

## SLOVAK BANKING SECTOR BEGINS PREPARATION FOR IMPLEMENTING NEW REGULATORY RULES

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The preparations of the Basle Committee for Banking Supervision and the Global Financial Sector are currently approaching publishing and concluding discussion on the new rules for banking regulation, known as the New Basle Capital Accord (NBCA) or simply Basle II.

### Definition of regulation – the Basle Capital Accords

The draft new capital accord was first presented for discussion to the professional public back in 1999. At that time it was more an outline of fundamental principles that the accord should then embody. In this article we shall refer to the original and still valid accord of 1988 as the BCA, this having been one of the most significant multinational acts achieved. Often it is reduced to the predictive number of 8%, meaning an 8% capital adequacy ratio. This however is not the whole story. By the introduction of any rate of capital adequacy there is actually defined the principle that owners of a banking institution must themselves bear a certain level of losses that may ensue from the institution's business. The BCA sets this rate simply at 8%, since it was only a number on which the signatory parties were able to reach a compromise.

The text of the accord itself is relatively brief and simple, comprising only 25 pages. This leads to certain stumbling blocks. Its brevity and simplicity have the consequence that the approach used is not flexible and may only with some difficulty suit the growing complexity and level of sophistication of financial instruments today. The BCA recognises only two types of risk, namely credit, the risk of counterparty in various types of operations and the risk of a transfer of risk from abroad. The first type of risk is represented by a converse factor termed credit weighting, which expresses the level of risk of a given exposure. The second type of risk had two possible approaches to its solution. Either a differentiation is made between domestic and foreign counterparties or a club solution is used. This means that two groups of countries are defined: one certain group of countries having risk corresponding to the domestic country, and a second group comprising other countries. On the basis of consultation with banks the second solution was selected and the OECD countries became a privileged club. In principle the BCA barely takes account of the lower level of risk of short-term receivables

compared to that of long-term receivables and recognises only a relatively narrow class of collateral. A significant element leading towards comparability of individual banks' risk profiles was the definition of individual capital levels. The first class of capital, Tier 1, was termed capital created via paid-up share capital, share premium funds and a wide variety of reserves and funds generated from profits that may be used for covering losses anywhere in the balance sheet without fulfilling any additional conditions. The second capital tier comprised primarily long-term subordinated debt and undisclosed reserves.

Dissatisfaction with the accord adopted led to the adoption of the Amendment to Incorporate Market Risks, which introduces a significant change in the overall approach to measuring risk borne. This refers to the possibility of an individual approach to individual banks by means of the possibility to use internal models for measuring specified market risks by which the spectrum of risks measured has been expanded. Nominally this concerned foreign exchange risk, equity and commodity risk and the risk pertaining to interest related instruments. Although the adoption of the amendments to the BCA introduced a completely new principle in the approach to regulated banks, nothing was said either in the original text or in the amendment about the process itself of managing risks and about the activity and roles of the regulator. Despite this, throughout the whole period from 1988, when the original accord was adopted, to the present, the Basle Committee for Banking Supervision has published over 50 various recommendations on best practice for managing credit risk, activity and cooperation with auditors, handling and overseeing derivatives operations, etc. This is only one of the signs of growth in the importance of the risk management process as well as of regulated institutions and the regulator. It is therefore not surprising that the draft new accord (which we will here refer to as the NBCA) is divided into three pillars, where one of these - the second, is dedicated to the process of supervision, the roles and approaches of regulatory bodies in supervision over the risk management process. The first pillar is devoted to credit and market risks and a new type of risk - operational risk. We can view this as an improvement on the original accord in terms of its greater sensitivity to the risk borne. The third pillar comprises the approach to market discipline via the publication of information on risks borne and the method used for managing these.



# The New Basle Capital Accord and Quantitative Impact Study

In what respects does the first pillar differ from the BCA still in force today? Although the principle of exposure to a given counterparty and its respective risk weighting in the measurement of credit risk remains, the method used for determining this is changed. Gross exposure is adjusted by discount factors (termed haircuts) according to the remaining balance payable, how it is secured, whether the collateral and/or guarantee is denominated in the same currency as the position secured. In so doing it thoroughly differentiates whether the mitigation of credit risk is realised by means of collateral, i.e. financial assets held for the case of a debtor's default or by guarantee, which replaces the credit risk of the original debtor by credit risk of the guarantee's issuer.

The process of determining the risk weighting already respects the principle of an individual approach to financial institutions. Its basis is the segmentation of the whole portfolio of a bank into individual, precisely defined parts, which the NBCA prescribes as minimum segmentation. For determining the risk weighting three possible approaches are defined: standardized, basic by means of internal ratings (foundation IRB) and the advanced by means of internal ratings (advanced IRB). In the case of the first approach the risk weighting in a given segment is set by the national regulator, where there is taken into account a debtor's external rating assigned by a rating agency licensed by the national regulator. Moreover, there is also introduced a risk weighting above 100%, i.e. a capital requirement above 8% of risk exposure. In the case that a bank operates at a sufficiently high level in the process of managing its risks, its national regulator may permit it to use a more sophisticated approach, based on the use of its own rating system. Naturally, the consent of the banking supervisory authority is tied not only to the quality of this system, but also to the quality of the whole process of risk management and this consent is on a highly individual basis. For example, in the case of a foreign head office, while it is probable that the high quality of its risk management process influences positively the level of risk management at its subsidiary bank in Slovakia, this need not necessarily be true. Therefore the consent of the national regulator is tied primarily to a thorough assessment of the situation at the given bank in Slovakia and not so much to the quality or otherwise of the foreign head office.

In the case of the basic approach by means of internal ratings a bank determines a part of the risk weighting. It determines the probability of creditor default (PD) in a given segment on the basis of its data and concurrently also determines the rate of return of the receivable in the case of default (LGD). On the basis of this data through using the defined relationship and with values determined in the NBCA the respective risk weighting to a given exposure is defined. In the case of the advanced IRB approach the

overall risk weighting is defined by the bank itself on the basis of its own data and using a process approved by the banking supervisory authority.

In the case of measuring the newly-introduced operational risk there are again several possible approaches. The Basic Indicator Approach, Standardized Approach and Advanced Measurement Approach. In the first case this in fact refers not to the actual measurement of risk, but rather a certain indicator. The bank's gross income was selected as this indicator and through multiplying this value by a set coefficient, determined by the Basle Committee, we get the level of risk exposure. In the second case the whole portfolio is first divided into the set segments - business lines. The indicator is again the gross income, but this time in a given line of business. This is multiplied by a set coefficient and through the sum of these for each line of business we get the indicator of the level of operational risk. In the third approach the bank on the basis of its own data and models determines the rate of its own operational risk and following the approval of the banking supervisory authority can via this process determine also its capital requirement.

From these approaches result two important facts. The significance of relevant data and the indispensable role of the banking supervisory authority in assessing and authorising models and procedures used for measuring individual types of risk. Already in the first draft NBCA, published in 1999, the efforts of the Basle Committee to ensure that the adoption of the new accord should not mean a significant growth in capital requirement were clear. This was true even despite the fact that one of the innovations that the NBCA introduced into banking regulation is the principle of setting the capital requirement level individually on the basis of a bank's risk profile. Therefore much of the discussions with the financial sector concentrated on numerical parameters that the Basle Committee will set in the individual approaches to measuring risk. In order to gain the bases for its decision making, it initiated several impact studies. These are known under the title QIS (Quantitative Impact Study) and the number of the edition. Significant data was gained only after the QIS 2 study, which was aimed at gaining data on the impact of the draft NBCA, published in January 2001. Among other things it showed that the 20% coefficient for measuring operational risk via the basic indicator approach leads to a too high capital requirement. Similarly it was shown that it is more appropriate to leave the so called factor w, representing the capital requirement for the influence of residual risk factors in measuring credit risk, to the choice of the national regulator. The data gained from QIS 2 show that the numerical coefficients are set in such a way that there is lacking any significant motivation for banks to opt for more sophisticated approaches to risk management and measurement. Therefore this year two additional QIS editions have been undertaken. One focuses on operational risk, because part of the consultative NBCA document

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of 2001, has been significantly modified. The second, entitled QIS 2.5, was focused on the regulation of numerical parameters for more advanced approaches to measuring credit risk, based on internal ratings. On the basis of the results gained the NBCA was significantly modified and the text was published in the form of instructions (composed of three parts: the Overview Paper for the Quantitative Impact Study 3, QIS 3 Instructions and Technical Guidance) for the last edition of the impact studies, which was commenced under the title QIS 3 on 1 October 2002. Before we focus on it, we will briefly describe some of the results of QIS 2.5, as these have significantly influenced the writing of the NBCA text.

#### QIS 2.5 results in comparison with QIS 2

For the needs of the impact studies the participating banks are divided into two groups: group G1, comprising banks operating internationally, having Tier 1 capital of at least EUR 3 billion, with other banks forming the G2 group. On the basis of the QIS 2 results it was shown that the use of the foundation IRB approach means a growth in the capital requirement for credit risk by 14% against the current requirement according to the BCA. If operational risk is also taken into account, the growth of the capital requirement is as much as 24%. Therefore the wording of the NBCA in January 2001 was changed and the Basle Committee for Banking Supervision requested that the G1 group of banks participate in an additional impact study, entitled QIS 2.5. Data was provided by 38 banks of the G1 group, of which 35 banks had yet participated in QIS 2. The result of the changes was that the capital requirement for the participating banks was lowered by 8% for credit risk and if there is added in also the requirement for covering operational risk in the amount of 10% of the regulatory capital; the overall increase is less than 2%.

For any objective assessment of the results gained the composition of the participating banks' portfolios is decisive. The corporate lending portfolio formed 47% of the overall volume of assets, retail 22% and interbank and governmental forming 31%. In this, in the corporate and retail portfolio there is a decline in the risk-weighted assets for the foundation IRB approach of measuring credit risk by 7% (decrease in capital requirement by 4%) or respectively 37% (decrease in capital requirement by 9%). In the remaining portfolios of the participating banks the situation is otherwise, a growth of 215% for the governmental portfolio (growth in capital requirement by 2%) and by 47% for interbank (growth in capital requirement by 4%). What this will mean for the Slovak banking sector, unless the structure of portfolios changes significantly, can be easily derived. A significant factor here is the participation of banks from a similar sector type in impact studies, because this will make it possible to calibrate the definitive text of the NBCA also for these banks. Another difference to the text of the NBCA of January 2001 is the admission of a wider category of collateral types. This is expanded by physical collateral and purchased receivables. This effect was not significant, for physical collateral this means a growth of secured exposures from 2% to 8% in individual segments and for receivables from business intercourse from 0% to 5%. A significant side effect of QIS 2.5 is the effort to define precisely small and medium-sized enterprises (SME portfolio) on the basis of maximum annual turnover (EUR 50 million) and the bank's maximum consolidated exposure (EUR 1 million). This however applies only for the following QIS 3 impact study.

### QIS 3 in the Slovak banking sector

The history of the Slovak banking sector's participation in the QIS impact studies has been short but intensive. QIS 3 is the first impact study in which the banking sector has participated to any significant extent. In June this year the Banking Supervision under the auspices of the Vice-Governor of the National Bank of Slovakia organised a professional seminar, which was in large part devoted to the issue of the NBCA. Banks were concurrently requested to participate in preparing data for QIS 3 and to nominate a coordinator for its preparation both specially for the impact study and for NBCA implementation. The aim of this activity is not simply to gain data for the impact study, but also has a more long-term dimension, this being a significant improvement in the quality of the whole risk management process in the banking sector. The banking sector has realised the urgency of this challenge and with the exception of two banks has become involved in the whole process. The structure of data required for the impact study is in no way anything unusual. For a well-managed bank with an acceptable system of managing its risks this is merely data with which it has to work each day. The quality of the risk management system will be the focus point of the Banking Supervision interest in the following period, since this is a significant factor affecting the stability of the whole system. Therefore a bank that is not able to provide the relevant data will have to seriously re-evaluate its risk management process and will have to quickly convince the national regulator that it does not represent a potential source of systemic instability. An important reason for becoming involved in the impact study is the possibility to influence the appropriateness of the NBCA text and its implementation also for the type of banking sector as we have in Slovakia. For example, in the QIS 2.5 results discussed above it is stated that the capital requirement in the sovereign segment will increase by more than 200%. This may not be significant for the portfolios of the G1 group banks participating in QIS 2.5, but could be crucial for the Slovak banking sector. For all these reasons the Banking Supervision has focused comprehensively on preparation.

For the needs of the participating banks a cycle of regular seminars has been arranged in which Banking Super-



vision officers both lecture on the theoretical principles of the NBCA and deal with specific data, their definition and sources, for the QIS 3 impact study. The aim of this activity is to gradually create groups of professionals who will be in a relatively short time able to implement the new principles that the draft accord and prepared EU Directive embody. In the framework of the sector's gradual preparation it is probable that this cycle of seminars will be continued, as there is an aim to repeat the impact study, this time only in the Slovak banking sector for the audited results of 2002. The reason for this is that for QIS 3 the banks mostly opted for the standardized approach to measuring credit risk. The aim is however that banks improve their risk management processes and choose more advanced approaches. For these approaches it is however necessary to have a sufficiently long track record of quality data. Therefore a gradual preparation is important, enabling continual improvement of the level of risk management in the sector. It is clear that although there is a lot of work to do on the banks' side, the Banking Supervision has significant tasks ahead of it, which must be managed "on the hoof". The text of the NBCA gives it many powers, but simultaneously also great responsibility. Let's mention only the individual approach depending on a bank's risk profile. If it approves a certain model and procedure as usable for measuring a certain risk, it concurrently takes on also certain responsibility for its quality. This means among other things also the process of defining control mechanisms for this quality in the form of scenarios for stress testing and evaluating the feedback from the testing.

#### Conclusion

The collection of data for the QIS 3 impact study ends on 20 December 2002. For banking supervisory authorities in the participating countries this means a working Christmas, as in spring 2003, probably in April, the definitive NBCA text will be published for concluding consultation and in autumn 2003 the whole process should be finished. Implementation should be by the end of 2006, but in order for banks to be able to use one of the more advanced approaches to measuring risk, they must begin collecting data at latest from the end of 2003. It's about time to begin right now.

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