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DEVELOPING AN INTERNAL CONTROL TESTING MODEL FOR BANK SUPERVISION BY A KNOWN CENTRAL BANK IN AFRICA: A REFERENTIAL PRAGMATIC APPROACH

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This paper develops an Internal Control Testing Model (ICTM) to strengthen supervision of commercial banks by a known Central Bank in Africa. Grounded in a referential pragmatic approach, the ICTM integrates established internal control frameworks (e.g., COSO's Internal Control – Integrated Framework) with Enterprise Risk Management (ERM) concepts and the Theory of Constraints (TOC) to address systemic risks and practical constraints in the studied economy's banking sector. The proposed model aims to (i) enhance the Central Bank's capacity to identify and diagnose emerging risks, (ii) improve the relevance and completeness of supervisory data and reporting, and (iii) support risk-based supervisory interventions aligned with international standards. A mixed-methods research design is outlined: quantitative assessments of bank control environments and performance indicators, combined with qualitative interviews of the Central Bank supervisors and bank risk managers. Expected contributions include a practical ICTM tool that the Central Bank can institutionalize, methodological guidelines for its implementation, and insights into how international control frameworks can be adapted in a developing economy context.

KEYWORDS: ***Bank supervision, internal controls, Central Bank, COSO, Enterprise Risk Management (ERM), risk-based supervision, developing economies, pragmatic framework, Theory of Constraints***

1. INTRODUCTION

Weaknesses in a country's banking system can threaten both domestic and global financial stability. This was underscored by the final communiqué of the Lyon G-7 Summit (1996), which called for concerted action to strengthen financial systems. Since then, bodies such as the Basel Committee on Banking Supervision, the Bank for International Settlements (BIS), the International Monetary Fund (IMF), and the World Bank have promoted enhanced regulatory practices to mitigate banking risks via central bank supervision of commercial banks. Consistent with this global agenda, this research addresses the supervision of commercial banks by the Known Central Bank – the country's central bank and primary banking regulator.

In the studied economy and similar developing economies, financial stability faces unique challenges. Economic structures often lack diversification, making them vulnerable to exogenous shocks in key sectors. For example, misaligned industrial policies in the 1970s and 1980s led many developing countries to favour enterprises that later generated nonperforming loans, undermining banks' health (Long & Evenhouse, 1989; World Bank, 1989). Government interventions in lending (e.g., directed credit, administered interest rates, high reserve requirements) also frequently distort banks' incentive structures, leading to higher risks and complicating supervisory oversight (Ehrenhard, Manda, & Richardson, 2017; Mavhiki, Nyadzayo, & Chikozho, 2019).

The central Bank under study supervisory effectiveness is further challenged by resource constraints, data limitations, and gaps between formal regulations and actual risk management practices within banks. In response to global financial crises (e.g., 2008), there has been a shift from siloed, rule-based oversight to holistic frameworks like Enterprise Risk Management (ERM). ERM has brought focus to integrated governance, risk, and control (GRC) frameworks (COSO, 2013; COSO, 2017). However, the literature indicates a need for research on how such frameworks can be operationalized in supervisory testing, especially in emerging markets (Fernando, Ashby, Carter, & Grafton, 2023; El Hajj & Hammoud, 2023). Recent scandals (Enron, WorldCom, Barings, Intermarket, Daiwa, Parmalat, Tyco, Investrust Bank) further highlight the urgency of robust internal controls in banking operations (El Hajj & Hammoud, 2023).

The aim of this study is to develop a comprehensive Internal Control Testing Model (ICTM) for Central Bank's supervision of commercial banks. The ICTM is conceptualized through a referential pragmatic approach, integrating:
COSO's Internal Control – Integrated Framework (2013, 2017) to define control components (Control Environment, Risk Assessment, Control Activities, Information & Communication, Monitoring);
Enterprise Risk Management (ERM) principles to align control effectiveness with risk outcomes;

Theory of Constraints (TOC) to identify and manage bottlenecks in supervisory processes; and
Pragmatic adaptation to studied economy's regulatory environment and the Central Bank's capacities.
This approach ensures the model is theoretically grounded yet adaptable to local conditions (Lewis et al., 2019).
The following research questions guide the study:
1. What components and metrics constitute an effective Internal Control Testing Model (ICTM) for commercial banks in the economy in question?
2. How can the ICTM be aligned with international standards (COSO, Basel, ERM frameworks) while addressing this economy's specific regulatory context?
3. Which data sources, indicators, and testing procedures best predict emerging bank risks and supervisory intervention needs?
4. How can the ICTM be integrated into the Central Bank's governance, risk, and compliance (GRC) structures to support decision-making and enhance transparency?
5. What resources (e.g., training, technology, policy changes) are required for Central Bank to implement the ICTM effectively?
To answer these questions, the research adopts a mixed-methods design. The quantitative component will involve structured assessments of internal control environments at a sample of the economy's banks and analysis of supervisory data. The qualitative component will use interviews with Central Bank supervision staff and senior risk managers at banks, alongside policy document analysis, to contextualize and refine the model. Together, these methods will enable the validation and calibration of the ICTM.

The rest of this article is organized as follows. Section 2 reviews relevant literature on bank supervision, internal controls, and ERM, highlighting challenges in developing country contexts. Section 3 presents the research methodology, including sampling, data collection instruments, and analysis strategies. Section 4 outlines the proposed ICTM, including its conceptual framework and measurement instrument. Section 5 discusses findings from a conceptual perspective (in lieu of empirical results) and reflects on implications for Central Bank and broader policy. Finally, Section 6 concludes with contributions, limitations, and directions for future research.

2. LITERATURE REVIEW

2.1 Evolution of Bank Supervision

Early banking supervision was primarily compliance-focused, ensuring banks adhered to capital and reserve requirements. Over time, central banks and international bodies recognized that systemic stability requires ongoing risk assessment and governance oversight. The Basel I (1988) and Basel II/III (2004–2010) Accords introduced risk-weighted capital guidelines and encouraged comprehensive risk-based supervision (Basel Committee on Banking Supervision [BCBS], 2011). Concurrently, organizations like the IMF and World Bank stressed institutional reforms in developing countries (IMF, 1999). Zambia's regulatory framework has evolved in this international context, with Central Bank adopting Basel-inspired regulation and closer collaboration with global agencies.

2.2 Internal Control Frameworks and ERM

COSO's Internal Control – Integrated Framework (first released 1992; updated 2013, 2017) remains the most adopted standard for evaluating control systems. COSO (2013) defines five interrelated components of effective internal control: Control Environment, Risk Assessment, Control Activities, Information & Communication, and Monitoring (Figure 1). The updated 2017-2018 COSO guidance emphasizes technology, organizational culture, and global compliance demands. In parallel, ERM frameworks (e.g., COSO ERM, ISO 31000) extend internal control to an enterprise-wide risk perspective, breaking down silos among credit, market, operational, and compliance risks (COSO, 2013; ISO 31000:2018). Scholars note that strong internal controls are foundational to effective ERM (Arena, Arnaboldi, & Azzone, 2010).

Figure 1.
Conceptual alignment of COSO internal control components with supervisory objectives.
(Note: Figure is a placeholder illustrating how COSO's five components underpin supervision targets such as risk identification, transparency, and depositor protection.)

Despite these frameworks, global audits and crises (e.g., Enron, Barings) revealed failures in governance and oversight, prompting calls for integrated GRC strategies (COSO, 2017). ERM adoption has grown, but research on its effectiveness in banks—especially in emerging markets—is still limited (Fernando et al., 2023; El Hajj & Hammoud, 2023).

2.3 Challenges in Developing Economies' Supervision

Developing-country supervisory agencies often operate under resource constraints and political pressures. For example, directed lending policies (to agriculture, SMEs) and administered rates can yield high nonperforming loans, complicating risk monitoring. Sectoral concentration means bank idiosyncratic problems can quickly become systemic. Studies find that inadequate data reporting, low supervisory capacity, and outdated accounting practices hinder early warning in many emerging markets (Kasiak, 2000; Khan & Schiller, 2017). In the economy under study specifically, limited experience among supervisory staff and governance issues in banks have been noted (Mwansa, 2021).

These challenges suggest that the Central Bank requires tools that go beyond standard checklists. It needs an ICTM that is sensitive to both quantitative indicators (e.g., capital adequacy, asset quality) and qualitative signals (e.g., corporate governance culture, governance bottlenecks). The emerging literature on banking supervision underscores the importance of comprehensive dashboards and scenario analysis (BIS, 2018; Baele, 2005) – elements we incorporate into ICTM.

2.4 Gaps in Existing Supervisory Models

Many existing supervisory frameworks focus on compliance metrics or capital adequacy. What is often missing is a structured approach to testing the effectiveness of banks' internal controls under stress. Moreover, international models like the Basel Consolidated Supervision protocols (quantitative and qualitative) are designed for large, diversified banking groups and may not easily translate to the studied economy's market (BCBS, 2019). Preliminary reviews of the economy's

bank supervision suggest reliance on off-site reports and periodic on-site exams, with less emphasis on frequent control testing or real-time risk metrics. Anecdotal evidence indicates that Central Bank supervisors would benefit from a more systematic internal control evaluation tool.

3. METHODOLOGY

3.1 Research Design

The study uses an explanatory sequential mixed-methods design. In the first phase, quantitative data will be collected and analysed to identify patterns in control environments and risk outcomes. In the second phase, qualitative data will supplement and explain these patterns, informing model refinement (Creswell & Plano Clark, 2018). This design is suitable because it allows the strengths of one method to validate and deepen the findings of the other (Tashakkori & Teddlie, 2003).

3.2 Sample and Setting

Study Area

The setting is the Capital of the economy under study, where Central Bank headquarters and most commercial banks are based.

Population

All commercial banks licensed by Central Bank as of [2024]. (Appendix 1 lists current banks.) Central Bank supervisory staff and senior risk/compliance officers at these banks form the pool for interviews.

Quantitative Sample

A sample was not necessary assess internal control components (COSO elements) as the study employed a Census due to the limited number of personnel in the population, key performance indicators, and instances of control lapses in the past three years. Supervisory ratings or enforcement actions (if data can be accessed) will be linked to survey responses.

Qualitative Sample

Purposive sampling will identify 5–10 Central Bank supervisors (with varying seniority) and 10–15 bank risk officers. This range should achieve saturation in interviews about supervisory practices and perceptions of internal controls (Guest, Bunce, & Johnson, 2006).

3.3 Data Collection Instruments and Procedures

Quantitative Instruments

A structured ICTM survey will be developed (Appendix 3). Key sections include:

Control Environment

Questions on governance structures, ethical tone, management commitment to control (e.g., presence of audit committees, frequency of board reviews).

Risk Assessment

Items on risk identification processes, stress testing, and scenario analysis use.

Control Activities

Checklist of automated and manual controls (e.g., authorization procedures, reconciliation practices), including changes after stress events.

Information & Communication

Quality and timeliness of financial reporting, internal reporting channels, and communication of risk policies.

Monitoring

Frequency and scope of internal audit, follow-up on past findings, and corrective action processes.

Process Bottlenecks (TOC Lens)

Questions identifying delays or constraints in supervisory workflows (e.g., data aggregation delays, skill shortages).

Responses will mostly use Likert scales (e.g., 1=Strongly Disagree to 5=Strongly Agree) and nominal data on control practices. The instrument will be pilot-tested with one bank and a Central Bank unit to refine clarity.

Qualitative Instruments

Semi-structured interview guides (Appendix 4) will cover:

Supervisory practice: How do supervisors currently assess bank risk and controls?

Perceived gaps: What are common failures in banks' internal controls?

ICTM feedback: Reactions to preliminary ICTM components or test items (during the second phase).

Implementation issues: Resources, training, or organizational changes needed to adopt a model.

Document analysis will include Central Bank policy guidelines, supervision manuals, and recent bank examination reports (as available), to triangulate findings.

3.4 Data Analysis

Quantitative Analysis

Data will be analysed using SPSS or R. We will perform:

Descriptive statistics to profile control components across banks.

Reliability tests (Cronbach's alpha) for survey scales.

Exploratory Factor Analysis to confirm constructs (e.g., that items group into COSO components).

Regression or Structural Equation Modelling to test relationships (e.g., whether stronger control environments predict higher supervisory ratings or lower incidence of enforcement).

Comparative analysis to see if different bank types (e.g., large vs. small, local vs. foreign owned) score differently on the ICTM scales.

Qualitative Analysis

Interviews will be audio-recorded (with consent) and transcribed. Analysis will follow Interpretive Phenomenological Analysis (IPA) and thematic coding (Smith & Osborn, 2007). Steps include:

1. Familiarization - Reading transcripts to note initial impressions.
2. Coding - Identifying meaningful units related to control testing, supervision challenges, and ICTM feasibility.
3. Theme development - Clustering codes into themes (e.g., "data quality issues," "governance culture," "technology constraints," "training needs").
4. Interpretation - Linking themes to the quantitative findings, refining the model components accordingly.

Integration
Results from both phases will be integrated by comparing quantitative patterns with qualitative insights. For example, if surveys indicate weak monitoring in smaller banks, interviews might reveal reasons (e.g., lack of auditors). This integrated analysis will inform a final ICTM, scored by thresholds indicating satisfactory versus deficient control testing.

3.5 Ethical Considerations
This research will adhere to ethical standards. Participation (survey and interviews) will be voluntary with informed consent. Bank identifiers will be anonymized. Sensitive supervisory information will be handled per Central Bank and University of Zambia protocols. Approval will be obtained from the University's Ethics Committee and Central Bank oversight, as needed. Any potential conflicts of interest (e.g., researcher affiliations) will be disclosed; no external funding has influenced the research design.

4. PROPOSED INTERNAL CONTROL TESTING MODEL (ICTM)
4.1 Model Structure
Drawing from the literature and research findings, the ICTM will consist of:
Dimension 1 – Control Environment
Measures of governance, ethical climate, and management's risk appetite.
Dimension 2 – Risk Assessment
Quality of risk identification processes, including how macroeconomic and sectoral risks are factored.
Dimension 3 – Control Activities
Presence and effectiveness of key controls (e.g., segregation of duties, automated controls, limit checks).
Dimension 4 – Information & Communication
Timeliness and accuracy of internal management information, and channels for raising concerns (e.g., whistleblower systems).
Dimension 5 – Monitoring and Corrective Action
Functioning of internal audit, compliance functions, and follow-up on audit findings.
These correspond to COSO's five components. Additionally, a Dimension 6 – Supervisory Constraints (TOC) will capture bottlenecks in data collection and analysis (e.g., reliance on paper reporting, staff turnover in supervision departments). This helps the Central Bank identify internal constraints to effective oversight.
Each dimension will have several indicators drawn from survey and interview data. For example, "Control Activities" might include indicators like "Reconciliation frequency" or "Approval matrix comprehensiveness." Scoring guidelines (e.g., 1–5 scales) will be developed such that the Central Bank can rate each bank on these dimensions annually.

4.2 Instrument Details
An excerpt of the ICTM questionnaire (Appendix 3) might look like:

ICTM Dimension	Indicator	Scoring (1–5) Description
Control Environment	Formal organization charts and job scopes	1=No documented clarity;5=Fully documented
Risk Assessment	Use of stress testing (e.g., scenario analysis)	1 = Never; 5 = Regular, multidimensional
Control Activities	Segregation of duties for key operations	1 = Poor; 5 = Complete abs. segregation
Info & Communication	Timeliness of financial reporting to board	1 = >90 days delay; 5 = <30 days
Monitoring	Internal audit coverage (% of processes)	1 = <20%; 5 = >80%
Remediation	Remediation of audit findings (avg time)	1 = >1 year; 5 = <3 months
TOC – Constraints	Data collection lead time (days)	1 = Very high ratio; 5 = Adequate staff

Table 1. Sample ICTM indicators and scoring rubric (simplified).

Central Bank supervisors would use such an instrument to score each bank. The scores can then be aggregated (e.g., weighted sum or composite indices) to provide an overall control quality rating. Banks scoring below a threshold would trigger supervisory review or mandated improvements.

4.3 Data Integration and Reporting
The model envisions integration into the Central Bank's supervisory data systems. For instance, banks could submit ICTM data annually (similar to financial returns), and supervisors would analyse trends over time. Cross-bank benchmarks could be established. Supervisors would also incorporate ICTM findings into on-site exam scopes (e.g., if a bank rates low on Control Activities, the examination would probe specific controls).

ICTM results would feed into the Central Bank's risk dashboards. For example, a composite dashboard could display each bank's scores by dimension alongside traditional CAMEL ratings (Capital, Assets, Management, Earnings, Liquidity). Figure 2 illustrates how ICTM fits into the overall supervision cycle.

Figure 2.
Proposed integration of the ICTM into the Central Bank's supervision process.
(Figure placeholder: A flowchart showing the inputs (bank data, ICTM scores), processing (Central Bank analysis, report generation), and outputs (supervisory actions, feedback to banks).)
Geared towards practicality, the ICTM complements existing Basel-style assessments. While Basel Pillar 2 principles encourage supervisors to evaluate banks' internal risk processes, the ICTM provides a concrete tool for doing so systematically. By tying each dimension to supervisory checkpoints, Central Bank can make subjective judgments more objective and data-driven.

5. DISCUSSION

Although empirical results are pending (as this is a proposal framework), the proposed ICTM offers several potential benefits and avenues for research:

Formalizing Best Practices

By codifying control testing into a standardized instrument, the Central Bank can reduce subjectivity and ensure consistency across different exam teams and time periods.

Early Warning

The TOC-based indicators, in particular, highlight how supervisor delays or bank reporting lags can themselves become early warning signals. Monitoring these constraints can prompt Central Bank to adjust resources or processes.

Capacity Building

Filling out the ICTM instrument requires banks to self-assess their controls and possibly strengthen their internal audit. This aligns banks' incentives with regulatory goals. Simultaneously, Central Bank can tailor training for supervisors on new risk indicators.

Research Implications

Future work could involve piloting the ICTM with actual data and evaluating its predictive validity (e.g., do low ICTM scores predict subsequent liquidity or credit problems?). Comparative studies could test the model in other African central banks to assess generalizability.

However, several challenges should be anticipated. Data accuracy is critical: banks might initially under-report control gaps. Confidence-building measures and triangulation (e.g., matching self-reports with exam findings) will be needed. There may also be resistance from banks accustomed to compliance reporting but not control self-assessments. A phased rollout, starting with workshops to explain the benefits, could help adoption.

Finally, the ICTM should not be static. As noted by COSO (2017), governance and risk landscapes evolve (e.g., fintech risks, cyber threats). The model must be reviewed regularly (CXO governance) to incorporate new risks or control practices. Building feedback loops where Central Bank adjusts ICTM indicators based on observed incidents will keep the model relevant.

6. CONCLUSION

This paper has outlined a proposal for an Internal Control Testing Model (ICTM) to enhance a Central Bank's supervision of commercial banks. The ICTM bridges international best practices (COSO, Basel, ERM) with a pragmatic understanding of the studied economy's supervisory context. Its structured approach to evaluating control environments and processes promises to improve risk identification, foster proactive governance, and ultimately contribute to financial stability and depositor protection.

Key Contributions

1. A conceptual framework aligning COSO components with regulatory objectives and TOC insights.
2. A draft instrument structure for measuring internal control dimensions.
3. A methodological roadmap (mixed-methods design) for implementing and refining the model.

Once validated with actual data, the ICTM could become an official Central Bank supervisory tool. Moreover, the findings should be informative for other developing-country regulators seeking data-driven, cost-effective ways to upgrade their oversight in line with global standards.

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Conflict of Interest Statement

The author declares no conflicts of interest related to this research. This study is conducted independently as part of a PhD requirement at the University of Zambia; no external funding or institutional ties have influenced the content.

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APPENDICES

Appendix 1: List of Commercial Banks in Zambia (as of 2024).

1. AB Bank Zambia Ltd: Part of Access Holding Group.
2. Absa Bank Zambia Ltd: Part of Absa Group.
3. Access Bank Zambia Ltd: Part of Access Bank Group.
4. Bank of China (Zambia) Ltd: Part of Bank of China Group.
5. Citibank Zambia Ltd: Part of Citigroup.
6. Ecobank Zambia Ltd: Part of Ecobank Group.
7. First Alliance Bank Zambia Ltd.
8. First Capital Bank Zambia Ltd: Part of First Capital Bank Group.
9. First National Bank Zambia Ltd: Part of FirstRand Group.
10. Indo-Zambia Bank Ltd.
11. Stanbic Bank Zambia Ltd: Part of Standard Bank Group.
12. Standard Chartered Bank Plc: Part of Standard Chartered Group.
13. United Bank for Africa Zambia Ltd: Part of UBA Group.
14. Zambia Industrial Commercial Bank Plc.
15. Zambia National Commercial Bank Plc (Zanaco).

Appendix 2: Sample ICTM Questionnaire (Draft).



Questionnaire-1%20-%20Internal%20Contr

Appendix 3: Semi-Structured Interview Guide (Supervisor).

Part A. Interview Preparations

Interviewee profile (examples): Central Bank supervisory staff, internal control/quality assurance personnel, bank examiners, risk/compliance officers, policy/regulatory liaison leads, Barclays/Barclays-like supervisors (Barbados framework liaison if applicable), external auditors with Central Bank experience.

Estimated duration: 60–90 minutes

Format: In-depth, semi-structured; allow for clarifying questions and prompts

Recording: With consent, audio-record; take field notes on non-verbal cues and context

Data use: Align questions to protect confidentiality and utility for the study

Part B. Opening and Context (Warm-up)

1) Please describe your role within the Central Bank and your involvement with bank supervision and internal control testing.

2) How would you characterize the current internal control testing framework used by the Central Bank in supervising commercial banks?

3) In your view, what are the major aims of the Central Bank's prudential regulation and how does internal control testing support those aims?

Part C. Main Interview Domains and Questions

Domain 1

Discrepancies between the Central Bank's framework and external prototypes (Linked to Sub Research Question 1)

Core question: What discrepancies does the Central Bank exhibit from its internal control testing framework when compared with the generated prototype from extant literature?

Probes

Which components of the Central Bank's framework align with the Barbados Central Bank supervision framework, and which do not?

Can you provide examples where the Central Bank's framework diverges from the prototype? (e.g., processes, indicators, timelines)

What factors do you think drive these discrepancies (policy, resource constraints, organizational culture, data availability)?

How do you currently validate or adjust the Central Bank's framework in response to new literature or international standards?

How is feedback from banks and examiners incorporated into refining the framework?

Domain 2
Application of internal control testing under stress (Linked to Sub Research Question 2)
Core question: To what extent does the Central Bank employ its internal control testing framework to diagnose commercial banks that are under stress?
Probes
How is "stress" defined and detected within Central Bank's supervisory system?
What internal control indicators are most predictive of distress, according to current practice?
Describe a recent instance where the framework identified a bank under stress. What actions followed?
What data sources are used (financial ratios, governance indicators, market signals, macro conditions), and how reliable are they?
What challenges limit effective diagnosis (data gaps, lag times, inter-agency coordination)?
How could the framework be enhanced to improve early detection and response?

Domain 3
Mitigating consumer/investor interests and systemic safety (Linked to Sub Research Question 3)
Core question: How does the Central Bank apply its internal control testing framework to mitigate consumer, investor interests and integrity of the financial system safety and soundness of a commercial bank's financial stability?
Probes
Which aspects of the framework are designed to protect consumers and investors?
How are findings translated into supervisory actions (e.g., corrective plans, enforcement, remedial measures)?
How is the effectiveness of these actions assessed?
Can you discuss any trade-offs between prompt enforcement and preserving financial stability?
How does the Central Bank communicate risks and actions to banks and to the public?

Domain 4
Application under stress conditions (Linked to Sub Research Question 4)
Core question: How does the Central Bank apply its internal control testing framework to mitigate consumer, investor interests and systemic safety when a bank is under stress?
Probes
What additional or altered controls are activated when a bank is stressed?
How is communication with stakeholders managed during stress scenarios?
What lessons have been learned from past crises (e.g., Intermarket, Investrust, Merridian BIAO cases) in applying the framework?
What indicators signal a need for escalated intervention, and who approves these escalations?
How does the Central Bank balance rapid action with due process and fairness?

Domain 5
Theoretical framing and practical integration (Linked to TOC and pragmatism)
Core question: How do Goldratt's Theory of Constraints (TOC) concepts translate into the Central Bank supervision practice? Are there constraints that most strongly limit effective supervision?
Probes
In your view, what are the five most significant constraints (policy, mental models, people, attitudes, finances, etc.) affecting supervision outcomes?
How are these constraints identified, measured, and mitigated in daily operations?
Do you see alignment (or misalignment) between the theoretical model and practical workflows?
What changes would help overcome key constraints without compromising safety and soundness?

Domain 6
Data, validity, and governance
Core question: What data governance, quality, and integrity considerations are critical for accurate internal control testing?
Probes
How is data collected, cleaned, and validated for testing?
What are the data access and privacy considerations?
How is bias or subjectivity in assessment minimized?
What documentation and traceability exist for supervisory decisions based on the framework?

Domain 8
Implementation and improvement
Core question: What actionable recommendations would you propose to enhance the Central Bank's internal control testing framework?
Probes
Specific changes to processes, indicators, or governance structures
Training or capacity-building needs for staff
Ways to incorporate international standards while reflecting local context

Suggested pilot steps or timelines for implementing improvements

Part D. Closing Questions
1) If you had a single recommendation to the Central Bank leadership to improve bank supervision via the internal control testing framework, what would it be?
2) Are there any ethical or regulatory concerns you want to highlight about the current framework?
3) Is there anyone else you recommend we speak with to gain additional perspectives?

Part E. Probes and Prompts (for eliciting richer data)
"Tell me more about that." “Can you give a concrete example?”
Use hypothetical scenarios: “If a bank shows X indicator, what would your action be?”
Use timeline prompts: “What happened first, then what followed?”
Compare and contrast: “How does this differ from your past experience in [another jurisdiction]?”
Ask for document references: “Are there internal guidelines or checklists you rely on?”

Part F. Ethical and Safety Considerations
Ensure consent and confidentiality
Clarify use of anonymized quotes
Allow interviewee to skip questions they are not comfortable answering

Part G. Interview Guide Logistics
-Date, time, location
- Interviewee role and unit
- Consent confirmation
- Recording status
- Key takeaways and follow-up actions