BEST PRACTICE GUIDELINE

From the Banking Regulation and Supervision Agency:

GUIDELINE ON ICAAP REPORT

FIRST PART

General Principles

1. This guideline is prepared within the aim of explaining banks the best practices expected from them within the frame of the article 56 of the Regulation on Internal Systems and Internal Capital Adequacy Assessment Process of Banks (RICAAP), published in the Official Gazette number 29057 dated July 11, 2014, as well as informing them about the content and form of the report and communicating them about the minimum issues to be taken into account in the audits to be performed by the Banking Regulation and Supervision Agency (Agency).

2. The guideline has been drafted pursuant to the articles 93, 95 and 96 of the Banking Law Nr. 5411 dated October 19, 2005 and the article 7/A entitled "Best Practice Guidelines" of the Regulation on the Principles and Procedures Concerning the Audit to be Performed by the Banking Regulation and Supervision Agency", published in the Official Gazette number 26458 dated March 10, 2007 and the article 56 of the RICAAP.

3. The ICAAP Report should be drafted by all banks by the end of the year, as two separated reports for consolidated and non-consolidated bases. It is essential that banks prepare their ICAAP reports on a consolidated basis. On the other hand, reports to be prepared in non-consolidated basis may be composed of just tables. Tables which will take place in non-consolidated ICAAP reports are expected to be the individual equivalents of the ones within consolidated basis. It is expected that, within the scope of the consolidated ICAAP Report, processes and assumptions regarding the consolidation of portfolios and positions of parent and affiliates to be in written, the scope of consolidation to be determined and fundamental criteria used in determining affiliates and subsidiaries that are subject to consolidation to be explained.

4. The accuracy of the data used in the ICAAP Report, as well as the adequacy of systems and processes and whether the data, system and processes are ensuring accurate information and analysis should be investigated by the Internal Audit Unit and/or, if deemed necessary, one of external audit firms authorized within the framework of the "Regulation on Bank Information Systems and Banking Processes Audit to be performed by External Audit Institutions" and the results of this investigation should be gathered in a report. The report autographed by those who drafted it should clearly and unconditionally confirm (provide reasonable guarantee) that there aren't any vulnerabilities which may affect significantly the results in data, systems and processes or in case such a vulnerability is detected, specify it as well as its possible effects on the ICAAP Report.

5. Additionally, the validation of models and/or methods used in the risk measurement within the scope of the calculation of internal capital adequacy ratio should be carried out and reported separately by a team independent from the units which developed and implemented these models and/or methods within the bank and/or by a specialized and respected institution outside the bank. In this report, the limits of models and methods and the accuracy of assumptions used in the ICAAP Report should also be questioned.

6. Investigation regarding data, systems and processes to be realized within the framework of the article 4 also includes the internal model validation process to be carried out within the framework of the article 5. To ensure the independence of the internal audit team which will perform this investigation, any interactions between the units developing and implementing models and the team performing the validation should be prevented.

7. Once the guarantee is provided by the reports to be prepared within the framework of the articles 4 and 5, the ICAAP Report will be negotiated, finalized and approved by the board of directors. The board of directors is responsible for the surveillance of the quality and the level of the guarantee provided.

8. The ICAAP Report, investigation reports drafted by Internal Audit Unit or by an external auditor, validation report and record of proceedings of the board of directors should be sent to the Agency by the end of March. In addition, these reports should be transmitted to the Agency formatted in MS Word, by producing SHA512 Hash code. The code produced should also be specified in the report. Internal regulation constituting a basis for the analyses within the Report, working papers and technical documents regarding methods and models should be made available for the Agency's analysis until the specified date.

9. The ICAAP Report should be prepared wholly as to meet the form and content specified in the **Annex** within the framework of the principle of proportionality. Principle of proportionality is about the complexity of models and/or methods used and the weight of quantitative elements within them. Within this scope, it is expected that the factors concerning the content specified in the Annex are met by all banks. It is essential that titles and numbering considered as conclusive in the Guideline are respected. On the other hand, if the bank desires to specify an additional issue, this should be given under the appropriate part of the Report. Otherwise, if detected, it will be considered as a significant deficiency in the Agency's analysis and assessment of the ICAAP Report.

10. Risk assessment and internal capital and liquidity adequacy amounts and/or ratios realized and calculated by the bank in the ICAAP Report will be approved as a result of the audits and assessments performed by the Agency or in case they are found deficient and/or false, they should be corrected to determine a new internal capital requirement ratio which will remain valid unless any feedbacks are given by the Agency. Moreover, the ICAAP Report will constitute an important entry for the investigations made and decisions taken by the Agency about the bank's corporate governance, risk management and capital adequacy. Accordingly, the narration in the ICAAP Report should be concise, identifications and assessments made should be concrete (related to a quantifiable result as far as possible) and enduring, and the data used should be confirmable.

11. The introduction of the ICAAP Report should be composed of the Table of Contents, List of Tables, List of Charts and the List of Abbreviations.

ANNEX- FORM AND CONTENT OF THE ICAAP REPORT

THE ICAAP REPORT of […] BANK A.Ş.
DATED […]

(The board of directors Decision number [..] and dated [..])

[COVER PAGE]

1. EXECUTIVE SUMMARY

Executive summary should be composed of following issues as a minimum.

- Significant financial figures of the bank, as well as its partnership structure, budget and strategic plan,
- Bank's ICAAP approach (brief assessment concerning the risk exposed and the measurement method used)
- Stress tests and scenario analyses (brief introduction in risk basis or about the results of overall stress tests),
- Bank's risk appetite framework,
- Bank's internal capital calculation results and assessment,
- Issues concerning the bank's liquidity planning,
- Important events occurred in the bank or in environmental circumstances (which affected the ICAAP and/or the bank's risk management in general).

2. GENERAL ASSESSMENT AND EXPECTATIONS

In this section, the bank's **assessment** and expectation are given under the related sub-titles.

a) Macro Economic Assessments and Expectation (World and Turkey): In this section, assessments regarding global&domestic macroeconomic events realized in the past year and expectations for the future are narrated.

b) Assessments on the Turkish Banking Sector: In this section, assessments of the sector belonging to previous year are made and important events and developments occurred in the past year and affected the sector are given and the bank's expectations for the sector's next year are mentioned. Also in this section, events, developments and trends which may affect the sector are cited.

3. CORPORATE FRAMEWORK OF THE ICAAP (DECLARATION PROCESS)

3.1. Declaration Process

Pursuant to the article 47 (1a) of the RICAAP, banks should make the ICAAP business process an independent document approved by the board of directors. The brief summary of the mentioned internal regulation should be given under this title, as well as the amendments made during the period, including their justifications.

In the business process document regarding the ICAAP to be prepared by the bank, the bank's capital and liquidity adequacy assessment process should be narrated in details and by schemes when deemed necessary. The purpose of this document is to lead the Agency and the members of the board of directors for comprehending the bank's ICAAP architecture, and to map the interrelations and processing of the elements comprising the ICAAP.

The ICAAP business process document should involve the functioning of the ICAAP within the bank and should include the following as a minimum.

1. The Bank's risk appetite and risk management framework by referring also to policies and procedures (how the actual risk appetite is composed; how it's reflected on budget, strategy, business plans, risk and capital management processes and how it’s monitored will be demonstrated clearly),
2. Explanation of the ICAAP with an integrated perspective and on a consolidated basis,
3. Control activities established for efficient functioning of the ICAAP,
4. Approaches adopted relating to the processes of risk assessment and capital allocation to business lines/units and the relation between these processes.

Pursuant to the article 51 of the RICAAP, banks should review their ICAAP in a frequency appropriate for themselves no less than once a year. The results of this review should be given under this title.

3.2. Use of the ICAAP within the Bank (Use Test)

It is expected that a capital management involving capital modeling, scenario analyses and stress tests is adopted by all concerned units and in important processes of the bank (such as compensation, determining current and future business plans and transactions) also internalized by its affiliates. Under this title, how units and processes relating to activities above-mentioned are affected by the ICAAP should be set out concretely and in details.

3.3. Corporate Governance

Pursuant to the article 51(4) of the RICAAP, the Internal Audit Unit should assess the level of compliance of the bank's ICAAP with the provisions of the above-mentioned Regulation; and specify the results of this assessment as well as the level of compliance under this title.

Within the scope of the ICAAP reports, banks should also assess the significant amendments made in legal regulations in respect of their effects on the ICAAP and risk management.

3.4. List of Regulations

Under this title, only the index of internal regulations, communiqués, action plans and decisions by which the policies and procedures and business flows and processes are determined and duties and responsibilities are assigned relating to corporate governance, management of each risk type (identification, measurement, monitoring, control and reporting) capital and liquidity planning within risk management structure should be listed as to include following issues and should be appropriate for analysis (categorized by each risk type and showing the hierarchical and functional relations between each other) and presented in the annex of the ICAAP Report. Inside the Report, amendments made to regulations within the period, as well as new regulations entered into force and justified information about abolished ones should be given to express the ameliorations in the bank's risk management capacity and its elasticity face to changing conditions. These regulations should be just the significant ones affecting the ICAAP directly and it is not expected to mention all regulation amendments and to present regulation texts within the annex of the report.

[Name and number of the Regulation-date of first publication-version number-date of last version-unit/position which prepared and approved the regulation-its content in one sentence (purpose)-function]

4. RISK APPETITE, PROFILE AND CAPACITY

Under this title, assessments relating to the previous year of the bank should be made and important events/developments occurred in previous year that affected the bank are cited. Information concerning the budget and strategic plan, as well as the bank's assets and liabilities for each portfolio and business line should be shared clearly in this section and quantifiable targets for the next three years should be stated. Especially for essential and broad activity fields such as loans, breakdowns (retail, corporate, commercial, SME, etc.) of growth targets and plans should be shared. On the other hand, alongside financial targets, other targets and possible capital sources are also expected to be shared. Moreover, information relating to the risk profile and capacity to be attained as a result of the implementation of existing strategic plan should also be given.

On the other hand, in this section, a general declaration of risk appetite, as concrete as possible and including all risks considered as important relating to the bank's risk appetite should be presented. This section should also include the frequency of review of the bank's risk appetite.

Moreover, the determination of risk appetite, as well as policies, procedures, controls and systems ensuring its transmission from up to down within the bank and its monitoring and risk limits, roles and responsibilities regarding the implementation and monitoring of risk appetite should also be referred in this section.

5. RISK MANAGEMENT

First phase of risk management is the identification of material risks exposed by the bank. Following steps are measurement, control and mitigation. Within this scope, separate sub-titles should be opened for identification, measurement, control and risk appetite of each risk "identified" by the bank and information in accordance with the following content should be given in these sub-titles. In identifying their own risks, banks should also consider risks arising from the parent company or subsidiaries belonging to the parent company (for example,

reputational risk), alongside the risks existing by themselves or arising from their consolidated affiliates and subsidiaries. In doing so, they should be attentive that there are no inconsistencies between the identification of risk and measurement and management activities. In case within the components of an identified risk, there are ones which are not taken into attention in measurement and management and if it is decided that these components don't form material risk and there is no need for capital requirement because of these risks, this situation should be explained in the report with proving analyses.

5.1. [Risk type1]

5.1.1. Identification of Risk

Pillar 1 risks (credit, market, counterparty credit risk and operational risk) that are material for all banks are identified by the legislation. If the bank prefers to use the definitions in the legislation within the scope of the ICAAP, there is no use to identify again these risks. However, in case those risks are resolved to identify other risks or integrated to take into account under other risks or in case the bank prefers to use another classification for risk types, appropriate definitions for this classification should be given.

The bank should also identify the risks exposed other than Pillar 1 risks (interest rate risk, concentration risk, residual risk, business risk, securitization risk, model risk, strategy and reputational risk or other risks to be identified) and categorize them as risks material/immaterial for itself. The bank is responsible to justify why these risks immaterial. It is essential that the bank holds capital for risks which are considered to be material; and it should manifest the level of capital it determined in the light of risk measurement, risk management, control and mitigation techniques.

5.1.2. Risk Measurement

This section is composed of two parts which are measurement method and measurement result. Within the report, measurement results and all statistical values providing the interpretation of these results (for example; descriptive statistics, test results) and expert opinions should be presented. The model that is used to determine the internal capital requirement within the scope of the ICAAP, expresses the method used by the bank to identify its strategies and risk appetite, as well as its other decision-making processes. Accordingly, it is expected that the method providing entries for the bank's decision-making processes, the results of this method, and the use of results in risk management and control processes are explained in this section. Within the annex of the report, detailed information concerning the measurement method should be given and the motive of preference of the mentioned method should be specified. Moreover, if the method used is different from the one used in regulatory capital calculations; its methodology, assumptions, portfolios to which the method is applied should be clarified. Even if the reference source regarding the software and model used is specified, it is expected that detailed information is given about the model's general working principles. This information should be given in the software/model table within the annex of the report. Information concerning the method should be appropriate to following content.

Annex:[Nr]

Following issues should be organized in a table.

About the software used:

[Software(s)' name- version- date of release- purpose- operating- name of producer firm/ unit/ person- is the source code in the bank?- is the technical document in the bank?-is it possible to make revisions and amendments when needed without external support?- does the bank have comprehensive information about the algorithm and calculation phases of the software? - name of the Bank personnel/unit using the functions of the software]

About the databases used:

[Database(s) supporting software- are databases open for manual intervention? - are they externally or internally audited? - do operational transactions form momentary records? - is there an automatic integration between databases? - is there a data storage[1] used in risk calculations based on databases?]

About the data set used:

Following the categorization by each risk type [data's name-description-source-period-time frame-data elimination and completion method-characteristics (from which market, at what time, which type (average, maximum, minimum etc.), on what basis (n/360, n/365), at which interest rate (simple/compound/continuous compound etc.)) - are the controls relating to data transfer and production being made? – from which database are they taken?]

About the variables used:

[Variable's name-period-time frame-production method of the related data (if it's not raw data; for example linear interpolation, bootstrapping, function etc.) - random data production method (simulation, optimization and other phases)]

About the assumptions, techniques, models and methods:

[Model's/method's name- reference sources/technical documents in the literature in which the model/method is cited (only the sources transmitting directly the model/method should be specified)- assumptions- statistical approvals such as confidence interval/lock-up period- corrections made in the data set (for example the kurtosis measure) - is the internal and/or external validation study realized?- Name of firm/person/unit performing the validation- Validation date- Amendments after validation-model/method assessment (advantages, weaknesses and limits)- are the calibration of model/method, its internal calibration and back testing realized? - if yes, its date and unit/person who performed it]

Testing model results

Results of the test performed to see the soundness of model, statistical and qualitative assessment

Banks have three alternatives regarding the measurement of fundamental risks:

1. Standard approach as explained in the Regulation on Measurement and Assessment of Capital Adequacy of Banks and sub-regulations,
2. Internal Ratings Based Approaches as explained in the Regulation on Measurement and Assessment of Capital Adequacy of Banks and sub-regulations,

[1] Information regarding this should be given separately in the table entitled “about the software used”.

3. Internal approach which will be formed by the bank according to its own risk profile, risk appetite, as well as its activities, volume and complexity of its business and transactions, independent from the approaches specified in the Regulation on Measurement and Assessment of Capital Adequacy of Banks and sub-regulations.

First two alternatives shall be used in the calculation of regulatory capital adequacy. The third one shall be taken into consideration in the calculation of internal capital requirement within the scope of the ICAAP.

In case within the scope of the ICAAP, one of the first two methods is contended with, the compliance of this measurement method with the bank's risk profile, as well as the volume and complexity of its activities, business and transaction should be demonstrated.

The banks has also the alternative to use Pillar 1 methods by modifying them according to its own needs and risk profile (for example re-determining the coefficients by optimization or another statistical method or based on an expert opinion or by adding/subtracting variables). In this case, the reasons of this modification should be explained.

The effect of risks arising from affiliates on the bank's consolidated risk profile should also be cited under the risk type they are related to. The calculation of this effect should be explained in the annex.

5.1.3. Risk management (control)

In this section, information about the bank's risk management ability should be given. If there are any issues increasing the risk level and capital requirement due to weaknesses in risk management or decreasing them due to the efficiency of controls, an assessment about these issues should be made and qualitative assessments should be made as quantitative as possible.

In the analyses and assessments made about the level of weaknesses and the efficiency of controls, the provisions of the RICAAP and best practice guidelines published by the Agency for each risk type should be taken as essential assessment criteria.

In consequence of the assessments made, the level of compliance of the bank to the guidelines for each risk type should be determined according to the following scale. In case the bank is assessed as "largely compliant" or "materially non-compliant", the problematic issues should be emphasized.

1. Fully compliant,
2. Largely compliant,
3. Materially non-compliant,
4. Non-compliant.

The bank's risk management structure should involve "Three Phased Protection":

- Business units creating risk,
- Independent risk management and internal control functions,
- Independent internal audit function.

In the first phase, while business units and personnel are performing their daily activities, they should;

a) Abide by the risk limits assigned to them,
b) Identify, measure/assess, monitor, control, mitigate and report risks at business unit level
c) In doing so, take into account the bank's policies, procedures and control system and risk appetite framework.

Second phase is composed of the development and maintenance of systems ensuring the efficiency and effectiveness of operations; sufficient control (management) of risks; prudential development of businesses and banking products; reliability of the information reported inside the bank or published outside the bank; compliance of activities with laws, regulations, Agency directives, corporate governance principles and internal regulations and decisions and is undertaken by the bank's risk management, internal control and compliance units independent from its executive units. Within this scope, in the first phase, the ability of business units to perform their duties within the bank's risk management structure is sought, the bank's risk limits are specified and observed depending on the overall risk appetite and policy of the bank and approved by the board of directors, its capital and liquidity are planned and managed, and the top management is reported about these issues. Units assigned in the second phase should have sufficient power, authority, statute, independence, resources in the bank, as well as the ability of direct communication with the board of directors..

Third phase ensures an independent assessment of the processes, systems and controls composed within the scope of the first and second phases and is called as “internal audit”.

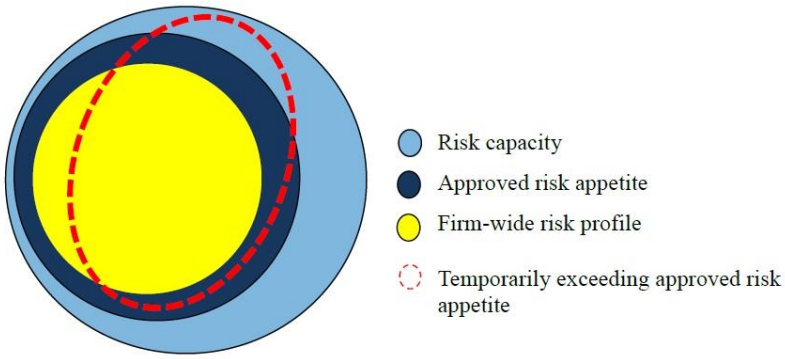
The bank should conduct its own internal assessment about the mentioned three phased protection based on risk types under the section of “5.1.3 Risk management (control)”, and aggregately under the section of “3.Corporate Framework of the ICAAP (Declaration Process)”. It is expected that banks give information concerning the management, reporting and control activities realized at each level especially within the framework of "Three Phased Protection". These information should include activities conducted in business unit basis, as well as activities conducted by units within the scope of internal systems.

Functions about internal systems cited above should not be mistaken with units having similar names in the organizational structures of banks. For example, only one part of risk control function shall be performed by banks' internal control unit or risk management is a fundamental function to be performed by all executive units of the bank and particularly by the board of directors. Thus, in the ICAAP Report, what is sought is not the ability of units formed within the scope of internal systems to perform their duty, but the ability of the bank as a whole to perform functions as to include it.

5.1.4. Risk appetite and risk limits

Information about risk appetite relating to risk type should be provided. For quantifiable risk types, risk appetite definitions should be quantitative, while for risk types which are not

quantifiable, definitions should be qualitative. The relation between risk appetite, risk capacity and risk profile is explained in the scheme below[2].



The bank's risk profile is composed of individual risks of each business lines and should be measured, monitored and managed so as to provide the bank to stay within risk limits. Risk limits are expected to be used to ensure that approved risk appetite is not exceeded. Sufficient information should be given about limit types determined based on risk types, the level of determination of limits (person, business unit, sector, product etc.), the process of determination of limits, control of exceeding, and types of reporting made about related risk type to the board of directors, top and middle management. In case some business units or lines cannot perform their activities within the approved risk appetite, (temporarily exceeding of risk appetite), the board of directors should be informed as to include action plans ensuring related business line or unit to stay within risk appetite. In the ICAAP report, risk profile, capacity, appetite and limits should be given comparatively on a consolidated and non-consolidated bases.

On the other hand, since the limits of risk capacity is drawn by limits specified by the legislation (regulatory capital adequacy ratio, liquidity ratios, FXNGP/Own Funds ratio, IRRBB standard shock ratio, credit limits, internal risk limits etc.) risk limits should be determined more prudently.

5.2. [Risk type 2]

…

6. CAPITAL PLANNING

In this section, it is expected to explain how the bank will be affected in cases of an economic crisis, a regression in bank's activities, a situation of stress peculiar to the bank or a deterioration in the markets in which the bank operates, as well as how the bank's management will maintain the bank's activities and capital without being no less than the minimum capital adequacy ratio and, accordingly, to have a capital plan including these matters.

Scenario analyses and stress tests should be established and implemented in accordance with the principles specified in the Guideline on Stress Tests to be used by Banks in their Capital and Liquidity Planning (Guideline on Stress Tests) published by the Agency. Within this framework, in making business plans and capital planning for three years, at least one of the crisis scenarios to be used in stress tests should be specified considering the last-25-years period. However, the bank shouldn't be contented with scenarios based on historical information and hypothetical scenarios formed by future expectations should also be composed.

[2]Source: Financial Stability Board (FSB), "Thematic Review on Risk Governance - Peer Review Analysis", 2013

Furthermore, in case the Agency releases a series of scenarios, the stress test program is implemented within scenarios determined by the bank should be repeated.

In capital planning, an agreement should be reached between the bank's current capital adequacy under stress and its risk appetite and capacity. Thus, the bank will demonstrate that it would stay within regulatory boundaries even under stress conditions because regulatory capital measures are fundamental factors determining risk capacity. Capital planning should be made as to make the ratios of the bank no less than the regulatory ratios even under stress conditions.

Another issue to be considered in capital planning is an emergency contingency plan involving the actions to be taken by the bank in case of the realization of the scenarios determined. In this plan, the capital level to be specified or the action to be taken in case the event within the scenario realized should be clearly expressed by making match-ups. The actions to be taken should be available to be implemented under stress conditions.

Stress test program to be used within the scope of capital planning should be repeated in the framework of the scenarios specified by the Agency and the bank. These scenarios should be reported as to include and not include probable results of the action plan for each scenario, in accordance with the following table[3]. Capital requirement to be held within the framework of the Regulation on Measurement and Assessment of Capital Adequacy of Banks (based on RWA estimates) regarding Pillar 1 risks should be shown in the fourth line. In case the capital requirement calculated "internally" relating to Pillar 1 risks exceeds the amount in the fourth line, the exceeding amount should be shown in the fifth line with the capital requirement calculated for Pillar 2 risks. Capital planning buffer should be identified considering the worst case scenario including an action plan.

	TL Million	**Current**	**1st year**	**2nd year**	**3rd year**
1	Total Risk Weighted Assets (RWAs)[4]				
2	**Current capital**				
3	**Capital Subject to Calculation[5]**				
4	Capital Requirement for Pillar 1 Risks				
5	Capital Requirement for Pillar 2 Risks				
6	**Internal Capital Requirement**				
7	**Capital Surplus (or Free Capital)**				
8	Capital Need				
9	**Capital Planning Buffer (CPB)**				

Pursuant to the article 60(7) of the RICAAP, ratios calculated under stress tests should be calculated under the scenario producing the worst result for internal capital adequacy ratio calculation and shown as to include the results within following table at least.

[3]Since the capital plan should be prepared as to prevent the capital requirement to fall below regulatory and internal minimum capital requirement for three years, the table is formed within the aim of showing the bank's capital level face to these two limits comparatively.

[4]The table is prepared based on the assumption that basic outputs of stress tests are total RWAs, capital and capital requirement for Pillar 2 risks. However, the bank's stress test program may produce different outputs. Thus this table may vary according to the outputs of the methodology used by the bank and may be prepared as to involve more details if deemed necessary.

[5]Banks should use the target capital ratio by 12% specified by the Board Resolution number 2026 dated November 16, 2006, instead of the minimum available capital adequacy standard ratio in their calculation of capital planning buffer.

	Current	1st year	2nd year	3rd year
Common Equity Tier I Ratio (%)				
Tier I Ratio (%)				
Regulatory Capital Adequacy Standard Ratio (%)				
Leverage Ratio (%)				

7. CONSOLIDATION OF RISKS

Once risk types and risks in subsidiaries and affiliates (within the frame of consolidated analysis) are analyzed under related titles, these should be consolidated under this title considering also correlation and diversification effect on condition that they are calculated safely and in case it is preferred by the bank-. Methodology used in correlation and diversification effect should be presented in details in the annex.

8. CONCLUSION

If internal capital charge amounts obtained from detailed risk assessments made based on each risk category can be calculated reliably, they should be consolidated considering also correlation effect. Capital Planning Buffer (CPB) is calculated based on stress tests and scenario analyses. Moreover, pursuant to the provisions of the Regulation on Capital Conservation and Countercyclical Capital Buffers, the Capital Conservation Buffer should be calculated. The higher amount CPB and Capital Conservation Buffer is added to internal capital charge amount. To this amount, the Countercyclical Capital Buffer (CCB) calculated according to the Regulation on Capital Conservation and Countercyclical Capital Buffers is added. Internal capital requirement ratio (ICRR) is obtained by dividing internal capital requirement amount to the total risk weighted assets for Pillar 1 (R-RWA).

If the bank's internal capital requirement ratio exceeds the regulatory capital adequacy standard ratio it is called as the internal capital buffer[6]. If the Banking Regulation and Supervision Board has specified a target capital adequacy standard ratio, the bank's current capital level should meet the higher one among this target capital adequacy standard ratio and the Internal Capital Requirement Ratio (ICRR).

For a bank to conduct its activities without any constraints, its current capital level should be higher than ICRR. Within this scope, the Bank's risk capacity is determined according to its internal capital requirement.

In consequence, a table similar to the following one is obtained. In the conclusion part, in addition to this table, a general assessment of the Bank's risk management and capital planning should be made and actions to be taken if deemed necessary should be cited. The scenarios under which the figures obtained considering the worst results produced by stress tests within the conclusion part of the ICAAP reports were realized should be specified separately.

[6] In case the Agency has determined a different minimum capital adequacy ratio regarding the calculation of internal capital buffer, this ratio should be used.

1	**Capital Charge for Pillar 1 risks (2+3+4+5)**
2	Credit risk
3	Market risk
4	Operational risk
5	Counterparty credit risk
6	**Capital Charge for Pillar 2 risks (7+8 …)**
7	Risk type 1
8	Risk type 2
9	…
10	Correlation effect
11	**INTERNAL CAPITAL CHARGE (1+6+10)**
12	CCB
13	CPB
14	Capital Conservation Buffer[7]
15	**INTERNAL CAPITAL REQUIREMENT (ICR) (11+12 + maximum (13,14))**
16	**Internal capital adequacy ratio (ICAR) (%) (11/Y-RWA)**
17	**Internal capital requirement ratio (ICRR) (%) (15/Y-RWA)**
18	**INTERNAL CAPITAL BUFFER (17-%8)**
19	**CURRENT CAPITAL ADEQUACY STANDARD RATIO**

A simplified example concerning the filling of this table is given below.

EXAMPLE: *Y Bank Inc. has realized that alongside Pillar 1 risks, its interest rate risk in the banking book, credit concentration risk based on risk groups, model risk and residual risk are also material. Considering the volume and complexity of its activities, it provided from economic capital models as internal capital for all its risk types. According to the precautionary principle, the correlation effect was disregarded.*

On the other hand, within the last one year, due to control deficiencies in credit monitoring and follow-up processes concerning SME risks, an important level of loan loss reserves were kept and a plan to minimize this weakness was prepared in line with the suggestions of the internal audit unit. However, it was decided to weight loss possibilities produced by credit risk and residual risk model(s) by 1.1 coefficients, within the aim of reflecting the effects of these control weaknesses during the period until the plan is implemented successfully and shows its results.

[7]Banks should take into account the "Capital Conservation Buffer" in the calculation of internal capital requirement within the scope of minimum ratios taking place in the temporary first article of the Regulation on Capital Conservation and Countercyclical Capital Buffers, published on the Official Gazette number 28812 dated November 5, 2013.

Following results were obtained in consequence of the risk assessment realized. (TL million)

1	***Capital charges for Pillar 1 risks***	***1.689,04***
2	*Credit risk*	*1.273,70*
3	*Market risk*	*180,73*
4	*Operational risk*	*119,73*
5	*Counterparty credit risk*	*114,88*
6	***Capital charges for Pillar 2 risks***	***320,96***
7	*Interest rate risk in the banking book*	*137,97*
8	*Concentration risk arising from risk groups*	*115,92*
9	*Model risk*	*32,16*
10	*Residual risk*	*34,91*
11	*Correlation effect*	*0,00*
12	***INTERNAL CAPITAL CHARGE***	***2.010,00***

The bank has prepared a capital plan composed of activity and risk strategy and budget for three years and a contingency plan and stress tests. In the stress test, in addition to three scenarios notified by the Agency, the Bank has determined and used four other scenarios. Among the scenarios determined by the Bank, two were hypothetic, one was based on historical data and the other one was basis scenario. In composing one of the hypothetic scenarios, the departure point was reverse stress test results involving fast deposit outflow, while for the other one it was correlation changes between risk types. Negative stress test results including the results of the action plan are given below:

	TL Million	***Current***	***1st year***	***2nd year***	***3rd year***
1	*Total Risk weighted asset (RWA)*	*21.113*	*23.634*	*25.159*	*24.685*
2	***Current Capital***	***2.600***	***2.510***	***2.470***	***2.550***
3	***Capital Subject to Calculation***	***2.534***[8]			
4	*Capital* **charge** *for Pillar 1 risks*	*1.689*	*1.891*	*2.013*	*1.975*
5	*Capital* **charge** *for Pillar 2 risks*	*321*	*384*	*402*	*395*
6	***Internal Capital* Charge**	***2.010***	***2.275***	***2.415***	***2.370***
7	***Capital Surplus***	***524***	***235***	***55***	***180***
8	*Capital Need*		*289*	***469***	*344*
9	***Capital Planning Buffer (CPB)***	***469***			

In line with the results given in the table, the bank's maximum capital requirement for three years of prediction is calculated as TL 469 million and this amount was considered as the capital planning buffer (CPB).

[8]This amount is obtained by multiplying the Bank's RWA amount by 12% target capital ratio, determined according to the Board Resolution number 2026 dated November 16, 2006. (21.113*0,12=2.534)

Calculations summarized above were reflected on the conclusion table as follows.

12	***INTERNAL CAPITAL CHARGE***	***2.010,00***
13	*CCB*	*0*
14	*CPB*	*469*
15	Capital Conservation Buffer	*131,96*[9]
16	***INTERNAL CAPITAL REQUIREMENT (ICR)***	***2.479***
17	***Internal capital adequacy ratio (ICAR)(%)***	***9,52%***
18	***Internal capital requirement ratio (ICRR) (%)***	***11,74%***[10]
19	***INTERNAL CAPITAL BUFFER***	***3,74%***
20	***CURRENTCAPITAL ADEQUACY RATIO***	***12,31%***

The Bank has TL 55 million more than the amount of capital it might require currently and for the next three years.

9. LIQUIDITY PLANNING

In this section, distinctively from information given in the "5.Risk Management" section of the ICAAP Report, involving the amount of possible loss, capital requirement and planning, explanations about Internal Liquidity Adequacy Assessment Process (ILAAP) should be given, as well as liquidity adequacy and planning. The provisions of Guideline on Liquidity Risk Management and Guideline on Stress Test number 6241 dated March 19, 2015 published by the Agency should be taken into account in the analyses and assessments to be made.

Liquidity risk measurement method used by the Bank, as well as its results and the actions to be taken for a possible liquidity crisis should be specified.

Within this scope, stress test and scenario analyses should be made regarding expected cash flows and a liquidity crunch in markets (including also margin and collateral completing requirements) and the results thereof should be analyzed.

Main determinants of risk concerning liquidity are;

- Collateralized and uncollateralized funding (related mostly to non-deposit financing) risk,
- Retail (related mostly to deposit financing) funding risk,
- Intraday liquidity risk,
- Intragroup liquidity risk,
- Cross-currency liquidity risk,
- Risk arising from off-balance sheet transactions,
- Implicit or open liquidity support risk regarding the survival of affiliates or subsidiaries and special-purpose institutions,
- Risk arising from assets which may be purchased and sold in the market,
- Risk arising from assets which may not be purchased nor sold in the market,
- Risk arising from concentration.

Banks should identify the above-mentioned risk determinants and the ones they consider necessary and analyze issues such as liquidity position, access to liquidity, composition of liquid assets, contractual and behavioral assumptions relating to wholesale and individual funds

[9] The ratio is used as 0.625% for 2016.

[10] Even if the Bank's ICA ratio is 11.74%, its current capital level cannot be under the target capital ratio by 12% determined by the Board Resolution number 2026 dated November 16, 2006.

(for example deposit accounts), collateralized and uncollateralized funding possibilities under ordinary circumstances and under stress conditions and by consequence, they should assess the processes, assumptions and results of ILAAP. It is expected that the assessment is explained in accordance with following sub-titles within the scope of the ICAAP:

- Liquidity risk management,
- Liquidity risk appetite framework,
- Liquidity stress test policies, processes and methodologies,
- Assumptions used in the description of limits concerning the execution of scenario assumptions and stress test and remedial actions planned by the senior management,
- Emergency and contingency plans regarding funding,
- Processes and procedures used in management, monitoring, measurement and identification of liquidity risk, as well as reports submitted to top management,
- Bank's assessment of liquidity deficit and review and justification of the decisions in line with this assessment. In the assessment of liquidity deficit, banks should at least show their liquidity deficit determined quantitatively (upon detailed cash flow table), liquidity risk appetite and capacity and assess the relation between those in the light of stress test results, and emergency plans.

In the liquidity analysis, it is expected that banks use information and documents concerning liquidity and especially Management Information Systems reports of Treasury units (daily, weekly, monthly cash flow estimates), Asset Liability Committee (ALC) statements, documents regarding solo and consolidated liquidity and funding policies, reports of the Internal Audit Unit regarding treasury units, distribution of authorization and duties concerning liquidity and funding as well as reporting channels, policy documents regarding the exceedings of authorization, stress test document regarding liquidity risk, securitization calendar and plans of banks, intragroup liquidity regulations, number, scale, calendar of commitments to off-balance sheet financial instruments - counterparties within the market (including margin/trigger/guarantee liabilities) - customers and funding plans face to bad situations in an order to be determined under above-mentioned titles and submit a detailed analysis of liquidity demand and supply and information about its management on a strategic level.

In liquidity planning, an agreement should be reached between the bank's current liquidity requirement and its liquidity requirement under stress and its risk appetite and capacity. Thus, the bank will demonstrate that it would remain within regulatory boundaries even under stress conditions. Forasmuch as regulatory liquidity measures are basic factors determining risk capacity. Liquidity planning should be made as to prevent the decrease under these ratios even under stress conditions. Currently, the mentioned regulatory liquidity measures are composed of; five liquidity ratios determined by the Regulation on Measurement and Assessment of Liquidity Adequacy of banks and liquidity coverage ratio determined by the Regulation on Calculation of Liquidity Coverage Ratio of Banks. Since liquidity plan involves a future-oriented assessment, changes which may occur in liquidity measures set out by the legislation or new liquidity measures which may be added should also be taken into consideration. Regulatory ratio results achieved as a result of stress tests should be given as a table, comparatively with ratio limitations within the legislation.

In the liquidity plan, the Bank should make an assessment considering cash flows[11] corrected according to different prediction periods and different assumptions required by the

[11] Includes corrections arising from credit risk.

structure of cash flow. Accordingly, the liquidity plan is not subjected to the minimum three years of prediction rule specified in capital planning.