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Beatrice Nyokabi Wanjiru, Ephantus Mwangi Ireri, Peris Njeri Kiarie, Abdullahi Yunis Guliye, Hilda Liagala Bengo and Dr. John Mungai, PhD





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Beatrice Nyokabi Wanjiru¹

Ephantus Mwangi Ileri²

Peris Njeri Kiarie³

Abdullahi Yunis Guliye⁴

Hilda Liagala Bengo⁵

Dr. John Mungai, PhD

^{1,2,3,4,5}, PhD Fellows, Kenyatta University,
Department of Finance and Accounting

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Abstract:

The financial stability of commercial banks underpins confidence in the financial system, the mobilisation of savings, the extension of credit and the wider growth of an economy. Banks nonetheless face a persistent challenge in choosing a financial structure that balances profitability, liquidity, solvency and risk, where financial structure refers to the combination of short-term debt, long-term debt, equity and retained earnings used to fund operations. This paper reviews the relationship between financial structure and the financial stability of commercial banks, with attention to how each financing source shapes a bank's capacity to absorb shocks.

The review is motivated by mixed empirical evidence: some studies link debt financing to stronger performance, others link excessive leverage to financial distress, and equity and retained earnings are generally associated with firmer capital buffers, although their effect still depends on how the funds are used. The paper is anchored on the Modigliani-Miller theorem, Trade-Off Theory and Pecking Order Theory. The Modigliani-Miller theorem offers a benchmark for financing irrelevance under perfect market conditions; Trade-Off Theory explains how firms weigh the benefits of debt against distress and repayment costs; and Pecking Order Theory highlights a preference for internal funds ahead of debt and external equity. Drawing these perspectives together, the paper offers a theoretical account of how the components of financial structure may influence bank stability once market imperfections, regulatory requirements and risk conditions are taken into account. The review further points to a need for empirical work that measures financial stability more broadly, through capital adequacy, liquidity, asset quality and insolvency risk, rather than relying mainly on profitability.

Keywords: *Financial Structure; Financial Stability; Commercial Banks; Debt Financing; Equity Financing.*

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1. INTRODUCTION

1.1 Background of the study

In the contemporary financial system, commercial banks occupy a critical position in mobilising savings, allocating credit and facilitating economic activity. The stability of banks is therefore important because disruptions in their funding, liquidity or capital positions can affect lending and the wider financial system. Recent evidence shows that financial structure is closely connected to banks' capacity to absorb shocks and maintain stable operations. Forbes, Friedrich and Reinhardt (2023), for example, found that the source and composition of bank funding influenced the degree of financial stress experienced during periods of market disruption. Their findings indicate that banks with greater reliance on funding from non-bank financial institutions and foreign-currency funding experienced greater stress during the COVID-19 shock. This demonstrates that the structure and stability of bank funding are important considerations in assessing financial resilience.

Financial structure refers broadly to the combination of funding sources used by an institution to finance its assets and operations. In commercial banks, these sources include customer deposits, short-term and long-term borrowing, shareholders' equity and retained earnings. Unlike non-financial firms, banks operate with substantial financial leverage because deposits and other liabilities constitute major sources of funding for lending and investment activities. Patel, Sorokina and Thornton (2022) demonstrate that liquidity and bank capital are closely interconnected, arguing that liquidity conditions can influence the capital structure of financial institutions. Their findings further suggest that capital and liquidity should be considered jointly when assessing financial stability because changes in one can influence the other.

The importance of an appropriate financial structure is further demonstrated by the relationship between bank capital, liquidity creation and resilience. Nguyen, Matousek and Muradoglu (2024) found a significant relationship between regulatory capital and liquidity creation, with the results varying according to bank characteristics and funding structures. The study suggests that capital is not only a regulatory requirement but also an important component of banks' capacity to undertake intermediation activities. Similarly, Sharma (2023), using data from 688 commercial banks in ten emerging economies, examined the effects of Basel III capital and liquidity requirements on bank lending and financial stability. The study demonstrates the importance of capital adequacy and liquidity requirements in shaping banking-sector resilience while also highlighting the need to consider their implications for banks' lending activities.

The relationship between financial structure and bank stability is also influenced by the composition and source of funding. Forbes et al. (2023) established that funding vulnerabilities can increase financial stress, particularly where banks depend substantially on less stable sources of finance or foreign-currency funding. In addition, Ma and Yao (2022) found that financial structure is relevant to bank risk and stability, showing that changes in the broader financial



structure of an economy can influence banks' risk exposure. Saklain and Williams (2024) similarly examined the role of financial structure in banking and found that financial structure was associated with banks' business activities without necessarily increasing bank risk. These findings indicate that financial structure does not affect banking outcomes through a single mechanism; rather, its implications depend on the nature, source and management of financing.

Financial stability is particularly dependent on the ability of banks to maintain adequate capital and liquidity while continuing their core intermediation functions. Barry and Diabaté (2024) found that banks respond to liquidity shortages partly through adjustments to their capital ratios, including reducing lending and holding less risky assets. This finding demonstrates the interaction between liquidity conditions, capital management and lending capacity. International banking standards similarly place emphasis on leverage, capital adequacy, liquidity coverage and stable funding because these measures are intended to limit excessive leverage and strengthen banks' capacity to withstand liquidity and solvency pressures.

The Kenyan banking sector provides an important context for examining these relationships. According to the Central Bank of Kenya (CBK, 2025), the banking sector remained stable and resilient in 2024, supported by adequate capital and liquidity buffers. Total capital adequacy stood at 19.6 per cent in December 2024, above the statutory minimum of 14.5 per cent, while the average liquidity ratio reached 56.0 per cent, above the 20 per cent minimum requirement. However, the sector also experienced challenges, including a decline in customer deposits, contraction in gross loans and an increase in the gross non-performing loan ratio from 15.6 per cent in 2023 to 17.1 per cent in 2024. These developments demonstrate that adequate capital and liquidity buffers do not eliminate financial risks and that the structure and quality of bank funding remain important considerations for financial stability.

The Kenyan evidence therefore creates an important basis for examining how individual components of financial structure relate to financial stability. Although commercial banks may maintain regulatory capital and liquidity above minimum requirements, changes in deposits, borrowing, equity and retained earnings can affect their ability to absorb losses, meet obligations and sustain lending. Existing studies have also examined individual aspects of bank capital, liquidity and funding, but the evidence does not provide a uniform explanation of how the combined components of financial structure influence broader financial stability. Moreover, financial stability extends beyond profitability to include capital adequacy, liquidity, asset quality, leverage and the capacity to withstand financial shocks. Consequently, examining short-term debt, long-term debt, equity financing and retained earnings together provides a broader basis for understanding the financial structure–stability relationship among commercial banks. The present study therefore focuses on financial structure and financial stability of commercial banks, with the objective of establishing how different financing components are associated with banks' capacity to remain financially resilient while continuing to perform their intermediation role.

1.2 Research Problem

Kenya's Vision 2030 sets out an ambition to industrialise the economy and to reach middle-income status, a milestone that depends on wide access to financial services (Republic of Kenya, 2008). Progress toward the United Nations Sustainable Development Goal on industry, innovation and infrastructure likewise rests on the growth of, and access to, financial services (National Treasury and Planning State Department for Planning, 2019). Commercial banks, together with other financial institutions, are central to this agenda because they extend credit to governments, businesses and individuals and thereby facilitate commerce more broadly.

Despite this pivotal role, the aggregate financial performance of commercial banks in Kenya has shown signs of strain. Sector-wide return on assets moved from 3.33 per cent in 2017 to 3.5 per cent in 2018, 3.3 per cent in 2019, a marked dip to 2.07 per cent in 2020, and a partial recovery to 3.3 per cent in 2021, a pattern that points to an unstable rather than a steadily improving profitability trend. Return on equity told a similar story, falling from 22.5 per cent in 2018 to 21.8 per cent in 2019 and to 13.9 per cent in 2020. Over the same period, several banks, among them Chase Bank, Imperial Bank, Charterhouse Bank and, more recently, Spire Bank, were placed under receivership or ceased to operate independently, and a number of mergers and acquisitions have likewise been linked to underlying financial difficulty.

While capital adequacy, liquidity and asset quality are all recognised drivers of bank stability, financial structure is widely regarded as a significant contributor to the profitability decline and the periodic collapse of commercial banks. Financial structure is, at its core, the way a firm finances its assets through a chosen combination of debt and equity, encompassing short-term liabilities, long-term debt and shareholders' equity. A bank that lacks a sound financial structure is more exposed to credit, market and liquidity risk and is less able to meet shareholder expectations or to invest in innovation. Yet striking the right balance between debt and equity, and between liquidity and profitability, remains a persistent challenge for bank executives and financial managers. Much of the existing research on this question has also tended to measure bank soundness narrowly, largely through profitability ratios such as return on assets and return on equity, even though profitability is only one facet of a much broader concept of stability that also encompasses capital adequacy, liquidity and asset quality. This narrower focus makes it harder to draw firm conclusions about how financial structure affects a bank's ability to withstand shocks, as distinct from its ability to generate short-term returns. It is against this background that the present paper examines how financial structure bears on the financial stability of commercial banks, with particular attention to the theoretical mechanisms that connect financing choices to the wider indicators of stability that regulators and depositors ultimately care about.

2. LITERATURE REVIEW



Several theoretical frameworks have been advanced to explain how firms choose a financial structure, including the Modigliani-Miller theorem (Modigliani & Miller, 1958), Trade-Off Theory (Myers, 1984), Pecking Order Theory (Myers & Majluf, 1984), Agency Theory and Signalling Theory. This paper concentrates on the first three of these, since they speak most directly to the balance between debt, equity and internal funds that defines a bank's financial structure.

Modigliani-Miller Theorem

The Modigliani-Miller theorem, first advanced by Modigliani and Miller (1958), holds that under perfectly competitive capital-market conditions, the value of a firm does not depend on how it is financed. Given a fixed investment policy, the theorem argues, the choice between debt and equity leaves the market value of the firm unchanged, because value is driven by the present value of expected future earnings and the underlying operating risk rather than by the financing mix used to fund the business. Investors, the theorem assumes, can replicate a firm's financing decisions through their own personal borrowing or lending, which removes any advantage that a particular mix of debt and equity might otherwise confer. A later refinement by the same authors introduced corporate taxation into the analysis and acknowledged that debt can create a tax-shield benefit, since interest payments are deductible for tax purposes. Taken together, the original and revised versions of the theorem provide a benchmark against which to judge whether observed differences in financial structure and firm value stem from financing choices themselves or from market imperfections such as taxation, bankruptcy costs, information asymmetry and agency conflicts.

The theorem rests on a demanding set of assumptions: the absence of taxes, transaction costs, regulatory costs, bankruptcy costs and agency costs; symmetric information between managers and investors; uniform risk classes across firms; equal borrowing and lending rates; and a strict separation between investment and financing decisions. Under these conditions, investors can offset or replicate a firm's financing choices in their own portfolios, so that shifts in the debt-equity mix leave firm value unaffected.

The theorem's principal strength lies in the clarity of the benchmark it offers. By starting from the premise that financing choices are irrelevant in a perfect market, it allows researchers to isolate the specific imperfections, whether taxation, bankruptcy costs or information asymmetry, that make financing decisions matter in practice. It also draws a clean line between investment and financing decisions, underlining that a firm's economic value ultimately rests on its capacity to generate future earnings rather than on the manner in which those activities happen to be financed. Its later extension to incorporate taxation shows that the framework can accommodate real-world frictions without losing its core logic (Brusov et al., 2022).



The theorem's practical reach, however, is limited by how demanding its assumptions are. Actual financial markets are not frictionless: firms face transaction and regulatory costs, corporate taxation shapes financing choices, bankruptcy and distress carry real costs, and managers typically know more about a firm's prospects than outside investors do. Information asymmetry can lead investors to read financing decisions as signals about firm risk, and agency conflicts between managers, shareholders and debtholders can make the debt-equity choice consequential in ways the original theorem does not capture. Firms also operate in markedly different risk environments, which sits uneasily with the assumption of homogeneous risk classes. The later, tax-adjusted version of the theorem partly addresses this by recognising the tax benefits of debt, while also implying that heavy reliance on debt can expose a firm to financial distress.

Applied to commercial banks, the Modigliani-Miller theorem supplies a theoretical benchmark against which the effects of financing choices can be judged. Because the theorem implies that, in a perfect market, the composition of a bank's financing should not by itself affect its value or performance, any observed link between financial structure and financial stability can be read as evidence of the market imperfections, such as taxation, information asymmetry, agency problems, financial distress and regulatory constraint, that characterise real banking markets. This makes the theorem a useful lens for asking whether variation in banks' mix of debt, equity and other funding sources is associated with differences in stability indicators such as profitability, capital adequacy, liquidity and risk exposure. Its tax-shield argument offers a basis for weighing the benefits of debt financing, while its restrictive assumptions draw attention to the costs that come with excessive leverage and financial distress. In this sense, although the theorem does not capture the full complexity of commercial banking, it remains a valuable point of departure for examining why and under what conditions financial structure might matter for bank stability. Subsequent extensions of the framework, including generalised versions that relax some of its original restrictions, have continued to demonstrate its usefulness as a starting point even where its literal predictions no longer hold (Brusov et al., 2022).

Trade-Off Theory

Trade-Off Theory, associated principally with Myers (1984) and building on the tax-related insight of the revised Modigliani-Miller framework, holds that firms set their financial structure by weighing the benefits of debt financing against the costs that come with higher leverage. The chief benefit of debt is the tax shield generated by deductible interest payments, while the principal costs are financial distress, bankruptcy and agency costs. Myers argues that the tax advantage of debt is eventually offset by the costs of distress and agency conflict, so that firms aim for a target level of leverage at which the marginal benefit of additional debt matches its marginal cost. The theory further recognises that this target differs across firms according to their profitability, asset composition, size, the stability of their cash flows and the level of business risk they carry: firms with stable earnings and tangible assets can typically sustain higher leverage, while those with



volatile earnings and fewer tangible assets tend to limit debt so as to reduce their exposure to distress.

The theory assumes that managers pursue a target financial structure that balances the identifiable benefits and costs of debt, that debt carries a tax advantage through interest deductibility, and that different sources of finance carry distinct costs tied to a firm's earnings capacity, business risk and insolvency risk. It further assumes that market participants share broadly similar expectations about a firm's value and profitability, and that firms with stronger, more stable financial positions can accommodate relatively higher leverage than weaker ones.

Trade-Off Theory's central strength is that it offers a realistic account of why firms use debt without borrowing as heavily as the tax shield alone might suggest. Rather than treating financing choices as irrelevant, it brings taxation, financial distress, bankruptcy costs and agency costs into a single, more complete explanation of financing behaviour. It also helps explain why financial structures differ across firms, since organisations vary in profitability, asset tangibility, size, cash-flow stability and business risk, and it provides a rationale for why firms adjust their leverage over time as they move toward a target level.

The theory's limitations are nonetheless real. Its assumption of broadly shared expectations among market participants sits uneasily with the uneven distribution of information that characterises actual markets, and it does not yield a single, precisely measurable optimal leverage ratio, since the appropriate level of debt can shift with firm characteristics and economic conditions. Recent evidence from a large sample of Japanese public and private firms illustrates the point: the theory performed best for companies with low leverage and during periods of subdued economic growth, but performed less well elsewhere, which suggests that its explanatory power is conditional on the economic and institutional setting rather than universal (Voutsinas & Werner, 2025). The costs of financial distress and agency conflict are also difficult to estimate with precision, which complicates any attempt to pinpoint exactly where the benefits of additional debt stop outweighing its costs.

Trade-Off Theory is relevant to the study of commercial banks because it offers a framework for examining how banks weigh the benefits of different financing sources against the risks that come with leverage and financial distress. The theory suggests that debt can generate value through interest tax shields and can help discipline management, but that excessive reliance on debt raises exposure to distress, insolvency and the costs that follow from them. Recent evidence on bank capital buffers illustrates this trade-off directly: buffers held above the regulatory minimum act as a safety net that strengthens stability, yet they are also associated with lower returns on assets and equity, showing that the benefits of a cautious financial structure come at a measurable cost (Hendrawan et al., 2023). Applied to commercial banks, Trade-Off Theory therefore provides a basis for asking whether the composition and level of financial structure are associated with a



bank's capacity to withstand financial pressure while sustaining its operations, while recognising that banks differ in profitability, asset composition, liquidity and risk exposure, and that the optimal balance may therefore vary across banks and over time. Because banks operate under prudential capital and liquidity rules that most non-financial firms do not face, the target leverage envisaged by the theory is, in practice, partly set by regulation rather than by managerial judgement alone, which adds a further layer to the trade-off between the benefits and costs of debt in a banking context.

Pecking Order Theory

Pecking Order Theory, first sketched by Donaldson (1961) and given a rigorous theoretical foundation by Myers and Majluf (1984), holds that firms follow a hierarchy of financing preferences when funding their operations and investments. The theory argues that information asymmetry between managers and outside investors makes external financing relatively more costly than internally generated funds, since outside investors typically know less than managers about a firm's current operations, future earnings and investment prospects. Firms therefore prefer to finance new investment first through retained earnings, then through debt, and only turn to external equity when internal funds and additional borrowing prove insufficient. The theory further predicts an inverse relationship between profitability and debt, since highly profitable firms can generate enough retained earnings to finance their own activities and so have less need to borrow externally. On this view, financial structure is best understood as the cumulative outcome of a firm's past financing and investment decisions rather than a deliberate attempt to reach some predetermined optimal leverage ratio.

The theory assumes that information asymmetry exists between corporate insiders and external investors, with managers holding more complete knowledge of a firm's value, profitability and prospects than outside financiers. It further assumes that external financing carries additional information and transaction costs, because the issuance of new securities can be read by the market as a signal that management considers those securities to be over- or under-valued. Firms accordingly prefer internal funds, which require no such disclosure, and turn to debt before equity when internal resources are inadequate, since debt is generally considered less sensitive to information asymmetry than a new equity issue. The theory also assumes that more profitable firms rely more heavily on retained earnings and therefore carry lower levels of external debt.

The theory's strength lies in its explicit treatment of information asymmetry, which addresses a limitation shared by theories that assume managers and investors possess identical information. It offers a coherent account of why firms might favour retained earnings over external financing, and why debt is typically preferred to equity when internal funds fall short. It also offers a persuasive explanation for the observed inverse relationship between profitability and leverage, since firms with strong earnings can finance investment internally and consequently borrow less, and it

recognises that financing decisions accumulate over time as firms fund successive investment opportunities from whatever combination of internal and external resources is available.

Even so, the theory has notable limitations. Its central proposition, that firms turn to external financing mainly when internal funds are insufficient, has been questioned on the grounds that financing choices are also shaped by interest rates, lender relationships, government policy and other institutional factors, and that large or indivisible investment projects may require both internal and external financing simultaneously, meaning firms cannot always follow a strict financing hierarchy in practice. A recent international comparison across public and private Japanese firms over nearly three decades found that the pecking order model performed best for private firms and for those with high leverage, and performed less well among public firms and low-leverage firms, which suggests that the theory's descriptive power depends on firm type and ownership structure rather than holding uniformly across all firms (Voutsinas & Werner, 2025).

Pecking Order Theory is relevant to the study of commercial banks because it offers a framework for understanding how banks might prioritise internally generated funds over external financing when meeting funding and investment needs. The theory suggests that more profitable banks can generate larger retained earnings and therefore depend less on external debt, whereas banks with weaker internal resources may lean more heavily on external financing, a relationship that matters for stability because the choice and cost of funding shapes a bank's exposure to leverage, refinancing pressure and financial risk. The theory's emphasis on information asymmetry is especially pertinent to banking, where managers, depositors, investors, creditors and regulators typically hold different levels of information about a bank's asset quality, profitability and risk exposure. The theory also helps explain why a bank's financing decisions may reflect a history of accumulated choices rather than a fixed target structure, making it a useful lens for examining whether profitability, internally generated funds, debt financing and information asymmetry shape the financial structure of commercial banks and, in turn, their capacity to remain stable. Because depositors and regulators are especially sensitive to signs of weakness in a bank's capital position, the reputational cost of a poorly received external financing decision may be larger for banks than for firms in most other industries, which strengthens the case for reading the theory's predictions as particularly relevant to banking.

Conceptual Framework

Figure 1 sets out the conceptual framework guiding this review. Short-term debt, long-term debt, equity financing and retained earnings are treated as the independent variables that together constitute a bank's financial structure. Capital adequacy is treated as a moderating variable, since the strength of a bank's capital position can alter how each financing source translates into stability outcomes. Financial stability, captured through indicators such as profitability, liquidity, asset

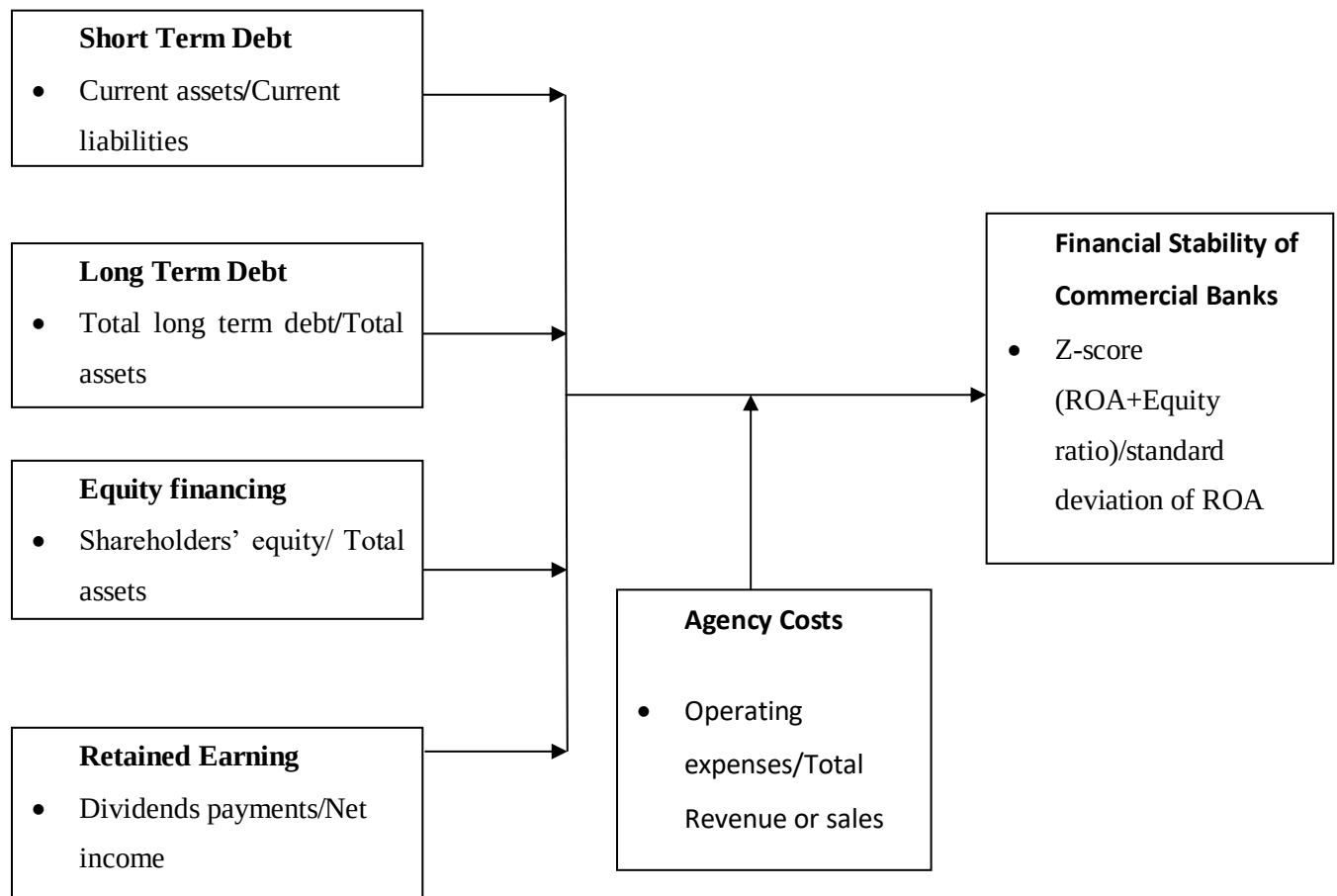
quality and insolvency risk, is treated as the dependent variable that the framework seeks to explain.

Figure 1

Conceptual framework

Independent Variables
Dependent Variable

Moderating Variable



This section reviews the empirical literature linking the four constructs of financial structure, namely short-term debt, long-term debt, equity financing and retained earnings, to the financial stability of commercial banks, and reads the resulting evidence against the three theories set out above. Because most of the underlying studies draw on data from Africa and Asia, and because several combine banks with non-financial firms or microfinance institutions in a single sample, the discussion that follows treats the findings as broadly indicative of the direction and mechanisms at work rather than as a precise, universally applicable estimate of effect size.

Short-Term Debt



Recent evidence on short-term financing paints a mixed picture. In an Ethiopian panel of private commercial banks, Muhammed et al. (2024) found that a higher loan-to-deposit ratio, a common proxy for how intensively deposits are converted into interest-earning loans, was associated with a significantly higher return on assets, while a related measure of asset growth was associated with weaker performance. Working with Vietnamese data and a Bayesian estimation approach, Oanh et al. (2023) likewise found that the composition of short-term financing and liquidity jointly shaped bank performance, with the direction of the effect depending on how the funds were deployed rather than on the volume of short-term borrowing alone. Evidence from Ghanaian microfinance institutions points in a similar direction: Dabi et al. (2023) found that the way short-term liabilities were combined with other financing sources influenced both financial performance and the sustainability of the institutions studied. Taken together, this evidence suggests that short-term debt can support liquidity and day-to-day operations, but that heavy or poorly managed reliance on it raises refinancing and liquidity pressure that can weaken stability.

These findings offer only partial support for each of the three theories. The dependence of the outcome on how funds are used, rather than on leverage alone, is broadly consistent with the Modigliani-Miller proposition that financing mix should not matter under ideal conditions, while the fact that it clearly does matter in practice points to the market imperfections, such as liquidity costs and information asymmetry, that the theorem is designed to expose. Trade-Off Theory helps explain the mixed results by suggesting that the liquidity benefits of short-term debt must be weighed against the distress costs it can create if maturities are not carefully matched to assets. Pecking Order Theory, for its part, implies that a heavy reliance on short-term borrowing may signal that a bank's internal financing capacity is limited, since firms with ample retained earnings would be expected to rely less on external funds of any maturity. On balance, the literature suggests that short-term debt should be kept within the bounds of a bank's liquidity capacity and repayment ability if it is to support, rather than undermine, financial stability. This also implies that regulators and bank managers alike have reason to look beyond the headline volume of short-term borrowing and to pay closer attention to how well its maturity profile is matched against the liquidity of the assets it funds.

Long-Term Debt

Evidence on long-term debt is similarly divided. Ayalew (2021) examined the relationship between capital structure and profitability among private commercial banks in Ethiopia and found that the level and composition of long-term financing were closely linked to profitability outcomes, underlining that the maturity structure of a bank's liabilities is not a neutral choice. Outside the banking sector, but within the same broad literature on capital structure and firm performance, Boshnak (2023) found that leverage shaped the financial performance of Saudi-listed firms, while Anozie et al. (2023) reported that capital structure choices, including the extent of long-term borrowing, were significantly associated with financial performance among Nigerian oil and gas



firms. The consistent thread running through these studies is that long-term debt can supply stable financing for productive investment, but that its benefits erode once debt-servicing costs grow large relative to a firm's earning capacity.

Trade-Off Theory offers the most direct explanation for this pattern, since it frames long-term debt as beneficial up to the point where the tax advantage of interest deductibility is outweighed by the cost of financial distress. Pecking Order Theory is also consistent with the evidence, in that it treats long-term debt as an appropriate source of finance once internal funds have been exhausted, while the Modigliani-Miller theorem continues to supply the benchmark case in which financing structure would leave firm value unaffected under perfect market conditions. Because banking involves additional layers of credit quality, liquidity and regulatory capital that do not apply to non-financial firms in the same way, the effect of long-term debt on bank stability should be read alongside these other dimensions rather than in isolation. Overall, long-term debt appears capable of strengthening financial stability when it is properly matched to a bank's asset base and repayment capacity, but it can just as easily raise financial vulnerability when leverage is allowed to grow unchecked. This underlines the point that maturity, and not merely the volume of long-term borrowing, is what ultimately determines whether such debt supports or undermines a bank's stability over time.

Equity Financing

The literature generally links equity financing to improved financial stability, although the strength of the relationship varies. Mensah et al. (2025) found that capital structure, including the proportion of equity financing, was significantly associated with business growth among firms listed on the Frankfurt Stock Exchange following the adoption of International Financial Reporting Standards, suggesting that a stronger equity base can support expansion as well as resilience. Evidence on bank capital buffers, which are built up primarily through equity and retained earnings, tells a more nuanced story: Hendrawan et al. (2023) found that capital buffers held by Indonesian commercial banks served a genuine safety-net function and supported financial stability, but that this benefit came at the cost of lower returns on assets and equity, illustrating that equity financing strengthens a bank's capacity to absorb losses even as it can weigh on short-term profitability. Sdiq and Abdullah (2022) add a further layer of nuance, showing that agency costs moderate the relationship between capital structure and financial performance in emerging markets, which implies that how additional equity capital is governed and deployed matters as much as the amount raised.

These findings sit comfortably within Trade-Off Theory, which treats equity as a way of reducing financial distress because it carries no fixed repayment obligation, and within Pecking Order Theory, which places equity last in the financing hierarchy precisely because of its higher information and issuance costs relative to retained earnings. The Modigliani-Miller theorem, by



contrast, implies that the debt-equity choice should not matter under perfect markets, so the consistent empirical link between equity financing and stability outcomes can be read as evidence of the very market imperfections, including agency costs and regulatory capital requirements, that the theorem's assumptions rule out. Equity financing therefore appears to give commercial banks a stronger capital buffer and a greater capacity to absorb losses, provided that the additional capital raised is deployed efficiently and supported by sound risk management rather than held simply to satisfy a regulatory minimum. Where equity is raised opportunistically, and left largely idle, its stabilising benefit is likely to be smaller than where it is integrated into a bank's broader lending and risk strategy.

Retained Earnings

Most recent studies point to a positive association between retained earnings, or the broader capital adequacy that retained earnings help to build, and financial stability. Linggadjaya et al. (2025) found that capital adequacy, much of which is accumulated through retained profits, moderated the relationship between several bank-specific characteristics and sustainable growth among Indonesian commercial banks, turning what would otherwise have been an adverse effect of higher leverage, lower liquidity and weaker efficiency into a more favourable one. Working with Ethiopian data, Muhammed et al. (2023) found that credit risk and the underlying strength of a bank's capital position, which retained earnings help to reinforce, were closely linked to bank soundness, while Rastogi et al. (2025) showed that a bank's internal financial strength interacts with market competition and ownership structure to shape liquidity outcomes in the Indian banking sector, underscoring that internally generated capital does not operate in isolation from the competitive and ownership environment in which a bank sits.

These findings offer strong support for Pecking Order Theory, since retained earnings represent the most preferred source of internal financing and reduce a bank's dependence on external debt and equity. They are also consistent with Trade-Off Theory, insofar as retained earnings lower leverage and the financial distress costs that come with it, whereas the Modigliani-Miller theorem would treat the source of financing as irrelevant under the idealised conditions on which it rests. Taken together, the evidence suggests that retained earnings strengthen financial stability chiefly by reinforcing capital buffers and by financing investment without creating new repayment obligations, although the extent of this benefit still depends on whether retained profits are put to productive and prudently managed use. A bank that retains earnings but continues to take on disproportionate risk elsewhere in its balance sheet may see little of the stabilising benefit that the theory would otherwise predict.

3. CONCLUSIONS



Financial structure is an important determinant of the financial stability of commercial banks because the composition and management of financing sources influence liquidity, solvency, risk exposure and the capacity to absorb financial shocks. The reviewed evidence indicates that short-term debt, long-term debt, equity financing and retained earnings have varied effects on financial stability. Short-term debt can support liquidity and operational requirements, but excessive dependence may increase refinancing and liquidity pressures. Long-term debt can provide stable financing, although excessive obligations may increase financial distress and repayment risks. Equity financing strengthens loss-absorption capacity and reduces dependence on fixed repayment obligations, while retained earnings provide internally generated funds that can strengthen capital buffers and reduce reliance on external financing.

The findings are supported by the complementary perspectives of Modigliani–Miller Theory, Trade-Off Theory and Pecking Order Theory. Modigliani–Miller provides a benchmark for understanding financing neutrality under perfect markets, while Trade-Off Theory explains the balance between debt benefits and financial distress costs. Pecking Order Theory emphasizes internally generated funds before external financing. Overall, financial stability depends on maintaining an appropriate financing mix, supported by effective risk management, adequate capital and prudent liquidity management. The study therefore concludes that financial structure should be managed strategically rather than focusing on any single source of finance.

4. RECOMMENDATIONS

Commercial banks should adopt balanced financial structures that match their financing requirements with their liquidity, profitability and risk-bearing capacities. Bank management should closely monitor short-term debt to prevent excessive refinancing obligations and liquidity pressures, particularly during periods of financial market uncertainty. Long-term borrowing should be undertaken prudently, with careful assessment of repayment capacity, financing costs and expected returns from investments.

Banks should also strengthen equity financing and retained earnings because these sources can provide stronger capital buffers and improve the capacity to absorb unexpected losses. Retained earnings should be supported by effective profitability and cost-management strategies while ensuring that internally generated funds are invested productively. In addition, bank boards and managers should regularly review the relationship between leverage, capital adequacy, liquidity and financial stability to identify emerging vulnerabilities.

Regulators should strengthen monitoring of banks' financing structures and ensure compliance with applicable capital and liquidity requirements. Finally, commercial banks should integrate financial structure decisions with comprehensive risk-management frameworks rather than treating financing decisions independently. This would support sustainable financial stability



while allowing banks to maintain adequate funding for lending, investment and other core operations.

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