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TECHNICAL ASSISTANCE REPORT—RISK-BASED SUPERVISION PILLAR 2 IMPLEMENTATION

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TECHNICAL ASSISTANCE REPORT

REPUBLIC OF KAZAKHSTAN

Risk-Based Supervision—Pillar 2 Implementation

February 2022

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Monetary and Capital Markets Department

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GLOSSARY

Agency	Agency for Regulation and Development of the Financial Market of the Republic of Kazakhstan
AQR	Asset Quality Review
BASTD	Bank Analytics and Stress Testing Department
BRD	Banking Regulation Department
EU	European Union
EVE	Economic Value of Equity
HHI	Herfindahl-Hirschman index
ICAAP	Internal Capital Adequacy Assessment Process
ILAAP	Internal Liquidity Adequacy Assessment Process
IMF	International Monetary Fund
IRRBB	Interest Rate Risk in the Banking Book
KZT	Kazakhstani Tenge
MCM	Monetary and Capital Markets Department
NBK	National Bank of Kazakhstan
NII	Net Interest Income
NPL	Non-performing Loan
RAS	Risk Assessment System
RBS	Risk-Based Supervision
Rules	Regulation 188: "Rules for formation of risk management and internal control system for second-tier banks"
RWA	Risk-weighted assets
SA	Standardized Approach
SREP	Supervisory Review and Evaluation Process

TA	Technical Assistance
WG	Working group on developing methodologies for assessing the ICAAP and setting capital add-ons

PREFACE

At the request of the Agency for Regulation and Development of the Financial Market of the Republic of Kazakhstan (the Agency), the Monetary and Capital Markets (MCM) Department conducted a virtual mission in Almaty, Kazakhstan from November 16, 2020 to January 28, 2021 to assist the Agency with the development of internal supervisory methodologies for the assessment of a bank's Internal Capital Adequacy Assessment Process (ICAAP) and setting individual Pillar 2 supervisory capital requirements.

The mission had virtual meetings with the Chairperson of the Agency, Ms. Madina Abylkassymova, Deputy Chairperson of the Agency, Ms. Mariya Khadzhiyeva, and with senior and middle management of the Agency. In addition, four training sessions were conducted with bank supervisors and other Agency staff. The mission also had virtual meetings with representatives of a large domestic bank and a subsidiary of an overseas bank in Kazakhstan.

The mission team would like to express its gratitude to the Agency and its staff, and in particular to Mr. Oleg Smolyakov, Mr. Ivan Moysov, Mr. Olzhan Taubayev, Mr. Madi Burin and his team, and to the members of the working group on developing methodologies for assessing the ICAAP and setting capital add-ons (WG) for their openness, productive discussions, and excellent cooperation.

EXECUTIVE SUMMARY

This virtual technical assistance (TA) mission supported the Agency in strengthening certain elements of its risk based supervisory framework. The mission focused on assisting the Agency with its development of internal supervisory methodologies for assessing a bank's ICAAP, and for setting individual Pillar 2 supervisory capital requirements. The mission provided recommendations and targeted training. The priorities for the next TA missions were discussed with the Agency (strengthening banking supervision and cybersecurity, and diagnostic TA of insurance sector supervision will be considered). The mission benefited from simultaneous translation.

The Agency is continuing to work towards aligning its prudential regulatory and supervisory frameworks with international standards. The legal framework for banking supervision was revised in 2018, enabling the supervisory authority to apply risk-based supervision (RBS). In particular, the amendments addressed a critical flaw in the legal framework—insufficient powers of the supervisory authority to make supervisory judgments. The regulatory framework for banks was strengthened in 2019, with new regulations relating to corporate governance, risk management, business models, and the ICAAP.

The Agency is in the process of rolling out a risk-based approach to supervision through the implementation of the Supervisory Review and Evaluation Process (SREP). The SREP framework, based on the European Union (EU) model, was designed by external consultants and an international audit firm. A key element of the SREP framework is the supervisory assessment of a bank's ICAAP, which the Agency is planning to roll out this year. The implementation of an ICAAP framework will significantly enhance the Agency's overall risk based supervisory regime, providing an invaluable additional source of information for supervisors on which to base their overall risk assessment of a bank. The Agency's existing SREP methodology will need to be revised to incorporate the new ICAAP assessment procedures.

A WG has been set up by the Agency to develop the methodologies for assessing a bank's ICAAP and for setting capital add-ons. The mission team worked closely with the WG to develop the analytical framework for assessing a bank's ICAAP and for setting capital add-ons, drawing on international best practice. The main features of an ICAAP assessment were discussed, and a checklist of issues that supervisors should consider when assessing the ICAAP documentation was provided. The various methodologies for assessing and quantifying Pillar 2 capital add-ons were also discussed. Based on the mission team's guidance, the WG produced draft methodologies for assessing a bank's ICAAP and for setting capital add-ons.

The Agency's draft methodologies provide a good basis for implementing the ICAAP framework, but the mission provided recommendations on strengthening it further (see Table 1). There are a number of omissions in the draft ICAAP assessment methodology which should be addressed. There is limited reference to the assessment and quantification of Pillar 2 risks, and peer group analysis should be incorporated in the methodology. As the ICAAP is a key element of the overall SREP framework, the linkages to the risk assessment system (RAS) and SREP framework should be made clear. More generally, the draft methodology should be revised to make it more practical for supervisors to use, setting out the actions and expectations required of supervisors at each stage of the assessment. Supervisors should be consulted on the methodology as it is developed to test how practicable the document is to use in practice.

The mission made a number of recommendations in respect of the draft methodology setting out a proposed approach to supervisory capital add-ons. The Agency's draft provides detailed approaches for quantifying capital add-ons for the Interest Rate Risk in the Banking Book (IRRBB) and for under-provisioning by banks, but there are no approaches in the draft for concentration risk or other risks that are not fully captured by Pillar 1 (e.g., reputational, legal, strategic, and operational risk). The mission recommended that these be included in the methodology if considered material by the Agency.

As part of its Pillar 2 capital add-on approach, the Agency has also proposed a governance and management scalar to increase banks' minimum capital requirements to address weaknesses in a bank's corporate governance, business model, or risk management. The Agency should review its approach to determining the capital add-on for such weaknesses to align with best practice. It is common to apply an additional capital requirement above a bank's existing minimum capital requirements to reflect the risks posed by the weakness identified in the SREP process. The methodology should set out the specific criteria that the Agency should apply when determining whether a capital add-on for governance weaknesses is appropriate and specify that the additional requirement should be removed when the weakness has been addressed.

The draft ICAAP methodology should include a section on the governance arrangements around the ICAAP assessment process. The draft methodology should provide clarity for supervisors on the internal decision-making framework for each stage of the ICAAP assessment and the timelines and internal processes for approving the outputs of the assessment. This section should be closely linked to the decision-making processes around the supervisory committee in the SREP methodology.

The mission included four days of training. Topics covered the various stages and elements involved in the assessment of a bank's ICAAP, and the various methodologies for assessing and quantifying Pillar 2 capital add-ons.

Table 1. Kazakhstan: Key Recommendations

Key Recommendations	Priority	Timeline[1]
1. Agency to review and finalize the draft methodology for assessing a bank's ICAAP. To revise: - Process for requesting a bank's ICAAP documentation; - Supervisory evaluation process of the documentation received; - Process for review of a bank's internal governance, risk management, and internal controls; and - Usability of methodology by supervisors. To include: - Review of a bank's risk appetite statement; - Analysis of the Pillar 1 and 2 risks against which a bank is required to hold capital; - Linkages with the RAS and SREP; - Peer group analysis; and - The governance of the ICAAP assessment.	High	ST
2. Agency to review and finalize the draft methodology for setting individual Pillar 2 supervisory capital requirements. To include: - Agreeing methodologies for calculating capital requirements for Pillar 2 risks; - Identifying the material risks that are not fully captured by Pillar 1 and drafting methodologies for calculating the capital required to cover these risks; and - A revision of the approach to determining capital add-ons for governance, business model, or risk management weaknesses.	High	ST
3. Agency to review the existing SREP methodology to enhance the overall assessment of a bank's risk profile. To include; - Integration of the processes for, and results of, the ICAAP assessment; - Peer group analysis; and - The setting of individual Pillar 2 supervisory capital requirements aligned to the risk profile of each bank.	High	ST
4. Supervisors to integrate the assessment of banks' ICAAPs and setting individual Pillar 2 supervisory capital requirements in the supervisory framework to better tailor supervisory activities to the risk profile of each bank.	High	MT
5. Supervisors to review and assess banks' ICAAPs and include results of the assessment in SREP reports.	High	MT
6. Supervisors to set up additional individual capital requirements based on banks' risks that are not fully covered in Pillar 1 of Basel II.	High	MT

[1] **ST**, *short-term*, with results less than 6 months; **MT**, *medium term*, with results from 6 to 24 months.

I. INTRODUCTION

1. **The MCM Department conducted a remote mission in Almaty, Kazakhstan from November 16, 2020 to January 28, 2021 to assist the Agency with its development of internal supervisory methodologies for assessing a bank's ICAAP, and for setting individual Pillar 2 supervisory capital requirements.** The mission held a number of virtual meetings with senior and middle management of the Agency and delivered training to bank supervisors and other Agency staff on the conduct of an ICAAP assessment and setting capital add-ons. The mission also held meetings with representatives of a large domestic bank and a subsidiary of an overseas bank.

2. **There have been significant developments in the Kazakhstan regulatory and supervisory landscape in the past few years.** In 2019, the Kazakh authorities split the monetary policy and financial sector supervisory responsibilities of the National Bank of Kazakhstan (NBK), and the new regulatory Agency was established in Almaty in early 2020. Kazakhstan continues to strengthen their banking sector. In 2019, the NBK completed an asset quality review (AQR) of 14 banks, which helped to address long-standing issues and to boost confidence in the sector. The legal and regulatory framework for banks has also been strengthened. In 2018, the supervisory authorities were given legal authority to adopt a risk-based supervisory approach, and a regulation[1] was issued in 2019 setting new requirements on banks relating to their corporate governance, risk management, internal controls, business models, and ICAAP.

3. **In September 2020, a remote TA mission assisted the Agency with the strengthening of its institutional set up and banking supervisory capacity.** The mission provided a number of recommendations to enhance the Agency's operational independence, accountability, transparency and organizational arrangements for banking supervision, and inter-agency cooperation. The Agency's Chairperson noted in the concluding meeting of the current mission that all recommendations from the previous TA mission (Appendix I) are included in the Agency's draft Supervisory Plan for 2021, which is due to be finalized shortly.

4. **The purpose of the second mission was to provide assistance and training on the development and implementation of certain elements of Pillar 2 to enhance the Agency's risk-based supervisory approach.** The Agency has developed a methodology to roll out a SREP, but has yet to complete a full SREP of a bank. The Agency's SREP methodology[2] was designed by external consultants and is based on the EU model. Two important elements of a SREP framework are the supervisory assessment of a bank's ICAAP, and the determination of whether additional capital requirements should be applied to a bank under Pillar 2 of the Basel framework. The focus of the mission was to provide TA to the Agency in support of its development of methodologies for these two elements, drawing on international best practice and

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[1] Resolution of the board of the NBK No.188 (November 12, 2019). http://adilet.zan.kz/eng/docs/V1900019632.

[2] A summary of the Agency's SREP process is available on its website (https://finreg.kz/document/?docid=6778&switch=eng).

taking into consideration the specific circumstances of the Kazakh regulatory framework and banking sector.

5. **This report is divided into three sections.** After this introductory section, Section II provides an overview of the banking sector, and Section III discusses enhancements to the Agency's SREP methodology, including recommendations for developing methodologies to assess a bank's ICAAP and to calculate Pillar 2 capital add-ons.

II. BANKING SECTOR OVERVIEW

6. **The banking sector of Kazakhstan consists of 26 commercial banks,[3] of which 14 are affiliated to foreign banks.** As of December 1, 2020,[4] total assets of the banking sector stood at US$ 71 billion[5] (KZT 30.3 billion), representing 43 percent of GDP. Total assets increased by 13.4 percent from the start of 2020. Banks are the main component of the Kazakh financial sector, comprising 87.2 percent of the total assets of all financial institutions.

7. **At December 1, 2020, the total loan portfolio of the banking sector stood at US$ 37 billion (KZT 15.6 billion), an increase from the beginning of the year of 5.9 percent.** The total volume of loans to corporates stood at US$ 10 billion (KZT 4.1 billion), and loans to individuals at US$ 16.2 billion (KZT 6.9 billion), an increase of 10.1 percent on the year. Retail loans stood at US$ 10.6 billion (KZT 4.5 billion), an increase of 2.7 percent in 2020.

8. **The average total capital ratio for the banking sector was reported to be 25.5 percent on December 1, 2020, but COVID-19 relief measures may hinder the timely recognition of loan losses.** In such a situation, prudential returns' data on banks' non-performing loans (NPLs), profitability, and capital ratios may temporarily not accurately reflect a bank's current financial situation. NPL levels remain high, with an average NPL level of 7.9 percent for loans over 90 days past due. This figure has fallen marginally from 8.1 percent as a percentage of total loans during the year, but the figures may be understated due to the relaxations in the authorities' loan classification and provisioning rules introduced in response to the COVID-19 pandemic. The sector remains profitable, recording a gross profit of US$ 1.7 billion as of December 1, 2020 (KZT 742 billion). Return on assets stands at 2.8 percent and return on equity at 21.1 percent. Appendix II provides further details of the banking sector.

9. **In response to the COVID-19 crisis, the Agency introduced a number of exceptional regulatory and supervisory measures to support the Kazakh economy.** The Agency relaxed

[3] The license of Tengri Bank JSC, the subsidiary of India's Punjab National Bank, was revoked in September 2020.

[4] Data from the Agency's publication 'Current State of the Banking Sector of Kazakhstan' as of December 1, 2020 (https://finreg.kz/cont/%D0%A2%D0%B5%D0%BA%D1%83%D1%89%D0%B5%D0%B5%20%D0%91%D0%92%D0%A3_%D0%B0%D0%BD%D0%B3%D0%BB_01.12.2020.pdf).

[5] Exchange rate at as of December 1, 2020: US$1:425 Tenge.

certain capital, liquidity, loan classification, and provisioning requirements. The Agency is encouraged to monitor the impact of these exceptional measures. The Agency should encourage a more targeted approach to restructuring loans, prepare an exit strategy, and withdraw the exceptional measures when the economy and banking sector start to recover from the impact of the pandemic. Where relevant, banks should produce credible medium-term plans to restore their capital and liquidity buffers and address the recapitalization needs identified as part of the AQR.

III. PILLAR 2 IMPLEMENTATION

A. Enhancing the Agency's SREP

10. **As a key element of its risk based supervisory approach, the Agency has developed a SREP methodology[6] with the assistance of external consultants.** The SREP is planned to be an annual supervisory process involving an assessment by the Agency's supervisory division of a bank's financial and non-financial risks, and the controls in place to mitigate those risks. The Agency's RAS is currently based on a quarterly analysis of 33 quantitative indicators and 122 qualitative indicators. The majority of the quantitative indicators are generated automatically by the Bank Analytics and Stress Testing Department (BASTD) from regulatory data submitted by the banks, and the qualitative indicators are generated from a questionnaire sent to each bank requiring a yes or no answer to each question. The four broad categories assessed in the SREP are a bank's business model and profitability; its capital adequacy; its liquidity and funding; and its corporate governance. The quantitative and qualitative indicators generate a rating between one through four for each category, with the line supervisor of the bank adjusting the rating based on existing knowledge of the bank. The ratings are entered into the Agency's RAS, which derives the overall SREP rating for the bank within each category. The Agency has yet to conduct a full SREP, but intends to fully implement the framework this year.

11. **The Agency will need to amend its existing SREP methodology to incorporate the assessment of a bank's ICAAP.** The Agency is planning to roll out an ICAAP framework this year. The assessment of a bank's ICAAP will form an important element of the SREP process, providing an invaluable source of information for supervisors on which to base their overall risk assessment of a bank. The ICAAP assessment will provide greater clarity and depth of information around the overall risks a bank is running, and the risk management and internal controls the bank has in place to mitigate those risks. This information will complement the existing quantitative and qualitative indicators available to the Agency and significantly enhance the overall assessment of a bank's risk profile. The ICAAP documentation will also identify any risks that banks are running for which capital is not held, and quantify the additional capital required for such risks. As an important input to the RAS and the overall SREP, the Agency

[6] The internal SREP and RAS methodologies were not made available to the mission team, but a high-level overview of the Agency's current SREP regulations and internal supervisory procedures was gained through discussions with management.

should review its existing SREP methodology to integrate the new process for, and results of, the ICAAP assessment.

12. **The new SREP framework will require a fundamental change of approach to the way banks have been supervised under the former compliance-based regime.** The Agency's onsite inspections will need to focus increasingly on the assessment of banks' governance and risk management frameworks, and its offsite processes and procedures will involve more frequent contact with bank management. The implementation of the ICAAP framework will reinforce these changes. More frequent onsite inspections will be required to validate the assertions in ICAAP documentation around the effectiveness of banks' risk management and internal controls, and there will be greater supervisory engagement from the offsite teams with banks' management to substantiate the information provided by banks in their ICAAP documentation.

13. **The Agency should incorporate peer group analysis into its SREP and ICAAP methodologies.** The final recommendations arising from a SREP, including any proposed supervisory and capital measures, are submitted for review and approval by the Agency's supervisory committee.[7] The final SREP report submitted to the supervisory committee should include a peer group analysis of the findings to ensure that the proposed supervisory measures, including any quantitative measures relating to additional capital and liquidity[8] requirements, are consistent with those applied to comparable banks. Peer group analysis would also ensure that the Agency's overall SREP approach is proportionate to banks of a similar size and complexity. The Agency should revise its SREP methodology to build in peer group analysis. The mission provided the WG with a range of elements that could be subject to peer review in the SREP framework—see Appendix III.

B. Assessment of a Bank's Internal Capital Adequacy Assessment Process

14. **Although an essential component of the SREP framework, the Agency has yet to fully implement its ICAAP framework and should do so as a matter of priority.** The Agency's ICAAP regulations are set out in Chapter 5 of Regulation No.188 issued in November 2019[9] (the Rules) and require the board of directors of a bank to approve an internal document that sets out the approaches and principles of its ICAAP. The Rules, which came into force on October 1, 2020, note that the ICAAP should be an integral part of the management of a bank and should cover the identification, assessment, aggregation, and control of significant types of risk inherent in the activities of the bank in order to determine the necessary level of capital to be

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[7] Although the supervisory committee has yet to convene, its composition has been agreed. It will be chaired by the First Deputy Chairman of the Agency and comprises the Deputy Chairmen of the Agency and the Heads of Banking Regulation Department (BRD), the Methodology Department, and the Legal Department.

[8] Additional liquidity requirements will form part of the Agency's Internal Liquidity Adequacy Assessment Process (ILAAP) framework, when implemented.

[9] See Footnote 2.

held against those risks. The Agency is developing a methodology to assess a bank's ICAAP and to incorporate the findings into its SREP framework. The assessment by the Agency has three main objectives. Using expert judgement, the supervisor aims to identify the risks a bank is running; assess the effectiveness of the governance, risk management, and internal controls the bank has in place to manage those risks; and to assess whether the bank has an appropriate level of capital to cover the risks identified. The ICAAP documentation submitted by banks should be sufficiently comprehensive to enable a supervisor to form a view on all three of these objectives.

15. **The Agency should finalize its methodology for assessing a bank's ICAAP and implement as a matter of priority.** A WG has been set up by the Agency to develop the methodologies for assessing a banks' ICAAPs and for setting capital add-ons. The mission team worked closely with the WG to develop the analytical framework for the ICAAP assessment, drawing on international best practice. The main features of an ICAAP assessment were discussed (i.e., the various stages of an assessment; the issues to be considered when the ICAAP document is received; guidance on how the findings of the assessment feed into the SREP framework; and the internal governance requirements), and a checklist of issues that supervisors should consider when assessing the ICAAP documentation was provided—see Appendix III. Training on the conduct of an ICAAP assessment was also provided to staff from the supervisory department. Based on the mission team's guidance, the WG produced a draft of the methodology for assessing a bank's ICAAP.

16. **The Agency's draft internal methodology provides a good basis for supervisors to conduct an ICAAP assessment but needs to be strengthened in a number of areas.** The draft methodology sets out the supervisory processes for each stage of the ICAAP assessment. It includes a general section to explain the rationale for, and scope of, the assessment; the approach to be adopted when requesting the ICAAP documentation from a bank; the approach for evaluating each risk element, including liquidity and funding, stress testing and corporate governance; and the link to the final rating of the SREP framework. The mission team reviewed the draft methodology, which should be fully compliant with the requirements set out in the Rules, and made several recommendations to enhance it.

17. **The methodology should be revised to make it more practical for supervisors to use, including changes to the structure and flow of the document.** The methodology should clearly set out what actions and expectations are required of supervisors at each stage of the assessment, including timelines where relevant. It should also provide more detail on internal supervisory processes, including details of the systems and template reports supervisors should use for the assessment, and how supervisors should document their findings. It is recommended that supervisors be consulted on the methodology as it is developed to test how practicable the document is to use in practice.

18. **The Agency should specify the content and format that a bank's ICAAP document should take.** The mission team recommended increased standardization in certain sections of the ICAAP methodology. Although the Rules already specify a baseline set of documents that banks

should include in their ICAAP submission,[10] the Agency should consider designing a template letter for supervisors to issue to banks when requesting this information to standardize and simplify the process. In addition to the baseline information, the methodology should make clear that supervisors should consider whether additional documents are required from a bank when requesting the ICAAP documents. This will depend upon the bank's circumstances and risk profile. The Rules do not set out the form that an ICAAP document should take, but it is common practice to require a consistent format that facilitates the assessment of the documentation by supervisors. The Agency should consider issuing guidance to banks on the format of their submission. Particularly important is that a bank's ICAAP documentation includes an executive summary that clearly sets out the bank's view of its risk profile; quantifies its Pillar 1 and Pillar 2 risks; and describes both the composition of the bank's capital and its assessment of its own capital adequacy requirement.

19. **The draft methodology includes a section on liquidity and funding risks, which is not common in ICAAP documents.** The mission noted that it was unusual to cover liquidity and funding risks in an ICAAP document, but it was sensible to include such risks in the draft methodology until such time as the Agency implements an ILAAP regime, which would cover such risks in detail.

20. **There are several omissions in the draft methodology which should be addressed.** The methodology sets out the approach that supervisors should take to identifying the main Pillar 1 risks (i.e., credit, market, and operational), but there is limited reference to Pillar 2 risks. The methodology should include the approaches supervisors should adopt for identifying and assessing Pillar 2 risks, and for assessing how such risks are managed by a bank. The draft methodology should also include guidance on the approach to be taken in respect of reviewing a bank's Risk Appetite Statement, and how the bank's risk appetite links to the assessment of individual risk elements. The methodology should also include a section on the Agency's approach to peer review at each stage of the assessment, and the areas which should be covered by such analysis. The mission provided guidance on these issues.

21. **The draft methodology should also include a section on the governance arrangements around the ICAAP assessment process, and the linkages between the ICAAP and the RAS and SREP frameworks.** The internal decision-making framework for each stage of the ICAAP assessment should be set out in the draft methodology to provide clarity for supervisors on the timelines and internal processes for approving the outputs of the assessment. This section should link closely to the decision-making processes around the supervisory committee in the SREP methodology. Given that the ICAAP assessment is an important input to the RAS and the SREP, the draft methodology should describe the various linkages between

[10] This includes descriptions of the organizational structure of the ICAAP; its risk appetite strategy; the organization of credit, market, operational risk management; the organization of stress testing procedures; the organization of risk management procedures for new products and activities; and the organization of self-assessment procedures for the ICAAP.

these frameworks. Of particular interest are the linkages between the assessment of a bank's business model analysis and of its corporate governance, both of which are covered in the SREP methodology, but which are more commonly undertaken as part of the ICAAP assessment.

C. Setting Individual Pillar 2 Supervisory Capital Requirements

22. **A key objective of the ICAAP assessment and broader SREP framework is to determine the minimum level of capital a bank is required to hold against its material Pillar 1 and Pillar 2 risks.** Drawing on international best practice, the mission provided the WG with guidance on the various methodologies for identifying the risks a bank is running, which are not fully covered by Pillar 1 capital, and for calculating the appropriate level of capital required to cover those risks.

23. **The Agency has developed a draft methodology that identifies risks that banks are running for which Pillar 1 capital is not held, and that determines capital add-ons for such risks.** Two main risks for which capital under Pillar 1 is not held in the Kazakh banking sector are concentration risk and IRRBB. In addition, a particular issue regarding credit risk in the Kazakh context concerns possible capital shortfalls resulting from under provisioning. The draft methodology sets out a simple, matrix-based, approach for calculating capital add-ons where banks are considered to be under-provided, which appears to be fit for purpose. The draft methodology does not, however, include an approach for applying capital add-ons for concentration risk. Concentration risk may cover single name, geographical, sectoral, products provided by banks, and concentrations in the incomes of banks. If concentration risk is considered to be material in the Kazakh banking sector, the Agency should decide which approach it would wish to employ for quantifying concentration risk and incorporate it in the methodology. The mission provided guidance to the WG on the most common approach adopted by regulatory bodies for quantifying concentration risk (i.e., the Herfindahl-Hirschman index (HHI)), [11] but noted that the Agency may wish to construct a simpler model, such as a scalar for risk-weighted assets (RWA) linked to the size of business undertaken with individual concentration types.

24. **The draft methodology includes an approach for assessing additional Pillar 2 capital required to cover a bank's IRRBB.** The Agency should regularly evaluate the adequacy, integrity, and effectiveness of a bank's IRRBB management framework and assess whether its practices comply with the stated objectives and risk tolerances set by its board. The Agency should also assess the adequacy of a bank's capital relative to its IRRBB exposures to determine whether the bank requires more detailed examination and should potentially be subject to additional capital requirements and/or other mitigation actions. This evaluation should be undertaken both on a standalone basis and by making comparisons with peer banks.

[11] Alternative measures include the Gini coefficient or internal supervisory models.

25. **The Agency's methodology for calibrating the amount of capital to be held for IRRBB should use measurement systems and a range of interest rate shock and stress scenarios.** The methodology should consider:

a) the institution's governance of IRRBB, strategy of IRRBB, and its risk appetite in relation to interest rate risk;

b) bank's nature and composition of the interest rate risk profile (in term of repricing of all asset, liabilities, and off-balance sheet items/cash flows);

c) assessment of behavioral assumptions the banks is using (non-maturing deposits, prepayments)

d) impact of different interest rate scenarios on economic value as a portion of the bank´s own funds—or economic value of equity (EVE);

e) impact of different interest rate scenarios on earnings—net interest income (NII).

26. **The Agency should ensure that banks with a high level of IRRBB that could result in losses in a plausible range of market scenarios should ensure that they have sufficient capital to withstand the adverse impact of these scenarios.** The Agency should ensure a comprehensive peer analysis to identify any outliers in the market in respect to IRRBB.

27. **Apart from IRRBB, the Agency's draft methodology for Pillar 2 capital add-ons does not cover other risks that are not fully captured by Pillar 1.** These should be included in the methodology if considered material by the Agency. It is recognized that there are aspects of the main Basel Pillar 1 risks (credit, market, and operational risk) that are not fully captured under Pillar 1 and which should be considered under Pillar 2. Of particular interest for the Agency are those for operational risk, where the gross income used in the basic indicator and standardized measurement approach is only a proxy for the scale of operational risk run by a bank and can, in some cases (e.g., for banks with low margins or profitability), underestimate the need for capital for operational risk. The Agency's ICAAP assessment methodology should cover these shortfalls in the Pillar 1 regime. As all banks in Kazakhstan use the standardised approach (SA) to calculate their Pillar 1 capital requirements, supervisors should ensure as part of the routine supervisory process that a bank has allocated its credit risks to the appropriate SA risk weight buckets and has adopted the standardized method for market and operational risk, and that its calculation of overall capital adequacy is therefore reliable. The Agency may wish to consider whether the Basel SA risk weights are appropriate for the Kazakh banking sector. In some jurisdictions, adjustments are made to the risk weightings for sovereign exposures and for residential mortgage loans to reflect local circumstances. If any such adjustments are required, corresponding adjustments would need to be made to banks' capital requirements.

28. **The Agency's methodology for Pillar 2 capital add-ons should consider all other risks that are not captured by Pillar 1, if considered material.** The draft methodology does not include approaches for applying capital add-ons for other risks that are not captured by Pillar 1. These risks include, but are not limited to, reputational, legal, strategic risk, and model

risk (e.g., in the context of IFRS 9 provisioning, IRRBB, liquidity and operational risk). If considered material, the Agency should incorporate these into the draft methodology. Although such risks often arise from inadequate control or risk management processes, which may be addressed more appropriately by supervisory measures that seek to strengthen a bank's internal control framework rather than a capital add-on, it is not uncommon for supervisory bodies to apply additional capital requirements for such risks as a form of incentive to management to expedite improvements to the risk and control framework. This capital add-on shall be set on top of other capital add-ons regardless of the capital adequacy ratio the bank is reporting, the additional capital requirement is then removed when the inadequate control or risk management process has been addressed.[12]

29. **As part of its Pillar 2 capital add-on approach, the Agency has proposed a governance and management scalar to increase banks' minimum capital requirements to address weaknesses in corporate governance.** It is proposed that the add-on will initially represent 2.5 percent of the bank's available capital above its minimum capital requirements, including any that have been applied for other Pillar 2 risks. This approach is not consistent with international best practice. It is common to apply an additional capital requirement[13] above the bank's existing minimum capital requirements to reflect the risks posed by the weak governance, risk management, or internal controls that have been identified in the SREP process. The capital add-on should be proportionate to the risk identified. This additional capital requirement should be removed when the weakness in the bank's governance has been addressed. The methodology should also set out the specific criteria that the Agency should apply when determining whether a capital add-on for governance weaknesses is appropriate.

[12] See Section 3.6 of https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/policy-statement/2015/ps1715.

[13] See paragraphs 9.34-9.37 of https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/statement-of-policy/2020/the-pras-methodologies-for-setting-pillar-2a-capital-update-dec-2020.pdf?la=en&hash=140C86597A4C4ACF6631A46842F7EBC82A740672.

APPENDIX I. SEPTEMBER 2020 TA RECOMMENDATIONS

Key Recommendations	Priority	Timeline[1]
1. Develop and adopt an action plan to strengthen the Agency's institutional set up, including its operational independence, accountability and transparency, and overall banking supervisory capacity.	High	I
2. Sign a MoU with the NBK that sets out the coordination and cooperation arrangements between the two institutions, including the responsibilities and accountability of each institution and protocols for the exchange of information.	High	ST
3. Review and enhance the organizational structure and staffing of the Banking Regulation Department (BRD) to ensure effective prudential banking supervision. To include: – restructure the BRD to transfer all non-critical to financial stability functions to other Departments of the Agency; – establish a dedicated Supervisory policy team within the BRD for drafting supervisory procedures and operating manuals, ensuring consistent treatment of the implementation of the Agency's supervisory approach, and supporting supervisory planning; – embed the new Bank Analytics and Stress Testing Department into the SREP framework to ensure effective coordination with offsite and onsite teams and to provide valuable input to effective banking supervision; – prescribe the role and responsibilities of the Agency's supervisory committee in legislation and ensure that supervisory decisions are taken at a level appropriate to the significance of the issue; – build up specialist risk expertise among onsite and offsite teams; – introduce a comprehensive training program for offsite and onsite supervisors to address identified skill shortages required to assess banks' corporate governance, risk management, business models; consider the possibility of seconding staff to foreign supervisory authorities.	High	M
4. Develop or update offsite, onsite, and SREP processes and procedures. To include: – undertake more frequent offsite qualitative risk and corporate governance reviews, using banks' internal management documents and reports; – introduce regular prudential meetings with banks' senior and middle management, including an annual meeting with Supervisory and Executive boards on strategic issues; – enhance annual supervisory plans for the banking sector, by including high-level supervisory priorities, the supervisory programs for individual banks and more risk-focused onsite inspection plans; – implement fully an ICAAP regime and capital-ons; – – update the supervisory procedures, manuals, roles and responsibilities of structural units, including supervisors' job descriptions, for conducting a SREP and integrating offsite and onsite supervision into the new framework;	High	M

– develop supervisory procedures for documenting and recording supervisory findings and supervisory judgements, arrangements for the approval of SREP results, including scores, and for communicating the outcomes of the SREP to the banks.		
5. Amend legislation by including additional safeguards to enhance the Agency's operational independence, including the implementation of FSC recommendations, and by prescribing the accountability framework; strengthen the Agency's transparency by additional disclosures.	Medium	M
6. Require banks to produce credible medium-term capital and liquidity restoration plans to mitigate the impact of the exceptional COVID-19 measures.	High	I
[1]**I,** *immediate*, with results less than 3 months; **ST**, *short-term*, with results from 3 to 6 months; **MT**, *medium term*, with results from 6 to 24 months.		

APPENDIX II. STRUCTURE OF THE BANKING SECTOR: JANUARY 1, 2021[1]

BANK	ASSETS (US$BN)	MARKET SHARE (PERCENT)	CONTROL	PARENT COUNTRY
HALYK SAVINGS BANK OF KAZAKHSTAN[2]	23.7	32	JSC	
SBERBANK	7.5	10.2	SUBSIDIARY	RUSSIA
FORTE BANK	5.1	6.9	JSC	
KASPI BANK	6.7	9	JSC	
BANK CENTER CREDIT	4.4	5.9	JSC	
ATF BANK	2.8	3.8	SUBSIDIARY	
'OTBASY BANK' HOUSE CONSTRUCTION SAVINGS BANK	4.1	5.5	JSC	
FIRST HEARTLAND JÝSAN BANK	3.9	5.3	JSC	UK
EURASIAN BANK	2.9	3.9	JSC	ISRAEL, BELGIUM
CITIBANK	2.2	2.9	JSC	USA
BANK RBK	2.4	3.2	JSC	
ALFA-BANK	1.8	2.4	SUBSIDIARY	RUSSIA
ALTYN BANK	1.4	1.9	SUBSIDIARY	CHINA
NURBANK	1.0	1.4	JSC	
HOME CREDIT AND FINANCE BANK	0.9	1.3	SUBSIDIARY	CZECH REPUBLIC
BANK OF CHINA	0.9	1.2	SUBSIDIARY	CHINA
JSC BANK VTB (KAZAKHSTAN)	0.8	1.1	SUBSIDIARY	RUSSIA
INDUSTRIAL AND COMMERCIAL BANK OF CHINA	0.5	0.7	SUBSIDIARY	CHINA
AB "KAZAKSTAN-ZIRAAT INTERNATIONAL BANK	0.3	0.4	SUBSIDIARY	TURKEY
BANK KASSA NOVA	0.2	0.3	SUBSIDIARY	
CAPITAL BANK KAZAKHSTAN	0.1	0.1	JSC	
ASIA CREDIT BANK	0.1	0.2	JSC	
SHINHAN BANK KAZAKHSTAN	0.1	0.2	SUBSIDIARY	KOREA
AL-HILAL ISLAMIC BANK	0.1	0.2	SUBSIDIARY	UAE

[1] Source: The Agency.

[2] 14 banks participated in AQR 2019 (in grey).

ZAMAN-BANK	0.1	0.1	JSC	
NATIONAL BANK OF PAKISTAN	0.0	0.1	SUBSIDIARY	PAKISTAN
TOTAL	**74**	**100**		

APPENDIX III. SUPERVISORY ISSUES FOR CONSIDERATION ON RECEIPT OF INTERNAL CAPITAL ADEQUACY ASSESSMENT PROCESS DOCUMENTATION

The assessment of ICAAP documents submitted by a bank involves expert judgement on the part of the supervisor. The following questions provide a guide to issues that the supervisor should considered. They are not exhaustive and should consider the size, nature, and complexity of the bank.

Executive Summary of the ICAAP Report

- Is there a clear overview of the risks to which the bank is exposed?
- Is there a clear explanation of the capital required to cover each risk?
- Are any deviations from the Pillar 1 framework clearly stated?
- Are Pillar 2 risks set out and the capital against such risks clear?
- Are other risks quantified?
- Is the overall assessment of the bank's internal capital adequacy requirement clearly stated?

Organization and Governance of ICAAP

- Does the ICAAP comply with the requirements set out in Chapter 5 of 188 Regulation?
- What is the internal governance of the ICAAP? Has it been approved by the board?
- What other units in the bank have been involved in the ICAAP process?
- Is the ICAAP commensurate with the size, scale and risks of the business?
- Does the ICAAP outline the business undertaken, the risks being run, structure of the business, legal entity, management's risk appetite, the governance supporting this, the risk and control environment etc?
- How is the ICAAP used internally?
- Is it a dynamic document that is used to manage risks?
- What circumstances would lead to the ICAAP being updated?

Risk Appetite Statement

- Does the Risk Appetite Statement comply with the requirements of Chapter 3 of the Rules?
- Is the Risk Appetite Statement owned by the board and appropriate senior management committees?
- Is the risk appetite statement documented in writing and there is evidence that it is communicated to the staff of the bank?

- Does the risk appetite statement consider all material risks to which the bank is exposed and contains risk limits, tolerances and thresholds?
- Are the limits comprehensive, internally consistent and realistic given the business undertaken?
- Is the risk appetite framework forward-looking and in line with the bank's strategic planning horizon, and regularly reviewed?
- Does the risk strategy consider the financial resources of the bank (i.e. the risk appetite should be consistent with supervisory own funds and liquidity requirements and other supervisory measures)?
- Does it explain how/where risk limits were set?
- What evidence is there that management uses the Risk Appetite Statement to run the business?
- Peer analysis—how have similar banks calibrated their risk limits?

Capital Related Information in the ICAAP

- Does the ICAAP explain how these risks arise within the business?
- In line with Chapter 5 of Regulation 188, does the ICAAP describe the bank's organisation of credit, market and operational risk management. For credit, the ICAAP should include:
    - details of the credit risk management process from approval, administration, detailed credit analysis/monitoring, managing and dealing with troubled loans;
    - details of the credit rating model or scoring analysis;
    - details of the loan classification system;
    - details of the information technology system for credit risk.

(There are similarly detailed requirements for market risk and operational risk in Chapter 5 of Reg 188.)

- Is the information in these documents sound, effective and comprehensive?
- Does the ICAAP explain what policies and procedures the firm uses to manage these risks?
- Is the risk and control environment explained in the ICAAP?
- Is the internal structure of risk management clearly explained (e.g., committees, management information etc.) and consistent with the views of the Agency?
- Does the ICAAP document how Pillar 1 is calculated? Does it enable the supervisor to confirm that the standardised approach has been applied correctly?

- Does the ICAAP explain what risks aren't covered under Pillar 1?
- Does the ICAAP explain which of the non-Pillar 1 risks are to be covered by capital and which will be covered by qualitative measures?
- Does the ICAAP set out clearly any Pillar 2 risks identified?
- Has capital been calculated for Pillar 2 risks (e.g., IRRBB and concentration risk)?
- Are the methodologies for calculating Pillar 2 risks clearly stated?
- Have other risks not captured by Pillar 1 been identified?
- Has capital been calculated for such risks and the methodology specified?
- Does the firm use an economic capital model? Is the capital plan it generates relevant to the business (i.e., it's not group and not relevant to Kazakhstan)?
- Does the ICAAP detail/ explain stress tests?

Stress Tests

- Are the stress tests proportionate to the size and nature of the business?
- Are all material risks run by the bank covered by the stress tests?
- Are the stress tests appropriately calibrated?
- Are the underlying assumptions in the stress tests reasonable?
- Are the stress tests comparable with peer banks?
- Does the ICAAP include reverse stress tests? How are these calibrated?
- Do stress tests indicate a low point?
- If applicable, how are regulatory-driven stress tests incorporated into the ICAAP?

Additional Information that may be Requested

- Risks identified in outsourcing contracts?
- Risks arising from remuneration policy?
- Risks arising from new products or product change?
- Risks arising from information technology/cyber events?
- Risks arising from operational risk failures?
- Any new material issues identified in internal audit reports?

Business Model Analysis

- Does the BMA documentation comply with Chapter 2 of Regulation 188?
- Does the BMA contain at least a three-year outlook?
- Is the strategy regularly updated and approved by the board?
- Are the strategic goals clearly identified?
- Have target market segments been identified?
- Is there an analysis of the strategy's strengths and weaknesses?
- Does the bank generate strong and stable returns which are acceptable given its risk appetite and funding structure?
- Are there any material and unsustainable asset concentrations or concentrated sources of income?
- Does the bank have a strong/sustainable position in the market?
- Does the current strategy reinforce its market position?
- Are the bank's financial forecasts based on plausible assumptions about the future business environment?
- Are the strategic plans appropriate given the current business model and management execution capabilities?
- Does the BMA outline the size of individual business lines (revenue, customers, P&L, etc), concentrations, geographical exposures?
- Does the BMA consider wider group risks (i.e., if the crystallisation of group issues could affect the Kazakhstan sub?)

Internal Governance and Internal Controls

- Does the bank have a transparent organizational structure with clear responsibilities and separation of risk taking from risk management and control functions?
- Is the functioning of the board appropriate?
- Is the number of members of the board adequate, and composition appropriate?
- Do members demonstrate a sufficient level of commitment and independence?
- Is there a fit and proper assessment of members upon appointment and on an ongoing basis?
- Is the effectiveness of the board reviewed?
- Is sufficient time allowed for board members to consider risk issues, and appropriate access granted to information on the risk situation of the bank?

- Does the board set the bank's governance principles, corporate values and appropriate standards, including independent whistle-blowing processes and procedures?
- Does the board understand the bank's operational structure (e.g., entities and the links and relationships amongst them; special purpose or related structures) and the associated risks?
- Is there evidence of clear and strong communication of strategies and policies to all relevant staff and that the risk culture is applied across all levels of the institution?
- Does the bank's ethical corporate and risk culture create an environment of effective challenge in which decision-making processes promote a range of views?
- Is the remuneration policy in line with the bank's risk profile and maintained, approved and overseen by the board?
- Is the internal audit function independent and operates effectively in accordance with established internal standards and requirements?
- Is the recovery plan complete and credible and recovery planning arrangements are appropriate?
- Does the bank have policies in place to identify and avoid conflicts of interest?
- Does the bank have an outsourcing policy and strategy that considers the impact of the outsourcing on its business?
- Is the bank´s ICAAP (and ILAAP) framework sound, effective and comprehensive?

Risks to Capital—Pillar 1 Risks

Every Pillar I risk should be assessed from the point of potential impact on the bank considering the level of inherent risk and management and controls.

Inherent credit risk:

- What is the nature and composition of credit exposure, and of exposures to complex products (CCR, settlement risk, country risk, FX lending, specialized lending)
- Credit concentration in line with peers?
- Level of forborne and NPLs is in line with peers?
- IFRS 9, coverage of provisions and CVA adjustments in line with peers?
- Quality of guarantees and collateral?
- Results of stress testing?

Management/control of credit risk:

- Is there consistency between credit-risk policy, strategy and risk appetite?

- Does the organizational framework for credit risk show clear responsibilities and separation of tasks between risk takers and management and control functions?
- Is credit risk measurement, monitoring and reporting appropriate for the scale of the business?
- Sound, effective and comprehensive credit risk limit system and compliance with risk appetite and strategy.

Inherent market risk:

- Is the credit risk limit system comprehensive and in compliance with risk?
- What is the nature and composition of market risk exposure and of exposures to complex products (FX, position risk (risk—general and specific), equity risk, commodity risk)?
- Is there a market risk concentration?
- Is there volatility of returns around market risk exposures?
- Results of stress testing?

Management/control of market risk:

- Is there consistency between market-risk policy, strategy and risk appetite?
- Are there clear responsibilities and separation of tasks (between risk takers and management and control function?
- Is market risk measurement, monitoring and reporting appropriate?
- Is the market risk limit system comprehensive and in compliance with risk appetite and strategy?

Inherent operational risk:

- What is the nature of operational risk events and exposures (conduct risk, ICT risk, model risk)?
- What is the frequency of "low frequency/high severity losses"?
- What is the exposure to operational risk events - comparison to peers, scenario analysis?
- What is the level of losses experienced in recent years and trend (compared to peers)?

Management/control of operational risk:

- Is there consistency between operational-risk policy, strategy and risk appetite?
- Are there clear responsibilities and clear separation of tasks (between risk takers and management and control functions)?
- Is the operational risk measurement, monitoring and reporting appropriate?
- Is the operational risk control framework comprehensive?

Additional assessment directly linked to the amount of capital covering Pillar 1 risks:

- Has the bank allocated assets correctly to the appropriate RWAs as per standardised methodologies?
- Is Pillar 1 capital quantification adequate for the risk undertaken?
- Is there a clear articulation of the capital required for these risks?
- Is the methodology for such calculations clear and accurate?

Risks to Capital—Pillar 2 Risks

- Given the bank's business, strategy, risk and control environment etc, have all risks not fully captured under Pillar 1 been clearly identified and quantified?
- Have IRRBB and concentration risk been identified and quantified?
- Have all other risks not captured by Pillar 1 been identified and quantified, including but not limited to:
    - Strategic risk
    - Reputational risk
    - Legal risk
    - Model risk (IRRBB, liquidity, etc.)

IRRBB should be assessed from the point of potential impact on the bank considering the level of inherent risk and management and controls.

Inherent IRRBB:

- What is the nature and composition of the interest rate profile?
    - assessment of timing mismatch in the maturity and repricing of assets, liabilities and off-balance sheet positions (re-pricing risk)
    - assessment of gap analysis (correct assignment to buckets), or duration calculations, granularity depends on size and complexity of the bank
    - assessment of risk arising from the changes in slope and shape of the yield curve
    - assessment of risk arising from e.g. hedging and embedded options (e.g., prepayments)
    - results of scenario and stress testing
    - sensitivity of eve to changes in interest rates

- sensitivity of earnings to changes in interest rates (NII)
- sensitivity of EVE and NII to changes in underlying assumptions (e.g., prepayment assumptions change)

Management/control of IRRBB:

- Is there consistency between IRRBB policy, strategy and risk appetite?
- Are there clear responsibilities and clear separation of tasks (between risk takers and management and control functions)?
- Is the IRRBB measurement, monitoring and reporting appropriate?
- Is the IRRBB risk control framework comprehensive and consistent with internal limits, compliance and the bank's risk appetite statement?

Concentration risk

This may be assessed within credit risk assessment framework. Special attention to be paid to

single-name concentration (special attention to be paid to group of connected clients)

- sectoral concentration;
- geographical concentration;
- product concentration;
- guarantee and collateral concentration

General to Pillar 2 risks

- Is there a clear articulation of the capital required for these risks?
- Is the methodology for such calculations clear and accurate?
- Do these produce an increased capital requirement to be held under Pillar 2?
- In case of IRRBB as a result of:
    - The effect of interest rate shock on EVE
    - Different shifts in the yield curve
    - Longer-term averages, not just the latest value, trend being included.
- In case of concentration risk through:
    - The HHI;
    - Capital add-on/increased risk weight for exposures larger than x percent of capital.

Peer Analysis

A key element of the ICAAP and SREP process is peer analysis. Supervisors should assess a bank against similar banks across a range of factors, including but not limited to:

- Risks identified
- Risk appetite statements
- Limit frameworks
- Business model analysis
- Internal governance
- Pillar 1 capital quantification, Pillar 1 capital ratio
- Pillar 2 capital proposed
- Liquidity and funding profile
- Stress tests proposed
- Outcome of stress tests