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# Capital requirements for banks with Basel 2

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### Summary

The Basel Committee on Banking Supervision and CEBS<sup>1</sup> have conducted a study on how the new capital adequacy regulations that enter into force next year can be expected to affect the capital requirement for banks. The study is entitled Quantitative Impact Study 5 (QIS  $5^2$ ) and is conducted on data gathered during the autumn of 2005. It encompasses the member countries of the Basel Committee (G10), several EU and EES countries and a handful of other countries.<sup>3</sup>

Both the Basel Committee and CEBS are publishing detailed reports regarding the results of the study for each group.<sup>4</sup> Finansinspektionen provides here a summary of these reports, including a separate group report for the results of the participating Swedish banks.

The underlying motivation for the study was partly the need to evaluate if the proposed regulations could be expected to achieve reasonable and desirable results, or if the regulations should be re-calibrated. The Basel Committee has now drawn the conclusion that the results from QIS 5 do not indicate a need for any adjustments before the regulations come into force. The Basel Committee has thereby determined not to do the previous calibration of the regulations. The EG directive has been calibrated in the same manner.

The study demonstrates that the minimum capital requirement under Pillar 1 in the new regulations decreases in comparison to the current capital adequacy regulations. For the group of internationally active and diversified banks with Tier 1 capital exceeding EUR 3 billion, the minimum capital requirement decreases on average by 6.8 percent in G10 countries and 7.7 percent in CEBS, based on the method the banks themselves consider most probable that they will apply. For the four Swedish banks<sup>5</sup> that participated in the study, the results indicate that the minimum capital requirement on average decreases by 1.2 percent using the standardised method and 25.8 percent using the foundation IRB method. The results for the four plan to use the foundation IRB method.

The general results of this study demonstrate that there is to some extent a decrease in the calculated capital requirements under Pillar 1. However, the comparison is not comprehensive. The internal capital assessment that the banks will complete under Pillar 2 of the new regulations can in practice result in an increase compared to Pillar 1. The internal capital assessment must also be evaluated by Finansinspektionen via the total capital

<sup>&</sup>lt;sup>1</sup> Committee of European Banking Supervisors

<sup>&</sup>lt;sup>2</sup> During the course of the project, several previous studies of a similar nature have been conducted. The differences in scope are, however, so large that relevant comparisons between QIS 5 and the previous studies cannot be made.

<sup>&</sup>lt;sup>3</sup> Basel Committee member countries are USA, Japan, Canada, Switzerland, Great Britain, France, Italy, German, Spain, Netherlands, Belgium, Sweden and Luxembourg. Historically also referred to as G10.

<sup>&</sup>lt;sup>4</sup> Available at <u>www.bis.org</u> and <u>www.c-ebs.org</u>.

<sup>&</sup>lt;sup>5</sup> The participating Swedish banks are Föreningssparbanken, Handelsbanken, Nordea and SEB.

assessment and may require more capital than what the bank has calculated. The increases under Pillar 2 can depend on various factors:

- Risks other than those covered under Pillar 1 (credit risk, operational risk and market risk) are considered.
- The banks need to maintain a certain margin to the capital requirement under Pillar 1.

The latter is particularly important since sensitivity for economic trends is built into the new regulations compared to the existing capital coverage regulations. By basing the capital requirement on the bank's internal measurements of credit risk in borrowers, the capital requirement will increase when the economic trend takes a downward turn and the measured credit risk in borrowers increases. This has with all probability had an effect on the results in QIS 5. The measurements were made during a period when the economic trend was strong in the majority of countries. Under different economic conditions, the effects on the capital requirement under Pillar 1 could be different.

It should also be noted that QIS 5 was conducted on the banks' models prior to approval from financial authorities. Continued review of the models and further internal development at the banks may result in final models that present a different outcome than the results presented in QIS 5.

The capital requirement under Pillar 1 for the Swedish banks decreases, as mentioned above, more than the average of CEBS and G10 banks (25.8 percent compared to 7.7 and 6.8 percent, respectively). There are several explanations for this difference. One is that the capital requirement primarily decreases for retail loans and Swedish banks have an above-average percentage of these types of loans.

Portfolio composition is also important. The Swedish banks' capital requirement also appears to decrease more than average for a given portfolio size for both retail loans and corporate loans. This effect is related to how the risks are measured in the internal models and is therefore more difficult to explain at the current stage. Several possible causes may be:

- The economic trend has been particularly good in Sweden compared to many of the comparison countries.
- Credit losses have been considerably lower for Swedish banks than for banks in other countries during the past few years. Data in the internal models comes primarily from the most recent years, which means that the measured risk can therefore be lower.
- As a result of its bank crisis, the credit portfolios in Swedish banks have been "cleaned out" in so far as many poor loans have been managed. The banks' credit portfolios consist of loans that were issued based on the significantly improved credit checking developed by the banks after the bank crisis. Other countries have not necessarily been subject to a similar acid test.

It is not possible at this time to evaluate the scope of the effect of these factors. Within its assessment of the IRB models, Finansinspektionen will review these relationships carefully. Requirements have been imposed to

take into consideration the effects of more serious economic downturns than were experienced at the beginning of the 2000s.

The results of QIS 5 show what could hypothetically happen if the Basel II regulations were applied in full. It is important to remember that there are integrated transition regulations (floors) that should prevent the capital requirement from falling too sharply for individual banks. During 2007, 2008 and 2009, these floors are 95, 90 and 80 percent of the capital requirement that would apply under the current regulations. During this period, supervision authorities will carefully follow the outcome of the new system.

Another factor to take into consideration is that the banks' capitalisation to a great extent depends on how the international rating institutions assess capital requirements. It is unclear to what extent these institutions accept capital cutbacks without reflecting the change in the bank's rating.

## Results from the QIS 5

#### **Background and purpose**

In June 2004, the Basel Committee proposed new capital adequacy regulations for internationally active banks. One important goal of the new regulations has been to enhance financial stability and soundness in the future. One way of expressing this is that the total capital requirement for internationally active banks should remain to a large degree unchanged. In addition, the new capital coverage regulations should be designed to encourage banks to introduce more risk-sensitive and sophisticated methods of measurement.

In order to evaluate the effects of the Basel II regulations on the banks' capital requirement, the Basel Committee decided to implement a study, Quantitative Impact Study (QIS  $5^6$ ), during the autumn of 2005. The result of the study would create the basis for the Basel Committee's final discussion concerning any necessary re-calibration of the regulations before they come into force on January 1, 2007. Within EU, the Committee of European Banking Supervisors (CEBS) resolved to implement a similar study. The Basel Committee and CEBS have coordinated their efforts. For example, the reporting templates used during both evaluations were the same.

#### **Participating banks**

Banks from a total of 31 countries participated in the study. All G10 countries (with the exception of USA<sup>7</sup>) and 19 non-G10 countries were included in the evaluation. As in previous QIS studies, the banks were divided into two groups, Group 1 and Group 2. Group 1 includes banks that have Tier 1 capital in excess of EUR 3 billion, are diversified and are internationally active. Other banks are classified as Group 2.

The Basel Committee's secretariat has received data from 56 Group 1 banks and 146 Group 2 banks in G10 countries (including a number of German banks on the basis of their QIS 4 study) and 155 banks from other countries. 26 banks from the American section of QIS 4 have also been included in the calculations. Four Group 1 banks from Sweden participated.

The results from QIS 5 are reported for three different country groups:

- G10, which includes the 13 member countries in the Basel Committee
- European countries that either are members in EU, have applied for membership to EU or are members of the European Economic Area

 $<sup>^6</sup>$  During the course of the project, several previous studies of a similar nature have been conducted. The differences in scope are, however, so large that relevant comparisons between QIS 5 and the previous studies cannot be made.

<sup>&</sup>lt;sup>'</sup> USA has not formally participated in QIS 5, but the results from a similar evaluation have to some extent been included when compiling the results from QIS 5. Since USA only intends to apply the advanced IRB method, figures referring to American banks are only included in selected tables.

(EES). This group as a whole represents the Committee of European Banking Supervisors (CEBS) and includes 30 countries (both in and outside of G10), of which 20 have provided data for QIS 5. Since they are all CEBS members or observers, this group is identified as CEBS.

• Other non-G10 countries, which consist of all non-G10 countries that are not included in the CEBS group. Eight countries from this category have provided data for QIS 5.

Banks in most of these countries have been asked to report data using at least two of the new methods and the existing regulations. A bank that intends to apply a method that is based on the foundation internal ratings-based approach (the foundation IRB method) reports data using the foundation IRB and standard methods. Banks that intend to apply the advanced IRB method report data using the advanced and foundation IRB methods. It is important to note that the information in QIS 5 is to a large degree based on estimated figures and not actual data.

In order for the banks to use their own IRB method for calculating the capital requirement for credit risk, the models must be tested and approved by each country's supervisory authority. Finansinspektionen is currently testing models for eight Swedish banks. None of these models have been approved yet. There is, therefore, a certain degree of uncertainty inherent in the data provided for the evaluation due to these ongoing development efforts.

#### **Results in general**

The table below shows the total change in the minimum capital requirement compared with the current capital adequacy regulations. The table shows that the minimum capital requirement under Basel II on average falls in QIS 5 in comparison to the current regulations for all groups except G10 Group 1 banks and banks in other non-G10 countries using the standardised method.

For G10 Group 1 banks the minimum capital requirement decreases by 6.8% using the method the banks themselves consider to be the most probable that they will apply. Between the two IRB methods, the advanced method indicates a larger reduction in the minimum capital requirement (-7.1%) than the foundation method (-1.3%). The minimum capital requirement in the standardised method would increase by 1.7%. Very few, if any, Group 1 banks in G10 are expected, however, to use this method. For Group 2 banks in G10 the decrease in the minimum capital requirement is larger. The minimum capital requirement in the most probable method is expected to decrease by 11.3%, while the decreases in the standardised method, the foundation IRB method and the advanced IRB method are 1.3%, 12.3% and 26.7%, respectively.

	Standardised method	Foundation IRB method	Advanced IRB method	Most likely method
G10 Group 1	1.7	-1.3	-7.1	-6.8
G10 Group 2	-1.3	-12.3	-26.7	-11.3
CEBS Group 1	-0.9	-3.2	-8.3	-7.7
CEBS Group 2	-3.0	-16.6	-26.6	-15.4
Other non-G10	1.8	-16.2	-29.0	-20.7
Group 1				
Other non-G10	38.2	11.4	-1.0	19.5
Group 2				
Sweden	-1.2	-25.8		-25.8

Table 1. Percentage change in the minimum capital requirement compared to current capital adequacy regulations. Consideration has not been given to transition regulations.

The results for CEBS countries are similar to those for G10 countries. CEBS Group 1 banks demonstrate on average a decrease in the minimum capital requirement by 0.9%, 3.2% and 8.3% using the standardised method, the foundation IRB method and the advanced IRB method, respectively. CEBS Group 2 banks indicate decreases of 3.0%, 16.6% and 26.6%. When focusing on the methods that will most likely be applied, the results lean toward, on average, decreases of 7.7% for CEBS Group 1 banks and 15.4% for CEBS Group 2 banks.

The average results for Group 1 banks in other non-G10 countries show a decrease in 16.2% and 29.0%, respectively, when using the foundation and advanced IRB methods. The standardised method results in an increase of 1.8% and the most likely method in a decrease of 20.7%. Group 2 banks report an increase of 38.2% using the standardised method, an increase of 11.4% using the foundation IRB method and an insignificant decrease of 1.0% using the advanced IRB method. Using the most probable choice of methods, other non-G10 Group 2 banks report an increase of the minimum capital requirement by 19.5%.

The Swedish banks have been classified in the study as Group 1 banks. The results for their change in minimum capital requirement, however, are more similar to the changes in Group 2 banks. The minimum capital requirement decreases by 1.2% using the standardised method and by 25.8% using the foundation IRB method. The latter is similar to the results Group 2 banks in G10 are reporting when using the advanced IRB method. One explanation for this is the focus of the Swedish banks on the retail sector, where the foundation and advanced IRB methods happen to be the same.

In summary, it can be said that the results from QIS 5 roughly coincide with the intentions behind the Basel II proposal. The minimum capital requirement for internationally active banks (Group 1 banks) decreases moderately and there is a clear incentive for banks to adopt more risk-sensitive and sophisticated measurement methods to calculate the capital coverage requirement.

#### **Results at the portfolio level**

#### Standardised method

To analyze the effect of the Basel II regulations on the portfolio level, the so called portfolio contribution is used. The portfolio contribution is calculated by multiplying the portfolio's (relative) size by the change in the minimum capital requirement under Basel II compared to the minimum capital requirement under the existing regulations at the portfolio level. The minimum capital requirement in turn requires total capital to equal at least 8 percent of risk-weighted assets.

	G10 Group 1			Sweden Group 1			
Portfolio	Size Change in Contrib Size		Change in	Contrib			
		minimum	ution		minimum	ution	
		capital			capital		
		requirem			requirem		
		ent			ent		
Wholesale; of which	32.2	7.9	2.5	32.0	3.3	1.1	
- Corporate	26.9	3.2	0.9	28.9	3.1	0.9	
- Bank	4.9	30.0	1.5	3.0	5.5	0.2	
- Sovereign	0.4	55.5	0.2	0.0	-9.2	0.0	
SMEs	8.6	-2.5	-0.2	14.9	3.8	0.6	
Specialised lending	4.6	-5.5	-0.3	0.0	0.0	0.0	
Retail; of which	26.5	-26.9	-7.1	26.3	-29.3	-7.7	
- Residential mortgage	22.3	-28.3	-6.3	19.8	-31.6	-6.3	
loans							
- Qualifying revolving	0.6	-20.5	-0.1	0.8	-10.4	-0.1	
retail exposures							
- Other retail exposures	3.7	-19.7	-0.7	5.7	-24.1	-1.4	
SME (retail)	1.8	-23.4	-0.4	2.5	-18.5	-0.5	
Equity	3.2	5.3	0.2	0.3	0.0	0.0	
Purchased receivables	0.3	-6.2	0.0	0.0	0.0	0.0	
Other assets	3.3	0.0	0.0	1.0	0.0	0.0	
Securitisation	3.0	7.4	0.2	0.0	0.0	0.0	
Counterparty risk	1.2	35.1	0.4	1.7	28.9	0.5	
Specific risk	1.3	5.4	0.1	2.4	5.6	0.1	
Market risk	1.6	0.6	0.0	1.4	0.0	0.0	
Related entities	4.7	16.7	0.8	5.0	0.0	0.0	
Other deductions	3.5	0.0	0.0	9.8	0.0	0.0	
Partial use	3.9	-1.1	0.0	2.7	0.0	0.0	
Operational risk			5.6			4.8	
Total	100.0		1.7	100.0		-1.2	

Table 2. Comparison between the standardised method and currentregulations in percent

Table 2 presents the average results for the standardised method for Group 1 banks in G10 countries and Sweden. For both bank groups, the retail portfolios are the primary drivers behind the decreased minimum capital requirement for credit risk compared with the existing regulations while

operational risk is responsible for a counteractive increase. The contribution from other portfolios is very low.

Residential mortgage loans for the retail sector contribute most to the reduction in the minimum capital requirement, -6.3% for both the G10 and the Swedish banks. Other retail portfolios also show a negative contribution, which is on average marginally larger for the Swedish banks than for the G10 banks.

In general, corporate exposures contribute very little to the change in the minimum capital requirement using the standardised method. The fact that external ratings are not common in some countries is of importance. Corporate exposure is therefore given a risk weight of 100% in both the new and the old regulations.

	CEBS Group 1		Sweden Group 1			
Portfolio	Size	Change in minimum	Contrib ution	Size Change in minimum		Contrib ution
		capital	ution		capital	unon
		requirem			requirem	
		ent			ent	
Wholesale; of which	24.1	7.6	1.9	32.0	3.3	1.1
- Corporate	17.7	-1.9	-0.3	28.9	3.1	0.9
- Bank	6.0	29.0	1.8	3.0	5.5	0.2
- Sovereign	0.4	97.6	0.4	0.0	-9.2	0.0
SMEs	8.3	-5.1	-0.4	14.9	3.8	0.6
Specialised lending	5.4	-6.4	-0.4	0.0	0.0	0.0
Retail: of which	32.9	-27.4	-9.0	26.3	-29.3	-7.7
- Residential mortgage	27.7	-28.2	-7.8	19.8	-31.6	-6.3
loans						
- Qualifying revolving	0.7	-22.9	-0.2	0.8	-10.4	-0.1
retail exposures						
- Other retail exposures	4.4	-23.6	-1.0	5.7	-24.1	-1.4
SME (retail)	2.7	-22.2	-0.9	2.5	-18.5	-0.5
Equity	1.2	18.3	0.2	0.3	0.0	0.0
Purchased receivables	0.1	-19.3	-0.1	0.0	0.0	0.0
Other assets	3.0	0.0	0.0	1.0	0.0	0.0
Securitisation	2.6	12.9	0.4	0.0	0.0	0.0
Counterparty risk	1.6	34.4	0.9	1.7	28.9	0.5
Specific risk	1.3	6.5	0.1	2.4	5.6	0.1
Market risk	2.1	0.9	0.0	1.4	0.0	0.0
Related entities	5.7	19.9	2.0	5.0	0.0	0.0
Other deductions	5.0	-0.5	0.0	9.8	0.0	0.0
Partial use	4.2	-3.2	-0.2	2.7	0.0	0.0
Operational risk			5.5			4.8
Total	100.0		-0.9	100.0		-1.2

## *Table 3. Comparison between the standardised method and current regulations in percent*

Operational risk naturally results in a positive contribution since there previously has not been an explicit capital requirement for this risk. The contribution is slightly larger for Group 1 banks in G10 countries than for the Swedish banks.

If similar comparisons are instead made with Group 1 banks in CEBS (table 3), the results only change marginally. The relative increase of retail exposures in Group 1 banks in CEBS countries is, however, larger than in the corresponding bank group in G10 countries.

This portfolio contribution is also calculated by multiplying the portfolio's (relative) size by the change in the minimum capital requirement under Basel II compared to the minimum capital requirement under the existing regulations at the portfolio level. The calculations include a scaling factor of 1.06 for credit risk-weighted assets.

Table 4 presents the portfolios' contributions to the changes in the minimum capital requirement using the method that the banks with greatest probability will apply in the future. Banks within G10 may choose either the foundation or advanced IRB methods. The Swedish banks that participated in QIS 5 have applied for approval to use the foundation IRB method.

Table 4 shows that the minimum capital requirement for Group 1 banks in G10 decreased by 4.5%, while the corresponding figure for the Swedish banks totalled –25.8%. An important explanation for this difference is the focus of the Swedish banks on the retail sector. On average, the Swedish banks are not as diversified in this sector as assumed by the definition of Group 1 banks.

For both groups, residential mortgage loans are the most important driver behind the reduced minimum capital requirement. However, because of their considerably larger percentage of exposures, residential mortgage loans have a significant impact on the Swedish banks' minimum capital requirement. Other important portfolios that affect the results are corporate exposures, including both SMEs and other retail exposure. As previously stated, operational risk is responsible for the largest increase.

Retail exposures in general reduce the minimum capital requirement. Qualifying revolving retail exposures (primarily credit cards) are, however, an exception. While this portfolio has a negative contribution in Sweden and most other G10 countries using the IRB methods, its positive impact in some countries pulls up the average for the G10 countries.

	G10 Group 1		Sweden Group 1			
Portfolio	Size	Change in	Contribution	Size Change in		Contribution
		minimum			minimum	
		capital			capital	
		requirement			requirement	
Wholesale ; of	32.1	-10.3	-3.3	32.0	-22.9	-7.3
which:						
- Corporate	27.8	-18.0	-5.0	28.9	-27.5	-8.0
- Bank	3.8	10.1	0.4	3.0	6.2	0.2
- Sovereign*	0.5	237.9	1.3	0.0	2,476.9	0.4
SMEs	6.9	-19.0	-1.3	14.9	-16.0	-2.4
Specialised	3.4	-11.6	-0.4	0.0	0.0	0.0
lending						
Retail; of	17.6	-46.3	-8.1	26.3	-75.9	-20.0
which:						
- Real-estate	11.8	-64.4	-7.6	19.8	-80.4	-15.9
credits						
- Qualifying	1.5	23.0	0.3	0.8	-56.7	-0.5
revolving						
retail						
exposures						
- Other retail	4.3	-20.4	-0.9	5.7	-62.9	-3.6
exposures						
SME (retail)	2.9	-48.7	-1.4	2.5	-39.4	-1.0
Equity	3.1	85.0	2.6	0.3	104.0	0.0
Purchased	0.1	17.7	0.0	0.0	0.0	0.0
receivables						
Other assets	3.6	0.0	0.0	1.0	0.0	0.0
Securitisation	2.8	-0.4	0.0	0.0	0.0	0.0
Counterparty	1.9	14.8	0.4	1.7	-15.8	-0.2
risk						
Specific risk	1.4	4.1	0.1	2.4	5.6	0.1
Market risk	2.5	-0.7	0.0	1.4	0.0	0.0
Related	6.8	8.1	0.6	5.0	0.0	0.0
entities						
Other	12.1	-0.1	0.0	9.8	0.0	0.0
deductions						
Partial use	2.7	9.7	0.3	2.7	0.0	0.0
Operational			6.1			4.8
risk						
Total	100.0		-4.5	100.0		-25.8

*Table 4. Comparison between the IRB method that will probably be applied and current regulations in percent* 

\* The large percentage changes in the minimum capital requirement for sovereign exposures is due to the significant portion of these exposures that have a risk weight of 0% in the current capital coverage regulations. Every other risk weight in the new methods gives an extreme percentage increase in the capital requirement for banks that only have these types of exposures, even if the change in absolute terms is small.

Table 5 compares Group 1 banks in CEBS with the Swedish Group 1 banks. The comparison demonstrates the difference in percent between the foundation IRB method and the current regulations. The same general patterns stated previously are also evident in this comparison. The Swedish banks have a larger percentage of retail exposure and also report larger changes in the minimum capital requirement for both corporate and retail exposures than Group 1 banks in CEBS. Changes in the minimum capital requirement is in turn a function of the banks' own estimations of various risk factors, such as the probability of default (PD), loss given default (LGD), etc. There are also large differences between banks depending on how far each bank had progressed at the time of the study in its implementation of the new regulations, access to historical data, etc.

		CEBS Gr	oup 1		Sweden G	Sweden Group 1	
Portfolio	Size	Change in minimum capital requirement	Contribution	Size	Change in minimum capital requirement	Contribution	
Wholesale ; of which	28.2	-11.5	-3.2	32.0	-22.9	-7.3	
- Corporate	23.3	-17.1	-4.0	28.9	-27.5	-8.0	
- Bank	4.3	-4.5	-0.2	3.0	6.2	0.2	
- Sovereign*	0.5	178.4	0.9	0.0	2,476.9	0.4	
SMEs	7.2	-18.1	-1.3	14.9	-16.0	-2.4	
Specialised lending	4.2	-16.9	-0.7	0.0	0.0	0.0	
Retail; of which	20.1	-44.1	-8.9	26.3	-75.9	-20.0	
- Residential mortgage loans	13.8	-64.5	-8.9	19.8	-80.4	-15.9	
- Qualifying revolving retail exposures	1.6	48.8	0.8	0.8	-56.7	-0.5	
- Other retail exposures	4.8	-15.8	-0.8	5.7	- 62.9	-3.6	
SME (retail)	4.1	-49.5	-2.0	2.5	-39.4	-1.0	
Equity	1.3	81.9	1.1	0.3	104.0	0.0	
Purchased receivables	0.1	-39.5	0.0	0.0	0.0	0.0	
Other assets	2.8	0.0	0.0	1.0	0.0	0.0	
Securitisation	2.0	8.6	0.2	0.0	0.0	0.0	
Counterparty risk	2.3	9.1	0.2	1.7	-15.8	-0.2	
Specific risk	1.5	5.1	0.1	2.4	5.6	0.1	
Market risk	2.9	-2.1	-0.1	1.4	0.0	0.0	
Related entities	6.9	12.7	0.9	5.0	0.0	0.0	
Other	13.2	0.0	0.0	9.8	0.0	0.0	

*Table 5. Comparison between the IRB method that will probably be applied and current regulations in percent.* 

deductions						
Partial use	3.1	12.2	0.4	2.7	0.0	0.0
Operational			5.8			4.8
risk						
Total	100.0		-7.5	100.0		-25.8

\* The large percentage changes in the minimum capital requirement for sovereign exposures is due to the significant portion of these exposures that have a risk weight of 0% in the current capital coverage regulations. Every other risk weight in the new methods gives an extreme percentage increase in the capital requirement for the banks that only have these types of exposures, even if the change in absolute terms is small.

#### Quality of data provided

The QIS 5 study constitutes a comprehensive compilation of data concerning bank exposures in various asset classes structured around the requirements of the new regulations. However, exact data has not always been available.

For some exposures, the participating banks were not able to provide data based on the Basel II regulations since the bank had not progressed far enough in its implementation of the new regulations. For example, only a few G10 banks appear to have successfully applied the new methods for estimating counterparty risk and only ten banks were in a position to calculate estimates for double default, i.e. the probability that both the borrower and lender will fail.

In other cases, the banks have attempted to the best of their ability to estimate the required information based on data available at the time of the study. Application of the term "economic down-turn LGD" and issues raised in the Basel Committee's proposal related to trading book treatment are areas that are obviously still under development and still require improvements in information.

In situations where the banks needed to estimate data, it appears that the assumptions made were conservative in nature. An example of this would be conversion factors for undrawn credit facilities, where banks appear to have systematically chosen high values. Difficulties in correctly distributing corporate risk due to challenges in identifying size factors (customer company's annual sales volume) is another example of where banks stated that they failed to make favourable adjustments in the calculation for the minimum capital requirement.