

DESIGNING AND IMPLEMENTING ICAAP PROCESS

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Abstract

The aim of the Pillar 2 processes is to enhance the link between a credit institution's risk profile, its risk management and risk mitigation systems and its capital. ICAAP is part of the risk management process, closing “the ring” of the whole process. Credit institutions should develop sound risk management processes that adequately identify, measure, aggregate and monitor their risks. The direct effect of the risk management process is now reflected in the level of capital needed. The credit institutions are expected to have an adequate assessment process that encompasses all the key elements of capital planning and management and also generate an adequate amount of capital to set against those risks.

The fact that the capital adequation has to be monitored following the main risks directs the ICAAP process towards the business lines. The “calibration” of the needed capital level is now done taking into consideration and correlating the following issues:

- *the bank business strategies on its business lines;*
- *the bank risk appetite reflected in its defined risk profile;*
- *the real exposure at risks as a result of its operational activity;*
- *related risks implemented controls.*

The present paper focuses on Basel requirements and the means of their implementation. The Romanian regulatory framework has already implemented these requirements. The Romanian banks started to design and implement their ICAAP. Their options related to the risk approach conducts to different ICAAP solutions containing more or less deep defined analysis and scenarios. The authors emphasize the management responsibilities on ICAAP process, and generally on risk management process and presents the decision process based on ICAAP information.

The study is based on an analysis and documentation realized by the author in different Romanian banks in her missions on ICAAP assessment aiming to focus on the main components and issues of ICAAP. Based of the analysis developed the authors formulate their opinion regarding the necessary steps to be followed in the next years. The paper presents also the supervisor's role and challenges related to Pillar 2 requirements.

Keywords: Capital Adequation, Risk Management, Risk Profile, Basel Requirements.

JEL classification: G21, G32

1. BASEL II REQUIREMENTS

The capital adequacy framework is made up of three integrated areas, the so-called pillars:

The minimum capital requirements (Pillar 1) concern credit, market and operational risk which are characterized by a quantitative approach of the prudential requirements. In brief, Pillar I offers flexible and advanced rules to determine the minimum capital requirements based on the complexity and volume of the bank activity. There are alternative methods for calculating the minimum capital requirements for different risks:

- For the credit risk the banks can opt for:
 - ✓ Standardized approach;
 - ✓ Internal risk models approach (IRB) with one of the two solutions: basic approach or advanced approach.
- For the operational risk the banks can opt for:
 - ✓ Basic indicator approach;
 - ✓ Standardized approach;
 - ✓ Advanced assessment approach.
- Market risk.

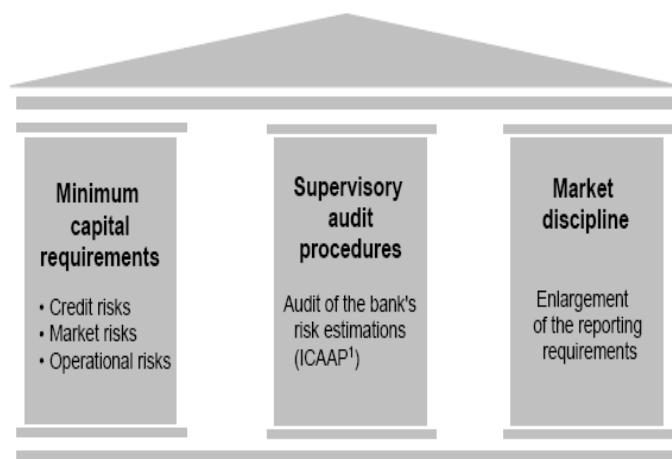


Figure no. 1 The three pillars of Basel II

Pillar 2 establishes requirements both for banks and supervisory entities. For the banks the requirements ask to identify and assess material risks, identify mitigating controls, identify the amount of capital in relation with the business plan and the defined risk profile and produce capital number and assessment. Pillar 2 brings human judgment directly to bear upon risks not fully captured by Pillar I (e.g., portfolio concentration risks), as well as factors that are less subject to empirical measurement (i.e. business and strategic risks, interest rate risks). **Pillar 2** also addresses to the supervised entity asking to perform a comprehensive assessment of the banks' capital management and capital adequacy in relation to the risk profile of the business and the risks in its operating environment. The NBR considered necessary to ask the banks to maintain excedentary equity comparing with the level showed by Pillar I. NBR considered also necessary to develop mechanisms for early reaction of NBR.

In essence, Pillar 2's objectives address the following issues:

- ✓ The capital requirements get a stronger focus on real risks or on business concepts (dealing with risk calculation and capital allocation);
- ✓ Including those risks that have not been considered up to now (e. g. operational risk);
- ✓ Giving higher importance to qualitative aspects;
- ✓ Involving markets in addition to the supervisory authorities should discipline banks.

The final scope is that banks better control the risks and cover the risk by allocating the necessary capital. In this context the main objective is reached: stability of the financial sector.

Implementing Pillar 2 requirements induces important benefits for business [2]:

- ✓ Enhances Board and senior management ability to understand how much capital flexibility exists to support risk appetite and acquisition strategy;
- ✓ Enables banks to understand capital requirements under different scenarios and “stress scenarios”;
- ✓ Builds and supports linkage between risk and capital;
- ✓ Strengthens bank’s positions to respond to increasing focus on capital management by both rating agencies and analysts;
- ✓ Supports the industry’s long-term goal to move away from regulatory capital models to a regime in which the internal models will be relied upon regulators;
- ✓ As regulators and banks gain experience with Basel II framework, objective would be to have the “regulatory” capital requirement move closer to the bank view of required capital – blurring of Pillar 1 and Pillar 2 components.

Requirements of capital adequacy disclosure (Pillar 3) complement Pillar 1 and Pillar 2 of the capital adequacy framework so that depositors, investors and other external parties can assess information on the capital adequacy and risk management of market participants. In this way is promoted the market transparency and it is introduced the market discipline.

2. IMPLEMENTING ICAAP

The Basel Committee has published recommendations concerning capital adequacy and risk management, which form the basis for the EU Directives (2006/48/EU and 2006/49/EU) on capital adequacy.

An adequate ICAAP (*Internal Capital Adequation Assessment Process*) ensures the appropriate risk coverage at any given time by the allocation of risk coverage capital. The figure 1 presents the content of the Basel II pillars and EC Directives regarding capital adequacy [2].

In our opinion Pillar 2 must be understood as a holistic review of capital, having Pillar 1 as a sub-set, rather than understanding Pillar 2 as an “add-on” to Pillar 1. The figure 2 shows the two important components of Pillar 2: ICAAP (in the banks’ responsibility) and SREP (Supervisory Review and Evaluation Process – in the supervisors’ responsibilities).

As we stated in the previous chapter, Pillar 2 offers the possibility to opt for different solutions.

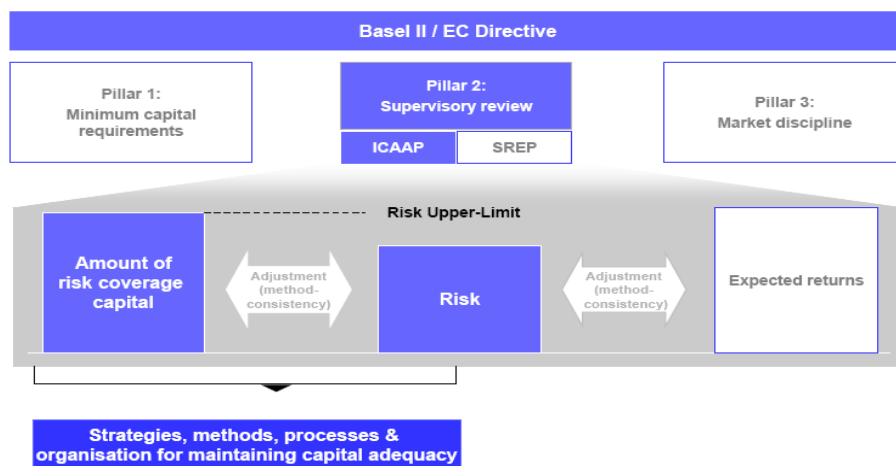


Figure no. 2 Regulatory foundation of ICAAP

According with the data published by NBR, starting with January 2008, the Romanian credit institutions' options regarding the means of implementation of Basel II requirements are:

- ✓ **For the credit risk:**
 - 31 banks opted for standard approach;
 - one entity opted for standard approach (in case of public sector exposures) and internal rating model approach (in case of sovereign entities and banks).
- ✓ **For operational risk:**
 - 22 entities opted for basic indicator approach;
 - 9 entities opted for standard approach;
 - one entity opted for advanced approach.

No matter the option chosen, the banks must have in view two important issues: ICAAP is part of the risk management process and that the principle of proportionality must be applied. The principle of proportionality is referring to the following aspects:

- ✓ Undertakings individual risk profile;
- ✓ Type and scale of the business;
- ✓ Business complexity;
- ✓ Materiality principle.

The figure no. 3 presents in a very suggestive way the content of Pillar 2 [2].

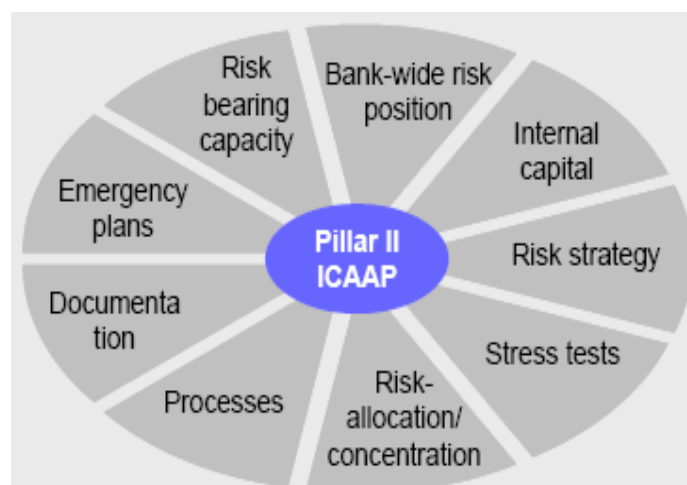


Figure no. 3 Pillar 2 issues

The banks must be aware of their risk-bearing capacity and its wide risk position. Risk-bearing capacity is assessed increasingly on the basis of the need for so-called economic capital. This means extensive estimation of the amount of capital necessary to cover potential losses. The bank must have developed its risk strategy defining the risk profile and means of mitigating risk. The ICAAP imply stress tests. Stress tests approach helps quantifying capital planning element given the current strategy and growth target of the bank. The risks must be identified, assessed, controlled and monitored over all the processes and the concentration of risks must be permanently monitored. All the ICAAP must be well documented and permanently reviewed. For special conditions, emergency plans must be prepared.

The supervisory entity evaluates the risk bearing capacity the bank and aims at early identification of pressures for change and potential sources of mismatch between risk exposures and risk bearing capacity (proactive supervision). In order to fulfill their responsibilities the supervisors have to review the followings issues:

- the establishment of capital targets by the bank based on the business plan and the assessed level of risks;
- the definition of capital in relation to the overall risk profile and the entity's strategy for maintaining capital adequacy;
- the adequacy of internal control and risk management processes and the bank's capacity for fulfilling prudential capital adequacy requirements.

The Committee of European Banking Supervisors (CEBS) established the principles to be followed in ICAAP's design and implementation. These principles are:

1. Every institution must have a process for assessing its capital adequacy relative to its risk profile (an ICAAP).
2. The ICAAP is the responsibility of the institution.
3. The ICAAP's design should be fully specified, the institutions' capital policy should be fully documented, and the management body (both supervisory and management functions) should take responsibility for the ICAAP.
4. The ICAAP should form an integral part of the management process and decision-making culture of the institution.
5. The ICAAP should be reviewed regularly.
6. The ICAAP should be risk based.

7. The ICAAP should be comprehensive.
8. The ICAAP should be forward-looking.
9. The ICAAP should be based on adequate measurement and assessment processes.
10. The ICAAP should produce a reasonable outcome.

We appreciate as necessary to present, briefly, how these principles can be implemented. The Romanian legislation has implemented the most important requirements of Pillar 2, but the banks effort to implement all these principles must continue. In the authors opinion the Romanian banks are not in full compliance with all the principles presented above.

3. GETTING ALIGNED TO THE CEBS' ICAAP PRINCIPLES

The ICAAP of the bank is based on appropriate risk identification, measurement and assessment. Sound risk management practices serve to reliably ensure an appropriate capital adequacy level under various conditions, and internal control and risk management are also designed to prevent excessive risk exposures. Each bank must define its risk strategy and related policies and the risk profile must be periodically reviewed. The risk management process starts with risk identification. The risk quantification, permanent control and monitor are compulsory. The risk taking capacity can be determined based on the risks identified and their assessment. The risk must be subject of a continuous control so that the bank can provide quick reaction and mitigate the risk. The entire ICAAP must be fully documented and be reviewed periodically. All the developments in ICAAP must be discussed with the management and have to respond to its demands also.

Management is responsible for integrating capital management with corporate management and internal control systems. And so we are reaching the corporate governance area. The board of directors has the responsibility for preparing a capital plan setting out the amount and quality of capital and a strategy for the maintenance of capital adequacy. The board of directors should ensure that the bank has processes and methods in place for reliable definition of the level of capital necessary for covering the risks and for appropriate risk-based capital allocation. Capital management processes are an integral part of the monitoring system of the board of directors and of the corporate risk management system.

In our opinion the overall responsibility of the management can be sinthetized as follows:

- ✓ Responsibility for an adequate organizational framework;
- ✓ Implementation of an early-warning system;
- ✓ Risk awareness in day-to-day business (e.g. objective of risk reporting).

For the sophisticated institutions it is expected a complete integration of ICAAP into day-to-day management. Integral part of management process could include activities such as: allocation of capital to business units, individual credit decisions, more general business decisions (e.g. expansion plans) and budget.

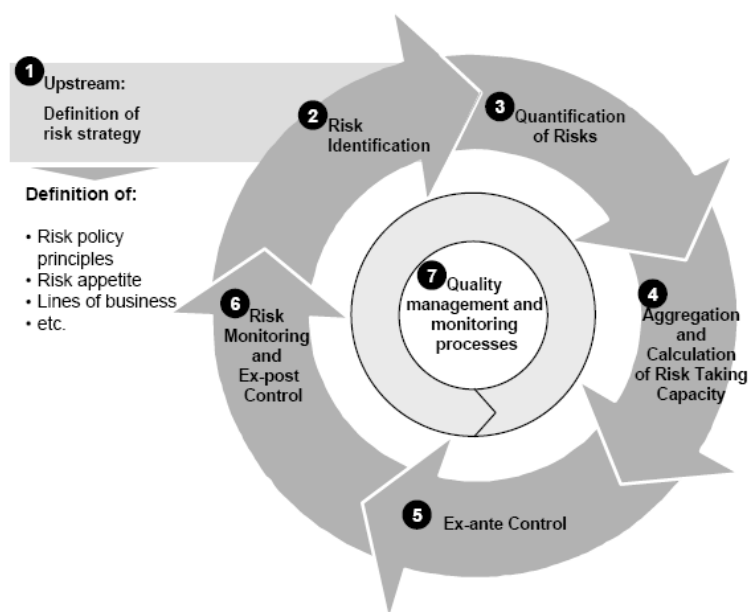


Figure no. 4 Processes in bank-wide risk management

There must be a close correlation and a specific determination between business strategy and risk strategy. The Figure 5 presents the components of the bank's strategy and its risk strategy [11]. The business can't be planned and managed without having a consistent understanding and control of risks.

The ICAAP should be risk based. As we already stated, The Internal Capital Adequacy Assessment Process aims to assess all material risks. For all the relevant risks materiality must be established. Credit risk (including concentration) market Risk (including FX) interest rate risk on the banking book (IRRBB), liquidity risk, operational risks (including legal and outsourcing), strategy risk (including business and growth) are usually considered material, whereas settlement risk, pension risk, reputation risk and residual Risks are not. For the moment, Romanian banks, according with the local regulations, are determining capital adequation based on credit, market and operational risks.

The figure 6 describes the ICAAP design based on the identified risks [3]. The process starts with the risk identification process, continues with their assessment giving the level of exposure to each risk, comparing those limits with the targeted ones. Then it can be determined the bank's risk-bearing capacity and finally the accepted level of risks is determined and approved by the Board of Directors.

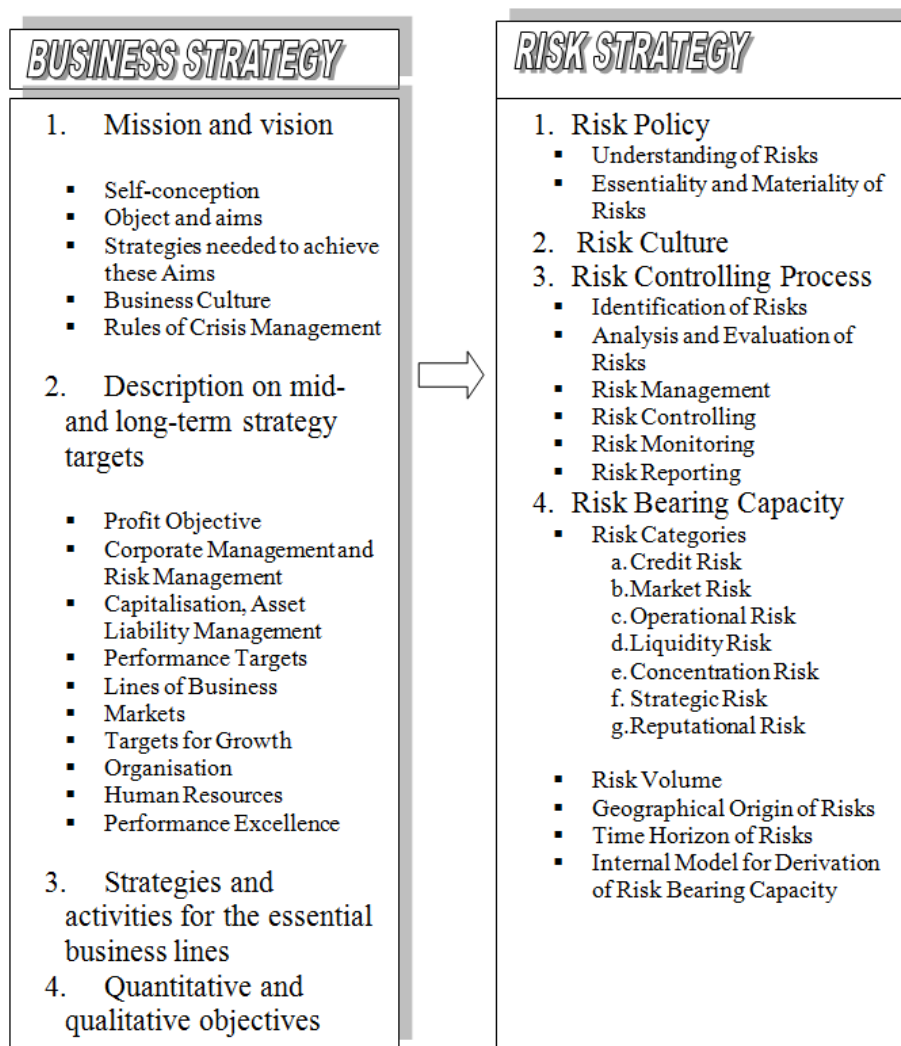


Figure no. 5 Necessary linkage between bank's business strategy and risk strategy

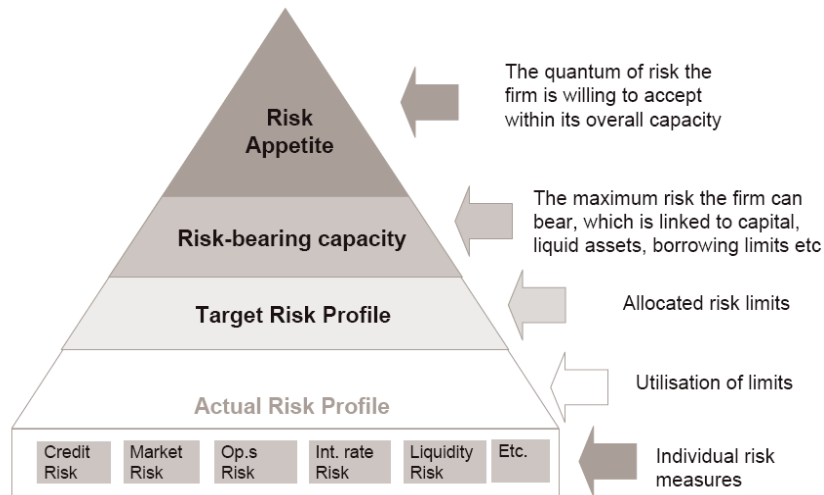


Figure no. 6 Designing an effective ICAAP

4. CONCLUSIONS

In the authors' opinion, the effort to align the ICAAP to the EU Directives must continue. The step forward made by the Romanian banks is important and consistent with the EU requirements. In the same time, a real imbedding of ICAAP in the risk management process must be a priority for the future. In the authors' opinion the main issues for the future are:

- Developing the planning capital process based on a more consistent and detailed stress testing;
- Better define the risk appetite;
- Extend the type of risks considered in ICAAP;
- Better articulated, holistic scenarios;
- Focus on key econometric drivers;
- Develop/acquire IT specialized tools for stress tests;
- Being aware of the necessity to adopt more advanced methods in the future;
- Improved linkage between stress test outcomes and capital plan;
- Ensure adequate documentation for ICAAP;
- Demonstrate progress from year to year.

References

- [1] Barfield Richard ICAAP – the story so far*. RiSk Minds 2008 Conference. Geneva, 8-12 December 2008
- [2] Günther Blaha, Hauka Hannappel, Marta Kudlicki, Klaus Schuster ICAAP - a Central Pillar of Basel II. Prezentare. Ljubljana, 3rd July 2008.
- [3] Matten Chris Developing an effective ICAAP: making pillar 2 work from a business perspective. November 2008. PriceWaterhouseCoopers.
- [4] *** Committee of European Banking Supervisors: Technical aspects of the management of interest rate risk arising from nontrading activities under the supervisory review process. October 2006.
- [5] *** Committee of European Banking Supervisors: Guidelines on the Application of the Supervisory Review Process under Pillar 2 (CP03 revised). 2006.
- [6] *** Committee of European Banking Supervisors: Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directives 2006/48/EC and 2006/49/EC as regards banks affiliated to central institutions, certain own funds items, large exposures, supervisory arrangements, and crisis management. {SEC(2008) 2532. {SEC(2008) 2533}. October 2008.
- [7] *** Hungarian Financial Supervisory Authority: Internal Capital Adequacy Assessment Process. Guidelines for supervised institutions. 2007.
- [8] www.bis.org Basel Committee on Banking Supervision. Consultative Document Principles for sound stress testing practices and supervision. Issued for comment by 13 March 2009 January 2009
- [9] http://www.rata.bof.fi/NR/rdonlyres/CF162084-2E9B-4879-887B-DE8FC92A9AA/0/4Capitaladequacy_and_risk_management2007.pdf Capital adequacy and risk management. Definition of regulation policy. 2007. FIN-FSA
- [10] http://www.in-sure.ru/files/pdf/Life-08/Wolfsdorf_1.pdf Solvency II by German legislation. Minimum requirements for Risk Management. (maRisk) for Insurance Companies in Germany. Deloitte.
- [11] <http://www.bundesbank.de> Discussion of „Credit risk transfer in banking markets with Hard and Soft information.” Christian Laux. Conference Risk transfer: Challenges for financial institutions and markets. Frankfurt am Main. December 2008.
- [12] www.bnr.ro Piata creditului din Romania si reglementările Noului Acord de Capital – Basel II. Prim-Vice Guvernator Florin Georgescu. Decembrie 2007.