Commercial banks are the most dominant financial institutions with their main function being availing funds 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. In Kenya regulation of banks is the responsibility of the Central Bank of Kenya. Maintaining the liquidity requirement may mean that banks keep most of their assets in the form of short-term and easily convertible assets, which most of the times give lower returns. Currently, an institution is required to maintain a statutory minimum of 20% of its deposit liabilities with the Central Bank of Kenya. Several studies have been done showing that there is variations in liquidity in most banks thus affecting the performance of different banks. However, these studies do not explain which liquidity factors influence performance of commercial banks in Kenya. Thus the main objective of this study is to investigate the liquidity factors influencing performance of commercial banks in Kenya. The researcher chose to study on commercial banks due to availability of needed data and convenience. All 27 commercial banks operating in Kisumu City were investigated. Semi structured questionnaires were used to collect primary data from the respondents and secondary data was obtained from the library, business journals and publications. Out of the 81 questionnaires distributed to the heads of finance, 48 questionnaires were returned successfully filled giving a response rate of 59.2 %. Data was analyzed using descriptive statistics and factor analysis. Cross tabulation was used to determine the relationship between the variables of the study. From the study it can be noted that withdrawal factors like banking policies were said to influence liquidity most with 37.5% while bank characteristic had the least influence on liquidity level at 11.1 %. Inflation factors like macroeconomic conditions had the highest (4.30), mean and financial markets structures had the lowest (2.15) mean meaning that it had the least influence compared to microeconomic .factors. Of the profitability factors test, it was found that employee structure had the highest mean of 4. 78 thus having higher influence compared to credit risk which had the lowest mean of 3.67 which also shows that is has have a significant influence on liquidity. Interest rate factors like overhead costs had the highest a mean of 4.70 with a deviation of 0.465 indicating that overhead costs influenced the most performance of commercial banks. The study recommends a further study to be conducted based on various geographical areas since such areas represent a variation in target markets and consequently the customers banking habits. Comparisons could be done on whether or not there is any variation or similarity. The findings of this study would be useful to bank managers, central bank of Kenya, financial advisors, depositors and it forms basis for future research extending frontiers of liquidity level in financial markets. While formulating their policies, commercial banks in Kisumu should take into account that there are many factors that influence liquidity. Some of these factors are controllable since they are within the bank while others call for proper adjustments and competition since they are external to the bank. The CBK should advice banks from a well-informed point of view as well as be able to determine causes of any illiquidity in situations where banks are facing liquidity crises. That any deliberate actions taken by them to relax monetary policy must be implemented with caution because any turmoil leads to additional scars that may require time to heal.