

# **Happiness and Stock Markets in the UAE**

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## **Summary**

### ***Purpose and importance of study for the UAE***

Public happiness sentiment is important to all countries around the world. Global leaders and organizations are increasingly talking about using happiness as an alternative measure of countries' success. Under the pillar of Cohesive Society and Preserved Identity of National Agenda, UAE aims to be amongst the happiest of all nations. Despite of all these developments, to our knowledge, there are no studies looking at the links between happiness and financial variables, using UAE data. This study is the first one to analyze happiness sentiment and its effects on the UAE markets. Although some previous studies have examined the link between happiness and different financial variables, it is still not clear how investor happiness sentiment affects stock returns in the UAE, first and only country with a Ministry of Happiness. This study aims to fill this gap and investigate the association between daily investor happiness sentiment and stock returns of the firms trading in the UAE Stock Exchanges.

### ***Methodology***

We utilize a unique dataset extracted from daily tweets on Twitter as a measure for investor happiness sentiment. The happiness data is web scraped using data engineering through Phyton. The daily stock market data for UAE Stock Exchanges is collected through Bloomberg terminal. The happiness index is obtained through natural language processing technique on tweets published on Twitter. We analyze two sets of tweets: tweets in English and tweets in Arabic. Although official language of the UAE is Arabic, English is also heavily used in the country. Therefore, tweets in both languages contains important data about public sentiment. We check contemporaneous relationship between happiness and stock prices with linear and nonlinear correlation coefficient tests.

### ***Study Key Points***

Previous literature on investor sentiment has focused only on Western markets. Until now, none of the earlier studies has used UAE or other Middle Eastern countries' data to analyze the impact of public sentiment on stock prices. Also, studies utilizing social media sources to measure happiness used tweets only in English. This study better captures Arabic-speaking public's sentiment and is the first one to use Arabic tweets to measure happiness of an Arab population. Besides, in contrast to the studies using single events as a measure of sentiment, we use a high frequency happiness measure. And finally, recent studies using happiness measures extracted from social media channels mostly used linear relationships. In this study we employ both linear and nonlinear tests to better analyze the relationship between happiness sentiment and stock prices.

### ***Findings and Recommendations***

Both linear and nonlinear test results show that happiness moves along with the UAE stock market. However, after partitioning the data into quintiles from the least to the happiest days, we observe an asymmetric relationship between the investors' mood and market movement. The results show that the relationship is strongest for the least happy group and lower and mostly insignificant for the happiest group. Also, when the data is analyzed for subgroups for pre- and post-pandemic periods, the correlations are higher and stronger for the post-pandemic era.

Being a pioneer study looking at the financial effects of happiness sentiment in the UAE, the results of this study demonstrates the need for businesses and policy makers to formulate an effective and systematic approach to address negative public sentiments, as we find that negative mood significantly affects the price movements, whereas positive sentiment has no significant impact.