Banking industry has been changed after reforms process. The government has taken this sector in a basic priority and this service sector has been changed according to the need of present days. Banking sector reforms in India strive to increase efficiency and profitability of the banking institutions as well as brought the existing banking institutions face to face with global competition in globalization process. Now, there has been a rapid expansion in the number of banks including new private sector and foreign banks. At present, public sector banks, old private banks, new private banks and foreign banks are playing on equal field with the important role. Considering the performance of 2001-2002, all the banks are remarkable. These different types of banks differ from each other in terms of operations efficiency, productivity, profitability and credit efficiency. The objective of this study is to identify this difference within banking groups with reference to public sector banks and private sector banks. For the purpose of the study three banks are selected each from public sector banks and private sector banks, which are three largest banks in the respective sector. The banks selected from public sector are State Bank of India, Punjab National Bank and Bank of Baroda and the banks selected from private sector are AXIS Bank, HDFC Bank and ICICI Bank. The study period of 10 years from 2004-05 to 2013-14 is selected for the study period which is considered as the modern era of banking. The objectives of the study are to identify the difference among the banks and among the banking group with respect to CAMEL model variables i.e. Capital Adequacy, Assets Quality, Management’s Efficiency, Earnings Quality and Liquidity. The results that are obtained from the present study is helpful to the policy makers, depositors, investors and other stakeholders to take decisions about the capital adequacy, asset quality, management efficiency, earnings quality and liquidity of the selected public and private sector banks in India. The results of the study will also help banks to increase their financial and operational efficiency. The significant findings of the study are that there was no significant difference in management of capital adequacy among banks and among the banking sector groups. But there was significant difference found among the banks as well as among the banking groups in Assets quality, Management’s efficiency, Earnings quality and Liquidity.