The purposes of this study are two-fold: firstly, to evaluate the efficiency of the Malaysian banks and secondly to examine the factors that influence the efficiency levels of those banks. Accordingly, 23 Malaysian banks covering the period between 2006 and 2010 are considered in this study. The findings of the DEA approach indicate that in general the Malaysian banks are efficient over the studied period. Furthermore, exchange rate, GDP, and inflation rate are found to be significant determinants of Malaysian banks' efficiency. As such, the present study contributes to the existing literatures on banks efficiency. The finding might be useful to the regulators as well as the practitioners.