Key Success Factors for the Commercial Bank Risk Management under Downturn Market

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Abstract

The last global financial crisis has revealed a few shortcomings in the financial systems. The financial institutions regulation and banks risk management system belong to them. This paper focus on presentation of the key success factors which were identified by managing risk in the commercial bank in Slovakia during downturn period. To better understand environment under which commercial banks operate brief description of the Slovak economy, its banking sector and specifics of the global crisis impact are described at the beginning of paper. Positive opinion on contribution of the banking regulation to success of the commercial bank risk management under downturn is presented in the separate part. Key success factors are classified and described within three groups: l. Risk management system (with high level of I.T. support) which fulfills either Basel 2 requirements or ERM (enterprise risk management) the best practices. 2. Bank governance bodies involvement and readiness to widely support changes in the bank management due to downturn market. 3. CRO (chief risk officer) leadership role and key risk management activities during downturn**.**

I. Global Financial Crisis versus Slovak Economy and Banking Sector

Global financial crisis has influenced the Slovak economy and banking sector more than one and half year later than in the U.S. – at the beginning of 2009. In addition to that since January 1st 2009 Euro currency has been adopted in the Slovak republic. Main crisis impact has been through distress of the real economy (economic crisis) and starting recession. Slovak small open economy(5,4 mil. inhabitants) highly depended on foreign demand (in 2008Export+Import/GDP was168%) was seriously hit in 2009 when previous years of GDP growth (2007:10.6%, 2008:6,2%;) was replaced by sharp decline (-4,7% the highest among Visegrad countries)[2], growing unemployment rate (12,1%; 4.8% growth since the beginning of crisis is also the highest among Visegrad countries) and growing budget deficit – 6% (2007: 1,9%; 2008,2,3%). In spite of that Slovakia (together with Czech Republic has the best country rating among CEE countries (A+) and due to that has also benefited from Euro adoption with country interest rate premium (0,9%). On the other side due to the same reason (Euro adoption) Slovakia cannot react to downturn market via exchange rate that is more expensive for country. The highest crisis hit from sectors point of view have reached in cyclical industrial sectors (automotive, steel, chemicals); construction and in services – transport/logistics and tourism.

In spite of fact that the banking sector[3] hasn´t been involved among those ones heavily hit by crisis but it has been impacted mainly through real economy. Sector entered into crisis with almost 98% banks owned by foreign capital; highly concentrated (more than 60% of assets owned by 3 largest banks); highly competitive (15 fully licensed banks and 11 branches of the foreign banks operating on 1 license); sufficiently capitalized and liquid; core business activities are focused mainly on commercial banking and special activities in the area of financing housing construction; local banks operate mainly in Slovakia; banks operate under Basel 2 regulation since January 1st, 2008. Impact of the crisis on the Slovak banking sector had a few specifics in comparison to the other Western European and U.S. Banks. Background of these specifics is mainly following: a/ sector hasn´t been influenced by liquidity crisis directly mainly thanks to approaching Euro adoption, traditionally over liquidity in the market (which has continued also after January 1st 2009), highly conservative securities portfolio with approx. 76% government bonds, absence of toxic assets. However, liquidity crisis had indirectly influenced sector through increased costs of funds (liquidity margins applied on international financial markets). b/ "timing" of the global financial crisis which was positive for Slovakia in three ways: ba/prevented" the Slovak banking sector from deeper problems related to credit losses from aggressive lending. During the last period

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[2] Višegrad Countries – four Central European Countries: Hungary, Czech Republic, Slovakia, Poland.

[3] Sources of Slovak Banking Sector Data: [1], [17] , Slovak banks financial data and the Annual Reports.

(2003 – 2008) some signs typical for pre-crisis period in the U.S. were recognized in Slovakia, too: real estate housing prices bubble and high growth of the household financing (2008/2002 housing price index soared up to 270% and household and non-profit institutions annual loans growth was more than 20% in this time framework, bb/positive "timing" impact was also due to short-term period since the previous Slovak banking crisis and the banking sector recovery[4]. bc/ sector was well capitalized (with high quality Tier 1 capital close to 90%) and profitable before crisis. c/ foreign mother companies risk policies were mostly strict and the risky transactions, products and investments were mostly concentrated at headquarters not in local banks. d/ most of foreign owners belong to more conservative groups which strategy have been focused mainly on traditional commercial bank business model not on speculation or modern business model focus on "origination and distribution" e/ strict local regulator (National Bank of Slovakia) which was alert and since the beginning of crisis in the U.S. and Western Europe applied stricter regular monitoring of each banking institutions through reporting (new daily reports were introduced) focusing mainly on short-term and long–term liquidity. At the same time regulator seriously focused also on monitoring Basel 2, Pillar 2 implementation by the local banks.
However, 2009 banking activities and results have reflected crisis impact. Due to increased credit risk lending activities stagnated and investment into the Slovak Republic state bonds and state bonds of surrounding countries grew. While volume of corporate loans decreased (2009/2008 -3%), retail segment financing still grew (+10%). However, non performing loans ratio reached level 5,5% which is more than 70% higher than in 2008. Trend of stagnated loan volumes, worsening loan portfolio, decreased volume of deposit, low interest rates combined with Euro adoption seriously impacted financial results of the Slovak banks. 2009 profit after taxes in banking sector decreased almost by 50% and 11 banks posted loss (in 2008 it was 5 banks). Key drivers of decreased profitability were revenues (mainly decreased foreign exchange revenues due to Euro adoption and interest income) and creation of loan loss provisions (they increased by 25% on annual basis). On the other side the banking sector achieved quite high level of capital adequacy ratio (12,6%/ increased by 1.4% during year)[5], good liquidity position (e.g. loans to deposit ratio was 77%) and manageable market risk.

All of these circumstances tested commercial bank risk manages and CROs learnt lessons what to do to succeed in downturn markets.

II. Banking Regulation as a Contributor to Key Success Factors of the Commercial Bank Risk Management during Downturn Market

The bank risk management system and financial institution regulation have been identified among the key issues of the current financial crisis. On the other side John Hampton [6] presented that "Many business people pay lip service to Sarbanes-Oxley, Basel II, and ERM. In their hearts, they believe the processes required by all three were designed by bureaucrats, professors, or regulators who do not really understand risk". However, our opinion coming from the last years experiences operating during crisis is different and is presented in this paper through identification of the key success factors of the commercial bank risk management under downturn market within Basel 2 framework. Banking regulation in Europe has long-term history[7] and regulators effort has

[4] The previous crisis started in 1998 and in 2001 the privatization and restructuring of the major Slovak banks had been completed. In that period, "non performing loans ratio" reached 30%, 4 banks (out of 25) bankrupted and 1 was restructured and then sold. Owners of the newly privatized banks introduced more conservative approach towards credit risk – to be in line with the best banking principles.

[5] Level of minimum capital adequacy required by regulator is 8%.

[6] Hampton, J. John: Fundamentals of Enterprise Risk Management, "How top companies assess risk, manage exposures and seize opportunities", AMACOM 2009, p.240.

[7] In 1930 the Bank for International Settlements (BIS) has been established in the aftermath of the Great Depression. The first bank capital accord - predecessor/ basis of the current regulation has been launched in 1988 under the name New Basel Capital Accord (**Basel 1**). Originally in this regulation capital requirement was set to cover only **bank credit risk** (is defined as the risk that an unexpected change of the credit quality of a counterparty might generate a change in the value of the credit exposure towards it – it includes *Default risk, Migration risk, Country risk, Pre-settlement Risk, Delivery Risk, Securitization Risk, Residual risk)*
and its amount was simply calculated using risk-weighting structure based on type of borrower (obligor) and not directly on the risk of losses. This regulation was amended in 1996 – extended to cover also **market risk** (is defined as the impact that movements in market traded variables can have on the economic value of the Bank's portfolio. It includes *Interest rate risk, Exchange rate risk, Equity risk, Commodity risk, Volatility risk, Credit Spread Risk)*
. Basel I has been heavily criticized for being too crude, opening the door to regulatory arbitrage and of course related to the "credit crunch" of the early 1990s. Due to that the reforming process of Basel 1 started and has been finalized in 2006 and new regulation has been launched under the name Basel 2.

been materialized in Basel 2 regulation[8]. Basel 2 started to be valid in the countries of European Union since January, 1st 2008. Unfortunately, due to the global crisis timing for its validation was not the best one. Due to that at the moment it is not possible to fully verify hypothesis that the banks which applied for more sophisticated approaches (based on usage of own models created on own data…) to calculate capital requirements are better off than those that use simple/standard approaches. At the beginning of 2008 majority of the banking institutions in Slovakia were prepared for Pillar I implementation mostly only for the simplest method for capital requirements calculation for credit, operational and market risks. They were also ready for Pillar 3 application. However, in years 2008 and 2009 they still worked on projects of Pillar 2 implementation. In our opinion in spite of fact that the last financial crisis discovered serious weaknesses of Basel 2[9]one of the positive sides of this regulation is that in addition to intention to motivate banks to apply more sophisticated approaches for capital requirements calculation in Pillar 1, regulators also "legally" enforced financial institutions to develop and introduce comprehensive risk management system (or let´s say enterprise risk management system) through Pillar 2. This system if is fully developed and implemented creates a good framework for assessment, valuation and mitigation of the bank risk position during crisis period, too. Pillar 2[10] (and particularly its part Internal Capital Assessment Process - ICAAP) put pressure on commercial banks to develop tailored-made risk management system following key principles formulated by Basel 2 documents (including relevant EU Directives).

III. Key Success Factors in Downturn Market

We have classified key success factors into three groups. The best practices that have been used within each of these groups during the last downturn are further described.

1. Bank Operates under Risk Management System (with high level of I.T. support) which fulfills either Basel 2 requirements or the best practices of Enterprise risk management (ERM) system.

.Banking institutions which historically put effort and interest to systematically build relevant risk management system were among the first to apply for advanced models for capital requirements calculation (within Pillar 1) and in using ICAAP tool which could be marked as an alternative for the ERM.
ICAAP is known within the commercial banks as a regulatory requirement. It is important to admit that still isn´t widely accepted by bankers as a good framework for development of an internal risk management system which in line with Basel 2 /Pillar 2 principles is focused on:

- Adequately identify, measure, aggregate and monitor the **institution's risks**. Banks are required to correctly assess all material risks which are exposed to: a/ in addition to the risks of Pillar 1, in Pillar 2 those part of risks which are not covered by capital calculated in Pillar 1 are included in Pillar 2 (e.g. market risk of banking book if in Pillar 1 market risk for trading book is only included). b/ business risk, strategic risk, liquidity risk, financial investment risk, real estate risk, reputational risk etc.
- Hold adequate **internal capital** in relation to the institution's risk profile. While regulatory capital is a key for Pillar 1, in Pillar 2 capital categories like **economic and internal** [11]are crucial. In addition to

[8]The goal of regulators during long-term history is to regulate setting appropriate level of capital according to the riskiness of particular bank institution. Capital serves as a cushion to cover unexpected losses caused by external environment or specific events caused by individual bank. Basel 2 [6,7,18] **(B2)** regulation is often described as an architecture resting on 3 pillars: **Pillar 1 - Minimum capital requirements, Pillar 2 - Supervisory review and Pillar 3 – Market discipline**

[9] There have already been proposed changes by Basel Committee (in summer and December 2009) to fix these shortcomings (see more in European Commission: Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitizations, and the supervisory review of remuneration policies (COM(2009)362(CRDIII) – in approval process; European Commission: Consultation regarding further possible changes to the Capital Requirements Directive (CRD IV) under discussion.

[10] Minimum Capital Requirements from Basel I were expanded by Basel II to include the Supervisory Review Process (Pillar 2) and the Market Discipline (Pillar 3). Pillar 2 - regulates: a/ implementation of processes for assessment of capital adequacy; b/strategies for maintaining capital levels; c/ establishment of suitable risk management systems ; d/ evaluation process by supervisory authorities; e/necessary supervisory measures (on basis of evaluation process).

[11] **Economic capital**

- capital to cover potential unexpected risks, which is allocated for 1 year and is expected to yield a required return with required level of confidence.

that level of **available own funds** which are defined **as sources** for coverage of all risks are important, too.

- Use sound risk **management systems and develop them** further. This part should focus on "design" and implementation of relevant risk management processes and adequate organizational structure which ensures risk relevant corporate governance.

If the bank operates under ICAAP it has an excellent technical support framework both for modeling of internal capital needed for individual risks and their integration (applying diversification effects). In addition to that risk processes should fulfill minimum standards required by regulator. All-in (including risk culture which usually is built-in these types of institutions) are very important assumptions to manage risk during downturn correctly as at that time commercial bank risk management gets really complicated. However, lesson which we learnt is that adjustment and correct activities particularly in two components of the bank risk management system - Governance Bodies and CRO leadership and right management of his/her activities play key roles during downturn.

2. Bank Governance Bodies Involvement and Readiness to Widely Support Changes in the Bank Management due to Downturn Market

The Bank Governance Bodies play crucial role in the whole process of adjustment to a new situation when the key bank system – risk management gets complicated. They should bring in consensus the whole bank and to apply common approach (particularly risk and business units) to manage new situation. Key success drivers are :

a/ **Bank Governance Bodies[12] are involved from the beginning in the process of changes** to prepare bank in advance for a new situation. Their key role and responsibility in relation to **general managerial** areas are:

. to approve newly projected risk profile and risk taking capacity expected due to new conditions (acceptance how much risk is the bank willing/ able to accept in line with shareholder's appetite and own capacity).

. to communicate newly expected risk profile and risk taking capacity to key shareholders to know their risk appetite and readiness to support it by capital, if needed. Important part of this communication is to negotiate with shareholders potential changes in goals and targets of the bank.

. to launch process of changes and approval managerial documents (Bank Strategy/Budget and KPI s[13], Risk Strategy and Policies …) to reflect a new risk profile(parameters) and capacity if market conditions are changed or are expected to be changed significantly and key managerial documents don´t reflect them.

.to ensure that all approved documents are correctly communicated throughout the whole bank and truly implemented to **minimize strategic and business risks.[14]**

. to ensure clear alignment of risk and business models. The leadership role of CEO and the governance bodies are inevitable mainly if institution hasn't operated in this mode before downturn and senior leadership team responsible for business is reluctant to this alignment. Risk adjusted performance measurement system based on a newly created managerial documents and consistently implemented through all managerial levels of the bank is important factor to ensure this alignment.

. to oversee risks without owners but with high importance for the bank: strategic, business, reputational, horizon[15].

- basis for calculation are the corresponding VaR-figures
- covers all risk types included in calculation of minimum capital requirements (market, credit and operational risks), as well as those not accounted for (e.g. interest rate risk in banking book, real estate risk, business risk, financial investment risk etc.)

Internal capital is defined as total capital need for coverage of risks, the bank is exposed to at execution of its activity. It is expressed as the summary of aggregated economic capital adjusted by diversification effect and capital cushion. Capital cushion might be used to cover such risks as cyclicality, model risk etc.

[12]Governance bodies are statutory bodies: Board of Directors and Supervisory Board defined in line with the Slovak Commercial Code and Banking Act.

[13] KPI – key performance indicator.

[14] **Strategic risk** is defined as the risk of suffering potential losses due to taken decisions or radical changes in the business environment, improper implementation of decisions, lack of responsiveness to changes in the business environment, etc.

[14] **Business risk** is define as loss which can occur due to adverse, unexpected changes in business volume and/or margins that are not due to credit, market and operational risks-

[15] **Reputational risk** is current or prospective risk to earning and capital arising from adverse perception of the image of the financial institution on the part of customers, counterparties, shareholders, investors or regulators. **Horizon risk** is defined as an external exposure that arises when the organization is not actively scanning its external environment for developments and changing trends that could affect business and operations [15,p. 195]

b/ **To ensure and underline leadership role of Chief Risk Officer (CRO) and Chief Financial Officer (CFO) in key areas of importance -** in the capital management and risk management.
c/ **To support and ensure strong independent position of risk management unit (in line with its mission)** not only formally (via organizational chart required by valid legal acts) but also informally to declare risk culture in the bank.

3. CRO Leadership Role and Key Risk Management Activities during Downturn
CRO and his/her **team** are one of the **key success factors** if:
. CRO is authority accepted by the others (including CEO and Board of Directors) due to his/her personal characteristics (strong personality with high level of integrity…), communication skills but also professional capabilities and capabilities to encourage others to accept risk management mission.[16] He/she has to be flexible and able to manage under high level of uncertainty and should be rather conservative than liberal (mainly in decision on expected risk parameters, provisions, minimum level of capital, capital cushion etc.).
. CRO behaves very transparently and has in mind “corporate social responsibility” of his/her institution when does or proposes risk management solutions.
. CRO has a clear vision, own strategy and plan how to review the whole risk management system, to identify key risk drivers at each phase of the risk management process and their impact on the bank' s risk profile and risk taking capacity. In this way he/she has to act as a coordinator of numerous tasks and activities run by his own staff and closely cooperating units**.**
. risk team is both from professional and motivation sides able to assess impacts of the new environment on risk types and exposures they are responsible for and is also able to propose alternatives to mitigate them. CRO must assess team capabilities from those perspectives, to fix discovered weaknesses and encourage and support team to work under new circumstances.
. CRO adjusts reporting system to serve his/her needs in downturn market.
. Simply saying he/she is both a good leader and manager**.**

Key Risk Management Activities:

a/ Review, adjust and communicate Risk Management Mission to reflect appropriately new circumstances.

It is quite usual that mission of the Risk Management unit is very narrowly stated within commercial bank.
Due to that risk management role is many times incorrectly understood just as a narrow control function. This understanding is particularly danger during downturn when risk management unit should play its active leading role to properly respond toward crisis in its competence area. Therefore communication of mission through its key building blocks (see below) were found useful both as an explanatory tool and as a road map for review,

[16] It appeared that CRO who is well familiar (even expert) with Basel 2 processes brings an additional value to the organization (both in risk mitigation area and capital efficiency management).

adjustment and communication of the risk management role and system under new situation.

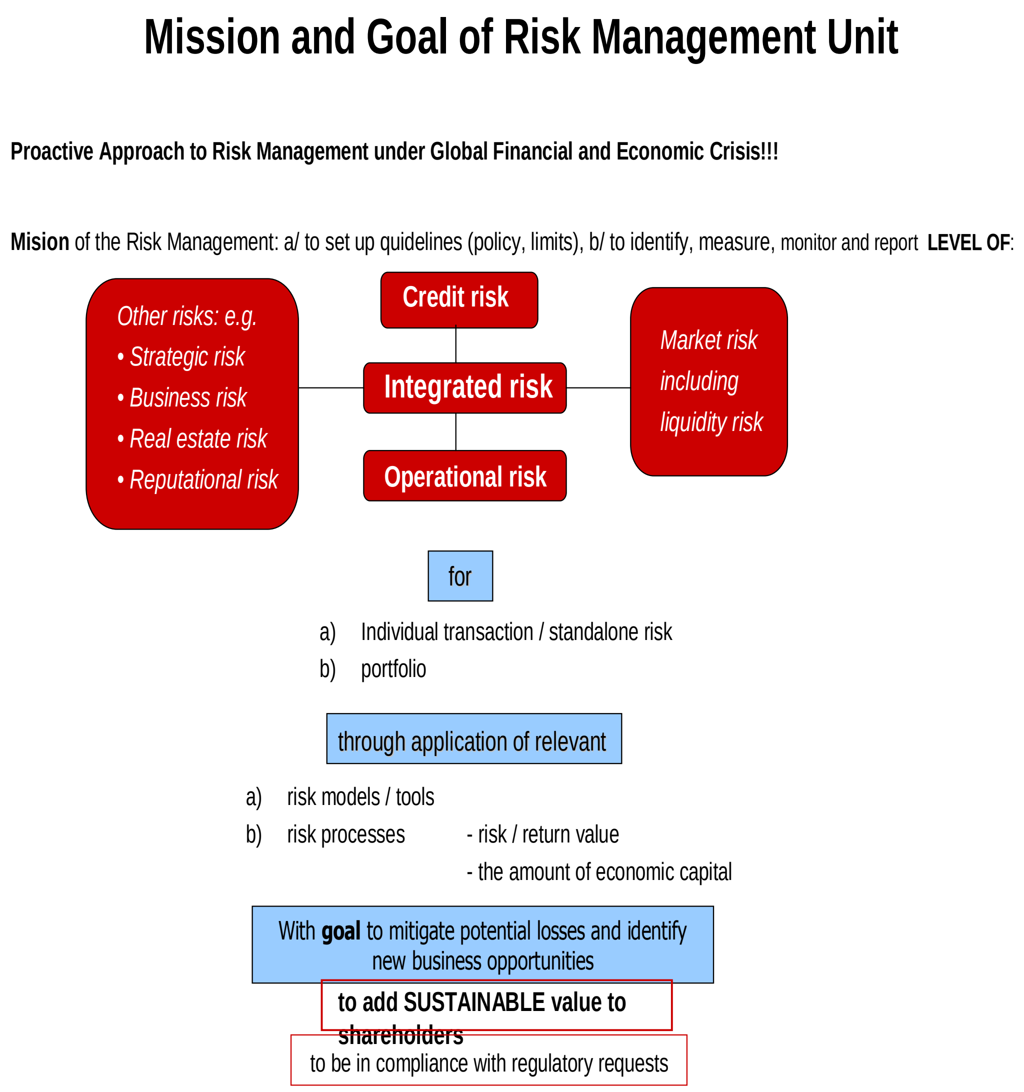

Chart 1: Key Building Blocks of the Commercial Bank Risk Management Unit Mission and Goals.

b/ To review/set up process to regularly scan external and internal environment with aim to identify, measure and mitigate impact of discovered changes on the bank' s risk profile and risk taking capacity. This must be a permanent process: it is never known which risk can pop-up or change its importance during downturn.
To do the first "fast and dirty analysis and valuation" of the warning signals which come from external (global and local macroeconomic, industrial) and internal (bank) environments at the beginning to assess the bank risk position fast and fairly and to propose to the governance bodies the first strategic and operational corrective actions is inevitable**.** This activity highly influenced the bank **horizon risk**. It is not unusual that at the beginning of downturn CRO is exposed to critique mainly from business people when he/she stresses importance to consider incoming changes in external environment and their impact on concrete risk types. As these changes are still not "visible" in the bank´s income statement business people are suspicious and think that e.g. their bank doesn´t have to be affected by crisis etc. Failing in this activity at right time might create serious problems for future.

Commercial bank which has already implemented ICAAP (or similar ERM system) is in advantage as it can use **ICAAP tool** to assess level of risk types and identify impact of changes through comparison current/estimated level with level achieved originally /at previous assessment. In line with model applied in this process each risk type is measured according to expected loss, economic capital for unexpected loss and finally (in line with the best risk management practices) it is useful to apply stress testing for calculation of required internal capital. Outcome of this analysis is the level of capital (both regulatory and internal bank capital) which is needed to cover assessed bank's risk profile[17]. The best practice is to calculate level of economic capital needed and the bank risk taking capacity) at least on quarterly basis or more often if market conditions are very volatile.
Based on achieved results it is important to set up risk priorities the bank should focus on. During the last crisis the Slovak commercial banks identified **credit risk as one that has been mainly affected by downturn**. [18]

c/ CRO Main Attention (Priority) Put on the Risk Types Heavily Influenced by Downturn: Credit Risk

The first crucial task is to review **credit risk strategy and propose its adjustment.**
Based on observation of the Slovak banks practices, it is important to set up a right credit risk strategy for current crisis. It meant to take into consideration past credit strategy. Two scenarios have been identified:.

(1) banks with aggressive credit risk strategy in the past (they were focused primarily on loans growth through fast market share acquisition both in corporate and retail segments). At the beginning of crisis those banks applied strict credit risk parameters adjustment (both on customer and product levels); exposure reduction for customers that have not been in line with expected credit risk parameters, ratings etc). **Result of these strategies was radical stop in loan expansion – credit crunch with serious macroeconomic impacts and threats also for customers who were temporarily influenced by downturn.**

(2) banks with conservative credit risk strategy in the past (they were focused on steady loan growth through retention of existing customers and acquisition of new ones with better ratings and applying stricter product credit risk parameters). A**t the beginning of downturn those banks only moderately adjusted their credit risk strategy and continued to do business as usual. It is a case when risk management (in line with its mission) discovers and support business opportunities in the market.**

When credit strategy is approved, the next activities should be done to implement it:
Comprehensive credit risk management reviewed both on aggregated and single transaction levels.
CRO should focus on comprehensive credit risk management review which means both review on aggregated level (loan portfolio and credit policies) and single transaction review (from processes and organizational point of view) .
Credit risk management assessment was on an aggregated level.
There are the following areas of focus on aggregated level**: credit risk policies and credit portfolio monitoring.**
Information collected from external and internal scanning. Agreed credit strategy created input data for changing of relevant credit risk policies. CRO role is to prepare these changes for wide discussion mainly with business units, to achieve agreement on their implementation and to propose them for final approval to the Board of Directors/Supervisory Boards. This is a very challenging task as it usually affects the bank business strategy and budget. But it belongs to the critical success factors when agreement on changes is achieved among senior management team members and in the next step is adequately communicated to the lower levels throughout the bank. If these agreed changes are not properly communicated within the bank, then confusion particularly among business and risk units, can cause destabilizing for the bank and its management.
Credit portfolio development monitoring is also very important component of the credit risk management on an aggregated level**.** In addition to a regular credit portfolio review CRO must ensure to monitor credit portfolio mainly from industrial and single exposure concentrations points of view. Outcome of this monitoring is usually

[17] This level of capital needed is compared to the bank own funds (information is provided by CFO areas) and based on that the bank can assess its risk taking capacity – how much capital is still available to cover future risk arising either by a new businesses or increasing risks from existing exposures due to downturn market development. These results serves as a basis for CRO proposal to governance bodies to decide what level of risk taking capacity (in relation to risk profile) is acceptable for the bank: either mitigate risk or use rising opportunities. This process (assessment, calculation level of capital and risk taking capacity) should be regularly repeated during downturn time.

[18] In spite of fact that **liquidity and market risks were not** identified as high ones as in the other European countries and the U.S., it was critical to regularly monitor their development (e.g. following setting limit fulfillment etc.) during the whole volatile period.

proposal for changing concentration limits for those industries which are heavily influenced by downturn and special review /monitoring should be set up for the largest exposure which default would cause significant losses and can be potential threat for the bank. To achieve consensus among risk management, finance and business units at the first step and the Board of Directors in the second step, contributed important success factors.

Single transaction credit process[19] screening and CRO role.
At each credit process phase there are events typical for downturn, which ask for CRO involvement and fixing.
Underwriting[20]
. due to customer credibility worsening and shortage of business opportunities, risk managers/risk analysts in underwriting units are exposed **to higher pressure from business people** to approve loans which are not fully in line with approved/valid rules (number of requests for exceptions from business side is increasing) this is a potential source of portfolio worsening in the future. CRO should ensure that appropriate "exceptions management policy, their recording and monitoring is in place" and regularly valuated.
. **fraudulent documentation and data** – worsening external environment conditions encourage some customers to present fraudulent documents within loan application process. CRO should focus on review of data verification process (to be independent from business units) particularly in retail segment to reveal fraudulence in advance. Potential loss which is related to this activity is classified as a risk type on edge (credit/operation risks).
. review **credit rating/scoring models** whether they are still reliable for decision making process during downturn conditions or should be adjusted or replaced by individual risk manager assessment**.**
Credit Risk Mitigation[21]
To review credit risk mitigation means and processes belong to the most difficult and important task in credit risk area. To be sure about legally correct bank position to be able to enforce its rights from e.g. collateral is very important due to increasing number of defaulted customers during downturn.[22] Those banks which passed through Basel 2 approval process for advanced capital requirements calculation models (IRB approaches…) are in better position also in area of credit risk mitigation. They had to proof that all types of their collateral are correctly managed in line with Basel 2 rules (e.g. correctly recorded in the banking system, regularly revaluated etc).
Monitoring[23]
Monitoring plays a very important role during downturn as through early warning systems informs management well in advance on a potential credit risk increase both on single level of exposures and within the bank credit portfolio. CRO should ensure that relevant monitoring processes (either manual or automated) are in place and may extend regular early warning system both for data from areas that were not part of monitoring before downturn(e.g. information from Social Security System, Tax Offices etc.) and from companies liquidity perspectives.
Work-out[24]
In a downturn work-out plays a key role in a credit risk management as a level of non-performing loan portfolio and efficiency of its recovery depends on work-out management strategy and capacity. CRO has to review work-out strategic alternatives and proposed the best solution which is the most acceptable for the bank from cost/benefit analysis point of view. Basically there are two possible options : a/ in-house solution – this option means to analyze expected future flow-in of non-performing loans, calculate work-out internal capacity extension and base on that run cost/benefit analysis of this alternative. Following experiences in Slovakia, this

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[19] In line with the best commercial banking practices credit process for single transaction is divided into the following phases: underwriting, monitoring and work-out

[20] Goal of underwriting is to grant loans or renew credit lines to bank clients to minimize risk of default and maximize the possibility of recovery in case of default

[21]Credit risk mitigation is defined as a set of means and processes which serve to the bank to protect against potential losses caused by borrower´ s default to cover liabilities towards bank from its primary sources of repayment (cash flow). Key parts of these means are different types of collateral which bank accepts**.**

[22] In cases of defaulted customers collateral is used to decrease losses via yield from executed collateral on which the bank apply its ownership rights.

[23] Goal of monitoring is to actively monitor and manage the credit risk profile of the bank clients after granting loans, in order to minimize their risk of default and maximize the possibility of recovery in case of default.

[24] Work-out is defined as a process which is applied when customer is in default. In line with the best banking practices defaulted customers should be transferred into special unit (Work-out) and special treatment should be introduced to minimize losses from client's exposure. Work-out in this paper is defined as an unit which dealing with corporate customers through Restructuring and Retail and Small Business customers through recovery.

option is preferable for banks with majority of corporate and mortgage portfolio. b/ outsourcing of work-out activities either through selling part of non-performing loan portfolio or transferring of work-out activities but related non-performing loan portfolio is kept on bank balance sheet. This option is preferred by banks with majority of retail portfolio.

d/ CRO and the Other Commercial Bank Risks during Downturn.

Regarding CRO role towards the other commercial bank risks it is important to stress that he/she is usually directly responsible for those risks which owners are directly identified which means in addition to credit risk his/her responsibility is also for operational, market and liquidity risks.[25]

Operational risk[26] after credit risk presents tendency to increase during downturn in Slovakia. It is mainly caused by worsening of the operating environment. This is also area where is evident that banks that have implemented Basel 2 advanced measurement approach (AMA) for required capital calculation (within Pillar 1) are better prepared for operational risk management under downturn market. Reason is that they had to pass strict approval process run by regulator during which they had to proof that their processes were duly mapped, risk owners identified, communication with central risk control unit defined, system of data collection is properly operating. Data are correctly transferred to the AMA model for capital calculation. Due to that their internal structure and processes are better manageable and controllable during downturn.

As far as risks types without owners (strategic risk, business risk, horizon risk, reputational risk, etc.) are CRO plays mostly supporting role both as their methodology and capital requirements quantification are. In spite of this role it is important to stress that those risks might be a big threat for the bank with highly negative influence on the level of requested capital during downturn. CRO role is both to check whether bank has sufficient capital to cover those risks and to play the "next level of control" whether right processes to mange these risks are in place. During downturn strategic, reputational and horizon risks are many times neglected as capital needed to cover them is not explicitly required by regulator to be presented (and of course is difficult to be calculated) but might be critical and CRO must be sure that governance bodies receive all relevant information to properly oversee them.

Conclusion

Recent financial crisis encouraged world-wide discussion what to do to minimize financial crisis occurrence in the future. New (adjusted) financial system regulations are currently either under discussion or approval. It is natural that financial institutions are many times reluctant towards further regulations mainly when they are excessive and ill-designed. But our opinion is that Basel 2, Pillar 2 principles can serve as a good guideline to set up such the commercial bank risk management system which (if is fully developed and implemented) can be helpful tool for the correct bank management during downturn. However, it is equally important to identify right factors and measurements on the level of each commercial bank which could allow fully exploit feature of the risk management system built on Basel 2, Pillar 2 principles. Practical experiences from managing risk in the commercial bank in Slovakia helped to identify key success factors. They can also serve as a basis for further discussion how to built efficiently operating commercial bank risk management system which could serve both for prevention of crisis situation and also for management if crisis occurs.

Reference

1. Analýza slovenského finančného sektora za rok 2009; http://www.nbs.sk/sk/publikacie/publikacie-nbs/analyzy-slovenskeho-financneho-sektora.

2. Basel 2 Enhancements as of July 13, 2009. see in: http://www.bis.org/publ/bcbs157.htm

3.Belmont, D.P: Value Added Risk Management in Financial Institutions. Leveraging Basel II&Risk Adjusted Performance Measurment. John Wiley & Sons (Asia) Pte Ltd.2004.

4. Bessis, J.: Risk Management in Banking. 2nd edition. John Wiley & Sons,Ltd, 2002.

5.CEE_QuarterlyQ1_10/1/pdf ; www.research.unicreditgroup.eu

Coprehensive respond to the global banking crisis. See in: http://www.bis.org/press/p090907.htm

[25] Market and Liquidity risks see notes[7, 18].

[26] Operational risk is defined as the risk of loss due to errors, infringements, interruptions, damages caused by internal processes or personnel or systems or caused by external events. Includes the following events : *Internal Fraud, External fraud, Employment practices and workplace safety, Clients, products and business practice, Damage to physical assets, Business disruption and system failure, Execution, delivery and process management*

6. Directive 2006/48/EC of the European Parliament and of the Council of 14 June 2006 relating to the taking up and pursuit of the business of credit institutions.
7.Directive 2006/49/EC of the European Parliament and of the Council of 14 June 2006 on the capital adequacy of investment firms and credit institutions.
8.Decree of the NBS no. 1/2007 on disclosures by banks and branches of foreign banks;
9.Decree of the NBS no 4/2007 on banks´ own funds of financing and banks´ capital requirements with the amendment Decree of the NBS no 17/2008;
10.Decree of the NBS no 15/2006 on risks and risk management systems (it is amendment to the Decree of the NBS no 12/2004).
11.European Commission: Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directives 2006/48/EC and 2006/49/EC as regards capital requirements for the trading book and for re-securitisations, and the supervisory review of remuneration policies (COM(2009)362(CRDIII) – in approval process;
12.European Commission: Consultation regarding further possible changes to the Capital Requirements Directive (CRD IV) under discussion.
13.Guidelines on Bank-Wide Risk Management: Internal Capital Adequacy Assessment Process.OeNB; http://www.oenb.at; http://www.fma.gv.at
14.Chorafas,D.,: After Basel II. Assuring Compliance and Smoothing the Rough Edges. VRL Publishing Ltd. 2005.
15.Hampton, J. John: Fundamentals of Enterprise Risk Management. How top companies Assess Risk, Manage Exposures and Seize Opportunities. AMACOM 2009,
16.International Convergence of Capital Measurement and Capital Standards 2006. Basel Committee on Banking Supervision – Bank for International Settlements, June 2006.
17. NBS Statistics (http://www.nbs.sk/sk/statisticke-udaje/menova-a-bankova-statistika),
18.Resti,A, Sironi A.: Risk Management and Shareholders´ Value in Banking. From Risk Measurement Models to Capital Allocation Policies. J. Wiley & Sons, Ltd 2007
19.Report and recommendations of the Cross border Bank Resolutions Group. See in:http://www.bis.org/publ/bcbs162.htm.
20. Rochet,J.CH., 2008: Why are there so many banking crises? The politics and policy of banking regulation. Princeton University Press: IBN-13:978-0691-13146-7.

Chinese commercial banks have in fact witnessed an improvement in asset quality in recent years due to the countryâ€™s booming economy. They also enjoy increasingly solid capital reserves. However, the rapid development of Chinaâ€™s banks has depended heavily on income from net interest margins averaging almost 2.5 per cent.Â This will create enormous opportunities for the development of retail and SME lending businesses. Compared to corporate business, risks from retail credit business are more systematic and can be mitigated through quantitative risk management techniques. Banks also have greater pricing power in retail and SME credit, enabling them to better accommodate risk and other factors to reach higher profit levels.