The aim of this project is to analyse the extent to which the profitability and statistical significance of technical analysis in the Spanish Stock Market justify its widespread utilizing. The data taken as base will be the daily closing prices exhibited during a 16 year period – January 2000 to December 2016- by the IBEX35 Index and the 19 of its components that have quoted it for the entire period. To this end, I have analysed the potential profitability of four trading strategies derived from several technical analysis indicators: Simple Moving Average, Exponential Moving Average, Moving Average Convergence and Divergence, Exponential Bollinger Bands, and Relative Strength Index; and performed a student’s t test aiming to ascertain if the average daily return of these strategies significantly differs from that obtained by a Buy&Hold strategy during the period.

The results obtained revealed that the technical indicators studied enjoyed a consistent predictive power over the price evolution of the studied instruments. Nevertheless, once transaction cost had been deducted, the profits generated through their use demonstrated to be fairly limited for the biggest share of the market. Consequently, in the presence of transactions costs, no substantive evidence has been found for the general dismissal of the weak form of EMH and the profitability sustenance of technical analysis for a substantial part of its users during the period remains under a shadow of doubt in the Spanish stock market.