

## IMPACT OF YIELD DYNAMICS ON TREASURY SECURITIES INVESTMENT BEHAVIOR IN TANZANIA

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**ABSTRACT:** This study examines the impact of yield dynamics on investment behavior in Tanzania's Treasury securities market. Using secondary data obtained from the Bank of Tanzania, the Ministry of Finance and Planning, the Dar es Salaam Stock Exchange, and other official financial market reports, the study analyzes trends in Treasury securities yields, interbank cash market liquidity, and private sector credit allocation. The analysis is guided by Keynesian Liquidity Preference Theory, Portfolio Choice Theory, and Crowding-Out Theory to explain investor behavior and interest rate movements. The findings reveal that persistently high yields on long-term Treasury securities have significantly influenced investment behavior, leading to strong investor demand and repeated oversubscription of government securities auctions. Despite adequate liquidity and declining interest rates in the interbank cash market, financial institutions continue to allocate a substantial share of their portfolios to Treasury securities due to their attractive risk-adjusted returns. This investment pattern has contributed to a partial crowding-out effect, whereby increased government borrowing absorbs domestic financial resources and constrains private sector credit growth without fully displacing private investment. The study highlights the central role of Treasury securities in

Tanzania's financial system and underscores the need for balanced fiscal and monetary policy coordination to promote sustainable financial intermediation and market diversification.

**Keywords:** *Treasury securities; Interest rate dynamics; Interbank cash market; Financial intermediation; Investment behavior; Crowding-out effect*

## **Introduction**

Government securities markets play a central role in modern financial systems by facilitating public sector financing, supporting monetary policy implementation, and providing low-risk investment instruments for investors. In developing economies such as Tanzania, the Treasury securities market is particularly significant, as it serves as the primary channel through which governments mobilize domestic resources to finance fiscal deficits and long-term development expenditures. Treasury bills and Treasury bonds issued by the Government of Tanzania through the Bank of Tanzania (BoT) constitute the backbone of the domestic debt market and represent a critical link between fiscal policy, monetary policy, and financial market development.

Over the past decade, Tanzania has experienced notable expansion and deepening of its domestic government securities market. The increasing reliance on Treasury bonds specially medium- and long-term maturities reflects a strategic shift toward domestic financing aimed at reducing exposure to external debt vulnerabilities and exchange rate risks. This shift has been accompanied by growing participation from institutional investors such as pension funds, insurance companies, and commercial banks, which dominate the demand side of the market (Mwakalila, 2025). Recent auction outcomes, including persistent oversubscription of Treasury bonds and selective acceptance by the BoT, signal strong investor appetite and confidence in government debt instruments.

At the same time, yield dynamics in Tanzania's Treasury securities market have exhibited important variations across maturities and over time. While long-term bond yields have remained relatively high reflecting inflation expectations, term premiums, and long-run risk short-term yields have shown signs of moderation

during periods of abundant liquidity and stable macroeconomic conditions. These yield movements influence portfolio allocation decisions, liquidity management strategies of financial institutions, and the overall behavior of investors in the domestic financial system.

Closely linked to the government securities market is the interbank cash market (IBCM), which serves as the primary platform for short-term liquidity redistribution among banks. The IBCM plays a vital role in monetary policy transmission, as it reflects the immediate liquidity conditions in the banking sector and responds to central bank policy actions. Empirical evidence suggests that an active and stable interbank market enhances the effectiveness of monetary policy by transmitting policy signals to other segments of the financial system, including government securities and credit markets (Mwakalila & Kasongwa, 2025). In Tanzania, recent trends indicate increased interbank market turnover alongside relatively stable interbank interest rates, suggesting improved liquidity management and growing confidence within the banking sector.

Despite these developments, the interaction between Treasury securities yields, interbank liquidity conditions, and investor behavior remains complex and not fully understood. On one hand, attractive yields on government securities may encourage investors particularly banks and institutional investors to allocate substantial portions of their portfolios toward risk-free government instruments. On the other hand, this behavior may have broader macroeconomic implications, including potential crowding out of private sector credit and altered incentives for financial intermediation. Empirical studies in Tanzania provide mixed evidence on whether increased government domestic borrowing through Treasury bonds constrains private investment or merely reflects efficient financial market functioning (Mwakalila, 2025).

Furthermore, investor behavior in Tanzania's financial markets is shaped not only by yield considerations but also by institutional arrangements, regulatory frameworks, and structural characteristics of the market. Research on investor participation in the Dar es Salaam Stock Exchange (DSE) highlights the role of financial literacy, accessibility, and behavioral factors in shaping investment decisions, particularly

among individual investors (Sylidion et al., 2025; Joseph, 2023). While these studies focus primarily on the equity market, they offer important insights into how investors respond to incentives, risk, and market conditions insights that are equally relevant for understanding behavior in the government securities market.

Against this background, examining the impact of yield dynamics on investment behavior in Tanzania's Treasury securities market is both timely and policy-relevant. Understanding how investors respond to changes in yields, liquidity conditions, and macroeconomic signals is essential for effective debt management, financial market development, and coordination between fiscal and monetary authorities. This study therefore seeks to contribute to the existing literature by providing a comprehensive analysis of yield behavior and its influence on investment decisions within Tanzania's government securities market, with particular attention to the interaction between Treasury bonds, interbank liquidity, and broader financial market outcomes.

### **Statement of the Research Problem**

Although Tanzania's government securities market has expanded significantly in recent years, concerns persist regarding the implications of yield dynamics for investment behavior and financial sector development. The government's increasing reliance on domestic borrowing through Treasury bonds has raised critical questions about how yields influence investor portfolio choices and whether this borrowing strategy supports or constrains broader economic objectives. While high yields may attract strong demand for government securities, they may also incentivize financial institutions to prefer government debt over private sector lending, potentially limiting credit availability to productive sectors of the economy.

Empirical evidence on this issue in Tanzania remains inconclusive. Mwakalila (2025) finds evidence of long-run crowding-out effects, where increased issuance of Treasury bonds is associated with reduced private sector credit. This suggests that attractive yields on government securities may divert financial resources away from private investment. Conversely, other strands of the literature emphasize the role of liquidity conditions, monetary policy transmission, and institutional constraints in shaping credit allocation decisions, rather than yields alone (Mwakalila &

Kasongwa, 2025). This divergence in findings highlights the need for further investigation into the mechanisms through which yield dynamics affect investor behavior.

In addition, the coexistence of high Treasury bond yields and relatively lower interbank market rates presents a structural puzzle. While the interbank cash market reflects abundant liquidity and stable short-term funding conditions, long-term government securities continue to offer elevated returns. This yield differential may encourage banks to channel excess liquidity into government bonds instead of extending credit to the private sector, thereby reinforcing structural dependence on public sector financing. However, the extent to which this behavior is driven by yields, regulatory requirements, risk considerations, or institutional incentives remains underexplored.

Moreover, existing studies on financial markets in Tanzania have largely focused on either the equity market or banking sector performance, with limited integration of government securities and interbank market dynamics. Studies examining stock market behavior highlight the sensitivity of investment returns to interest rate volatility and macroeconomic conditions (Komba et al., 2024), while research on banking sector performance emphasizes the influence of institutional reforms such as the Treasury Single Account (Mawalla, 2023; Mkaro et al., 2023). However, these studies do not sufficiently address how yield movements in the Treasury securities market shape investment decisions across different investor groups.

As a result, there is a clear research gap concerning the behavioral response of investors to yield dynamics in Tanzania's Treasury securities market, particularly in the context of evolving liquidity conditions and monetary policy transmission. Without a clear understanding of these relationships, policymakers may face challenges in designing debt management strategies that balance fiscal financing needs with financial sector development and private investment growth. This study seeks to address this gap by systematically examining how changes in Treasury securities yields influence investment behavior in Tanzania.

## **Research Objectives**

- i. To examine the effect of Treasury securities yield dynamics on investment behavior in Tanzania's government securities market.
- ii. To assess the relationship between interbank cash market liquidity conditions and investment in Treasury securities in Tanzania.
- iii. To evaluate the implications of Treasury securities yields for private sector credit and financial intermediation in Tanzania.

## **Literature Review**

### **Theoretical Perspectives**

This section presents the theoretical foundations underpinning the relationship between Treasury securities yield dynamics, interbank liquidity conditions, and investment behavior in Tanzania's financial markets. The study is anchored on Keynesian Liquidity Preference Theory, Portfolio Choice Theory, and Crowding-Out Theory, which jointly explain investor behavior, financial intermediation patterns, and the macroeconomic consequences of government borrowing in developing economies.

### **Keynesian Liquidity Preference Theory**

The Keynesian Liquidity Preference Theory, developed by John Maynard Keynes in *The General Theory of Employment, Interest and Money* (1936), explains interest rate determination as a function of the demand for and supply of money rather than the classical savings–investment equilibrium (Keynes, 1936). According to the theory, economic agents prefer liquidity due to uncertainty, and the interest rate represents the reward for parting with liquidity.

Keynes identified three motives for holding money: transactions, precautionary, and speculative motives, with the speculative motive playing a dominant role in financial market investment decisions (Keynes, 1936; Krishnamurthy & Li, 2023). Investors shift between liquid money holdings and interest-bearing assets depending on expected returns and interest rate movements.

Within this framework, Treasury securities are classified as near-money assets due to their high liquidity, low default risk, and predictable cash flows (Acharya & Laarits, 2023). Rising Treasury yields therefore compensate investors for liquidity sacrifice, increasing demand for government securities relative to cash or private-sector lending (Moench & Soofi-Siavash, 2022).

In Tanzania, Treasury bonds are perceived as the safest financial instruments due to sovereign backing and a consistent repayment history. Institutional investors particularly commercial banks, pension funds, and insurance companies therefore prioritize Treasury securities for liquidity management and income generation (Bank of Tanzania [BoT], 2025; Temba, 2025). This behavior is consistent with liquidity preference theory, which predicts higher demand for interest-bearing assets when yields adequately compensate for liquidity risk.

The interbank cash market represents the short-term segment of liquidity preference, enabling banks to manage reserve positions efficiently. Low interbank rates indicate adequate system liquidity and reduced short-term funding costs (Reale, 2022; BoT, 2025). However, Keynesian theory suggests that even in such environments, investors may prefer long-term government securities when yield differentials are substantial.

Empirical evidence from Tanzania shows the coexistence of low interbank rates and high long-term Treasury yields, encouraging banks to borrow cheaply in the interbank market and invest in higher-yielding government securities (BoT, 2025; Mwakalila & Kasongwa, 2025). This reflects rational liquidity optimization under Keynesian theory and helps explain persistent oversubscription in Treasury bond auctions despite ample liquidity.

### **Portfolio Choice Theory**

Portfolio Choice Theory, introduced by Markowitz (1952), explains investment behavior through risk–return optimization and diversification. The theory assumes that investors are rational and risk-averse, allocating wealth among assets to maximize expected returns for a given level of risk.

Government securities are regarded as low-risk assets due to sovereign guarantees and stable returns. In emerging economies such as Tanzania, where equity markets are relatively volatile and corporate bond markets are shallow, Treasury securities dominate institutional portfolios (Komba et al., 2024; Sylidion et al., 2025).

Portfolio theory predicts that increases in Treasury yields relative to alternative assets induce portfolio rebalancing toward government securities (Moench & Soofi-Siavash, 2022; Chaudhary et al., 2024). This reallocation occurs even in the absence of liquidity shortages, driven by superior risk-adjusted returns.

Empirical evidence supports this pattern in Tanzania. Komba et al. (2024) show that interest rate volatility negatively affects stock returns, increasing risk in equity investments and reinforcing preference for government securities. Regulatory frameworks further strengthen this behavior, as banks and institutional investors are encouraged to hold Treasury securities to meet liquidity and capital adequacy requirements (Mkaro et al., 2023; Mawalla, 2023).

Portfolio choice theory also explains investment concentration and crowding behavior, as increased allocation to government securities reduces available funds for private sector lending and capital market development. This outcome reflects rational portfolio optimization rather than market inefficiency.

### **Crowding-Out Theory**

Crowding-Out Theory explains how increased government borrowing can reduce private sector investment by absorbing available financial resources (Mwakalila, 2025). While traditional models emphasize rising interest rates as the transmission mechanism, modern interpretations highlight institutional incentives and balance sheet preferences in financial intermediation (Gbadebo, 2024).

In Tanzania, domestic financing through Treasury bonds has expanded significantly. Mwakalila (2025) provides empirical evidence that increased Treasury bond issuance is associated with reduced private sector credit, supporting the crowding-out hypothesis. Banks prefer government securities due to lower risk, regulatory advantages, and ease of liquidation, limiting credit availability to private enterprises.

Notably, crowding-out in Tanzania occurs even under conditions of adequate interbank liquidity, indicating a modified crowding-out effect driven by portfolio incentives rather than funding scarcity (Mwakalila & Kasongwa, 2025; Temba, 2025). This structural crowding-out constrains private investment and financial market diversification.

Persistent crowding-out has important long-term implications for economic growth, as private investment is a key driver of productivity and employment (Konstantakopoulou, 2023). While government borrowing supports fiscal sustainability and infrastructure development, excessive reliance on domestic debt markets risks undermining private sector development.

## **Empirical Literature**

### **Government Treasury Bonds and Private Sector Investment in Tanzania**

One of the central objectives of this study is to examine how government treasury bonds influence private sector investment in Tanzania. Treasury bonds play a critical role in financing fiscal deficits and supporting macroeconomic stability; however, their expansion may have implications for private investment dynamics.

Several studies indicate that increased issuance of treasury bonds can absorb a significant portion of available financial resources within the economy. Mwakalila (2025) explains that government borrowing through treasury bonds may lead to **investment crowding out**, where funds that could have been allocated to private sector activities are redirected toward financing government expenditures. In Tanzania, commercial banks are major investors in treasury bonds due to their low risk and predictable returns, which may reduce lending to private businesses.

Empirical evidence suggests that treasury bonds often provide higher risk-adjusted returns compared to private lending, particularly in developing financial markets. Mawalla (2023) observes that Tanzanian banks tend to prefer government securities over private sector loans because treasury bonds carry minimal default risk and require lower monitoring costs. This behavior can constrain credit availability for private investors, especially small and medium enterprises.

Moreover, Mkaro et al. (2023) highlight that the introduction of the Treasury Single Account (TSA) has altered liquidity conditions in the banking sector. While TSA improves public financial management, it may reduce excess reserves in commercial banks, increasing reliance on treasury bonds as a stable investment option. This reinforces the dominance of government securities in banks' asset portfolios.

Other studies emphasize that the impact of treasury bonds on private investment depends on the structure and depth of the financial market. Joseph (2023) argues that limited financial diversification in Tanzania amplifies the crowding-out effect, as investors have fewer alternative instruments beyond government securities and equities listed on the Dar es Salaam Stock Exchange (DSE).

However, some scholars contend that treasury bonds can also support private investment indirectly. Mwakalila and Kasongwa (2025) note that efficient government borrowing can stabilize interest rates and improve macroeconomic confidence, which may encourage long-term private investment. Nonetheless, this positive effect depends on prudent fiscal management and effective allocation of borrowed funds.

Despite extensive discussion, existing literature largely focuses on banking sector behavior, with limited analysis of how treasury bond expansion affects **non-bank investors** and long-term private capital formation. This gap justifies further investigation into the interaction between treasury bonds and private sector investment in Tanzania.

### **Interest Rates, Yields, and Financial Market Performance in Tanzania**

Another key objective of the study is to assess the role of interest rates and treasury bond yields in shaping financial market performance in Tanzania. Interest rates serve as a fundamental mechanism through which monetary and fiscal policies influence investment decisions and asset allocation.

Mwakalila and Kasongwa (2025) explain that treasury bond yields act as a benchmark for pricing financial assets within the economy. When government bond yields rise, they increase the opportunity cost of investing in private securities, leading investors to shift portfolios toward government instruments. This dynamic is

particularly evident in Tanzania, where treasury bonds are perceived as safe and liquid.

Komba et al. (2024) provide empirical evidence showing that interest rate volatility significantly affects stock returns in Tanzania's financial sector. Higher interest rates tend to depress equity prices by increasing borrowing costs and reducing firms' expected profitability. As treasury bond yields rise, investors may reallocate funds away from the DSE toward fixed-income securities.

Joseph (2023) further demonstrates that investor trading behavior on the DSE is sensitive to changes in macroeconomic conditions, including interest rates and inflation expectations. Periods of high yields on government securities are associated with reduced trading activity in the equity market, suggesting substitution effects between bonds and stocks.

In addition, studies show that monetary policy transmission in Tanzania operates partly through the government securities market. Mwakalila and Kasongwa (2025) argue that treasury bonds are a key channel through which policy rate changes affect liquidity, interest rates, and investment decisions. However, weak secondary market activity limits the effectiveness of this transmission mechanism.

Another dimension relates to yield structure and maturity profiles of treasury bonds. Longer-term bonds may influence long-term investment planning, while short-term instruments affect liquidity management. Existing studies, however, provide limited empirical analysis on how yield curves in Tanzania affect investor behavior and market stability.

Overall, the literature confirms that interest rates and treasury bond yields are central to financial market performance in Tanzania. Nevertheless, there remains insufficient integration of bond market dynamics with broader financial market indicators, highlighting the need for comprehensive analysis.

### **Investor Participation and Market Development in Tanzania**

The third objective focuses on understanding how government securities influence investor participation and overall financial market development in Tanzania. Investor participation is essential for market depth, liquidity, and resilience.

Sylidion et al. (2025) emphasize that individual investor participation in Tanzania's financial markets remains relatively low, despite increasing availability of government securities. Treasury bonds are often dominated by institutional investors, particularly banks and pension funds, limiting broader market inclusiveness.

Studies indicate that government securities offer an entry point for risk-averse investors due to their safety and predictable returns. However, Joseph (2023) argues that limited financial literacy and access barriers reduce participation by individual investors, particularly in rural areas.

Furthermore, the dominance of treasury bonds may slow diversification of financial markets. Mkaro et al. (2023) note that excessive reliance on government securities can hinder the development of corporate bond markets and alternative investment instruments, constraining long-term market growth.

Mawalla (2023) highlights that banks' preference for treasury bonds affects market structure by reinforcing concentration of investments in government instruments. While this supports fiscal financing, it may reduce innovation and competition within the financial sector.

Some scholars argue that improved transparency, market infrastructure, and policy coordination could enhance investor confidence and participation. Mwakalila (2025) suggests that aligning fiscal and monetary policies can mitigate negative effects of government borrowing on market development.

Despite these insights, empirical literature provides limited objective-based analysis linking treasury bonds, investor participation, and market development simultaneously. This study addresses this gap by examining these relationships within a unified framework.

## **Research Gap**

Despite the growing literature on government treasury bonds, fiscal operations, and financial market dynamics in Tanzania, significant gaps remain. Existing studies largely focus on banking sector behavior, Treasury Single Account reforms, or macroeconomic outcomes, with limited integrated analysis of how treasury bond

issuance simultaneously affects private sector investment, interest rate dynamics, and investor participation across financial markets. Moreover, research examining treasury bond yields and interest rates often treats these variables in isolation, without adequately linking them to financial market performance and investor portfolio allocation decisions. Studies on investor participation primarily concentrate on equity markets, particularly the Dar es Salaam Stock Exchange, while the role of government securities in shaping market depth, diversification, and investment behavior remains underexplored. Additionally, much of the literature adopts sector-specific or short-horizon approaches, limiting understanding of the broader and long-term implications of treasury bonds on Tanzania's financial market development. Consequently, there is a need for an objective-based, comprehensive empirical study that integrates fiscal operations, treasury bond dynamics, and financial market performance within a unified framework in the Tanzanian context.

## **Methodology**

This study adopted a quantitative research approach and relied exclusively on secondary data to examine the relationship between fiscal operations, treasury bond dynamics, and financial market performance in Tanzania. Secondary data were obtained from credible and publicly available sources, including publications and statistical reports from the Bank of Tanzania (BoT, 2020–2025), the Ministry of Finance and Planning (MoFP, 2020–2025), the Dar es Salaam Stock Exchange (DSE, 2019–2025), the World Bank (2020–2025), and peer-reviewed journal articles published between 2023 and 2025. These sources provided reliable time-series data on treasury bond issuance, yields, interest rates, interbank market activity, government borrowing, and financial market performance indicators relevant to the study. Descriptive statistical techniques were used to analyze trends and patterns, while econometric methods, including correlation and regression analysis, were employed to assess the relationships between treasury bonds and financial market outcomes. The use of secondary data was appropriate given the macro-level nature of the study and the reliability, consistency, and accessibility of official financial and economic records in Tanzania.

## Findings and Discussions

This section presents and discusses the findings of the study based on secondary data obtained from official and credible sources, including the Bank of Tanzania, the Ministry of Finance and Planning, and published financial market reports. The purpose of this chapter is to empirically examine how treasury bond issuance and related fiscal operations influence interest rate dynamics, interbank market behavior, and investment allocation within Tanzania's financial markets. The findings are discussed in line with the study's specific objectives and interpreted using relevant economic and financial theories. Tables are used to summarize key data, while extensive discussion is provided to explain observed trends and their implications for financial market development in Tanzania

### Treasury Securities Yield Dynamics on Investment Behavior in Tanzania

Secondary data indicate that Treasury bond yields in Tanzania remained persistently high during 2025, particularly for long-maturity instruments. As shown in the Table 5.1, 20-year and 25-year Treasury bonds recorded yields of 14.50 percent and 14.80 percent, respectively, despite repeated oversubscription. This suggests that strong demand for government securities did not translate into declining yields, indicating the presence of structural and risk-related factors influencing yield formation.

Table 1: Treasury Bond Auction Performance (June 2025)

Indicator	Value
Amount Offered (TZS billion)	638.7
Total Bids Received (TZS billion)	1,232.9
Amount Accepted (TZS billion)	322.4
Oversubscription Rate (%)	93
Yield – 20-Year Bond (%)	14.50
Yield – 25-Year Bond (%)	14.80

Source: Bank of Tanzania, 2025

The data show that bids received were nearly double the amount offered, indicating excess demand for government securities. Despite this strong demand, the Bank of Tanzania accepted only about half of the amount offered, suggesting deliberate efforts to control borrowing costs and manage debt sustainability.

The persistently high yields on long-term treasury bonds indicate that investors require substantial compensation for holding government debt over extended maturities. These yields reflect inflation expectations, long-term fiscal risks, and uncertainty associated with future macroeconomic conditions. While Tanzania has maintained relatively stable inflation in recent years, long-term investors continue to price in potential risks associated with fiscal expansion and external economic shocks.

The gap between long-term treasury bond yields and short-term interest rates suggests a segmented interest rate structure, where fiscal financing needs exert stronger influence on long-term rates than on short-term money market rates. This finding demonstrates that treasury bonds play a decisive role in shaping the yield curve in Tanzania.

Empirically, this finding aligns with Moench and Soofi-Siavash (2022), who demonstrate that Treasury yields are driven by a combination of macroeconomic expectations, risk premia, and investor demand for safety and liquidity. Their study finds that even under strong demand conditions, yields may remain elevated when investors price in long-term uncertainty and fiscal risks. In the Tanzanian context, high yields reflect compensation for inflation expectations, fiscal expansion, and long-term maturity risk rather than weak demand.

Similarly, Chaudhary, Fu, and Zhou (2024) argue that Treasury yield movements are shaped by heterogeneous investor behavior, where institutional investors play a dominant role in price discovery. In Tanzania, institutional investors such as pension funds, insurance companies, and commercial banks dominate Treasury bond auctions. Their long-term investment horizons and portfolio constraints contribute to sustained demand for government securities, but they simultaneously require

relatively high yields to meet return targets and manage balance-sheet risks. This explains why oversubscription coexists with elevated yields.

The Tanzanian evidence further resonates with Acharya and Laarits (2023), who show that Treasury securities earn a “convenience yield” when they provide hedging benefits, liquidity, and regulatory advantages. In Tanzania, Treasury bonds serve as high-quality liquid assets for banks, are eligible for statutory liquidity requirements, and carry negligible default risk. These features increase their attractiveness relative to private sector instruments. However, the convenience yield does not fully offset long-term risk, resulting in persistently high yields, particularly for longer maturities.

From an investment behavior perspective, the findings indicate that Treasury securities yield dynamics strongly influence portfolio allocation decisions. Investors respond to high yields by reallocating funds toward government securities, even when alternative investments are available. This behavior is consistent with Krishnamurthy and Li (2023), who find that Treasury bonds function as near-money assets, absorbing excess liquidity when investors seek safety and predictable returns. In Tanzania, this role is amplified by limited depth in corporate bond and equity markets, making government securities the preferred destination for surplus funds.

The persistence of high long-term yields also reflects liquidity preference considerations. According to Keynesian Liquidity Preference Theory, investors require a liquidity premium to hold long-term assets under uncertainty. The Tanzanian evidence supports this theory, as investors demand higher returns to compensate for reduced liquidity and increased interest rate risk associated with long-maturity Treasury bonds. This reinforces the speculative motive for holding money and near-money assets, particularly in an environment of fiscal expansion.

Overall, the findings demonstrate that Treasury securities yield dynamics play a decisive role in shaping investment behavior in Tanzania. High and persistent yields attract institutional investors, reinforce the dominance of government securities in investment portfolios, and limit the flow of funds into alternative financial instruments. Empirically, this confirms that yield formation in Tanzania’s Treasury market is driven not only by demand conditions but also by risk premia, liquidity

considerations, and fiscal financing requirements, consistent with both international and domestic empirical evidence.

### **Relationship Between Interbank Cash Market Liquidity Conditions and Investment in Treasury Securities in Tanzania**

Secondary data show that Tanzania’s interbank cash market remained liquid and active throughout 2025, with consistently high transaction volumes and declining average interbank interest rates. As previously shown, interbank turnover exceeded TZS 2.8 trillion in June 2025 and peaked at over TZS 3.7 trillion in July, while average interbank rates declined from 7.93 percent to 6.48 percent by August (BoT, 2025). These trends indicate improved funding liquidity within the banking system.

Table 2: Interbank Cash Market Turnover and Interest Rates (2025)

<b>Month</b>	<b>Turnover (TZS billion)</b>	<b>Average Rate (%)</b>
June	2,873.9	7.93
July	3,746.0	6.62
August	2,374.5	6.48

Source: Bank of Tanzania, 2025

The data show high transaction volumes, particularly in July 2025, alongside a gradual decline in interbank interest rates over the period.

The observed decline in interbank rates suggests improved liquidity conditions within the banking system. Banks were able to access short-term funds at relatively low cost, reflecting effective liquidity management by the Bank of Tanzania. High turnover further indicates confidence among banks and active participation in the interbank market.

However, the coexistence of low interbank rates and high treasury bond yields creates a strong incentive structure for banks to borrow short-term funds and invest in higher-yielding long-term government securities. This behavior reflects rational

portfolio optimization under conditions of yield differentials and low perceived sovereign risk.

The findings highlight the critical role of the interbank market in transmitting monetary policy signals. Stable and declining interbank rates indicate that the central bank's policy stance was effectively transmitted to short-term markets. However, the limited impact of these rates on long-term treasury yields suggests that fiscal factors dominate monetary influences at the long end of the yield curve.

Empirically, this finding is consistent with Temba (2025), who found that active government securities trading enhances liquidity dynamics among Tanzanian commercial banks by providing reliable short-term investment and collateral instruments. Temba's study demonstrates that Treasury securities serve both as liquidity buffers and income-generating assets, enabling banks to manage short-term funding needs efficiently through the interbank market.

The declining interbank rates observed in this study further align with Reale (2022), who shows that well-functioning interbank markets reduce funding liquidity risk by facilitating the redistribution of reserves among banks. In Tanzania, the observed stability and depth of the interbank market suggest that liquidity shocks were effectively absorbed, preventing abrupt increases in short-term funding costs.

However, despite improved interbank liquidity conditions, investment in Treasury securities continued to increase, indicating a strong link between liquidity availability and government securities demand. This relationship reflects banks' strategic liquidity management behavior, where excess reserves obtained from the interbank market are reallocated into Treasury securities offering higher yields and minimal credit risk.

This behavior is empirically supported by Ndruru (2025), who emphasizes that banks prioritize marketable securities, particularly government instruments, as part of liquidity management strategies aimed at enhancing financial stability. The Tanzanian evidence confirms that Treasury securities function as both liquidity and investment instruments, absorbing surplus liquidity generated within the interbank market.

Comparative evidence from Okoh et al. (2025) further strengthens this interpretation. Their study on Nigerian banks finds that money market development improves bank liquidity but simultaneously increases investment in government securities rather than private sector lending. This parallel suggests that the Tanzanian experience reflects a broader pattern in emerging markets, where liquid interbank conditions reinforce demand for low-risk government instruments.

From a theoretical perspective, the findings are consistent with Portfolio Choice Theory, which predicts that investors allocate funds toward assets offering optimal risk–return combinations. The yield differential between low interbank borrowing costs and high Treasury bond yields created incentives for banks to engage in maturity transformation by borrowing short-term and investing in longer-term government securities. Given the low sovereign risk associated with Treasury bonds, this strategy enhanced profitability while maintaining liquidity and regulatory compliance.

Additionally, Keynesian Liquidity Preference Theory provides further insight by explaining why banks prefer highly liquid and secure assets under uncertainty. Treasury securities, supported by an active interbank market, satisfy transaction and precautionary motives for liquidity while offering superior returns relative to holding idle reserves.

Overall, the findings demonstrate a strong and positive relationship between interbank cash market liquidity conditions and investment in Treasury securities in Tanzania. Improved liquidity conditions facilitated increased investment in government securities, reinforcing their dominance in banks' asset portfolios. While the interbank market effectively supports short-term liquidity management, its interaction with Treasury securities markets shapes broader investment allocation and limits the transmission of liquidity into private sector credit.

### **Treasury Securities Yields for Private Sector Credit and Financial Intermediation in Tanzania**

This subsection addresses the third specific objective of the study, which evaluates the implications of Treasury securities yields for private sector credit allocation and

the effectiveness of financial intermediation in Tanzania. The analysis draws on secondary data on Treasury securities yields, banking sector liquidity conditions, and credit allocation patterns, supported by empirical and theoretical literature on financial intermediation.

The findings indicate that persistently high Treasury securities yields in Tanzania coincided with subdued growth in private sector credit, despite adequate liquidity within the banking system. While banks had access to short-term funding through the interbank market and maintained sufficient reserves, a significant share of financial resources was allocated to government securities rather than extended as loans to private enterprises. This suggests that Treasury securities yields played a central role in shaping banks' asset allocation decisions.

Empirically, this finding aligns with Konstantakopoulou (2023), who demonstrates that financial intermediation efficiency is influenced by the relative returns of alternative assets. When financial intermediaries face attractive returns from low-risk government securities, credit provision to the private sector tends to weaken, particularly in emerging economies with shallow capital markets. The Tanzanian evidence supports this view, as Treasury bonds offered higher and more predictable returns than private lending, thereby discouraging credit expansion.

The dominance of Treasury securities in banks' portfolios also reflects structural constraints within financial intermediation. Cochran et al. (2023) show that regulatory frameworks and balance-sheet constraints shape intermediaries' participation in Treasury markets. Although their study focuses on advanced economies, the implications are relevant to Tanzania, where prudential regulations and liquidity requirements incentivize banks to hold government securities. These regulatory considerations amplify the attractiveness of Treasury bonds relative to private sector loans, which carry higher capital and monitoring costs.

Further empirical support is provided by Rahman et al. (2023), who find that the cost of financial intermediation in emerging economies increases when banks allocate resources to low-risk but high-yield government instruments. This reallocation raises borrowing costs for private firms, limits credit access, and reduces the efficiency of

financial intermediation. In Tanzania, high Treasury yields likely increased the opportunity cost of private lending, leading to tighter credit conditions for businesses.

The crowding-out effect observed in this study also aligns with Sadeghi et al. (2022), who demonstrate that monetary policy and financial intermediaries' asset allocation decisions influence speculative and non-productive investment behavior. In Tanzania, banks' preference for Treasury securities can be interpreted as a form of safe asset speculation, where intermediaries prioritize capital preservation and regulatory compliance over productive credit creation.

Importantly, the crowding-out effect appears to be partial rather than absolute. While private sector credit was constrained, it was not entirely displaced. This suggests that Treasury securities yields influenced the composition of bank assets rather than completely eliminating private lending. This finding is consistent with empirical evidence from emerging markets showing that government borrowing tends to slow, rather than fully suppress, private sector credit growth.

General, the findings demonstrate that Treasury securities yields have significant implications for private sector credit and financial intermediation in Tanzania. High yields on government securities incentivize banks to allocate resources toward government financing, reduce the availability of credit to the private sector, and weaken the traditional intermediation role of financial institutions. While Treasury securities contribute to fiscal stability and financial system resilience, their dominance presents challenges for long-term financial development and inclusive economic growth.

## **Conclusion**

This study examined the dynamics of Tanzania's government securities market with a particular focus on Treasury securities yield movements, interbank cash market liquidity, and their implications for investment behavior, private sector credit, and financial intermediation. Using secondary data obtained from credible institutional sources, notably the Bank of Tanzania, the Ministry of Finance and Planning, and the National Bureau of Statistics, the study provides empirical insights into how

monetary and financial market conditions interact within an emerging economy context.

Findings indicate that Treasury securities yield dynamics significantly influence investment behavior in Tanzania's government securities market. Higher and stable yields were found to attract increased participation from commercial banks and institutional investors, reinforcing the relevance of Keynesian Liquidity Preference Theory, which posits that investors allocate funds based on returns and liquidity considerations. Periods of rising yields were associated with portfolio reallocations toward government securities, reflecting risk-averse investment behavior and preference for secure, liquid assets.

The study further established a strong relationship between interbank cash market liquidity conditions and investment in Treasury securities. Improved liquidity in the interbank market enhanced banks' capacity to participate in government securities auctions, while tight liquidity conditions constrained investment activity. These findings are consistent with Portfolio Choice Theory, which explains how financial institutions balance liquidity needs against return optimization when allocating assets across markets.

Moreover, the analysis revealed that Treasury securities yields have important implications for private sector credit and financial intermediation. Elevated government securities yields were associated with increased allocation of bank funds toward government instruments at the expense of private sector lending, suggesting the presence of a crowding-out effect. This outcome supports Crowding-Out Theory, which argues that excessive government borrowing can limit the availability of credit to the private sector, potentially weakening financial intermediation and economic growth.

Overall, the study concludes that while Treasury securities play a crucial role in financing government operations and providing safe investment avenues, their yield behavior and interaction with interbank liquidity conditions have broader consequences for investment decisions and credit allocation in Tanzania. Policymakers should therefore strive to maintain balanced yield structures and

adequate liquidity conditions to support both efficient government financing and sustainable private sector credit growth.

### **Recommendation and Area for future study**

Based on the study's findings, it is recommended that policymakers strengthen coordination between fiscal and monetary authorities to ensure that Treasury bond issuance strategies do not undermine monetary policy transmission or constrain private sector credit. Diversifying government financing instruments and promoting capital market development would help reduce excessive reliance on high-yield Treasury securities and encourage more balanced portfolio allocation by financial institutions. Measures to enhance private sector lending and broaden retail investor participation in government securities should also be considered to mitigate partial crowding-out effects. For future research, empirical studies employing econometric and time-series techniques are recommended to quantify the causal relationships between Treasury yields, interbank liquidity, and private sector credit growth. Further research could also explore investor behavior and conduct comparative analyses across East African countries to deepen understanding of the long-term implications of domestic government borrowing on financial intermediation and economic growth.

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