

## **ABSTRACT**

The relative technical efficiency of nine chemical and seven pharmaceutical listed companies in Pakistan is estimated in this study by using data envelopment analysis (DEA) which is a non-parametric approach. DEA is applied by using both the assumptions called variable returns to scale (VRS) and constant returns to scale (CRS). Secondary data has been used in this study from the years 2003-2011. The results disclose an extensive stage of scattering of technical efficiency among these firms. Utilization efficiency of inefficient companies can be promoted by better handling of their inputs. The results indicate that pure technical inefficiency is causes of inefficiency in the firms instead of scale inefficiency. According to findings of this research it can be said that many firms are working under increasing returns to scale. For inefficient firms there is need to improve the given resources of firms.