Mergers and Acquisitions have become a prominent feature in Kenya's banking industry. The Central Bank of Kenya and shareholders of banking institutions in Kenya have a positive inclination to mergers and acquisitions. However, Kenya has witnessed a mix of dismal performance by some merged banking institutions and very positive performance by others. This has left stakeholders in the banking industry wondering whether mergers and acquisitions should be encouraged in the industry. This study therefore aimed at analyzing the value effects of mergers and acquisitions in Kenya's banking industry in a bid to offer a solution to this pertinent issue. The study investigated performance, efficiency and shareholders' wealth effects of banking institutions' mergers and acquisitions in Kenya between the years 1989 and 2010. Two major approaches were used in the study to determine the value effects of banking institutions mergers and acquisitions. These entailed modelling performance and efficiency effects to capture benefits streaming to the institutions and analyzing stock returns to determine shareholders' value effects. The study also determined the bank specific determinants of successful banking institution mergers and acquisitions. The study found that although mergers and acquisitions led to improved profit efficiency, large banks benefited more from improved performance than the small banks. Primary shareholders of banking institutions that engaged in mergers and acquisitions benefited from improved profit performance and stability in their wealth holding, while secondary shareholders did not experience capital gains. The study also found that the larger the merged banking institution, the higher was the probability of its success as a merger. Finally, higher expenditure levels also contributed positively to the probability of success of mergers and acquisitions. It is therefore the recommendation of this study that incentives for value enhancing mergers be offered. The government should also encourage more investment in the banking industry specifically targeting the small banking tier. Finally, merged banking institutions should spend more on advertisement, labor and modern technology to increase their probability of success.