

Designing a Model for Evaluating Comprehensive Banking Policies in Iran's Banking System with an Emphasis on Addressing Imbalances and Financial Sustainability: Findings from a Qualitative Study Based on Thematic Network Analysis

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ABSTRACT

The present study aimed to design a model for evaluating comprehensive banking policies in Iran's banking system, with an emphasis on addressing imbalances and enhancing financial sustainability. The study adopted a qualitative approach and employed Attride-Stirling's thematic network analysis method. Data were collected through 18 semi-structured interviews with experts in banking policymaking, senior and middle managers of public and private banks, and risk management specialists. Participants were selected using purposive sampling with a maximum-variation approach. Data analysis was conducted at three levels: Basic Themes, Organizing Themes, and Global Themes. Analysis of 974 meaning units extracted from the interviews resulted in the identification of 89 Basic Themes, 17 Organizing Themes, and six Global Themes, namely "Addressing Bank Imbalances and Financial Sustainability," "Development and Effectiveness of Comprehensive Banking," "Integrated Risk Management and Banking Resilience," "Governance and Institutional Legitimacy," "Technological Infrastructure and Data-Driven Intelligence," and "Human Capital Empowerment and Organizational Learning." The findings indicated that imbalance is a multidimensional and systemic phenomenon rooted in structural, financial, governance-related, and behavioral factors, and that effective evaluation of comprehensive banking policies requires a multidimensional approach. The proposed model provides a comprehensive and multilevel framework for evaluating comprehensive banking policies and can serve as a basis for identifying gaps between policy objectives and outcomes, improving implementation processes, managing systemic risks, and strengthening financial sustainability in Iran's banking system.

Keywords: policy evaluation, comprehensive banking, imbalance resolution, financial sustainability, thematic network analysis, Attride-Stirling

Introduction

Banking systems occupy a central position in the architecture of modern economies because they simultaneously perform the functions of financial intermediation, credit allocation, liquidity transformation, payment facilitation, risk absorption, and transmission of monetary and macroprudential policies. The quality of banking policy therefore has



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direct implications not only for the stability of individual financial institutions but also for investment, production, employment, business continuity, and the resilience of the wider economy. In recent years, the operating environment of banks has become substantially more complex as financial institutions have been required to respond concurrently to heightened regulatory expectations, digital transformation, technological disruption, changing customer preferences, new forms of competition, systemic liquidity risks, cyber threats, and increasing pressure to maintain adequate capital and sustainable profitability. The movement toward more integrated and technologically enabled banking models has consequently accelerated, creating a policy environment in which traditional approaches based on isolated financial indicators are no longer sufficient for assessing institutional performance or policy effectiveness. The transition toward Bank 4.0, for example, has highlighted the growing importance of digitally integrated services, data-driven decision-making, customer-centered ecosystems, automation, and organizational adaptability, all of which reshape the relationship between technological capability, banking strategy, and institutional performance (1). At the same time, digital transformation in banking has expanded the scope of financial services while also changing operational models, distribution channels, competitive structures, and the nature of financial risk (2). Emerging banking technologies such as metaverse-based service environments further demonstrate that the evolution of banking cannot be understood simply as technological modernization; rather, it involves changes in customer acceptance, service architecture, institutional readiness, and strategic positioning as banking moves from Industry 4.0 toward Industry 5.0 (3). These developments have increased the importance of comprehensive banking as an integrated institutional model through which a bank coordinates traditional lending, investment services, risk management, digital platforms, customer relationship management, and financial-group activities within a coherent strategic and policy framework.

Comprehensive banking, however, should not be evaluated merely in terms of service diversification or the expansion of banking products. Its policy significance lies in whether the integration of activities contributes to financial balance, efficient resource allocation, sustainable income generation, institutional resilience, and the reduction of structural imbalances. Banking imbalance is a multidimensional phenomenon that may emerge when the structure of assets is not compatible with liabilities, the maturity profile of deposits does not correspond with the maturity structure of lending, the quality of the credit portfolio deteriorates, non-performing assets accumulate, capital becomes inadequate relative to risk exposure, or revenue models become excessively dependent on unstable or interest-sensitive sources. Under such conditions, short-term profitability may coexist with deeper vulnerabilities, and apparent growth in balance-sheet size may conceal declining financial sustainability. Evidence regarding capital buffers and bank ownership indicates that capitalization policies can influence both profitability and the cost of financial intermediation, demonstrating that the relationship between capital strength, efficiency, and performance is neither linear nor institutionally neutral (4). Similarly, systemic banking risk is strongly affected by the broader macro-financial environment. Sudden reversals in capital flows can transmit instability to banks, while macroprudential policies can help contain the amplification of systemic vulnerabilities (5). Macroprudential policy is therefore increasingly understood as an important complement to micro-level bank management because it seeks to preserve the functioning of the banking system under aggregate shocks, protect the credit channel, and prevent institution-specific fragilities from evolving into system-wide instability (6). In addition, the interaction between asset-price dynamics, banking behavior, and monetary policy demonstrates that banking stability is closely connected with financial cycles and the possibility of bubbles, thereby reinforcing the need for evaluation frameworks that incorporate both institution-level and system-level conditions (7).

In the Iranian banking system, the issue of imbalance has particular strategic importance because the performance of banks is influenced by a combination of financial, regulatory, structural, technological, and governance-related conditions. Addressing these imbalances requires more than periodic supervisory intervention; it requires an evaluative framework capable of identifying whether banking policies are generating the intended outcomes across capital structure, liquidity, asset quality, profitability, governance, and risk. Policy evaluation is therefore essential because it creates a systematic mechanism for comparing policy objectives with actual implementation processes and observable outcomes. In a banking context, such evaluation should determine not only whether a policy has formally been implemented, but also whether it has improved the financial condition of banks, enhanced resilience, reduced excessive risk-taking, improved the productive allocation of resources, and strengthened institutional legitimacy. Research on banking stability policies has shown that stability-oriented interventions may influence efficiency differently across banking systems, indicating that the design and institutional context of policy are important for understanding policy outcomes (8). Similarly, policy-oriented analyses of digital banking have emphasized the need for evaluative models capable of linking digital implementation with broader smart-economy objectives rather than treating digitalization as an isolated technological project (9). From a broader policy-analysis perspective, the gap between policy intention and implementation practice remains a recurring concern, and evaluation must therefore examine not only formal policy content but also implementation mechanisms, institutional incentives, resource constraints, and the actual translation of policy into organizational outcomes (10). These considerations are directly relevant to comprehensive banking because a policy may promote integration, innovation, or diversification at the formal level while failing to resolve underlying financial imbalance if implementation remains fragmented or disconnected from risk, governance, capital, and liquidity considerations.

An effective policy evaluation framework for comprehensive banking must also recognize that financial sustainability is inseparable from the quality of governance and institutional accountability. Corporate governance determines how authority is distributed, how risk is monitored, how managers are supervised, how conflicts of interest are controlled, and how organizational decisions are aligned with the interests of depositors, shareholders, regulators, and other stakeholders. Evidence from the interaction between institutional governance conditions and market reactions to bank financing decisions indicates that governance quality affects external assessments of organizational behavior and may influence financial outcomes through mechanisms such as shareholder conflict, disclosure, and managerial accountability (11). In banking, these mechanisms are particularly important because information asymmetry is substantial, public trust is a core intangible asset, and the failure of one institution may create spillover effects across the financial system. Legal and institutional protections for creditors also demonstrate the importance of balanced governance arrangements. Comparative analyses of bankruptcy law show that the effectiveness of creditor-protection mechanisms depends on the design and implementation of legal procedures and on the capacity of institutions to balance competing stakeholder interests (12). Similarly, legislative approaches to protecting debtors and creditors reflect the importance of contractual justice and institutional balance when financial distress occurs (13). Although bankruptcy law and banking policy operate in different regulatory domains, both illustrate a common principle: sustainable financial systems require clear accountability, credible enforcement, stakeholder protection, and institutional mechanisms capable of responding effectively to financial deterioration. These elements should therefore be incorporated into the evaluation of comprehensive banking policies rather than being treated as peripheral legal or administrative concerns.

The effectiveness of comprehensive banking is also affected by how financial institutions allocate credit and align financing with productive economic activity. In banking systems where credit is used as an instrument of developmental or sectoral policy, the quality of policy design depends on whether directed financing achieves economic objectives without generating excessive concentration risk, non-performing loans, or distortions in resource allocation. Narrative investigations of credit-guidance policies in Islamic banking show that the implementation of policies directed toward small and medium-sized enterprises involves complex relationships among institutional priorities, financing constraints, and practical banking behavior (14). This issue is highly relevant to comprehensive banking because an integrated banking model should not be judged simply by the volume of financing it provides but by the quality, productivity, and sustainability of its resource allocation. At the same time, network-based approaches to policymaking in universal banking suggest that policy formation and implementation increasingly depend on interactions among regulators, banks, financial subsidiaries, technological actors, customers, and other stakeholders rather than on hierarchical decision-making alone (15). This implies that policy evaluation should account for the banking ecosystem as a network of interdependent actors and processes. The same logic applies to monetary and technological innovation. Central-bank policymaking concerning cryptocurrencies requires institutional mechanisms that reconcile technological change with trade development, monetary stability, and regulatory control (16), while the spread of digital currencies may alter banking models and monetary-policy transmission channels, thereby creating new challenges for conventional regulatory and banking structures (17). The effect of monetary-policy changes on cryptocurrency markets likewise suggests that central banks increasingly operate within a financial environment in which traditional and digital assets interact, generating new policy implications for liquidity, risk, and market stability (18).

Technological infrastructure constitutes another central dimension of comprehensive banking policy evaluation. Modern banking is increasingly dependent on reliable digital service platforms, integrated data architecture, automated processes, artificial intelligence, cloud infrastructure, open-banking mechanisms, and real-time analytical capability. These technologies can reduce transaction costs, support personalization, improve decision speed, and strengthen risk monitoring, but they also create new forms of technological dependence and operational vulnerability. The digital transformation of banking requires organizational redesign in addition to technological investment because digital capability must be integrated with strategy, governance, risk, skills, and customer experience (2). The evolution toward Bank 4.0 similarly demonstrates that banks must develop new capabilities in platform-based service delivery, digital customer interaction, analytics, and innovation if they are to remain competitive in increasingly technology-intensive financial ecosystems (1). FinTech also has particular relevance for Islamic and developing banking systems because it can expand access to financial services, improve operational efficiency, and support the modernization of Islamic banking models, while simultaneously introducing regulatory and institutional challenges (19). Cybersecurity is especially important in this context because digital integration broadens the attack surface of financial institutions. A systematic perspective on banking cybersecurity shows that the threat environment has evolved considerably from the pre-Industry 4.0 period to the post-Industry 4.0 era, with artificial intelligence, blockchain, digital platforms, and increasingly complex attack techniques reshaping the relationship between technology, policy, and operational resilience (20). Consequently, any evaluation model that treats digitalization only as a measure of service sophistication would be incomplete; it must also evaluate technological reliability, cybersecurity maturity, business continuity, data quality, interoperability, and institutional capacity to recover from disruptions.

New monetary technologies further illustrate the need to integrate innovation with risk and stability considerations. Central bank digital currencies, for example, may influence banking-network risk by changing payment structures, deposit behavior, liquidity management, and the relationship between the public and the central bank. Research examining the issuance of central bank digital currencies in Iran has therefore emphasized the potential implications for banking-network risk and the need to align such innovation with general monetary and banking policy (21). Similar concerns arise from broader forms of digital finance, where institutional adoption without a coherent policy framework may create fragmentation rather than efficiency. The pre-adoption evaluation of advanced banking environments, including metaverse banking, demonstrates that technological acceptance depends on perceived usefulness, readiness, risk, and institutional conditions, suggesting that technological evolution should be evaluated before large-scale implementation rather than assessed solely after adoption (3). This logic is consistent with the broader principle that banking innovation must be subjected to ex ante and ex post policy evaluation. Innovation that increases convenience but weakens risk oversight, liquidity management, data protection, or customer trust cannot be regarded as successful from the perspective of financial sustainability. Comprehensive banking policy evaluation must therefore consider technology not as an independent domain but as a component that interacts with risk, governance, human resources, customer relationships, and the financial structure of the bank.

Human capital and organizational capacity are equally critical because policies are ultimately implemented through organizational actors. Even well-designed banking policies may fail if employees lack the necessary competencies, if organizational culture resists change, if incentives are inconsistent with policy objectives, or if managerial structures do not support learning and adaptation. In Iran's banking industry, development-oriented human resource policies have been linked to cultural values and social responsibility, indicating that human capital strategy should not be limited to staffing or training but should also reflect institutional values, developmental objectives, and organizational legitimacy (22). Organizational health in the banking system is also shaped by multiple structural and behavioral factors, suggesting that institutional effectiveness requires coherence among leadership, internal processes, employee wellbeing, organizational relationships, and policy conditions (23). These findings are particularly important for comprehensive banking because integration across lending, investment, digital services, risk, treasury, and customer operations creates new competency requirements and demands cross-functional collaboration. Organizational learning becomes essential where banks must continuously update their practices in response to regulatory changes, emerging technologies, new risks, and evolving customer expectations. Human capital sustainability therefore has both financial and operational implications: weak capabilities can increase error rates, impair risk recognition, slow technological adoption, and reduce the quality of policy implementation, whereas strong organizational learning can improve adaptation and resilience.

Taken together, the literature indicates that financial sustainability in contemporary banking emerges from the interaction of capital adequacy, asset quality, profitability, liquidity, risk management, governance, technological capability, human capital, and policy implementation rather than from any single variable. Nevertheless, these dimensions are often studied separately. Research on capital buffers emphasizes capitalization and profitability (4); macroprudential studies focus on systemic risk, capital-flow shocks, and credit stability (5, 6); digital-banking studies emphasize technological transformation, Bank 4.0, FinTech, and emerging service environments (1, 2, 19); cybersecurity research emphasizes resilience against digital threats (20); governance-oriented research highlights accountability and institutional quality (11); and policy studies concerning digital banking, universal banking, and

monetary innovation focus on implementation mechanisms and regulatory adaptation (9, 15-17). These contributions are valuable, but the fragmentation of the literature creates a practical problem for policymakers: it remains difficult to evaluate comprehensive banking policies through a unified framework that simultaneously captures financial imbalance, policy effectiveness, integrated risk, institutional legitimacy, technological infrastructure, and organizational capability. This challenge is especially significant in Iran, where banking reform requires the alignment of supervisory policy, institutional governance, productive credit allocation, technological modernization, risk management, and human capital development within a coherent evaluative architecture.

The need for such an architecture is reinforced by the fact that policy effectiveness cannot be inferred exclusively from regulatory compliance or short-term financial performance. A bank may comply formally with supervisory rules while maintaining weak asset quality, unstable sources of income, high liquidity mismatch, insufficient digital resilience, or low organizational capacity. Conversely, technological expansion or service diversification may improve customer experience while simultaneously generating cyber risk, operational complexity, or new liquidity pressures. An adequate evaluation framework should therefore identify both intended and unintended consequences, examine relationships among dimensions, and recognize that banking imbalance is produced by interconnected causes. A thematic and qualitative approach is particularly appropriate when the objective is to identify these multidimensional relationships because expert experience can reveal mechanisms that are not readily observable through standardized financial ratios alone. Qualitative policy analysis can capture how policymakers, managers, risk specialists, and banking professionals understand the sources of imbalance, the barriers to policy implementation, the practical meaning of financial sustainability, and the organizational conditions required for comprehensive banking to function effectively. This is especially important in a policy environment characterized by institutional complexity, technological transition, macroeconomic uncertainty, and overlapping regulatory objectives.

Accordingly, the aim of this study was to design a comprehensive model for evaluating comprehensive banking policies in Iran's banking system, with particular emphasis on addressing banking imbalances and strengthening financial sustainability.

Methods and Materials

The present study adopted a qualitative approach and employed Attride-Stirling's thematic network analysis method (Attride-Stirling, 2001). This method, which is grounded in thematic analysis, enables the systematic identification, organization, and interpretation of meaningful patterns within qualitative data at three levels: Basic Themes, Organizing Themes, and Global Themes (Braun & Clarke, 2006). This method was selected because of the exploratory nature of the study and the need to identify the multiple dimensions of comprehensive banking policy evaluation.

The participants were selected from two main groups: the first group comprised academic experts, including professors and researchers in the fields of public policymaking, monetary economics, and banking who had direct experience in the formulation, implementation, or evaluation of banking policies; and the second group consisted of executive managers and specialists, including senior and middle managers of public and private banks, risk management experts, branch managers, and specialists in banking policymaking.

Participants were selected using purposive sampling with a maximum-variation approach (Patton, 2002). Variation was considered in terms of bank type (public/private), functional area (credit and lending, risk, funding,

technology, and investment), length of professional experience, and level of organizational responsibility. Snowball sampling was also used, where necessary, to gain access to individuals with specific relevant experiences.

The inclusion criteria were as follows: at least five years of managerial, executive, or research experience in banking, financial policymaking, or risk management; familiarity with the concepts of comprehensive banking, financial imbalances, and financial sustainability; and willingness and ability to participate in semi-structured interviews and provide written informed consent. Sampling continued until theoretical saturation was reached, such that the final interviews did not yield new data leading to the emergence of additional concepts or themes. In total, 18 interviews were conducted.

The data collection instrument used in this study was the semi-structured interview. The interview guide was developed based on a review of the theoretical literature and empirical background related to comprehensive banking, financial imbalances, and financial sustainability and consisted of four main domains: (1) participants' understanding and experience of comprehensive banking policies; (2) factors influencing the effectiveness of policy implementation in addressing imbalances; (3) indicators and criteria for evaluating financial sustainability; and (4) recommendations and reforms for improving the evaluation model.

To ensure content validity, the interview questions were reviewed and revised during a consultation session with three professors specializing in financial policymaking and banking management. To assess coding reliability, two interviews were randomly selected and independently coded by the researcher and another coder. The level of agreement was calculated using Holsti's coefficient, which yielded a value of 0.72, indicating acceptable coding reliability (Holsti, 1969).

Following coordination with the participants, the interviews were conducted either at their workplaces or in another quiet setting of their choice. Before each interview began, the purpose of the study, the manner in which the data would be used, guarantees regarding confidentiality, and the participants' right to withdraw from the study at any stage were explained, and informed consent was obtained. Each interview lasted approximately 45 to 60 minutes and was conducted using audio recording alongside simultaneous note-taking. Following completion, all interviews were transcribed verbatim and reviewed with the interviewees.

Data analysis was conducted using Attride-Stirling's thematic network analysis method in six stages (Attride-Stirling, 2001): (1) coding the data and extracting meaning units; (2) identifying Basic Themes by grouping conceptually related meaning units; (3) constructing thematic networks by categorizing Basic Themes into Organizing Themes; (4) describing and examining the thematic networks and identifying Global Themes; (5) summarizing the networks and refining the themes; and (6) interpreting the resulting patterns and presenting the final thematic network. To enhance the trustworthiness of the findings, Lincoln and Guba's (1985) four criteria of credibility, transferability, dependability, and confirmability were applied.

Findings and Results

Of the 18 interviewees, 14 (77.7%) were men and 4 (22.3%) were women. In terms of educational attainment, 12 participants (66.6%) held doctoral degrees and 6 (33.3%) held master's degrees. Regarding professional experience, 12 participants (66.6%) had more than 20 years of experience, 5 (27.7%) had between 10 and 20 years of experience, and 1 participant (5.7%) had less than 10 years of experience.

In the first stage of analysis, 974 meaning units were extracted from the interview transcripts. Based on conceptual similarity and semantic equivalence, these meaning units were categorized into 89 Basic Themes. Table 1 presents examples of the extracted Basic Themes and their supporting meaning units.

Table 1. Examples of Extracted Basic Themes and Supporting Meaning Units

No.	Basic Theme	Supporting Meaning Units
1	Capital adequacy	Maintaining the capital adequacy ratio above the regulatory threshold; strengthening banks' capital to cover existing and future risks; capacity to absorb potential losses
2	Credit portfolio quality	Ratio of non-performing loans to total facilities (NPL ratio); reduction of low-quality assets; improvement in the quality of the lending portfolio
3	Diversification and sustainability of non-interest income	Increasing the share of fee-based and service income; reducing dependence on lending income; creating stable and cash-generating revenue streams
4	Asset–liability maturity matching	Reducing maturity mismatches between deposits and lending facilities; managing interest-rate and liquidity risks; aligning loan and deposit maturities
5	Cybersecurity maturity and resilience	Preventing cyberattacks; reducing operational risk through investment in security; resilience against cyberattacks and the ability to recover rapidly
6	Integrated risk management	Establishing an integrated enterprise risk management (ERM) system; controlling the risks of subsidiaries at the financial-group level; simultaneous management of credit, liquidity, market, and operational risks

In the second stage, the 89 Basic Themes were organized into 17 Organizing Themes based on conceptual proximity. These themes included: (1) capital adequacy and quality; (2) asset quality, valuation, and productive utilization; (3) sustainable profitability and financial efficiency; (4) asset–liability management and the sustainability of funding sources and liquidity; (5) service integration and the comprehensive banking ecosystem; (6) the impact of comprehensive banking on financial balance and productive allocation of resources; (7) market orientation, customer experience, and competitiveness; (8) portfolio quality and credit risk management; (9) integrated risk management and financial resilience; (10) operational resilience, cybersecurity, and business continuity; (11) financial transparency, disclosure, and regulatory compliance; (12) corporate governance, organizational independence, and accountability; (13) public trust, legitimacy, and stakeholder participation; (14) technological infrastructure and digital service reliability; (15) data integration, automation, and emerging technologies; (16) organizational culture, motivation, and human capital sustainability; and (17) competency development and organizational learning.

In the final stage, the 17 Organizing Themes were grouped into six Global Themes, which constitute the principal dimensions of the comprehensive banking policy evaluation model (Table 2).

Table 2. Global Themes and Their Constituent Organizing Themes

Global Theme	Constituent Organizing Themes
Addressing Bank Imbalances and Financial Sustainability	Capital adequacy and quality; asset quality, valuation, and productive utilization; sustainable profitability and financial efficiency; asset–liability management and sustainability of funding sources and liquidity
Development and Effectiveness of Comprehensive Banking	Service integration and the comprehensive banking ecosystem; impact of comprehensive banking on financial balance and productive allocation of resources; market orientation, customer experience, and competitiveness
Integrated Risk Management and Banking Resilience	Portfolio quality and credit risk management; integrated risk management and financial resilience; operational resilience, cybersecurity, and business continuity
Governance and Institutional Legitimacy	Financial transparency, disclosure, and regulatory compliance; corporate governance, organizational independence, and accountability; public trust, legitimacy, and stakeholder participation
Technological Infrastructure and Data-Driven Intelligence	Technological infrastructure and digital service reliability; data integration, automation, and emerging technologies
Human Capital Empowerment and Organizational Learning	Organizational culture, motivation, and human capital sustainability; competency development and organizational learning

Figure 1 presents the final thematic network of the study, visually illustrating the relationships among the 89 Basic Themes, 17 Organizing Themes, and six Global Themes.



Figure 1. Final Thematic Network of the Study

Discussion and Conclusion

The present study developed a multidimensional model for evaluating comprehensive banking policies in Iran's banking system, with particular emphasis on addressing banking imbalances and strengthening financial sustainability. The thematic network analysis resulted in 89 Basic Themes, 17 Organizing Themes, and six Global Themes: addressing bank imbalances and financial sustainability; development and effectiveness of comprehensive banking; integrated risk management and banking resilience; governance and institutional legitimacy; technological infrastructure and data-driven intelligence; and human capital empowerment and organizational learning. This structure indicates that banking imbalance cannot be interpreted solely as an accounting, liquidity, or capital adequacy problem. Rather, it is a systemic phenomenon emerging from interactions among financial structure, risk exposure, governance arrangements, technological capability, organizational competencies, and policy implementation quality. This finding is consistent with studies showing that bank stability is shaped by multiple institutional and macro-financial variables rather than by a single balance-sheet indicator. For

example, capital buffers influence profitability and financial intermediation costs, while macroprudential policies affect the capacity of banks to absorb shocks and maintain their credit function (4, 6). Likewise, international evidence demonstrates that sudden capital-flow reversals can significantly increase systemic banking risk and that appropriate macroprudential interventions can mitigate such vulnerabilities (5). The model developed in this study therefore supports the view that effective evaluation of comprehensive banking policies requires simultaneous assessment of micro-level bank characteristics and broader institutional and systemic conditions.

The first Global Theme, “Addressing Bank Imbalances and Financial Sustainability,” was composed of four Organizing Themes: capital adequacy and quality; asset quality, valuation, and productive utilization; sustainable profitability and financial efficiency; and asset–liability management and the sustainability of funding sources and liquidity. The emergence of this theme as a central component of the model reflects the importance of balance-sheet resilience in the long-term viability of banks. In particular, participants emphasized that apparent profitability cannot be interpreted as sustainable when it is accompanied by weak capital, deteriorating asset quality, unstable funding structures, or maturity mismatches. This finding aligns with evidence showing that capital adequacy and capital buffers are closely connected with bank profitability, intermediation costs, and resilience, although the direction and magnitude of these effects may vary across ownership structures and institutional settings (4). The emphasis on productive asset utilization and credit quality is also consistent with research showing that the stability and effectiveness of banking systems depend not only on the amount of credit distributed but also on the quality and allocation efficiency of that credit. Narrative analysis of credit-guidance policies in Islamic banking has shown that lending policies aimed at supporting small and medium-sized enterprises must be implemented in ways that reconcile developmental objectives with the quality of financing decisions and the sustainability of credit portfolios (14). The present study therefore extends previous research by integrating capital, profitability, asset quality, and liquidity into a single evaluative dimension focused explicitly on correcting imbalance.

The second Global Theme, “Development and Effectiveness of Comprehensive Banking,” included service integration and the comprehensive banking ecosystem; the impact of comprehensive banking on financial balance and productive resource allocation; and market orientation, customer experience, and competitiveness. This finding suggests that comprehensive banking should be evaluated not merely by the breadth of services offered, but by the degree to which service integration produces strategic, financial, and customer-related value. The participants’ emphasis on integrated service ecosystems corresponds with current transformations toward Bank 4.0, in which digital channels, platform-based financial services, data analytics, and customer-centric models increasingly shape banking competitiveness (1). Similarly, the transformation of banking through new digital architectures requires the reconfiguration of operating models and service delivery rather than simply the digitization of conventional processes (2). The findings are also consistent with research on metaverse banking, which shows that the adoption of advanced banking environments depends on institutional readiness, customer perceptions, technological acceptance, and perceived value (3). From the perspective of banking policy, the important implication is that comprehensive banking becomes effective when integration enhances financial balance, customer experience, market responsiveness, and productive resource allocation simultaneously. This interpretation is also compatible with network-oriented approaches to universal banking policymaking, which emphasize interactions among multiple actors, institutions, and policy subsystems rather than isolated decision-making by individual banks (15).

The third Global Theme, “Integrated Risk Management and Banking Resilience,” consisted of portfolio quality and credit risk management; integrated risk management and financial resilience; and operational resilience,

cybersecurity, and business continuity. The prominence of this theme reflects the fact that comprehensive banking increases both the scope of opportunities and the complexity of risk exposure. When banks operate across lending, investment, digital services, subsidiaries, and diversified financial activities, fragmented risk management can allow vulnerabilities to accumulate unnoticed across organizational units. The findings therefore support the need for enterprise-wide risk management structures capable of integrating credit, liquidity, market, operational, technological, and systemic risk information. This is consistent with macroprudential research showing that banking risk is highly sensitive to external shocks and cross-border financial conditions, requiring both institution-level and system-level risk controls (5, 6). The emphasis placed by participants on cybersecurity and continuity also strongly aligns with previous research documenting the transformation of cybersecurity threats in banking in the post-Industry 4.0 environment, where artificial intelligence, blockchain, digital platforms, and interconnected financial infrastructures create new operational vulnerabilities (20). The findings additionally correspond with research on digital-banking evaluation, which argues that technological implementation should be assessed in conjunction with governance, security, organizational capacity, and economic value rather than evaluated solely by levels of digital adoption (9). Accordingly, resilience in comprehensive banking should be understood as the capacity to anticipate, absorb, respond to, and recover from interconnected financial and operational shocks.

The fourth Global Theme, “Governance and Institutional Legitimacy,” comprised financial transparency, disclosure and regulatory compliance; corporate governance, organizational independence and accountability; and public trust, legitimacy and stakeholder participation. This theme indicates that the effectiveness of comprehensive banking policies is contingent on the institutional framework through which banking decisions are made, disclosed, monitored, and justified. The participants’ emphasis on transparency and accountability is consistent with research demonstrating that corporate governance arrangements influence market responses and the way external stakeholders interpret bank-related decisions (11). Governance quality is especially important in banking because managers operate under substantial information asymmetry and because failures of accountability may impose costs not only on shareholders but also on depositors, creditors, regulators, and the wider economy. The emphasis on stakeholder protection in the present study is also conceptually aligned with comparative legal research demonstrating that effective financial systems require balanced mechanisms for protecting creditors and managing financial distress (12, 13). Although these studies focus on bankruptcy and creditor protection, their broader relevance lies in highlighting the importance of institutional safeguards, enforceable rules, and balanced stakeholder treatment when financial stability is threatened. The present findings therefore suggest that governance should not be treated as a supporting condition for policy evaluation; instead, it should be considered an integral evaluative dimension because inadequate governance can undermine financial stability even when formal banking policies appear technically sound.

The fifth Global Theme, “Technological Infrastructure and Data-Driven Intelligence,” incorporated technological infrastructure and digital service reliability as well as data integration, automation, and emerging technologies. This result reflects the growing dependence of comprehensive banking on integrated technological architecture. Participants viewed technology not simply as an operational support function but as an enabling foundation for service integration, risk management, customer analysis, real-time monitoring, and strategic decision-making. This finding is closely aligned with studies on digital transformation in banking, which show that technological change affects business models, service channels, data management, organizational structures, and competitive positioning (2). The movement toward Bank 4.0 similarly emphasizes the strategic significance of artificial

intelligence, analytics, digitally integrated services, and customer-oriented innovation (1). Research on FinTech in Islamic banking also supports the finding that technological capability can enhance efficiency, access, and service innovation, while simultaneously creating new regulatory and operational challenges (19). In addition, the growing influence of digital currencies and cryptocurrencies on financial systems reinforces the importance of technological intelligence within banking policy. Policymaking related to cryptocurrencies requires central banks to reconcile financial innovation with monetary stability and regulatory control (16), while qualitative research on digital currencies suggests that such innovations can reshape both banking models and monetary-policy mechanisms (17). The impact of monetary policy on cryptocurrency markets further illustrates the increasing interconnectedness of conventional banking and digital financial ecosystems (18). Thus, data and technology emerge from the present study as strategic components of banking sustainability rather than as peripheral modernization tools.

The sixth Global Theme, “Human Capital Empowerment and Organizational Learning,” was formed by organizational culture, motivation and human capital sustainability, together with competency development and organizational learning. This theme highlights the human and organizational dimension of policy effectiveness. The results indicate that comprehensive banking policies may fail despite adequate financial or technological resources if employees lack relevant competencies, organizational culture does not support change, or learning mechanisms are insufficient. This interpretation is strongly supported by research in Iran’s banking industry showing that development-oriented human resource policies must be linked to cultural values, social responsibility, and organizational development objectives (22). The findings are also consistent with research on organizational health in the national banking system, which identifies a broad set of structural and behavioral factors affecting the capacity of banks to function effectively (23). In the context of comprehensive banking, these human capital requirements are particularly important because integrated banking models demand cross-functional understanding of risk, technology, customer service, regulation, and strategy. Organizational learning enables banks to update competencies in response to rapid policy, technological, and market changes, while a supportive organizational culture can reduce resistance to transformation and strengthen implementation consistency.

Another important result of the study is the strong interdependence among the six Global Themes. The thematic network does not imply six isolated dimensions; rather, it shows that financial sustainability depends on reciprocal relationships among balance-sheet health, risk management, governance, technological capability, comprehensive service development, and human capital. For example, advanced digital infrastructure can improve risk monitoring and customer experience, but inadequate cybersecurity can simultaneously increase operational vulnerability. Similarly, stronger capital and liquidity positions can improve resilience, but weak governance may encourage poor risk-taking or inefficient resource allocation. This systemic interpretation aligns with stability-oriented banking research showing that institutional efficiency and stability policies interact in complex ways and may produce different effects across Islamic and conventional banking environments (8). It also supports the broader policy-evaluation principle that policy success should be assessed by examining both implementation processes and realized outcomes rather than by assuming that formal adoption produces intended results (10). The findings therefore suggest that the evaluation of comprehensive banking policies should employ a multilevel logic capable of detecting interactions among financial, organizational, technological, and institutional indicators.

The findings additionally indicate that policy evaluation in banking must move beyond compliance-based measurement toward an outcome-oriented and learning-oriented approach. Compliance remains necessary, particularly in relation to capital, risk, disclosure, and regulatory standards, but it does not by itself demonstrate that

comprehensive banking policies have reduced imbalance or improved sustainability. An institution may formally satisfy individual regulatory requirements while remaining vulnerable because of concentrated portfolios, unstable funding, poor technology integration, low employee capability, or weak stakeholder trust. Conversely, banks may achieve substantial digital innovation without corresponding improvement in resilience or financial sustainability. The policy evaluation framework identified in this study is therefore consistent with the logic of evaluative research that emphasizes alignment between policy intent, implementation, and actual institutional effects (9, 10). It also responds to the need for policy architectures capable of integrating innovation and stability objectives, a need that is increasingly visible in debates over central bank digital currencies and financial-system risk (21). By integrating financial, governance, technological, risk, and human-capital dimensions, the proposed model provides a more comprehensive basis for detecting policy gaps than evaluations based on isolated financial ratios or implementation checklists.

Overall, the results of this study extend the literature by offering an integrated qualitative model tailored to the evaluation of comprehensive banking policies in the Iranian banking system. Previous studies have separately examined bank stability, macroprudential policy, digital transformation, cryptocurrency regulation, FinTech, human resource policy, governance, credit allocation, and digital banking evaluation (1, 5, 6, 9, 11, 14, 16, 19, 22). The present study integrates these previously fragmented areas into a single thematic architecture. Its central contribution is the proposition that comprehensive banking policy evaluation should be organized around six mutually reinforcing dimensions and that the effectiveness of policy should ultimately be judged by its capacity to reduce structural imbalance, strengthen financial sustainability, improve banking resilience, increase institutional legitimacy, support technological intelligence, and enhance organizational capability. This multidimensional perspective is particularly relevant to the Iranian banking system, where policy effectiveness is influenced by the interaction of regulatory constraints, financial imbalances, technological transition, governance arrangements, and organizational capacity.

This study has several limitations that should be considered when interpreting the findings. First, because the research adopted a qualitative design and relied on 18 expert interviews, the results represent analytically rich but context-dependent interpretations rather than statistically generalizable estimates. Second, although maximum-variation purposive sampling was used, the perspectives of some stakeholder groups, including ordinary bank customers, external auditors, FinTech firms, institutional investors, and policymakers outside the banking sector, were not represented directly. Third, the model was developed within the institutional and regulatory context of Iran's banking system; consequently, some dimensions or relationships may operate differently in other national banking environments. Fourth, interview data are inherently influenced by participants' professional experiences, organizational positions, and perceptions, which may create recall bias or socially desirable responses despite the confidentiality procedures used. Finally, the study focused on model development and thematic identification and did not quantitatively test the relative weight, causal relationships, or predictive power of the identified dimensions.

Future studies should quantitatively validate the proposed model using large samples of banking managers, experts, and other relevant stakeholders and employ confirmatory factor analysis or structural equation modeling to examine the construct structure and relationships among the six dimensions. Researchers could develop a standardized policy-evaluation instrument based on the 89 Basic Themes and determine the relative importance of indicators using methods such as the Delphi technique, analytic hierarchy process, best–worst method, DEMATEL, or network analysis. Comparative studies between public and private banks, commercial and specialized banks,

and financially balanced and imbalanced banks could clarify how the model performs across different organizational settings. Longitudinal research could also examine whether improvements in the identified dimensions predict subsequent changes in liquidity, capital adequacy, non-performing loans, profitability, and resilience. Cross-country comparative research would be useful for assessing the transferability of the framework to other developing, emerging, or Islamic banking systems. Future research should additionally investigate possible causal interactions among governance, technology, human capital, risk management, and financial sustainability and assess whether some dimensions operate as mediators, moderators, or antecedents of banking-policy effectiveness.

Banking regulators and senior managers should use the proposed framework as an integrated policy-evaluation dashboard rather than assessing comprehensive banking through isolated financial indicators. Evaluation procedures should combine indicators of capital and asset quality, profitability, liquidity, credit risk, operational resilience, governance, technology, customer experience, and human capital within a unified monitoring architecture. Banks should establish periodic policy-review mechanisms capable of comparing intended policy objectives with measurable implementation outcomes and identifying emerging imbalances before they develop into systemic vulnerabilities. Integrated enterprise risk management should be strengthened at both bank and financial-group levels, while asset–liability management, cybersecurity, business continuity, and data governance should receive explicit attention in policy evaluation. Regulatory authorities should encourage greater transparency, accountability, stakeholder communication, and board-level oversight of comprehensive banking initiatives. At the organizational level, banks should invest systematically in digital infrastructure, interoperable data systems, analytical capabilities, employee competencies, and continuous learning. Finally, policy evaluation should be institutionalized as a recurring managerial process linked directly to strategic planning, corrective action, resource allocation, and supervisory decision-making rather than being treated as a one-time assessment exercise.

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Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adhered in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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