Saudi Central Bank (SAMA)

Output Floor Requirements

December 2022





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Output Floor Requirements

1. Introduction

- 1.1 The Basel Committee on Banking Supervision issued the Basel III: Finalizing post-crisis reforms in December 2017, which includes among others, the requirements for output floor, which aims to reduce excessive variability of Risk-Weighted Assets "RWA" and to enhance the comparability of risk-weighted capital ratios. Under these requirements, banks using internal models to derive RWAs will be subject to a floor requirement that is applied to RWAs. The output floor will ensure that banks' capital requirements do not fall below a certain percentage of capital requirements derived under standardized approaches.
- 1.2 The output floor requirements are issued by SAMA in exercise of the authority vested in SAMA under the Central Bank Law issued via Royal Decree No. M/36 dated 11/04/1442H, and the Banking Control Law issued 01/01/1386H.

2. Scope of Application

- 2.1 These requirements apply to all domestic banks both on a consolidated basis, which include all branches and subsidiaries, and on a standalone basis.
- 2.2 These requirements are not applicable to foreign banks' branches operating in the Kingdom of Saudi Arabia, and the branches shall comply with the regulatory capital requirements stipulated by their respective home regulators.

3. Implementation Timeline

3.1 These requirements will be effective on **1 January 2023**, subject to the transitional arrangements in paragraph 5.10.

4. SAMA Reporting Requirements

4.1 To the extent that output floor is applicable, SAMA expects banks to report their regulatory capital and RWA calculated based on the Output Floor Requirements based on SAMA's reporting template within 30 days after the end of each quarter starting from **1 January 2023**.

5. Minimum Risk-Based Capital Requirements

5.1 Minimum capital requirements and the components of capital are as per the

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definitions in SAMA's Enhanced Finalized Guidance Document Concerning the Implementation of Basel III circular No. 351000123076 issued in 2014, and subject to the transitional arrangements in Paragraph 5.10. Calculation of RWA shall be in accordance with the requirements as mentioned in paragraphs 5.2 and 5.3.

Risk-weighted Assets and Output Floor Requirements

- 5.2 There are different approaches to calculate RWA for market risk, credit risk including counterparty credit risk; some of these approaches require SAMA's prior approval. The nominated approaches of a bank refer to all the approaches that the bank is using or may use with SAMA's approval, to calculate regulatory capital requirements, other than those approaches used solely for the purpose of the output floor calculation outlined below.
- 5.3 The RWA that banks must use to determine compliance with the requirements referred in paragraph 5.2 above and capital buffers requirements in accordance with SAMA Circular No. 351000123076, dated 21 July 2014, entitled "Enhanced Finalized Guidance Document Concerning the Implementation of Basel III, Section A", SAMA Circular No. 371000034973, dated 4 January 2016, entitled "Applicability of Countercyclical Capital Buffer (CCyB) in Saudi Arabia", and SAMA Circular No. 351000138356, dated 7 September 2014, entitled "Domestic Systemically Important Banks (D-SIBs) Framework", is the higher of:
 - (1) The sum of the following three elements, calculated using the bank's nominated approaches:
 - (a) RWA for credit risk (as calculated in paragraphs 5.4);
 - (b) RWA for market risk (as calculated in paragraph 5.5);
 - (c) RWA for operational risk (as calculated in paragraph 5.6);
 - (2) 72.5% of the sum of the elements listed in point (1) above, calculated using only the standardized approaches listed in paragraph 5.7. This requirement is referred to as the output floor, and the RWA amount that is multiplied by 72.5% is referred to as the base of the output floor. This requirement is subject to transitional arrangements set out in 5.10.

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RWA for Credit Risk

- 5.4 RWA for credit risk and counterparty credit risk is calculated as the sum of the following:
 - (1) Credit RWA for banking book exposures, except the RWA listed in (2) to (6) below, calculated using:
 - (a) The standardized approach, set out in SAMA Minimum Capital Requirements for Credit Risk chapters 7 to 9; or
 - (b) The internal ratings-based (IRB) approach, set out in SAMA Minimum Capital Requirements for Credit Risk chapters 10 to 16.
 - (2) RWA for counterparty credit risk arising from banking book exposures and from trading book instruments (as specified in SAMA Minimum Capital Requirements for Counterparty Credit Risk (CCR) and Credit Valuation Adjustment (CVA)), except the exposures listed in (3) to (6) below.
 - (3) Credit RWA for equity investments in funds that are held in the banking book calculated using one or more of the approaches set out in chapter 24 of SAMA Minimum Capital Requirements for Credit Risk:
 - (a) The look-through approach.
 - (b) The mandate-based approach.
 - (c) The fall-back approach.
 - (4) RWA for securitization exposures held in the banking book, calculated using one or more of the approaches set out in chapters 18 to 23 of SAMA Minimum Capital Requirements for Credit Risk:
 - (a) Securitization Standardized Approach (SEC-SA).
 - (b) Securitization External Ratings-Based Approach (SEC-ERBA).
 - (c) Internal Assessment Approach (IAA).
 - (d) Securitization Internal Ratings-Based Approach (SEC-IRBA).
 - (e) A risk weight of 1250% in cases where the bank cannot use (a) to (d) above.

- (5) RWA for exposures to central counterparties in the banking book and trading book, calculated using the approach set out in chapter 8 of SAMA Minimum Capital Requirements for CCR and CVA.
- (6) RWA for the risk posed by unsettled transactions and failed trades, where these transactions are in the banking book or trading book and are within scope of the rules set out in chapter 25 of SAMA Minimum Capital Requirements for Credit Risk.

RWA for Market Risk

- 5.5 RWA for market risk is calculated as the sum of the following:
 - (1) RWA for market risk for instruments in the trading book and for foreign exchange risk and commodities risk for exposures in the banking book, calculated using one or more of the following approaches:
 - (a) The standardized approach for market risk, set out in chapters 6 to 9 of SAMA Minimum Capital Requirements for Market Risk;
 - (b) The internal models approach (IMA) for market risk, set out in chapters 10 to 13 of SAMA Minimum Capital Requirements for Market Risk; or
 - (c) The simplified standardized approach for market risk, set out in chapter 14 of SAMA Minimum Capital Requirements for Market Risk.
 - (2) RWA for credit valuation adjustment (CVA) risk in the banking and trading book, calculated using one of the following methods set out in chapter 11 of SAMA CCR and CVA Framework:
 - (a) The basic approach to CVA risk (BA-CVA).
 - (b) The standardized approach to CVA risk (SA-CVA).
 - (c) 100% of the bank's RWA for counterparty credit risk, for banks that have exposures below a materiality threshold (see paragraph 9 of chapter 11 in SAMA CCR and CVA Framework).

RWA for Operational Risk

5.6 RWA for operational risk is calculated using the standardized approach for operational risk, set out in paragraph 7.1 of SAMA Minimum Capital Requirements for Operational Risk.

Calculation of the Output Floor

- 5.7 The standardized approaches to be used to calculate the base of the output floor referenced in paragraph 5.3 (2) are as follows:
 - (1) The standardized approach for credit risk.
 - (2) The bank's nominated approach for equity investments in funds.
 - (3) For securitization exposures in the banking book and when determining the default risk charge component for securitization exposures in the trading book:
 - (a) if a bank does not use SEC-IRBA or SEC-IAA, its nominated approach; or
 - (b) if a bank does use SEC-IRBA or SEC-IAA, then the SEC-ERBA, SEC-SA or a risk-weight of 1250% as determined per the hierarchy of approaches.
 - (4) For counterparty credit risk exposure measurement:
 - (a) if a bank does not use IMM or the VaR models approach, then its nominated approach; or
 - (b) if a bank does use IMM or the VaR models approach, then the SA-CCR or the comprehensive approach.
 - (5) For market risk:
 - (a) If a bank uses the IMA for market risk, then the standardized approach for market risk; or
 - (b) If a bank does not use the IMA for market risk, then its nominated approach.
 - (6) The bank's nominated approach for CVA risk.
 - (7) The standardized approach for operational risk.

- 5.8 As per paragraph 5.7 above, the following approaches are not permitted to be used, directly or by cross reference,¹ in the calculation of the base of the output floor:
 - (1) IRB approach to credit risk;
 - (2) SEC-IRBA;
 - (3) IMA for market risk;
 - (4) VaR models approach to counterparty credit risk; and
 - (5) IMM for counterparty credit risk.
- 5.9 SAMA may review the level of the incremental increase for all banks. In addition, SAMA may also apply a cap on the incremental increase during the phase-in period on case–by-case basis. In this regard, banks must submit an application to SAMA with supporting justification for applying the cap on the incremental increase.
- 5.10 The output floor will be implemented as of 1 January 2023, the required calibration percentage will gradually increase as following:

Phase-in arrangements for output floor		
Date	Calibration	
1 January 2023	50%	
1 January 2024	55%	
1 January 2025	60%	
1 January 2026	65%	
1 January 2027	70%	
1 January 2028	72.5%	

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¹ As examples:

⁻ Although the requirements for calculating exposures to central counterparties (chapter 8 of SAMA CCR and CVA framework) cross-refer to IMM as a possible method for calculating exposure values, IMM may not be used when these rules are applied for calculating the base of the output floor.

⁻ For the look-through and mandate-based approaches for equity investments in funds, banks must use the standardized approach for credit risk when calculating the RWA of the underlying assets of the funds for the base of the output floor.

⁻ Although there is a cross reference in the standardized approach for market risk to the securitization chapter for the credit risk standard (chapter 18 to 23 of SAMA Minimum Capital Requirements for Credit Risk), SEC-IRBA may not be used when the standardized approach for market risk is calculated for the base of the output floor.