

ASSESSMENT OF INFLUENCE OF DEPOSIT WITHDRAWALS
AND INFLATION RATE AS COMPONENTS OF LIQUIDITY
LEVEL ON PERFORMANCE OF COMMERCIAL BANKS IN
KISUMU COUNTY

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ABSTRACT

In most developing countries, commercial banks are the most dominant financial institutions, with the capital market institutions playing a minimal role. The main function of commercial banks is the availing of funds (monetary) to its customers. For a bank to be in a position to do so, it must be in a healthy liquidity position. The banks' primary business in lending and investment are risky business. Banks are exposed to uncertainty and instability of the financial market as interest rate fluctuations, exchange rate variation and economic volatility could all lead to insolvency, bankruptcy and financial crisis. Vodava made analysis of liquidity of Czech commercial banks and its determinant, his results showed that there is a positive link between liquidity and deposit withdrawal. In this paper we assess the influence of deposit withdrawals and inflation rate as components of liquidity level on performance of commercial banks in Kisumu County, Kenya.

Keywords: Deposit Withdrawals, Inflation Rate, Liquidity Level, Performance, Commercial Banks.

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INTRODUCTION

Over the years, banks remained and will continue to be an important institution for any economy as they play the most fundamental role in the payments system. In most developing countries, commercial banks are the most dominant financial institutions, with the capital market institutions playing a minimal role. The five factors identified as the main factors that contribute to banks' risk exposure in the Malaysian banking scenario are liquidity and interest rate factor, domestic market factor, international market factor, business operation and credit factor. Profitability is also analyzed in the context of explanatory factors of bank failures. For example Wheelock and Wilson (1995) use micro-level historical data to examine the causes of bank failure. Besides standard financial ratios, the study considers membership in the deposit insurance systems and technical efficiency as explanatory factors. The results indicate that the latter two factors contribute to the probability of bank failures. In his analysis of Latin America and East Asia during the nineties, Arena (2008) concludes that bank-level fundamentals significantly affect the likelihood of bank failure. Liquidity was tested within this study as a contributing factor. However, this analysis only reveals whether there were statistical differences in bank-level fundamentals between failing and non-failing banks. It does not isolate the contribution of particular variables (e.g. short-term deposit positions) to the probabilities or timing of failure (Silvia, 1990)

The macroeconomic setting in Turkey over the last two decade has been dominated by chronic fiscal deficits with high and variable inflation, averaging about 70 percent, and relatively high and volatile GDP growth. The main for this has been Turkey's inability to implement the necessary structural reforms which to date is still the case. In 1989, Turkey liberalized its capital account, complicating macroeconomic management even more. The open capital account established a strong link between foreign and domestic rates and, given the unstable situation in Turkey, a large risk premium developed. As a result, domestic interest rates have been, and continue to be high which, in turn, negatively affects fiscal dynamics (Gelb & Silvia, 1990)

The deterioration in the banking industry in China in the early 2000s was caused by nonperforming loans and credits. The remedies include the opportunity for more foreign bank ownership in the Chinese banking environment primarily via larger ownership positions, less

restrictive capital requirements for branches, and increased geographic presence. Thailand suffered severe economic damage due to the Asian financial crisis, major structural changes have occurred in the Thailand banking sector. The sharp decline in the domestic currency had damaging effects on leading banks' balance sheets and their capital adequacy. In response to the depreciating exchange rate, Bank of Thailand (the central bank of Thailand) raised interest rates on deposits. This resulted in a decline in bank revenues, as banks could not pass on the higher interest rates to distressed corporate borrowers, resulting in negative interest rate spreads, and subsequently reducing banks' net income. (Berger, & Humphrey, 1997).

OBJECTIVES OF THE STUDY

The study was guided by the following specific objectives:

- i. To determine the extent to which deposit withdrawals as a component of liquidity level influence performance of commercial banks in Kisumu County.
- ii. To assess how inflation rate as a component of liquidity level influence performance of commercial banks in Kisumu County.

LITERATURE REVIEW

Inflation rate on performance of commercial Banks

The central bank can flood banks with base money. It has no means, however, to ensure that banks pass the impulse on to households and corporations through credit creation – which won't happen as there is no demand. And even when the central bank circumvents the banking system and targets directly the real economy through asset purchases (QE), chances are that households and corporations will either hold the receipt of these purchases as cash, or deposit the receipts with banks, who in turn deposit them with the central bank. I.e., whatever liquidity is injected comes straight back to the originator. With no means of reflating the real economy, however, the central bank cannot stimulate demand. And with no means to stimulate demand, it cannot create a shortage of goods and therefore inflation. If the central bank promises higher inflation then, this would reduce real rates already now, and thus help the economy out of depression. This link looks plausible but weak. (Baumol and Blinder, 2001).

Consider an economy like the U.S. that goes through a protracted balance sheet recession: credit constrained borrowers pay down excessive debts, transferring funds to creditors who have a higher propensity to save. Until debt is paid down to sustainable levels, private sector demand will be depressed – a process that can take years. The central bank could therefore promise higher inflation only for years down the road, changing savers' calculus at best for very long-term investments – which, in turn, would arguably trigger a minimal increase in demand only, insufficient to eliminate the excess in desired savings. Cash hoarding would remain prevalent. (By Hempel, Simonson and Coleman, 2003). Duetl and Zuniga (2001) in their study on 'Effect of monetary policy on money supply' observed that rising inflation led to a freeze in public employment. The public tends to abandon the domestic currency as a store of value and adapts to other foreign currency(s) as a form of storage (Dollarization). Due to this change of currency holding the forex rate is low and such a situation results to low liquidity levels. Hoggarth et.al. (1998) also mention that high and variable inflation has a major impact on bank performance. Firstly, it creates great difficulty for the "assessment of loan decisions", since a loan arrangement which performs at the anticipated rate of inflation may turn out to be much more marginal if inflation is unexpectedly low and realized interest rates thus unexpectedly high. Uncertainty about future inflation may cause problems in planning and in negotiation of loans. Finally, high and variable inflation encourages bank financing investment in property markets, an investment strategy which may lead to market losses or great profitability according to the implemented monetary policy.

Deposit withdrawal on performance of Commercial Banks

Banks need liquidity for them to meet deposit withdrawals and satisfy customer loan demands. This liquidity may be stored in the bank's balance sheet or purchase in the market place. Principles of bank management are crucial to maintain a healthy and profitable banking system. For instance, the banks' liquidity management involves acquiring sufficient liquid asset to meet the bank's obligation to depositors. In the process of doing so, banks are exposed to liquidity risk where the more liquidity is generated, the greater are the possibility and severity of losses associated with having to dispose of illiquid assets to meet the liquidity demands of depositor (Diamond 1999; Allen and Jagtiani, 1996). However, besides depositors, Gatev (2006) revealed that banks that make commitments to lend are exposed to the risk of unexpected liquidity

demands from their borrowers. The liquidity insurance role of banks, however, exposes them to the risk that they will have insufficient cash to meet random demands from their depositors and borrowers (Gatev, 2006). Vodava (2011) made analysis of liquidity of Czech commercial banks and its determinant, his results showed that there is a positive link between liquidity and deposit withdrawal.

Barua (2001) in his paper liquidity scenario in commercial banks of Bangladesh, the results showed that liquidity level has been dropped by 2% due to excess government borrowing and inconsistent growth of deposit. This has been supported by the liquidity ratio. Hardwick et al (2008) observed that in the event that the government employs open market operations, buyers buy securities with their cheques drawn on their accounts on the commercial banks. The effect is a reduction in the commercial banks cash reserve, which tend to cause a multiple contraction on the banks deposits. Such operations reduce the level of liquidity of the commercial banks. Conversely, if the central bank wishes to expand the money supply, it instructs its brokers to buy securities on the open market and pays for them with cheques drawn on itself. The sellers of the securities deposit their cash with the commercial banks and this increases the cash reserves. This activity tends to increase the liquidity level of the commercial banks, due to expansion of the bank deposits.

A study conducted by Stals (2002), in South Africa concerning the factors that influence availability of money in an economy revealed that depreciation of the exchange rate encouraged further capital outflows in form of negative leads and lags. The outflows of capital reduced liquidity in the banking sector and forced banks to borrow more from the reserve bank on a day-to-day basis. In his study on the monetary policy and money stability he observed that liquidity status would remain sensitive as money availability in a country reacted to rumors; the foreign Exchange rate, interest rate and share prices tended to react to rumors. This had an indirect impact on volatility of speculative transactions and adverse international developments. He concluded that any deliberate actions taken by the monetary authorities to relax monetary policy must be implemented with caution because any turmoil leads to additional scars that may require time to heal (Argenti, 2006). Liquidity is an important determinant of financial distress, because without liquidity a bank cannot meet the deposit withdrawals and satisfy customer loans (Mervin, 2002; Beaver, 2006).

CONCEPTUAL FRAME WORK

High and variable inflation encourages bank financing investment in property markets, an investment strategy which may lead to market losses or great profitability according to the implemented monetary policy. A decrease in the rate of liquidity drives down the real rate of return, majorly on assets in general. The implied reduction in real returns exacerbates credit market frictions. Since these market frictions lead to the rationing of credit, credit rationing becomes more severe as liquidity reduces. As a result, the financial sector makes fewer loans, resource allocation is less efficient, and intermediary activity diminishes with adverse implications for capital investment. The reduction in capital formation negatively influences both long-run economic performance and equity market activity, where claims to capital ownership are traded [Huybens and Smith 1999 and Boyd and Smith 1996]. Increase in inflation rate on deposits results in a decline in the bank revenues thus reducing the bank’s net income. On the other hand withdrawal of deposits from banks especially large and rapid withdrawals places the bank in distress thus forces their closure.

Independent Variables

Dependent Variables

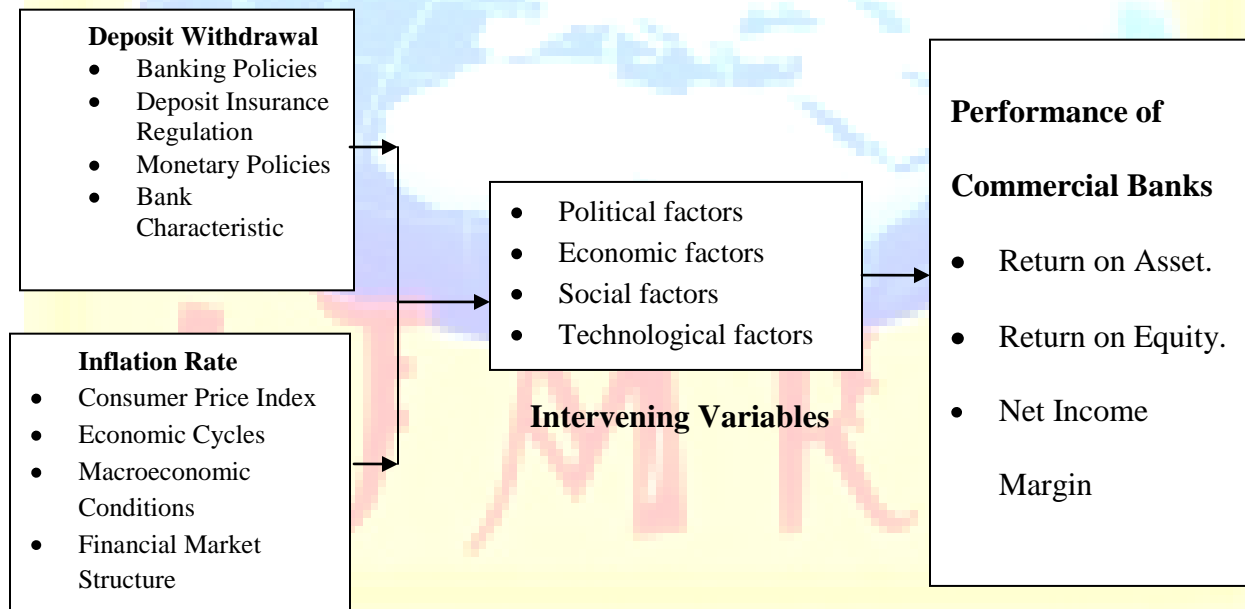


Figure 2.1 conceptual framework

Source: Authors Conceptualization, 2013

Incase Banks follow a first come first serve rule in paying out depositors, then depositors who observe problems in the market as a whole face a strong incentive to withdraw, even from banks that are solvent. This behavior can itself cause otherwise solvent banks to fail and produce chaos in the payment. Large size and higher overhead cost results in a lower bank profitability level and in extension banks which are not diversified and are poorly capitalized will exhibit low

profit thus need to study the influence of liquidity on the performance of Commercial Banks. It is assumed that there is a significant relationship between the independent and dependent variables, independent and intervening variables and independent, intervening and dependent variables. This model also will recognize other influences of liquidity levels on the performance of commercial banks.

RESULTS

Deposit withdrawals as a component of liquidity level on performance of commercial banks

In this part a cross tabulation was performed between deposit withdrawal and the tested variables. In this part the researcher was interested in observing the cross tabulation between, deposit withdrawal against, banking policies, deposit insurance regulation, monetary policies, and bank characteristic.

Table 4.2: Cross tabulation of all variables with respect to withdrawals

Deposit withdrawal factor Frequencies

How does deposit withdrawals factors as a components of liquidity level influence the performance of banks	Frequencies
	Percent
Banking Policies wrp deposit withdrawals	37.5%
Deposit Insurance regulation wrp deposit withdrawals	22.5%
Monetary Policies wrp deposit withdrawals	32.5%
Bank characteristics wrp deposit withdrawals	7.5%
Total	100.0%

Table 4.3 shows a summary of how each variable with respect to deposit withdrawal influence liquidity level. From the study, Banking policies being crucial to maintain a healthy and profitable banking system was found to influence liquidity most with 37.5% where management of liquidity towards acquisition of assets exposes banks to liquidity risk (Diamond 1999; Allen and Jagtiani, 1996), monetary policies having 32.5% was observed to make liquidity status remain sensitive thus having an indirect impact on volatility of speculative

transactions (Stals,2002) , followed by deposit insurance regulation which exposes banks to risks of having insufficient cash to meet demands from depositors (Gatev, 2006) at 22.5% while bank characteristic having the least influence on liquidity level at 7.5%.

4.3.2: Inflation rate as a component of liquidity level on performance of commercial banks

In this part a cross tabulation was performed between inflation rate and the tested variables. In this part the researcher was interested in observing the cross tabulation between, inflation rate against variables like consumer price index, economic cycles, macroeconomic conditions, and financial markets.

Table 4.4 shows a summary of how each variable with respect to inflation rate influence liquidity level. Consumer price index has the highest influence in liquidity with 34.1%, with a mean of 3.48 (see table 4.5) of the respondents acknowledging that it actually influences liquidity level, this is followed by economic cycles with 29.3% and a mean of 4.19, while financial market structure has the least influence on liquidity level with 7.3% and a mean of 2.15 as shown on table 4.4 and 4.5 respectively.

Table 4.3: Inflation rate factor frequencies

Inflation rate factors wrt liquidity factor	Frequencies
	Percent
consumer price index wrt inflation rate	34.1%
Economic Cycles wrt inflation rate	29.3%
Macroeconomics conditions wrt inflation rate	29.3%
Financial market structure wrt inflation rate	7.3%
Total	100.0%

Table 4.4: inflation rate factor Statistics

		consumer price index	Economic Cycles	Macroeconomics conditions	Financial market structure
N	Valid	27	27	27	27
	Missing	0	0	0	0
Mean		3.48	4.19	4.30	2.15
Variance		.567	.541	.601	.746

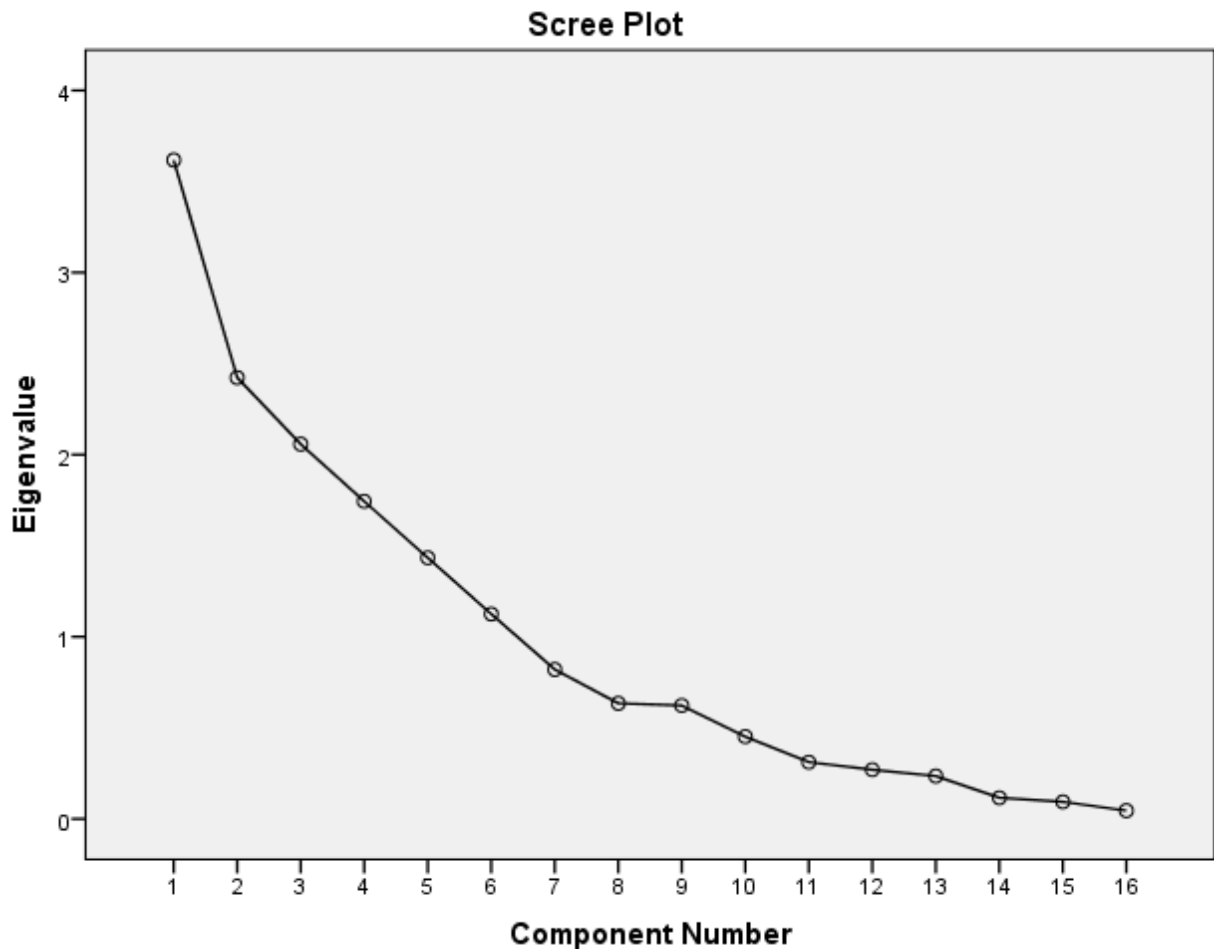


Figure 4.2: Scatter plot explaining the variances in tested factors

SUMMARY OF FINDINGS

Deposit withdrawal as a component of liquidity level on performance of commercial banks

The objective of the study was to determine the extent to which deposit withdrawal as a component of liquidity level influence performance of commercial banks in Kisumu County, Kenya. It was discovered that banking policies had the highest influence in performance in commercial banks with 37.8% of the respondents agreeing followed by monetary policies, 32.5%, deposit insurance regulation with 22.5% and bank characteristic having the least influence on liquidity level at 7.5%. These findings were in light with Stals (2002) proposal in

South Africa that factors that influence availability of money in an economy which revealed that depreciation of the monetary policies encouraged further capital outflows in form of negative leads and lags. The outflows of capital reduced liquidity in the banking sector and forced banks to borrow more from the reserve bank on a day-to-day basis. This study ranked deposit withdrawals by the CBK as an important variable in influencing liquidity level of commercial banks in Kisumu.

Descriptive statistics revealed that mean liquidity level among commercial banks in Kisumu was 3.5575, implying that for every Kshs 1 worth of net deposit liabilities, there are Kshs 3.5575 worth of net liquid investments to take care of short term obligations for the commercial banks associated with for example deposit liabilities and issuing of short-term loans. (see table 4.5) This is far much above the minimum statutory requirement of Kshs 2.0 by the regulatory body (Central Bank of Kenya). The following four factors were studied: banking policies, deposit insurance regulation, monetary policies and bank characteristic. Of these factors, monetary policies had the highest mean of (4.3) and bank characteristic had the lowest (2.15) mean. The results therefore support an argument by Miège and Miège (1999), that the objectivity of liquidity management therefore is to ensure that banks will be able to meet in full all their obligations as they fall due, therefore banks should observe that being too liquid is costly yet having too little liquidity is also risky, calling for a need for commercial banks to have a trade-off between liquidity risk and costs associated with illiquidity.

Inflation rate as a component of liquidity influence performance of commercial banks

Four factors which are components of liquidity were studied namely; consumer price index, economic cycle, macroeconomic conditions and financial markets structure. Of these factors, macroeconomic conditions had the highest (4.30), mean and financial markets structures had the lowest (2.15) mean. This supports Hoggarth et.al. (1998) study who mentioned in his findings that high and variable inflation has a major impact on bank performance. Firstly, he argued that it creates great difficulty for the “assessment of loan decisions”, since a loan arrangement which performs at the anticipated rate of inflation may turn out to be much more marginal if inflation is unexpectedly low and realized interest rates thus unexpectedly high.

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