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Risk taking of a credit institution and the limits of the basel framework

This paper is a compilation prepared in the style of case studies, with the ultimate goal of presenting the possibilities of a credit institution in terms of risk-taking through an example, exploring elements of capital requirement in the Basel accord, as well as the capital situation of the domestic financial sector.

BASEL II – COMPLEX RISK MANAGEMENT

Regulation of the capital levels needed for safe operation has had a long history. Basel I¹ was the first accord on capital standards that regulated measuring the long-term solvency of banks. It was justified because the capital represented in the accounting did not provide sufficient cover for losses generated by banking risks, which gave rise to the notion of capital in the broad sense, in other words, eligible regulatory capital, and that of risk-weighted assets (adjusted balance sheet total).

The ratio of the regulatory capital and the adjusted balance sheet total must reach 8 percent, as a minimum. A key risk component measured by Basel I is credit risk. One of the fundamental problems with it was that it focused on credit risk, ignoring the characteris-

tics of the credit institution. By 1992, the solvency indicator became a globally used indicator for assessing banks' solvency.

In 1996, a change was adopted in terms of calculating the indicator, meaning that market risks were also to be considered in addition to credit risk on calculating capital requirement. Basel II is a new legal framework equally applicable to all banks, which, since its adoption in 2004, has determined the capital requirement for operational risk. With the earlier calculation of capital modified, *complex risk management* is now used in terms of interest rate, credit, operational and legal risks. Consequently, *the ultimate goal is to achieve convergence between the economically justified capital requirement and the regulatory capital requirement, and to protect stability in the financial sector by way of adopting a comprehensive assessment of credit risks, among others.*

The philosophy underlying this new capital requirement demands capital adequacy to be calculated in a way that it provides adequate capital levels (regulatory capital) even against rare (extreme) risks.

At the inception of Basel II, the expected impacts were summarised as follows:

- stronger risk preference,
- development and expansion of risk mitigating techniques,

- changes in asset risk categories,
- involvement of international and external rating companies in the rating process,
- making clients interested in data supply.

On adopting the framework, countries, including Hungary, faced problems that stemmed from the shortcomings of the system of institutions and the legal background.

The European Parliament adopted the regulation of the new capital requirement for credit institutions and investment enterprises in 2006, followed by three government decrees to regulate the three pillars of Basel II individually.

THE STRUCTURE OF BASEL II

Compared to its predecessor, Basel II uses various approaches to the issue of capital adequacy, and is built around the following three pillars:

- Pillar 1: minimum capital requirement,
- Pillar 2: internal capital adequacy assessment process,
- Pillar 3: information to the public (regulatory capital, risks, risk management, etc.).

Before addressing the individual pillars in more detail, let us look into the methods. Applicable methods for determining the minimum (pillar 1) and the internal capital requirement (pillar 2):

- *internal ratings-based approach (advanced method)*

In such cases, banks must have an estimate for their key risk components, such as the probability of default, average loss in the event of default, the value of risk exposure in the event of default. The objective of the rating system is to pool risk exposures with identical risk characteristics into the same category. A condition to setting up this system is to possess relevant data series on clients and the transactions performed by them. In the aggregate, this method, considering the rate of risk

exposure, may certainly determine a lower or more realistic capital requirement for the bank in comparison with the use of the general method; in spite of that, few financial institutions use it, most prefer the standardised approach, which appears to be simpler.

- *standardised approach (general method)*

This paper presents the latter method on examining each risk component, except for operational risk management, where all the approaches will be presented.

In the continuation, we will look into how each pillar and the risks of Basel II are implemented in the practice of a domestic financial institution.

PILLAR 1: Minimum capital requirement

On determining minimum capital requirements, credit institutions must hold capital for:

- credit,
- market and
- operational risks.

Credit risk management

The credit risk weights used with the standardised approach were regulated pursuant to Government Decree 196/2007. Basically, this approach is similar to calculating the former adjusted balance sheet total. In terms of credit risk management, the following groups are formed.

➔ *Exposure to the central government and the central bank:*

credit rating	1	2	3	4	5	6
risk weight (%)	0	20	50	100	100	150

- regional governments and local authorities: 0–150 percent, if they have a sovereign right to impose taxes, it equals the risk weight applicable to the central government. The

rating is published by the Hungarian Financial Supervisory Authority (HFSA);

- public institutions: a 0-100 percent weight applicable to a credit institution or the central government, for example Hungarian State Holding Company (ÁPV Rt.), Hungarian State Treasury (MÁK), social security funds, public foundations, etc.;
- multilateral development banks: 0–150 percent, except for e.g. African Development Bank, European Investment Bank, Asian Development Bank, etc., which are assigned 0 percent;
- international organisations: 0 percent, International Monetary Fund, Bank for International Settlements, European Community.

➔ *Credit institutions and investment enterprises*

The exposure risk weight is 20–150 percent, if the term of exposure does not exceed three months; otherwise it is 20 percent.

➔ *For enterprises, if rating is performed by a recognised credit rating company:*

credit rating	1	2	3	4	5	6
risk weight (%)	20	50	100	100	150	150

If no recognised credit rating company is involved, the applicable risk weight is the higher of 100 percent and the risk weight associated with the central government of the enterprise's registered seat.

➔ *Exposure to retail portfolios*

With the examined credit institution, an exposure belongs to the class of retail exposures with a risk weight of 75 percent, if:

- exposure is to a natural person, micro, small or medium enterprise,
- exposure can be pooled with a significant number of exposures sharing the same characteristics, which facilitates mitigation of lending risk,

- the risk exposure of the credit institution or the given group to the debtor or group of debtors does not exceed EUR 1 million,
- the claim is other than securities,
- it is exposure secured by property that does not meet the conditions stipulated in the decree (for residential or non-residential property),
- portions of exposure not secured by property,
- the claims are not fully secured by residential property.

Typical products: revolving credits, lines of credit, credit cards, overdraft, personal term loans, leases, student and educational loans, personal finance, small business facilities.

Granularity criterion: the portfolio must be sufficiently diversified to reduce the risks in the portfolio, warranting a 75-percent risk weight; one way of achieving this may be to set up a limit that no client exposure can exceed 0.2 percent of the portfolio.

Claims fully secured by residential property: 35 percent

General conditions to eligibility of claims secured by property:

- at the time of contracting, it is enforceable in front of all jurisdictions,
- the contract allows for enforceability of the claim secured by mortgage within a reasonable time,
- it is properly registered in the real estate register at the proper time,
- frequency of reviewing the market value: for residential property, once every three years, for non-residential property, once a year. An independent property appraisal is needed if the property price significantly decreases in comparison to the market price, the loan amount is over EUR 3 million, or it reaches 5 percent of the regulatory capital,
- the property insurance against damage is monitored,

- rating of the client and independence of the property's loan-to-value ratio,
- at least 80 percent of the repayment depends on other than revenue from the property,
- the exposure cannot exceed 70 percent of the residential property value,
- the residential property is/will be occupied by the owner or is/will be let.

Claims secured by real estate other than residential property: 50 percent

The exposure value does not exceed 50 percent of the market value or 60 percent of the mortgage lending value of the property. (On determining the value of risk, the lower is to be considered.)

➔ *Exposure to past due items*

The risk weight associated with the amounts of individual provisions continuously over ninety days and of material obligations reduced by the amount of risk provision is 50–150 percent. In the event of exposure to residential property, if the provisions are below 20 percent of the gross value, the risk weight is 100 percent, if they are over, it is 50 percent, or if it is non-residential property, the risk weight is 100 percent. For other items, if provisions are below or over 20 percent of the gross value, the risk weight is 150 percent and 100 percent, respectively.

A case of material exposure to a retail portfolio is where the exposure amount is higher than the monthly minimum salary valid at the time when the due date passes, or is higher than 2 percent of the total contractual client obligations or higher than a monthly instalment. In the event of other exposures, it is HUF 250 thousand, 2 percent of the contractual client obligations.

➔ *Other items*

Investment in venture capital companies: 150 percent, for other than past due items with

provisions or risk provision accumulated: 100 percent or 50 percent, for tangible assets: 100 percent, for accruals, if no specific client can be assigned to them, it is 100 percent, for cash and cash equivalent items, it is 0 percent, for items being collected, it is 20 percent, for the value of participation not deducted from the regulatory capital, it is 100 percent, for gold held in own vaults or on an allocated basis, it is 0 percent, for repurchase transactions and forward purchases, the risk weight of the asset prevails.

➔ *Off-balance sheet exposures*

Exposure is categorised from 0 to 100 percent. Off-balance sheet exposures generally fall in the 100 percent category. For other cases, the following categories are set up:

- 50-percent exposure: other than credit substitute guarantees, underwriting related to securities issue, promissory notes related to underwriting, unutilised promissory notes and credit lines with an original maturity over a year for lending, for securities purchase, for granting bank guarantee and banker's indemnity, for bill discounting, for granting bill guarantee and for assuming other risks, letters of credit issued, irrevocable standby letters of credit.
- 20-percent risk weight: documentary credits, where the underlying shipment is posted to the credit institution, unutilised promissory notes and credit lines with an original maturity of one year for lending, for securities purchase, for granting bank guarantee and banker's indemnity, for bill discounting, for granting bill guarantee and for assuming other risks, which cannot be cancelled unconditionally, or where deteriorated borrowing capacity of the borrower does not automatically result in termination of the agreement.
- 0-percent exposure: claims from credits extended at other than the credit institution's own risk, unutilised promissory

notes and credit lines with an original maturity less than a year for lending, for securities purchase, for granting bank guarantee and banker's indemnity, for bill discounting, for granting bill guarantee and for assuming other risks, which may be unconditionally cancelled at any time with immediate effect, or where a deteriorated borrowing capacity of the borrower automatically results in termination of the agreement; standby letters of credit that may be revoked at any time.

Capital requirement for market risk

Risk components to be included: foreign exchange rate risk, commodities risk, interest rate position risk, equity position risk, excess of high-risk limits. Financial institutions not required to keep a trading book are only required to accumulate capital for foreign exchange rate risk: with the net and gross long and short positions determined by currency, the capital requirement is 8 percent of the net position of the higher of the two, if the net position exceeds 2 percent of the regulatory capital.

Operational risk

The capital requirement may be calculated using the basic indicator approach regulated in Government Decree 200/2007. In the event the standardised approach is used, the basic indicator is calculated pursuant to the relevant decree.

PILLAR 2: **Internal capital adequacy assessment process (ICAAP)**

Internal capital assessment can be divided into two major parts; the capital requirement is determined per risk, and a capital buffer is quantified.

In this case, risks that are not considered or considered differently for the minimum capital

requirement are also included; such risks are established by the financial institution by exploring its own risks.

Components of internal capital adequacy

The types of risk to be considered on calculating the internal capital adequacy:

- concentration risk,
- market foreign exchange rate risk,
- country risk,
- credit risk,
- risk in the market trading book,
- operational risk,
- other than interest rate risk in the trading book.

By quantifying these risks, the internal capital requirement less the capital buffer is received. The credit institution summarises the capital requirement applicable to these risks, which yields the internal capital requirement less the capital buffer.

Calculating the capital requirement for each risk type

➔ *Concentration risk:*

- high risk: exposure to a client or a client group reaches 10 percent of the regulatory capital. The limit is specified in the Act on credit institutions and financial enterprises (htp); 100 percent of the portion above the limit is to be funded by capital;
- debtor concentration at the level of portfolios: the internal capital requirement of the 20 top exposures (debtors) under htp. The limit is 2.5 times the regulatory capital;
- the capital to be accumulated for concentration of top debtors at the level of portfolios is the higher of the limit excesses, increased by 10 percent.
- Sectoral concentration: the exposure is classified according to activity (TEÁOR) code 99 or into one of the 20 categories published by the National Bank of

Hungary (MNB); the sectoral limit is 250 percent of the regulatory capital;

- collateral concentration: the limit applicable to the direct and indirect exposure to a client equals 75 percent of the regulatory capital.

➤ *Market foreign exchange rate, the same as for pillar 1.*

➤ *Country risk: the risk rating changes on a continuous basis.*

➤ *Credit risk: same as the value determined under pillar 1, except for the portion assumed by HG Zrt. and AVHGA at its own risk for a val, the risk weights according to Government Decree on the management and capital requirement of credit risk (HKR) are 50 percent and 100 percent, and the preferential weight permitted on calculating internal capital requirement is 20 percent. If the financial institution does not intend to use the preferential risk weight, the value equals that of the capital requirement calculated using the standardised approach.*

➤ *Risk in the market trading book is the same as for pillar 1.*

➤ *Operational risk*

The approaches to handling operational risk are the following:

- basic indicator (prevailing indicator),
- standardised,
- advanced measurement approach.

① **BASIC INDICATOR APPROACH**

This indicator can be calculated using the profit and loss statement. The capital requirement to be held is 15 percent of the amount specified as the basic indicator.

Items to be included in the basic indicator amount:

The arithmetical average of three years in terms of the following amounts: the difference

between interest and interest type revenues received and interest and interest type revenues paid, and the difference between revenues from shares purchased for trading, from participations, commission and fee revenues received, net profit from financial operations and other revenues from business activities, as well as the commission and fee expenses paid (payable) and net loss of financial operations.

For the calculation, the previous three annual reports certified by an auditor must be considered. If the financial institution does not hold three years' data, the estimates used in their business plan must be used. Also in the event of mergers, demergers and changes in the scope of activities, data must be obtained from the business plan approved by the HFSA.

On calculating the indicator, only positive figures are to be included. If figures for a year are negative or zero, the average of the positive figures of the remaining two years must be used. If the figures are negative or zero for two years, only the figures of the year with positive figures must be considered.

On calculating the prevailing indicator, the following must be excluded:

- loss in value and write-back, and the expenses and revenues related to the accumulation and utilisation of provisions, except for the profit or loss from the valuation of all balance sheet items and off-balance sheet items recorded in the trading book (loss in value and write-back, positive or negative difference of valuation, provisioning and release of provisions for expected loss from derivatives for trading);
- general administrative costs;
- amount of dividends or quotas received from credit institutions or financial enterprises;
- the contractual consideration paid for outsourced activities, except if no parent and subsidiary relationship exists with the institution;

- revenue from the sale of items not contained in the trading book, except for foreign currency;
- revenue from damages on insurance claims.

② STANDARDISED APPROACH

The capital requirement for operational risk equals the value of the prevailing indicator for the bank's business lines as weighted with various percentages.

If the basic indicator for a business line is negative, it can be considered on calculation. If the weighted basic indicator is negative for a given year, the negative figure is to be replaced by zero on calculating the three-year average.

Business lines in the bank, and the associated weights:

- corporate finances: 18 percent;
- underwriting, services related to underwriting, investment consulting, securities issuance and consulting, consulting provided to companies concerning leverage and business strategy, organising acquisition of influence in a company through public purchase offer and related services;
- trading and sales: 18 percent;
- financial agency in the interbank market, trading in financial instruments and commission agency, securities lending, interbank deposits;
- retail intermediary activity: 12 percent;
- commission agency with financial instruments;
- commercial banking: 15 percent;
- raising deposits and accepting other repayable funds from the public, extending credits and loans, financial leases, guarantees and bank guarantees, other banker's commitments and money exchange;
- retail banking: 12 percent;
- raising deposits and accepting other repayable funds from the public, extending credits and loans, financial leases, guarantees and bank guarantees, card services

provided with the cooperation of card companies, other banker's commitments and money exchange;

- payments and settlements: 18 percent;
- cash transfer to third persons not qualifying as clients, clearing and settlements, electronic money, as well as issuing cash replacement means of payment, and related services;
- agency to intermediate financial services: 15 percent;
- safe-keeping of securities and keeping the related records, safe custody of securities, agency for credit institutions or investment enterprises;
- property management: 12 percent;
- unique management of individual portfolios, deposit safe custody for collective investments, property management for voluntary insurance funds, property management for private pension funds.

Major conditions of using the standardised approach

The bank's operational risks are easy to explore, the relevant system is integrated in the institution's management information system, the system provides for control, the credit institution develops and operates an internal reporting system, and regulates the system and conditions of classifying services in the various lines of business.

Each service can be classified in a single business line. If at least 90 percent of the financial institution's activities stem from retail banking and commercial banking, and at least 50 percent of retail banking and commercial banking contain credits with a probability of default reaching 3 percent on average, and credits are priced for a high credit risk, the earlier weighting method can be replaced by an alternative indicator, subject to permission issued by the HFSA.

Calculating the indicator: a three-year average of the outstanding contractual amount of cred-

its extended – drawn down from the credit line, and still unrepaid –, multiplied by 0.035. The capital requirement for the retail and commercial banking lines of business equals the indicators of business line obtained as above, weighted by 12 percent and 15 percent, respectively.

3 ADVANCED MEASUREMENT APPROACH

Conditions of use

- the credit institution's system for assessing and measuring operational risk must be fully integrated with the day-to-day risk management process;
- risk management must be elaborate and documented;
- risk management is controlled by an internal auditor or an auditor;
- the risk management system is transparent and controllable, and the data are accurate. Risks must be explored and provisions accumulated to achieve an accuracy of 99.9 percent;
- the credit institution's risk management system must identify the factors influencing low probability events that involve serious losses;
- the system must be based on loss figures of at least 5 years;
- events that entail credit risk in addition to operational risk must also be considered for operational risk, and capital must be accumulated.

➔ *Interest rate risk other than in the banking book*: a 200-base point interest rate shock and a duration gap analysis constitute the basis of calculating capital requirement. It is not done for each item, only for the ones that exceed 5 percent of the balance sheet total.

Stress tests

Stress tests are also carried out in order to calculate the internal capital requirement:

- credit risk stress test,
- concentration stress test,

- foreign exchange rate stress test,
- interest rate risk stress test,
- liquidity stress test.

The results of these tests are used to formulate a capital buffer. Out of the stress test scenarios, the one calling for the highest capital requirement must be considered (i.e., values do not add up).²

Stress tests are carried out on a quarterly basis, and they may result in increased amounts of special provision and loss in value provision, and the capital requirement underlying past due claims may increase. The objective of the credit institution's operation is to accumulate a credit portfolio that entails minimum risk. The question is only the extent to which financial institutions are able to follow this objective in the current economic situation, considering that many of the previously good clients struggle with payment difficulties.

Types of stress tests

➔ For credit risk, any increase in past due items over 90 days + changes in Hungary's credit rating are examined.

➔ Concentration risk: is a risk that stems from aggregate risks arising from various contractual relationships with clients sharing the same characteristics, e.g. failed return of 20 percent of the claims.

➔ Foreign exchange rate risk: capital requirement of open foreign exchange positions (e.g. in the event of a 40-percent depreciation of the Hungarian forint).

➔ Interest rate risk not included in the trading book: it is examined when the ratio of the weighted net position to the regulatory capital exceeds 20 percent.

➔ Liquidity risk: quantifying the impacts of liquidity distress, i.e. if clients intend to withdraw a certain amount of deposit from the credit institution, the amount of liquid assets the bank needs to provide, and if the bank has insufficient primary and secondary liquid

assets, at what price the bank can obtain resources, and at what price the bank can liquidate its assets.

Capital requirement for self-assessment for risk

Self-assessment for risk: once a year, the credit institution assesses the adequacy along the guidelines issued by the HFSA. Depending on the ratio of responses, a 20-percent capital buffer is determined. Possible responses: compliant, partly compliant, non-compliant. If the ratio of “partly compliant” and “non-compliant” responses exceeds 30 percent of all responses, capital must be accumulated.

Possible areas for self-assessment for risk

➤ *Macro-environment* (risk of external factors – impact of economic cycles, concentration risk – geographical concentration risk).

➤ *Corporate governance:*

- management risk (qualifications, professional reputation, market judgement, management qualities),
- strategic risk – dividends policy,
- reputational risk (declined confidence, handling of complaints in the organisation),
- administrative risk: compliance with supervisory recommendations, production of audit reports.

➤ *Market appearance:* compliance of the offered services and products with the market, launching new services, change in market share, concentration of the institution's client structure, unauthorised activities, acquisition, marketing and publishing policy.

➤ *Business processes and capital*

- credit risk: asset quality compared to similar financial institutions, significant credit loss (5 percent of the regulatory capital), ratio of interest in suspense, management and control of credit risk in the system, counterparty with credit risk above the

average based on ratings and sectoral risk, compliance with prudential limits.

- residual risk: ratio of real estate among collaterals, per portfolio,
- country risk,
- foreign exchange risk,
- liquidity risk,
- operational risk.

PILLAR 3: Disclosure requirements

The regulation is built on Government Decree 234/2007, with a view to using the disciplinary force of publicity to encourage continuous review and increased transparency of the strategy, risk management and governance system of the credit institution.

Areas of disclosure:

- principles and methods of risk management,
- application of prudential rules,
- information related to the regulatory capital,
- capital adequacy of the institution,
- standardised approach,
- internal ratings-based approach,
- credit risk mitigation,
- trading book,
- shares and positions not included in the trading book,
- securitisation,
- counterparty risk management,
- operational risk.

CAPITAL SITUATION IN THE FINANCIAL SECTOR

The framework of Basel II is mandatory for comprehensive use in the domestic financial sector as of 1 January 2008. The traditional solvency indicator has been replaced by the new capital adequacy indicator, the solvency rate, which

must cover at least 8 percent of the risk-weighted exposure amount even after the separated capital requirements are deducted from the adjusted regulatory capital, as well as by the capital adequacy index, where the amount of minimum regulatory capital requirement is compared to the eligible regulatory capital amount

$$(8 \text{ percent of the eligible regulatory capital} / \text{minimum regulatory capital requirement}) \times 100$$

According to the HFSA report for the year 2008, the situation of the financial sector reflects a high level of stability; although decrease is seen in terms of the capital adequacy level over the years, it is caused by the new capital regulation, which lead to an increased minimum capital.

The average capital adequacy situation of financial service providers was relatively slightly involved in the financial crisis that evolved in 2008. The regulatory capital available to the entire financial sector increased by 13 percent during the year, while the total capital requirement by 15 percent.

In the banking system (banks) bearing largest weight and most risked by the recession,

the capital adequacy index slightly decreased, similarly to the sectoral average (from 145 percent of the previous year), and reached 142 percent in 2008. The capital adequacy index of cooperative credit institutions decreased to a higher extent but from a significantly higher level.

On evaluating the developments in the capital situation in 2008, it must be considered that the mid-year adoption of the rules set forth in the European Capital Directive (CRD) had a strong influence on credit institution service providers. Adoption of the CRD:

- decreased the capital requirement related to credit risks,
- introduced capital requirement for operational risk,
- required consideration of the capital requirement related to market risk in the basic regulatory capital indicator. (See Tables 1 and 2)

For institutions subject to the capital adequacy requirement, the increment of the ability to accumulate internal capital and that of capital requirement in 2008 were in balance, similarly to the previous year. For banks, a deficit is seen in the internal capital surplus of banks

Table 1

**REGULATORY SOLVENCY RATE AND CAPITAL ADEQUACY
(INSTITUTIONS ON A SOLO BASIS, PERCENT)**

Period-end figures	2003	2004	2005	2006	2007	2008
Solvency rate						
Banks	12.29	12.80	11.95	11.54	11.60	11.43
Cooperative credit institutions	15.40	15.95	15.57	15.32	15.82	13.67
Investment enterprises	59.2	61.15	94.38	37.39	30.24	n.a.
Capital adequacy*						
Banks	153.7	160.0	149.4	144.3	145.0	142.2
Cooperative credit institutions	192.4	199.4	194.7	191.5	182.2	170.9
Investment enterprises	451.1	310.9	441.8	200.4	204.1	n.a.
Insurance entities	176.5	167.8	182.5	216.6	223.5	234.2
<i>Sectoral average</i>	<i>160.0</i>	<i>163.2</i>	<i>155.6</i>	<i>152.8</i>	<i>153.1</i>	<i>149.9</i>

* Based on regulatory capital requirement

Source: Operation and risks of the supervised sector, HFSA, May 2009 (p. 34)

Table 2

ABILITY TO ACCUMULATE INTERNAL CAPITAL

Period-end figures	2004	2005	2006	2007	2008
Annual ROE (percent)					
Banks	23.4	22.3	23.0	17.9	14.3
Cooperative credit institutions	15.8	13.4	10.7	10.8	10.2
Investment enterprises	-6.2	-1.7	29.6	30.4	33.8
Insurance entities	25.5	29.0	23.9	20.2	18.0
Total	23.0	22.7	22.6	18.0	14.8
Increased capital requirement (percent)					
Banks	16.5	17.4	19.2	19.8	16.8
Cooperative credit institutions	22.2	15.4	7.9	8.9	16.2
Investment enterprises	-34.3	-13.7	95.0	2.4	n.a.
Insurance entities	25.2	7.4	6.1	9.9	2.2
Total	17.2	16.1	17.7	18.4	15.0
Internal capital surplus (percentage point)/1					
Banks	6.9	4.9	3.7	-1.9	-2.5
Cooperative credit institutions	-6.4	-2.0	2.8	1.9	-5.9
Investment enterprises	28.2	12.0	-65.4	28.0	n.a.
Insurance entities	0.3	21.6	17.7	10.3	15.8
Total	5.8	6.7	4.9	-0.4	-0.2

* The difference between the increase in ROE and the capital requirement, as a percentage

Source: Operation and risks of the supervised sector, HFSA, May 2009 (p. 35)

supervised by the HFSA, which means that the annual return on equity grows to a smaller extent than the regulatory capital requirement does.

At this point, however, we must consider again a previously mentioned circumstance, namely, that the return on equity for banks was improved by one-off items of significant amount in 2008. Without these, the bank system and all the institutions would have faced an internally induced capital shortage of nearly 7 percentage points and nearly 4 percentage points, respectively. Similarly, the internal capital shortage of cooperatives is only apparent, because, as mentioned previously, the fast increase in the capital requirement is attributable to a one-off impact of adopting the CRD.

Despite the tough business circumstances, the bank system is significantly profitable,

which means an annual return on equity (ROE) of 15.7 for the period January to May 2009. The banking profit and the ROE figures are highly seasonal, because return in the first half of the year is generally higher, whereas that in the second half – mostly due to a peak in provisioning and operating costs in the last quarter – is typically considerably lower. *Return in the period of January to May 2009 shows a firm decline compared to 2008, and even with the trend unchanged, a single-digit ROE figure is expected for the whole year.*

SUMMARY

A credit institution's eligible regulatory capital must cover the credit, market and operational risks defined in the provision of law specified in pillar 1, as well as the capital

requirement explored in pillar 2, i.e. quantifiable and less quantifiable risks, limit excesses, results of stress tests and self-assessment for risk. *Never so far has the development of the Basel framework and its practical application in the banking practice had so much justification as it has nowadays.* Evidence for this is the fact that the financial institutions were not forced to face the impacts of the financial crisis made on their capital situation unexpectedly (although the international financial processes were presumable), owing to an adequate regulation. An increasingly acute market competition, acquisition and retention of clients at almost any price, profit orientation, strife for efficiency and owners' expectations lead to the fact that the financial sector – although compliant with the domestic and international standards – *was forced to include transactions and clients representing increasing risk. A true benefit of the Basel II framework is that it offers complex risk management* instead of just focusing on one or two significant risk segments. Stress tests allow for quantification of events that the financial sector did not reckon with earlier, and these, unfortunately, did not take

place as test items only during the financial crisis. The new regulation represents a kind of defence system, where clients are also assigned considerable roles, i.e. the rule does not only focus on the inside, but also approaches efficient risk management, and thus also loss control, from the client side. In our opinion, adoption and use of the surplus capital requirement and the new risk management approaches for banks will surely yield long-term results. More efficient exploration of risks, more accurate mapping of components may represent less loss and lower requirements of reserve, which may improve confidence in the investment market, and may result in mitigated liquidity problems.

Concerning the Basel II framework, the Basel Committee put forward an amendment proposal, which the Committee developed expressly with respect to the financial crisis and the factors that shook the capital situation of banks, and in response to the risk management factors deemed insufficient. It lays a great emphasis on the rules of properly managing the risks of securitised products, and of calculating the capital for covering these.

NOTES

¹ The Basel Committee on Banking Supervision, BCBS was established in 1974 as an association of the central banks of 10 countries, and by 1988, it developed a regulation called Basel I, with a view to quantifying banking risks.

² The capital buffer amount: the higher of the stress test results and the quantified self-assessment for risk. Internal capital to be actually accumulated: if the pillar 1 value is higher than the pillar 2 value, it

will prevail, whereas, if pillar 2 is higher, it is to be actually accumulated.

The regulatory capital covers risks defined in pillar 1, plus the capital requirement of risks defined in pillar 2. Limits are set up for quantified risks, where the capital requirement is the portion above the limit. On defining the capital buffer amount, the stress test results must be considered, as well as the result of the self-assessment for risk.

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