The choice between debt and equity financing has been directed to seek the optimal capital structure. Several studies show that a firm with high leverage tends to have an optimal capital structure and therefore it leads it to produce good performance, while the Modigliani-Miller theorem proves that it has no effect on the value of firm. The importance of these issues has only motivated researchers to examine the relationship between capital structure and firms financial performance. The general objective of this study was to establish the effects of capital structure on financial performance of commercial banks in Kenya. The specific objectives of this study was to determine the financial performance of commercial banks in Kenya; to establish the determinants of capital structures for commercial banks in Kenya, and lastly to find out the effects of capital structure on the financial performance of commercial in Kenya. The financial performance was measured in terms of return on assets and return on equity. The period of study was 2004 to 2009. It is important to note that during this period of study, there was a global financial crisis that affected banks in the United States of America. In the same period Kenya experienced a political crisis, leading to uncertainty in the financial sector in the year 2008. Over the same period the minimum core capital required to operate a commercial bank in Kenya was raised from Kenya shillings 250 Million to Kenya shillings 1 billion. This therefore enabled banks to enhance the size of transactions that they could handle in lending to related parties. This presents an interesting period of study considering the ups and downs of the trade cycle. The population of study consisted of all the 43 commercial banks that are dully registered with Central Bank of Kenya by 2009. Secondary data used was obtained from the Central Bank of Kenya and consisted of consolidated financial statement of commercial banks in the period 2004 - 2009. Data analysis was done by use of regression analysis model with the help of Statistical package for social sciences software. The results found out that the major factors affecting capital structure of banks was liquidity, size, growth and profitability. In addition the researcher rejected the null hypothesis after conducting the chi test and accepted the alternative hypothesis that there is a relationship between capital structure and financial performance of commercial banks in Kenya.