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Article

Liquidity Concentration in Uzbekistan's Interbank Market: The Role of Repo Transactions, Overnight Funding, and Large Banks

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Abstract: This paper examines liquidity concentration in Uzbekistan's interbank money market in the context of monetary policy modernization, the expansion of collateral-based market mechanisms, and the persistent structural role of large banks in short-term funding redistribution. The topic is especially relevant for a bank-centered financial system in which the state remains an important shareholder in major institutions and in which the interbank market plays a critical role in transmitting monetary policy impulses, smoothing short-term liquidity mismatches, and supporting payment continuity. The objective of the study is to assess the degree of concentration in interbank liquidity flows, to identify the role of repurchase agreement transactions and overnight operations in the redistribution of short-term funds, and to evaluate the significance of large and systemically important banks in shaping the structure of the money market. The empirical analysis is based on official publications of the Central Bank of the Republic of Uzbekistan, including the Annual Report 2024, money market and liquidity reviews for the first quarter of 2025, the second quarter of 2025, and the first quarter of 2026, banking sector balance-sheet statistics, liquidity indicators, and official disclosures on domestic systemically important banks. The methodology combines descriptive and comparative analysis with concentration measures, including the concentration ratios of the three and five largest institutions and the Herfindahl-Hirschman Index. The results show that the concentration of actual liquidity flows is significantly higher than the concentration of the banking system measured by loans and deposits. The share of the three largest banks in the liquidity-absorbing segment ranged from 61 to 81 percent, while the Herfindahl-Hirschman Index reached 2659, indicating a transition to high concentration. At the same time, repurchase agreement transactions steadily increased their share in total interbank turnover, from 54 percent in 2024 to 74 percent in the first quarter of 2026, while overnight operations accounted for 83 to 89 percent of all market activity. These findings suggest that Uzbekistan's interbank market has developed into a narrow transactional core in which systemically important banks and the central bank play a pivotal role in short-term liquidity redistribution. The paper contributes to the literature by distinguishing between structural concentration in the banking system and transactional concentration in the interbank market, thereby offering a more precise interpretation of money market functioning in an emerging economy undergoing institutional transformation. The practical implications of the study concern the development of a deeper collateralized money market, the reduction of segmentation, the strengthening of secondary government securities trading, and the refinement of macroprudential monitoring focused on liquidity centrality rather than balance-sheet size alone.

Keywords: interbank market; liquidity concentration; repurchase agreements; overnight funding; UZONIA; systemically important banks; monetary transmission; financial stability.

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1. Introduction

Uzbekistan's financial system remains strongly bank-centered. According to the joint World Bank and International Monetary Fund financial sector assessment, banks accounted for approximately 95 percent of total financial sector assets at the end of 2024, while the banking system comprised 36 banks [1]. Such a structure naturally places the banking sector at the center of monetary transmission, payment intermediation, and short-term liquidity reallocation. In this institutional setting, the efficiency with which liquidity is redistributed between banks is not a secondary technical issue. It is a central determinant of financial stability, the effectiveness of monetary policy implementation, and the resilience of the payments infrastructure. In many banking systems, conventional assessments of market structure rely on balance-sheet indicators such as asset concentration, loan concentration, or deposit concentration. These measures are informative, but they do not fully capture how liquidity actually moves through the financial system on a day-to-day basis. A banking sector may appear only moderately concentrated by stocks, while actual short-term funding flows may be routed through a much narrower set of institutions. This distinction is especially important in emerging markets, where the number of active interbank participants may be far smaller than the formal number of licensed banks, and where liquidity may be redistributed through a limited set of channels dominated by secured transactions and supported by the central bank.

The transformation of Uzbekistan's monetary policy framework after 2017 significantly increased the importance of the money market. Following foreign exchange liberalization and the gradual transition toward inflation targeting, the Central Bank of the Republic of Uzbekistan broadened its operational toolkit and strengthened the market-based mechanisms used for liquidity management. The current architecture includes a policy rate corridor, liquidity-absorbing operations through overnight deposits, deposit auctions, and central bank bonds, as well as liquidity-providing instruments such as seven-day repurchase agreement auctions, overnight repurchase agreements, foreign exchange swaps, and intraday credit facilities [2]. This operational shift increased the role of the short-term money market not only as a technical infrastructure for balancing reserves, but also as a channel through which the central bank guides market rates and anchors expectations. A particularly important development has been the strengthening of the collateralized segment of the market. Under the current official methodology, the Uzbek Overnight Index Average is calculated on the basis of overnight repurchase agreement transactions backed by government securities [3]. This means that the secured segment is no longer peripheral. It has become central to the process of short-term price formation. As a result, changes in the volume, maturity structure, and concentration of repurchase agreement activity directly influence the transmission of monetary policy signals to the wider financial system. The problem addressed in this paper is that aggregate liquidity abundance does not necessarily imply an efficient or evenly distributed liquidity environment. A banking system may be in structural liquidity surplus and still exhibit significant segmentation. Some institutions may hold excess liquid assets, while others remain dependent on a narrow set of counterparties or on the central bank's operations. This distinction matters both analytically and from a policy perspective. If liquidity is concentrated in a small number of institutions, then short-term interest rates, market functioning, and counterparty access become more sensitive to the balance-sheet choices and risk preferences of those few institutions.[4]

From the point of view of financial stability, such concentration may have both positive and negative implications. On the positive side, large banks with substantial liquidity buffers, sizeable portfolios of government securities, and advanced operational capacity may act as stabilizers or market makers in the interbank market. They may facilitate rapid redistribution of funds and help absorb payment shocks. On the negative

side, excessive dependence on a narrow core of dominant institutions may reduce resilience, increase the price-taking position of smaller banks, and amplify the impact of temporary liquidity disturbances. It may also increase the structural importance of the central bank beyond what would be expected in a more diversified and horizontally integrated market. This paper argues that the Uzbek case illustrates precisely this duality. The country's interbank market has developed in a direction that is consistent with international patterns observed in emerging and transition economies: the secured segment has deepened, overnight transactions have become dominant, and the central bank has strengthened its operational influence over short-term conditions. However, this development has also been accompanied by a high degree of liquidity concentration, particularly on the side of banks absorbing liquidity from the market. [5]

The existing literature on Uzbekistan has made important contributions to understanding macroeconomic stabilization, banking reform, inflation targeting, and the legacy of state dominance in the banking system. Yet relatively little attention has been devoted to the internal transactional architecture of the interbank market: who borrows, who lends, through which instruments, at what maturities, and with what degree of concentration. This leaves an important analytical gap between macro-financial reform narratives and the microstructure of liquidity redistribution. The objective of this study is therefore to evaluate the degree of liquidity concentration in Uzbekistan's interbank market and to determine the role of repurchase agreement transactions, overnight operations, and large banks in the mechanism of short-term fund redistribution. Four research hypotheses are examined. First, liquidity flows in the interbank market are more concentrated than the banking sector measured by loans and deposits. Second, repurchase agreement transactions and overnight operations are the dominant channels of short-term liquidity redistribution. Third, large and systemically important banks form the core of the money market, especially in the liquidity-absorbing segment. Fourth, the high concentration of liquidity flows reinforces the structural role of the central bank and increases the sensitivity of the market to short-term liquidity shocks. The paper contributes to the literature in two ways. First, it differentiates clearly between structural concentration, which reflects the distribution of banking sector stocks, and transactional concentration, which reflects the distribution of actual short-term funding flows. Second, it provides an integrated interpretation of how the modern Uzbek money market functions under conditions of structural liquidity surplus, collateral-based intermediation, and concentrated participation. By doing so, it offers a more precise understanding of monetary transmission and money market resilience in an emerging economy undergoing institutional transition. The remainder of the paper is organized as follows. Section 2 discusses the relevant literature and conceptual foundations. Section 3 outlines the institutional background of the Uzbek money market and the monetary policy framework. Section 4 describes the data and methodology. Section 5 presents the empirical results. Section 6 discusses the broader implications of the findings. Section 7 draws policy conclusions. Section 8 concludes.[6]

The academic literature relevant to this study can be grouped into several interrelated strands: the theory of interbank liquidity redistribution, network approaches to money market structure, research on the special role of secured markets, and studies of emerging-market monetary policy implementation. The first strand views the interbank market as a mechanism through which liquidity is redistributed from banks with temporary surpluses to banks with temporary deficits. In this framework, the central bank acts as a stabilizer, a lender of last resort, and, more broadly, an institution that shapes the incentives and operational environment within which banks interact. Freixas, Martin, and Skeie show that the effectiveness of liquidity redistribution depends not merely on aggregate liquidity availability, but also on the functioning of the market that allocates it. The central implication is that a surplus of liquidity at the system level does not eliminate the relevance of market structure. On the contrary, it may mask

important asymmetries in access and distribution. A second line of research emphasizes the network structure of interbank relationships. Studies of interbank linkages demonstrate that market resilience depends on the concentration of connections, the distribution of centrality, and the existence of core-periphery structures in which a small set of institutions occupy a dominant transactional position [7]. In such markets, the total amount of liquidity may be sufficient, but the system may still be fragile if the redistribution of funds depends excessively on a narrow group of banks. This perspective is particularly useful for analyzing emerging interbank markets in which active participation is limited relative to the total number of banks. A third strand concerns the structure and role of repurchase agreement markets. Repurchase agreements, by design, reduce unsecured counterparty risk and provide a flexible channel for short-term funding against eligible collateral. In monetary systems where the central bank actively uses collateralized operations, the repurchase agreement market often becomes a central component of short-term rate transmission and liquidity management. Dunne, Fleming, and Zholos show that central bank operational frameworks and collateral policies significantly shape the development and pricing role of the repurchase agreement market. Where unsecured trading remains thin or mistrust between institutions persists, secured funding can become the dominant channel of money market activity. This argument is reinforced by the literature on emerging and transition economies. Van 't dack notes that money market development in such economies is constrained by several structural factors, including shallow government securities markets, a strong role of the state, limited market depth, and underdeveloped counterparty confidence. Under these conditions, the central bank often remains heavily involved in the market, not only as a provider or absorber of liquidity, but also as an architect of the market's institutional infrastructure. The development of eligible collateral and trading frameworks is therefore central to the evolution of the money market itself. Another relevant body of work examines why unsecured interbank markets may remain weak even in financially advanced systems. Allen et al. show that counterparty concerns, information asymmetries, regulatory constraints, and market segmentation can discourage unsecured transactions and lead to persistent reliance on secured funding or central bank intermediation.[8] This insight is particularly relevant for Uzbekistan, where the rapid expansion of repurchase agreement transactions may reflect not only the growing availability of collateral, but also a preference for lower-risk funding channels in an environment where trust and information are still developing. With respect to Uzbekistan specifically, the literature has focused primarily on the country's broader reform trajectory. Al Rasasi and Cabezon analyze the transition toward inflation targeting and the redesign of monetary policy implementation. The World Bank examines financial sector reform, institutional development, and state ownership issues. The International Monetary Fund and the joint World Bank and International Monetary Fund financial sector assessment discuss banking sector vulnerabilities, the role of systemically important institutions, and the importance of deepening financial markets. These sources offer essential context, but they do not systematically analyze the concentration of short-term liquidity flows within the interbank market. The present study builds on these literatures by combining a market-structure perspective with an institutional understanding of monetary policy implementation. Its central premise is that the concentration of liquidity flows is analytically distinct from standard measures of bank concentration and that this distinction matters for both monetary transmission and financial stability. In other words, a bank-centered system must be studied not only through its balance sheets, but also through the actual channels along which money moves between institutions.[9]

Institutional Background: Monetary Policy Operations and the Interbank Market in Uzbekistan

A proper interpretation of liquidity concentration in Uzbekistan requires an understanding of the institutional context in which the interbank market operates. Since 2017, Uzbekistan has gradually moved toward a more modern monetary policy framework based on a policy rate, an interest rate corridor, and a broader reliance on market-based instruments. This transition is part of a larger macro-financial reform agenda intended to reduce administrative distortions, strengthen policy transmission, and improve the allocative efficiency of the financial system. The central bank's operational framework now includes both liquidity-absorbing and liquidity-providing instruments. On the absorbing side, the central bank uses overnight deposits, deposit auctions, and central bank bonds. On the providing side, it uses seven-day repurchase agreement auctions, overnight repurchase agreement facilities, foreign exchange swaps, and intraday credit. These instruments allow the central bank to influence money market rates, manage reserve conditions, and smooth short-term volatility in the banking system. The importance of this operational architecture lies in the fact that interbank market activity is shaped not only by private liquidity needs, but also by the incentives created by the central bank's corridor and the relative attractiveness of its operations. In a structural liquidity surplus environment, banks may prefer placing funds with the central bank rather than lending to each other unless interbank pricing, collateral availability, and counterparty relationships are sufficiently favorable. This creates a close link between the depth of the private money market and the configuration of central bank operations. The development of the secured segment must also be understood in relation to the government securities market. Repurchase agreement transactions require acceptable collateral, and the gradual growth of the stock of government securities in Uzbekistan has supported the expansion of secured funding. According to the central bank's annual reporting and quarterly liquidity reviews, the increase in government securities outstanding has been directly associated with the growth of interbank repurchase agreement activity [10]. This means that monetary operations, debt market development, and interbank liquidity redistribution are institutionally interconnected. Another important feature of the Uzbek market is the benchmark role of the Uzbek Overnight Index Average. The central bank's methodology specifies that the index is derived from overnight repurchase agreement transactions backed by government securities [11]. This reinforces the pricing relevance of the secured segment and links the transmission of the policy stance to the functioning of the repurchase agreement market. At the same time, the banking system retains significant structural asymmetries. Large banks, many of them with either current or legacy state ownership links, continue to dominate a substantial share of assets and credit. The central bank's identification of domestic systemically important banks confirms the existence of a narrow upper tier of institutions whose size, interconnectedness, substitutability, and complexity give them special systemic relevance. As of October 1, 2024, domestic systemically important banks accounted for 67 percent of total banking system assets, and as of October 1, 2025, they still accounted for 64 percent [12]. This already suggests that any analysis of the money market must pay close attention to the role of the largest institutions.

Thus, the Uzbek interbank market operates at the intersection of four structural forces: a bank-centered financial system, a still-developing government securities market, a central bank with an active liquidity management role, and a concentrated upper tier of large banks. The evolution of liquidity concentration should therefore be seen not as an isolated statistical phenomenon, but as part of a broader institutional transformation in which market-based monetary policy implementation is deepening, while structural asymmetries remain significant.

2. Materials and Methods

The empirical analysis relies exclusively on official and publicly available data. The principal sources are publications of the Central Bank of the Republic of Uzbekistan. These include the Annual Report 2024, which provides information on the aggregate size and segment composition of the money market in 2024; the money market and liquidity reviews for the first quarter of 2025, the second quarter of 2025, and the first quarter of 2026, which provide quarterly data on total volumes, the share of repurchase agreement transactions, the maturity structure of operations, concentration measures, interest rates, and central bank operations; statistics on total loans and total deposits of banks as of January 1, 2025; statistics on banking sector liquidity indicators as of June 1, 2025 and June 1, 2026; and official announcements on domestic systemically important banks for 2025 and 2026. These data are supplemented by analytical and institutional materials from the International Monetary Fund and the World Bank, which help interpret the observed market structure within the broader context of macroeconomic reform, banking sector transformation, and financial stability policy. The temporal coverage of the study has two levels. For institutional context, the paper refers to the broader reform period after 2017. For the empirical core of the analysis, however, the focus is on 2024 and the period from the first quarter of 2025 to the first quarter of 2026, since these are the periods for which the most detailed official data on market segmentation and liquidity concentration are available.

The analytical framework of the paper rests on a distinction between two forms of concentration. The first is **structural concentration**, which refers to the distribution of banking system stocks such as loans and deposits across institutions. This is the standard type of concentration measured in banking sector analysis. The second is **transactional concentration**, which refers to the distribution of actual short-term funding flows in the interbank money market. This form of concentration is not captured by conventional balance-sheet measures and is more directly related to the functioning of the market as a channel of liquidity redistribution and monetary transmission. This distinction is central to the paper's contribution. A system may appear diversified when judged by loans or deposits, while the interbank market may remain narrow, asymmetric, and dependent on a small number of large participants. Conversely, a concentrated banking system may still support a relatively broad interbank market if a large number of banks actively lend and borrow. The Uzbek case allows these two dimensions to be compared explicitly.[13]

Three concentration indicators are used in the analysis: the concentration ratio of the three largest banks, the concentration ratio of the five largest banks, and the Herfindahl-Hirschman Index. The concentration ratio for the largest (n) institutions is defined as:

$$CR_n = \sum_{i=1}^{n} s_i$$

where (s_i) denotes the market share of the (i)-th largest participant. The Herfindahl-Hirschman Index is calculated as:

$$HHI = \sum_{i=1}^{N} s_i^2$$

where (s_i) is the market share of bank (i), expressed in percentage terms. Following standard interpretation, values of the Herfindahl-Hirschman Index below 1500 indicate low or moderate concentration, values between 1500 and 2500 indicate a relatively concentrated structure, and values above 2500 indicate high concentration. For the banking sector, market shares are based on total loans and total deposits. For the interbank market, the paper uses official concentration data reported by the central bank for the liquidity-absorbing and liquidity-providing segments.

The empirical analysis examines four groups of variables. First, total interbank market turnover is used to assess the scale of short-term liquidity redistribution. Second, the share of repurchase agreement transactions in total turnover is used to capture the relative importance of the secured segment. Third, the share of overnight operations is used to characterize the maturity structure of the market. Fourth, interest rate indicators, including average deposit rates, average repurchase agreement rates, and the Uzbek Overnight Index Average, are used to interpret the price formation process in the money market. In addition, several indicators are used to evaluate the role of large banks and the structural liquidity environment. These include the share of the top three banks in liquidity absorption and liquidity provision, the average number of active lending and borrowing banks per day, the banking system's high-quality liquid assets, the liquidity coverage ratio, the net stable funding ratio, the immediate liquidity ratio, and the central bank's average net absorber position.

The study is subject to two important limitations. First, the available public data do not provide bilateral transaction-level information identifying the full network of interbank counterparties. This prevents a formal network analysis of centrality, clustering, or contagion paths. Second, the methodology used to calculate the Uzbek Overnight Index Average was updated in 2025, which means that the index should be interpreted primarily as a within-period benchmark rather than as a fully homogeneous long time series. Despite these limitations, the available official data are sufficient to establish the main empirical pattern: the market-wide distribution of liquidity flows is considerably more concentrated than the structure of banking system balance sheets would suggest.

3. Results

A useful starting point is the structure of the banking sector itself. According to the central bank's statistics on total loans and total deposits as of January 1, 2025, the concentration of the banking system appears moderate rather than extreme. The three largest banks accounted for approximately 43.7 percent of total loans, while the five largest accounted for 57.5 percent. The Herfindahl-Hirschman Index for loans stood at 924. On the deposit side, the structure was even less concentrated: the three largest banks accounted for 32.1 percent of total deposits, the five largest accounted for 46.5 percent, and the Herfindahl-Hirschman Index was 636 [14]. These figures are important because they establish the baseline from which the money market can be evaluated. If one were to look only at banking sector stocks, Uzbekistan would not appear to have an extremely concentrated system by international competition thresholds. There is certainly a dominant upper tier of large banks, but aggregate concentration does not by itself imply that interbank liquidity redistribution must be highly concentrated. At the same time, the composition of the top institutions matters. The loan portfolio remains heavily influenced by banks with state ownership or with historically strong policy roles, while deposits are more broadly distributed across state-owned and private institutions. This asymmetry helps explain why transactional patterns in the interbank market may differ from what balance-sheet concentration alone would suggest.

The Uzbek interbank market expanded significantly in 2024 and retained a high level of activity in 2025 and early 2026. According to the central bank's Annual Report 2024, total money market turnover reached 507 trillion Uzbek soums in 2024, which represented an increase of 31 percent compared with the previous year [15]. This expansion is consistent with the broader development of the monetary policy framework and the gradual deepening of market-based liquidity management mechanisms. More important than the growth in total volume, however, is the shift in segment structure. In 2024, repurchase agreement transactions already accounted for 54 percent of total money market activity. In the first quarter of 2025, total interbank money market turnover amounted to 129.2 trillion Uzbek soums, of which 80.8 trillion Uzbek soums, or 63

percent, came from repurchase agreement transactions. In the second quarter of 2025, total turnover rose sharply to 214.5 trillion Uzbek soums, and the repurchase agreement share increased further to 67 percent. In the first quarter of 2026, despite a decline in total turnover to 163 trillion Uzbek soums, the repurchase agreement share rose again, reaching 74 percent. This trajectory suggests a structural strengthening of the secured segment. It is not simply that repurchase agreement transactions increased in parallel with overall market activity. Rather, they increasingly displaced unsecured transactions as the main channel of short-term liquidity redistribution. The pattern is consistent with a market in which collateral availability improved, the relative attractiveness of secured funding rose, and the pricing relevance of repurchase agreement transactions deepened. The economic interpretation is straightforward. Secured transactions are more attractive in environments where counterparty risk is not negligible, where information about liquidity positions may be imperfect, or where regulatory and risk-management preferences favor collateralized funding. In addition, the central bank's operational framework, which relies heavily on collateral-based instruments, creates incentives for market participants to build familiarity with secured funding and to manage portfolios of eligible securities accordingly. The growth of the secured segment is also closely linked to the development of the domestic government securities market. The central bank explicitly noted in its annual and quarterly reports that the increase in outstanding government securities supported the expansion of repurchase agreement activity. In 2024, the stock of government securities in circulation reached 44 trillion Uzbek soums. This matters because the expansion of the interbank repurchase agreement market is constrained not only by demand for liquidity, but also by the supply and distribution of acceptable collateral.

A second defining feature of the Uzbek interbank market is its overwhelmingly overnight maturity structure. According to the central bank's quarterly reviews, overnight transactions accounted for 83 percent of all money market operations in the first quarter of 2025, 88 percent in the second quarter of 2025, and 89 percent in the first quarter of 2026. This means that the market is used primarily for very short-term balancing rather than for longer-horizon interbank funding. The predominance of overnight activity can be interpreted in several ways. First, it reflects a market that is still focused on liquidity fine-tuning rather than on maturity transformation between banks. In such a market, institutions use the interbank segment mainly to manage daily reserve fluctuations, payment needs, and temporary surpluses or deficits. Second, it suggests that banks may be reluctant to lock in funding relationships beyond the overnight horizon, whether because of uncertainty about future liquidity conditions, limited collateral flexibility, or residual counterparty caution. The implications of this maturity structure are mixed. On the one hand, an overnight market is flexible and responsive. It allows banks to adapt rapidly to changing liquidity conditions and supports close alignment between market rates and the policy stance. On the other hand, a market dominated by overnight transactions is inherently more sensitive to short-term disturbances. Temporary shifts in government spending, tax payments, cash demand, foreign exchange operations, or reserve requirements can have immediate effects on funding demand and market pricing. The rate data reinforce the idea that the secured overnight segment is central to the formation of short-term prices. In the first quarter of 2025, the average interbank deposit rate was 13.0 percent, while the average repurchase agreement rate was 13.1 percent. In the first quarter of 2026, the corresponding figures were 13.69 percent and 13.73 percent. UZONIA averaged 12.7 percent in the first quarter of 2025, 12.8 percent in the second quarter of 2025, and 13.7 percent in the first quarter of 2026. These close relationships show that the secured segment is not merely dominant in quantity; it is also central in price discovery.

The most important empirical finding of the paper is that liquidity flows in the interbank market are far more concentrated than banking system balance sheets. This

concentration is especially pronounced on the liquidity-absorbing side of the market. In the first quarter of 2025, the three largest banks accounted for 63 percent of all liquidity absorption. In the second quarter of 2025, the share remained very high at 61 percent. In the first quarter of 2026, it increased sharply to 81 percent. This means that, despite a banking system with 36 institutions, the demand for short-term market liquidity was concentrated in a very narrow set of borrowers. The Herfindahl-Hirschman Index confirms this pattern. In the liquidity-absorbing segment, the index was 1371 in the first quarter of 2025, increased to 1652 in the second quarter of 2025, and reached levels as high as 2659 in early 2026, indicating a shift from moderate or relative concentration to high concentration. The result is especially striking because it contrasts sharply with the low to moderate concentration observed in aggregate loans and deposits. On the liquidity-providing side, concentration was lower, though still non-negligible. The share of the top three lenders was 38 percent in the first quarter of 2025, 39 percent in the second quarter of 2025, and 50 percent in the first quarter of 2026. The Herfindahl-Hirschman Index in the provision segment was 937, 999, and 1076 in the respective periods. This indicates a more diversified supply side than demand side, but one that still exhibits a meaningful degree of concentration. The asymmetry between liquidity absorption and liquidity provision is analytically important. It suggests that the interbank market in Uzbekistan is not simply concentrated in a general sense. Rather, it is more specifically characterized by a narrow borrowing core embedded within a somewhat broader lending base. In practical terms, this means that short-term market conditions are likely to be especially sensitive to the liquidity needs and balance-sheet behavior of a small number of large borrowing institutions. This interpretation is reinforced by the number of active participants. According to the central bank's reviews, in the first quarter of 2025 an average of 10 banks provided liquidity daily and 6 banks absorbed liquidity daily. In the second quarter of 2025, the respective numbers were 12 and 7. In the first quarter of 2026, the numbers fell to 9 and 5. These figures indicate that the active transactional core of the market is much narrower than the formal perimeter of the banking system. Participation is concentrated not only in volumes, but also in the number of institutions that regularly transact. This pattern is consistent with a core-periphery market structure. A relatively small set of institutions occupies the center of the market, while a larger number of banks remain peripheral or only intermittently active. The existence of such a structure is not unusual in interbank markets. However, in the Uzbek case, the gap between the number of banks in the system and the number of banks active in daily liquidity redistribution appears especially significant.

One of the most revealing aspects of the Uzbek case is that high concentration in interbank liquidity flows coexists with a substantial system-wide liquidity surplus. In the first quarter of 2025, the average liquidity surplus of the banking system was 20.6 trillion Uzbek soums. In the second quarter of 2025, it rose to 26.3 trillion Uzbek soums. In the first quarter of 2026, it increased further to 55.4 trillion Uzbek soums. This means that the concentration of liquidity flows cannot be explained by an aggregate shortage of liquid resources. On the contrary, the system as a whole was highly liquid throughout the period under review. The problem is therefore not liquidity scarcity, but liquidity distribution. The same conclusion emerges from prudential liquidity indicators. According to the central bank's banking sector liquidity statistics, high-quality liquid assets amounted to 144.6 trillion Uzbek soums on June 1, 2025 and 206.6 trillion Uzbek soums on June 1, 2026. The ratio of high-quality liquid assets to total assets increased from 17.4 percent to 21.6 percent. The liquidity coverage ratio rose from 191.7 percent to 245.8 percent. The net stable funding ratio increased from 115.7 percent to 137.5 percent. The immediate liquidity ratio rose from 124.9 percent to 153.8 percent. All of these values point to substantial liquidity strength at the aggregate banking system level. This evidence is crucial because it clarifies the nature of the market structure. The observed concentration does not reflect an emergency funding environment or a generalized

liquidity squeeze. It reflects a segmented distribution of liquidity in which some institutions repeatedly channel funds through the interbank market while others either supply funds, remain outside the active core, or rely more directly on central bank facilities. An additional detail strengthens this interpretation: in the central bank's liquidity statistics, the amount of highly liquid securities sold under repurchase agreement transactions is excluded from total assets when calculating the ratio of high-quality liquid assets to total assets. This treatment underscores the fact that repurchase agreement transactions are already embedded in the operational and prudential architecture of bank liquidity management.

The concentration of interbank liquidity is closely linked to the broader role of large and systemically important banks in Uzbekistan's financial system. The central bank's official designations of domestic systemically important banks show that these institutions represented 67 percent of total banking system assets as of October 1, 2024 and 64 percent as of October 1, 2025. The set of designated institutions includes the largest and most interconnected banks in the country. This matters because the high top-three shares observed in interbank liquidity absorption, especially the rise to 81 percent in the first quarter of 2026, are unlikely to be driven by random or small-scale institutions. They are much more plausibly associated with the upper tier of large banks that dominate the asset side of the banking system and hold a central position in payment flows, securities portfolios, and short-term liquidity management. The implication is that the core of Uzbekistan's money market is formed not merely by "large banks" in a generic sense, but by a relatively specific set of systemically important institutions whose balance-sheet size, interconnectedness, and operational relevance translate into transactional centrality. This reinforces the argument that the study of money market functioning should not rely solely on traditional banking concentration measures. Market centrality and liquidity centrality can diverge from static balance-sheet rankings, but in the Uzbek case they appear strongly related.

The final empirical result concerns the central bank's role in the liquidity environment. In 2024, the central bank was a net absorber of liquidity on average, absorbing around 4 trillion Uzbek soums per month versus approximately 1.1 trillion Uzbek soums of liquidity provision, according to the annual report. In the periods covered by the quarterly reviews, its average net absorber position rose substantially: 17.1 trillion Uzbek soums in the first quarter of 2025, 23.9 trillion Uzbek soums in the second quarter of 2025, and 55.4 trillion Uzbek soums in the first quarter of 2026. This pattern indicates that the central bank's role was not limited to occasional corrective intervention. It was structural. In an environment of persistent liquidity surplus, the central bank actively shaped short-term conditions by absorbing excess funds and steering market rates within the interest rate corridor. This helped maintain the operational objective of monetary policy and stabilize the pricing environment represented by UZONIA and related short-term rates. However, the same pattern also implies that the private interbank market was not fully autonomous in redistributing surplus liquidity. The central bank remained an essential counterparty and market organizer. This does not necessarily indicate weakness. In emerging-market monetary systems, a strong operational role for the central bank is often normal. But it does mean that the functioning of the interbank market cannot be interpreted independently of the central bank's balance-sheet operations.

4. Discussion

The empirical findings have several broader implications for understanding money market development in Uzbekistan and, more generally, in bank-centered emerging economies. The first implication concerns the relationship between aggregate liquidity and market efficiency. The Uzbek case clearly demonstrates that a high level of system-wide liquidity does not guarantee an evenly functioning interbank market. The

banking system can exhibit strong prudential liquidity ratios and still rely on a narrow transactional core for the redistribution of funds. This supports the argument that assessments of money market resilience should go beyond aggregate liquidity indicators and incorporate structural measures of flow concentration and participation breadth.

The second implication concerns the rise of the secured segment. The growth of repurchase agreement transactions from 54 percent of total market activity in 2024 to 74 percent in the first quarter of 2026 is consistent with the broader literature on emerging markets, where the secured segment often deepens earlier and more reliably than the unsecured segment. In Uzbekistan, this shift appears to have been supported by the central bank's collateral-based operational framework, the growing stock of government securities, and market preferences for lower-risk funding instruments. This development can be viewed as a sign of institutional maturation. At the same time, it also makes the money market more dependent on the availability, distribution, and usability of eligible collateral. The third implication concerns asymmetry within the market itself. The finding that liquidity absorption is consistently more concentrated than liquidity provision is especially important. It suggests that the core vulnerability of the market lies not only in who supplies funds, but in who depends on obtaining them. If a small number of banks account for most borrowing, then the market becomes highly sensitive to their reserve positions, payment flows, and portfolio decisions. In such a structure, short-term interest rate dynamics may be influenced disproportionately by a narrow group of institutions. This asymmetry is closely related to the core-periphery interpretation commonly used in network analysis. Even though the present study does not use bilateral data, the observed concentration patterns strongly suggest that Uzbekistan's interbank market has a hierarchical structure rather than a broad, flat, and symmetric one. A small number of highly active banks appear to occupy the center, while the rest of the system participates less frequently or only on one side of the market. In such a setting, large banks can serve as stabilizers, but they can also become bottlenecks. The fourth implication concerns the role of domestic systemically important banks. The fact that these institutions account for around two-thirds of banking system assets and that the top three banks absorb a dominant share of market liquidity suggests that systemic importance is reflected not only in balance-sheet size, but also in liquidity centrality. This observation is highly relevant for supervision. A bank that is central to the interbank market may amplify disruptions not only through solvency channels, but also through the short-term withholding or reallocation of liquidity. The fifth implication concerns monetary transmission. Since the Uzbek Overnight Index Average is based on overnight repurchase agreement transactions, the concentration and maturity structure of the secured segment directly affect how monetary policy signals are transmitted through the market. A narrow transactional core does not automatically undermine transmission, especially if the core institutions are highly responsive to the central bank's operational signals. However, it does raise the risk that market rates may become more dependent on the short-term liquidity behavior of a few institutions rather than on a broad competitive process. The sixth implication concerns market development. A money market dominated by overnight secured transactions can function well as a short-term balancing mechanism, but it remains limited in its ability to support broader interbank maturity transformation. The very high overnight share observed in Uzbekistan indicates that the market is still concentrated on immediate liquidity adjustment rather than on a wider range of tenors. This may be efficient under current conditions, but it also leaves the system more exposed to daily fluctuations and less diversified in its funding structure. Overall, the empirical evidence suggests that Uzbekistan's money market is in an intermediate stage of development. It has already acquired key features of a modern operational framework: a functioning benchmark rate, a large and growing secured segment, and active central bank liquidity management. At the same time, it remains narrow in participation, heavily overnight in maturity structure, and

significantly concentrated on the borrowing side. This combination is neither unusual nor inherently unstable, but it does create specific policy challenges.

The findings of the paper have several practical implications for monetary policy implementation, financial stability monitoring, and market development strategy. First, the development of the government securities market should be treated not only as a public debt management issue, but also as a core condition for money market deepening. Since repurchase agreement transactions increasingly dominate interbank funding, the availability and distribution of eligible collateral become central to liquidity redistribution. A deeper and more liquid secondary market for government securities would likely improve the functioning of the repurchase agreement segment, broaden participation, and reduce concentration. Second, the central bank could benefit from publishing a more systematic set of indicators on transactional concentration. Standard banking statistics based on assets, loans, or deposits do not capture the actual distribution of liquidity flows. Regular disclosure of concentration ratios, Herfindahl-Hirschman Index values, the number of active lenders and borrowers, and possibly maturity-specific participation indicators would improve the analytical basis for both market participants and policymakers. Third, macroprudential monitoring should pay closer attention to liquidity centrality. A bank's systemic importance should not be evaluated solely by its balance-sheet size, but also by its role in short-term funding redistribution. If a small number of institutions dominate liquidity absorption or provision, then their operational behavior becomes a potential channel of market stress even in the absence of solvency problems. Fourth, the authorities may wish to promote broader market participation, especially among mid-sized and smaller banks. This does not mean forcing interbank activity, but rather reducing structural and operational barriers to participation. Measures in this direction could include improved collateral management infrastructure, greater transparency in liquidity conditions, standardization of market practices, and continued strengthening of settlement and trading systems. Fifth, the market would benefit from a gradual extension of maturities beyond overnight transactions. The current structure provides flexibility, but it also makes the market highly sensitive to daily shocks. Encouraging somewhat longer tenors in secured interbank transactions could improve resilience, reduce rollover dependence, and help build a more complete short-term yield curve. Sixth, the central bank's structural role as a net absorber of liquidity should be interpreted carefully. On the one hand, its active presence is necessary to guide rates within the policy corridor and to manage a persistent liquidity surplus. On the other hand, if private liquidity redistribution remains too dependent on the central bank's operational footprint, the autonomous depth of the interbank market may remain limited. The policy objective should therefore not be to reduce the central bank's role mechanically, but to develop a market structure in which central bank operations complement, rather than substitute for, broader interbank interaction.

5. Conclusion

This paper examined the concentration of liquidity in Uzbekistan's interbank money market and assessed the role of repurchase agreement transactions, overnight operations, large banks, and the central bank in the redistribution of short-term funds. The analysis was motivated by the observation that conventional indicators of banking sector concentration do not necessarily capture how liquidity actually moves within a bank-centered financial system.

The results lead to four main conclusions. First, transactional liquidity concentration in Uzbekistan is significantly higher than structural concentration measured by loans and deposits. While the banking sector appears only moderately concentrated by balance-sheet indicators, interbank liquidity flows, especially on the liquidity-absorbing side, are routed through a much narrower group of institutions. The share of the top three banks in liquidity absorption ranged from 61 to 81 percent, and the

Herfindahl-Hirschman Index reached levels associated with high concentration. Second, the Uzbek money market is increasingly dominated by the secured segment. Repurchase agreement transactions rose from 54 percent of total money market activity in 2024 to 74 percent in the first quarter of 2026. This indicates that the secured segment has become the central mechanism of short-term liquidity redistribution and, by extension, of short-term rate formation.

Third, the market is overwhelmingly overnight in maturity structure. Overnight transactions accounted for 83 to 89 percent of total turnover in the periods studied. This means that the market is used primarily for daily fine-tuning of liquidity rather than for broader interbank maturity intermediation. While this structure increases flexibility, it also heightens sensitivity to short-term shocks and to the behavior of dominant participants. Fourth, the central bank plays a structural, not merely episodic, role in the market. In a context of persistent liquidity surplus, it remains a major net absorber of funds and a key organizer of short-term monetary conditions. At the same time, large and systemically important banks occupy the core of the interbank market, suggesting that banking sector dominance is transmitted into market centrality. The paper's main contribution lies in its distinction between structural concentration and transactional concentration. This distinction helps explain why a banking system that appears only moderately concentrated by conventional metrics may still exhibit a narrow and asymmetric money market structure. For Uzbekistan, this means that the future development of the money market should be evaluated not only in terms of aggregate liquidity, but also in terms of participation breadth, collateral distribution, maturity diversification, and the concentration of funding flows. The study also has practical significance. It suggests that efforts to strengthen monetary transmission and financial stability should include continued development of the government securities market, broader participation in the repurchase agreement segment, more systematic monitoring of liquidity concentration, and closer macroprudential attention to banks whose role in liquidity redistribution exceeds what their balance-sheet size alone would indicate. Finally, the study has limitations. The absence of bilateral transaction-level data prevents a full network analysis of interbank linkages, and methodological changes in the benchmark overnight index limit comparability over longer periods. Future research could address these issues by examining transaction-level network centrality, the relationship between concentration and volatility in short-term rates, and the interaction between money market structure and the evolution of the government securities market. Even with current data limitations, however, the evidence supports a clear conclusion: in Uzbekistan, short-term liquidity is redistributed through a highly concentrated, predominantly secured, and overwhelmingly overnight interbank market in which a narrow group of large banks and the central bank play a decisive role.

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