekly – wrapping nicer than the contents, dated 22 July 2011*).

We note that if in a subsequent period, the fair value increases and this can be "objectively related to an event occurring after the impairment loss was recognised", the relevant portion of the impairment loss would be reversed. So, there may be some (probably relatively small) reversal of the Q2 Greek debt impairments in Q3 2011 results.

2. HTM/L&R

The calculation of impairment for debt classified Held to Maturity (HTM) or Loans & Receivables (L&R) is more complicated

The calculation of impairment for debt classified Held to Maturity (HTM) or Loans & Receivables (L&R) is more complicated, as described in our 26 May and 8 July notes. **The amount of the impairment is the difference between the carrying value of the asset and the present value of the estimated future cash flows, discounted at the original effective interest rate** (or the effective interest rate at the date of classification into HTM/L&R if the asset was previously reclassified between accounting categories). Note also that for assets previously reclassified from AFS to HTM/L&R, the minimum impairment is any unrealised loss at the date of reclassification.

A bond exchange such as the one proposed in the IIF offer may trigger rules on derecognition

Furthermore, we believe a bond exchange such as the one proposed in the IIF offer may trigger rules on derecognition (see our previous notes), which could crystallise a loss as if the bond had been sold for proceeds equal to the fair value of the new instruments received in the exchange. If a bank anticipates such derecognition treatment on exchange, this would affect the calculation of impairment losses of HTM/L&R assets in Q2 results. This could mean the impairment calculation would be based on the fair value of the bond exchange instrument (discounted to a 30 June 2011 value). In practice, this means that HTM/L&R impairment charges could be relatively similar to the writedowns to fair value seen for AFS assets.

Some banks may argue that the IIF bond exchange does not constitute a derecognition event.…

…the Greek banks may make considerably smaller write-downs

However, we expect that some banks may argue that the IIF bond exchange does not constitute a derecognition event. In particular we anticipate the Greek banks may make this argument. In this case, the HTM impairment would be based on the modified cash flows that a bank expects to recover (which depend on which of the four IIF options it intends to accept) and the original effective interest rate at the date the bond was acquired or reclassified into HTM**. Therefore we expect that the Greek banks may make considerably smaller write-downs of their Greek debt in Q2 results than other European banks.**

Other Issues – Disclosures

As discussed in our note of 8 July, we believe that banks should give transparent data about sovereign exposures in Q2 results, partly due to amended requirements in IAS 34 (Interim Financial Reporting). Encouragingly, the IDW statement specifies that with regard to Greek government debt, German banks should disclose

- Magnitude of direct and indirect exposures;
- The nominal amount/cost, actual book value and fair value, and any impairments taken.
- These disclosures should be broken down into accounting categories (i.e. AFS, HTM, L&R).

Deutsche Bank provided most of this information in Q2 2011 results published 26 July 2011 (see pages 32-33 of Interim Report) for sovereign exposures to Greece, Ireland, Italy, Portugal, and Spain.

If these disclosures are provided, it should be possible for investors to estimate implied impairments on a consistent basis across the European banks, even if banks and their auditors have not calculated impairment charges consistently. We hope that European banks will provide the suggested information for all peripheral European sovereign debt exposure.

Appendix A-1

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