

# بسم الله الرحمن الرحيم

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بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

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# The Effect of Listing Shares on the Market Indices: An Applied Study on the Egyptian Exchange

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وراسة تطبيقية على البورصة المصرية

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# Dedication

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### Abstract

This thesis attempts to investigate the impact of joining or existing the major indices in the Egyptian Stock Exchange; EGX30, EGX100 and S&P EGX ESG or becoming cross-listed on the performance of the Egyptian listed companies. This has been conducted by event study methodology considering the impact of joining or leaving EGX 30, EGX 100, ESG indices or becoming cross-listed on the share price and trading volume during the period from 2016 to 2020. Overall, results indicate the following: 1) Significance of variation among CARs are shown for joining EGX 100, and show negative market reactions to these informational contents. 2) Significance of variation among CARs are for joining EGX 30, and show negative market reactions to these informational contents. 3) No significance of variation among CARs are for joining S&P EGX ESG. 4) significance of variation among CATVs are shown for joining EGX 100, and show negative market reactions to these informational contents. 5) No significance of variation among CATVs are for joining EGX30. 6) significance of variation among CATVs are shown for joining S&P EGX ESG, and show negative market reactions to these informational contents. 7) Significance of variation among CARs are shown for leaving EGX100, and show negative market reactions to these informational contents. 8) Significance of variation among CARs are shown for leaving EGX 30. 9) significance of variation among CARs are shown for leaving S&P EGX ESG, and show negative market reactions to these informational contents. 10) No significance of variation among CATVs are for leaving EGX100. 11) Significance of variation among CATVs are shown for leaving EGX30. 12) significance of variation among CATVs for leaving S&P EGX ESG. 13) Significance of variation among CARs for joining or leaving GDRs could not be tested as the data available in the market is too small to be tested. 14) Significance of variation among CATVs for joining or leaving GDRs could not be tested as the data available in the market is too small to be tested.

**Keywords:** EGX 30, EGX 100, S&P EGX ESG, cross-listed, share price, trading volume, Event study, Cumulative Abnormal Returns (CARs), Cumulative Abnormal Trading volumes (CATVs).

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# Chapter One

#### Introduction

#### 1.1 Introduction

The financial markets are made up of millions of individual stocks, bonds, derivatives, other financial securities and currencies. Financial market participants also trade several different kinds of commodities. Financial market indices aggregate vast amounts of price and other information about subsets of financial markets which, amongst other things, help investors keep track of broad market developments.

More specifically, financial market indices represent a mean of measuring the performance of a particular segment of a financial market. The names of some of these stock market indices will be fairly familiar to the general public. For example, one of the best known indices in the world is the S&P 500 Index, which was introduced in 1957, and which represents the U.S. market since it is comprised of 500 large capitalization US stocks. Another well-known equity index is the FTSE-100 index which comprises the 100 largest stocks listed on the London Stock Exchange.

In the Eurozone one of the best known stock indices is the Euro Stoxx 50, which comprises 50 of the largest publicly traded companies in the Eurozone; while the MSCI World Index is comprised of stocks listed in 23 developed economy equity markets. But benchmark administrators also produce indices based on other asset classes. For example, the Barclays Global Aggregate index is comprised of investment grade bonds

issued in 24 currencies by governments, government agencies and corporations as well as securitized bonds from both developed and emerging economies. The performance of these indices, and many others, is monitored closely by investors, central banks and other regulators, and by the mainstream media.

To assess the performance of a fund manager investors and their advisors make extensive use of financial market indices. These indices act as benchmarks; a way of measuring how the manager has performed relative to a relevant financial market index comprising the sorts of securities that the manager intends to hold and manage in their portfolio. For example, it might be appropriate to benchmark the performance of a manager of blue chip European stocks against the Euro Stoxx 50, since this index is comprised of blue chip European stocks. However, it would be inappropriate to benchmark a manager of Japanese small stocks against the same index.

The increasing importance of studying indices as one of the most important tools for evaluating market performance in both developing and developed countries has become highly noticeable. A market index is a numerical tool that measures the changes occurring in the financial market. A market index is a hypothetical portfolio of investment holdings that represents a segment of the financial market. The calculation of the index value is based on the prices of the underlying holdings.

Some indices have values based on market-cap weighting, revenue-weighting, float-weighting, and fundamental-weighting. Weighting is a method of adjusting the individual impact of items in an index. The main rule that indices play is that they can represent the overall

market performance and interpret the performance of the economy into a quantitative form.

The above mentioned importance has encouraged the researcher to shed a light on the impact of joining and existing the major indices in the Egyptian Stock Exchange; EGX30, EGX100 and ESG or becoming crosslisted on the performance of the Egyptian listed companies. This has been conducted by event study methodology considering the impact of joining or leaving EGX 30, EGX 100, ESG indices or becoming cross-listed on the share price and trading volume during the period from 2016 to 2020. The methodology of each index is illustrated in appendix B.

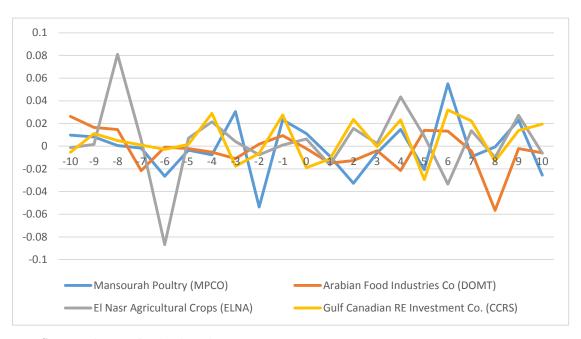
#### 1.2 Research Problem

The Egyptian Exchange is considered as a frontier market based in Cairo. EGX 30 index includes the top 30 companies in terms of liquidity and activity. EGX 30 Index is weighted by market capitalization and adjusted by the free float. Adjusted Market capitalization of a listed company is the number of its listed shares multiplied by the closing price of that company multiplied by the percent of freely floated shares.

For a company to be included in EGX 30 index, it must have at least 15% free float. This ensures market participants that the index constituents truly represent actively traded companies and that the index is a good and reputable barometer for the Egyptian market. Therefore, this study examines the impact of companies joining EGX 30 on their performance, (The Egyptian Stock Exchange, 2020).

EGX introduced a new price index; EGX 100 Price Index, on the second of August 2009, which tracks the performance of the 100 active companies, including both the 30 constituent-companies of EGX 30 Index and the 70 constituent-companies of EGX 70 Index. EGX 100 index measures the change in the companies' closing prices, without being weighted by the market capitalization, and was retroactively computed as of 1 January 2006. The EGX 100 index has been replaced by The EGX100 Equally Weighted Index "EGX100 EWI" on 10 May 2020.

Chart (1): Abnormal Returns (ARs) of four companies before and after joining EGX 100



Source: The Egyptian Stock Exchange

The above chart shows the Abnormal Returns of four companies before and after joining EGX 100 on 1August 2016. The chart illustrates that joining the index does not have a significant impact on the Abnormal return.

In addition, The Environment, Social and Governance (ESG) Index for Egypt has been created by the Egyptian Institute of Directors, Standard & Poor's and Crisil. The purpose of S&P/EGX ESG index is to raise the profile of those companies that perform well along the three parameters of environmental, social and corporate governance responsibility when compared to their market peers.

The process of creating this index is twofold. The first step is to define a multi-layered approach to create an 'ESG' score for each company. Often in the past, the approach has been to create such an index using subjective analysis, thereby limiting the complete transparency that is required to make an index attractive to some investors.

The current idea is to stay away from subjective decisions and, instead, make decisions based on quantitative factors. The second step is to create an index, which includes companies with the highest ESG scores. Its relative score determines each company's weight in the index i.e. companies carrying a higher score carry more weight. In addition, some weight is given to the size of each company. A secondary threshold for selection is liquidity. A company with a perfect ESG score but no market liquidity can become an impediment to the success of an index.