The Impact of Stock Split on Stock Prices in the Egyptian Stock Market

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Abstract
Due to the variant results of studies and scientific researches in regards to the impact of stock split policy on the share market value; in addition to the existence of manipulation with the splitting decree by some companies, and in the light of concern of the international controlling institutions to the stock markets which reflect the extent of responsiveness of stock markets to the splitting policy and its consequences. Moreover, the requirement of the emerging markets to more studies in regards to the impact of splitting policy on the shares trading, activating markets, and the requirements of the small investors to acquire sufficient awareness of stock split policy; such requirements are vital due to the scarcity of scientific researches and articles that tackle the calculations and standards of stock split policy' effect on the share market value s in the emerging markets especially the Egyptian stock market. Moreover, after many of the Egyptian companies are directed lately towards adopting such policy due to its active role in attracting small investors for contributing in stock markets, as well the consequences of this policy on the expansion of ownership of shares basis of companies and activation of stock market. Thus, it becomes necessary to clarify the illustrative frame of stock split policy by reflecting its illustration, importance and motives which companies follow the stock split. The researcher findings in the light of the aforementioned analysis and observations that are highlighted in this study: An accounting framework is suggested to set criteria and basics that companies have to follow upon taking the splitting decision; some lists are suggested to reflect the splitting impact to achieve the basic target of research. Prices of the market shares are affected by application of stock split on short term and medium range; whereas it is shown that, the majority of companies that performed splitting achieved increased prices in their shares after stock split. Achieved split ratios are (15:1), (29:1) that made the best impact on the share market value and share trade value .In addition, the impact of the sector's type that a corporation belongs to on the variance of the share market value and the share trade value after stock split; whereas a variance of the effect of stock split policy is significant on the share market value and the share trade value according to the sector's type that a corporation belongs to. Finally, the share trade value is affected by stock split in the short term and medium range.
Keywords: Stock split, stock prices, Egyptian stock Exchange, Accounting framework, mixed method.

1. Introduction

Stock splits imperishably encompass a puzzle to different parties involved in the stock market. However, this by some of stock market applicants recognised as an anomaly corporate event does not involve any changes in firm's future cash flows or in any other indicators of profitability. Stock splits per se do not change the fundamental value of firm. Besides, splitting the stock may be expensive to some extent because of the fees that are to be incurred, e.g. legal or administrative fees. Moreover, some of the academics indicate that stock splits may influence the ownership structure, especially the institutional stake what, sequentially, can impact the monitoring or agency costs.

Within the purest efficient market hypothesis stock splits as such would not improve the value to the stock price taking into account the abovementioned statements. However, as some of the scholars highlight that managers try to distinguish the stocks of their companies by moving back the stock price into territory perceived as being more superior. Theoretically, stock splits would not involve any profits but the reality provides a great deal of examples of the usage of this corporate event.

Even though the existence of numerous evidence on different consequences of stock splits the main reasons have remained anxious or, in a similar manner, the expectations and/or motivations that inspire the management decision to split the stock have not been fully identified. Some of the first known theories on stock splits proclaim that the stock split is used to realign the share price to optimal trading range within which there exists optimal level of trading liquidity (trading range hypothesis also known as liquidity hypothesis). Unfortunately, the factors that could help to define this range have not been identified yet.

The phenomenon of stock splits is considered as an old phenomena in the financial markets and it's usually aimed at reducing the market value of the company's shares whose prices have increased to record high levels and this reduction is usually contributes to the increase in the values of trading on the shares of these companies and increase liquidity after it became the prices within the reach of the various segments of investors and thus serve to broaden the base of the company's shareholders and retail is done by reducing the nominal

value of the shares of the company or the constituent value is the value put by the company's shares at its founding.

It allows low market price of shares to enter a new slide of shareholders, which is not accepted normally on high stock Price When one of the companies declare a split its shares into two parts, this means simply that the value of the stock will fall by half and also means that the number of shares will rise to the double and no any impact on owner's equity or shareholders, but the only effect of the stock split on property rights is the change in the nominal value of shares and number of shares and change in ownership structure and not in essence.

In light of the growing interest from regulators and clients in the financial markets with the stock split policy and what might their implications but no consensus on the impact of the stock split on the market value of the shares, and that the aim of stock splits may vary from company to company, and thus the sensitivity of price of the stock split vary from company to company, depending on the nature of the sector the company and the timing of a decision stock split, and also by the proportion of stock split, and economic circumstances surrounding the company or the market, according to the nature of management and ownership structure, was not clear that the effects in the financial statements, which indicates the presence of deficiencies in financial reporting, which did not indicate the impact of retail on the company's various items.

Hence the need to measure the impact of the stock split policy on the market value of the shares, even reliable when a decision has stock split, and determine to what extent it affects the application of rules and principles of corporate governance on the effectiveness of the stock split policy. And here comes to the mind of the researcher, a fundamental question: What is the possibility of drafting a proposed accounting framework to measure the impact of policy on the stock split price of the stock Market? The ramifications of this fundamental question the following questions:

- o What are the real motives for pursuing a policy of corporate stock split?
- o What are the implications of the market value of the policy of stock split shares in the Egyptian capital market?
- o Does the policy impact of fragmentation on the stock market value for different percentage of each of the retail sector, which the company belongs to it?

The researcher tries to answer these questions through theoretical study and practical research problem, in addition to the work of an accounting framework to measure the impact of the proposed stock split policy on the price of the stock market. The above research question inspired the main aim of this study which is to propose an accounting framework for measuring the impact of stock split policy on stock prices in the stock market of Egypt.

To achieve the above aim of the study the following sub-goals are settled:
1. Analysis of the intellectual framework of the stock split policy.
2. Identify the most important motives for companies to follow the policy of stock split.
3. Determine the dimensions of accounting and economic issues related to the stock split policy.
4. Clarify the information content of the policy of stock split.
5. An empirical study to measure the impact of policy on the share split by market value, through the work of the statistical study to lest the validity of hypotheses.

However, the importance of research stems from the following points
1. Scarcity of scientific research and literature on measuring the impact of policy on the stock split the market value of shares in emerging markets, especially the Egyptian stock market.
2. Growing interest of the General Authority for Financial Control and dealers in the stock market with stock split policy and its implications especially after the direction of many companies in Egypt recently to follow this policy.
3. The vital role of the policy of stock split to attract small investors for the financial markets, and the consequent expansion of the ownership base of enterprises, and stimulate capital markets.
4. Study the theoretical framework of the policy of stock split in terms of concept and importance and motivations of companies to follow the policy of stock split, and determine the best ratio of the fragmentation that fit the company's competitive position, and the nature of the sector the company belongs to him.
5. Clarify the role of the application of rules and principles of corporate governance in time governance decision fragmentation of its shares.
6. Important role of accounting in measuring the impact of stock split on the stock price market

Therefore, this research attempts to develop a proposed accounting framework to measure the impact of stock split on the stock market and to clarify the impact of stock split on the accounting thought.

2. Literature preview
Chern et al. (2008) employ event study to study the phenomena of the stock split announcement and abnormal

returns of 500 stocks listed on three exchanges: NYSE (New York Stock Exchange), NASDAQ (National Association of Securities Dealers Automated Quotations), and AMEX (American Stock Exchange). One of the hypotheses for the sample of 500 stock split events from the period 1975–2004 modeled by the researchers is that the new information of stock split announcement is more rapidly integrated with the stock prices of the matters that are optioned as matched with non–optioned stocks what arises from the fact that optioned stocks are more informational efficient than non–optioned ones. The significance of the signal of the announcement is thus declined by the probability of using the option after the appearance of new information. Chern et al. (2008) indicate significant differences in abnormal returns for two samples, i.e. the non–optioned and optioned stocks that declare the stock split, especially the first cause lower excess returns comparing with the second one on trading sessions 0 and +1 while day 0 represents announcement date (for both samples they are positive). Furthermore, similar results are found for the event window [–20; +20]. Chern et al. (2008) indicate that the presence of options [for stock–split–announcing companies] improve informational efficiency of trading.

Baker et al. (2009) analyse the sample of 13,354 stock split announcements of the split factor at least 1.25–for–1 between 1963 until 2006 with the involvement of firms listed on the NYSE. The researchers noted that a greater number of firms decide to split the stock when in the market low–priced or small–cap companies indicate higher valuations when compared with their peers. Furthermore, in an environment where market partakers prefer lower–priced stocks the average decrease in the stock price following stock splits is perceived to be deeper. The researchers discover that high split incidences pooled with low post–split prices suggest deteriorated future returns on small–caps compared with larger stocks. The similar pattern is anticipated from lower–priced stocks compared with higher–priced stocks. In actual fact, Baker et al. (2009) indicated a significant positive relation of post–split prices to the valuations of larger (or high–priced) stocks and significant negative relation of post–split prices to the valuations of smaller (or low–priced) stocks. Unexpectedly, volatile companies imitate a greater tendency to split the shares.

Weld et al. (2009) try to detect some norms and customs that work with regard to stock prices. Especially, the researchers specify that there is some settlement followed by firms when setting the stock price. More specifically, the stock prices in the U.S. capital market were considerably greater before 1929 and the custom for average stock prices around $35 apparently has been initiated in the period of Great Depression when the stock prices dropped from an average of $70. Those who choose to perform contrary to this norm, e.g. the remarkably high share prices of Berkshire Heathaway Inc. ($128,880.00 respectively as of the 17th of Aug. 2012). Alternatively, Weld et al. (2009) claim that actual norms for U.S. share prices are reliant on on such assurances as the industrial sector it belongs to or company's size.

The last statement is as well supported by McNichols and Dravid (1991) who determine that the split factor is positively associated with the deviation from "norm price". Remarkably, Weld et al. (2009) deliver evidence that companies whose share prices deviate from the price norm or instead do not split the stock subsequently to move the price to the price norm are not penalised by the market, i.e. price–targeting firms do not achieve statistically or economically significant returns in the next year. The researchers conclude that the gains resulting from following the price norm are short–existed and are anticipated to be reversed.

The subjects of [nominal] stock price puzzle along with the catering theory have been analysed as well by other researchers. Dyl and Elliott (2006) based on the sample of 6,638 companies investigated this issue before above-mentioned researchers examining the reasons for why firms select specific price ranges. One of the results is that big companies tend to have higher stock prices in addition to a greater number of stocks outstanding. Moreover, companies are likely to take proactive actions in order to bring the stock price to favorable trading range. Likewise Weld et al. (2009), Dyl and Elliott (2006) detect almost constant share prices over time accompanied by strong run–up in market indices, e.g. between 1976 until 2001 the average annual price equals $28.21 while the S&P500 in the same time interval rise by an approximate 1,159%. When letting the share prices to grow without having split the stocks the average stock price would be equaled to $405.39 each in 2001 instead of the average stock price of $28.48 each. Dyl and Elliott (2006) delivered practical evidence that companies whose share price crosses the anticipated trading range in year t are more likely to perform a split rather than a company whose share price does not diverge from the range. Furthermore, the researchers generalise a conclusion that the subject of trading range does matter to companies and stock split is one of the implements utilised to achieve desirable stock price range.

Leung et al. (2006) observed the puzzle of stock splits from the standpoint of insider activity on the example of splitters from Hong Kong wherever the sample era is set between 1980 until 2000. The researchers use abnormal insider trading activity, both selling and buying, with the aim of assessing the informativeness of the signal contained in the split announcement. In the time period of three to four months before the announcement there is detected abnormal superior insider activity. Additionally, nearby the announcement period there is stated positive and statistically significant share price performance, precisely positive abnormal returns in the event window [–1;+1] amount to 5.17% within the market model. Abnormal returns are as well detected in the pre–split event window [–50;–1] on the level of 43%. Leung et al. (2006) inferred this fact as a

provision for the notion that split contains positive information content to the market. Additional supposition is statistically significant greater trading liquidity in the event window [–20; +20] besides two measures of bid–ask spread, i.e. relative and absolute spreads, following the split which supported the liquidity hypothesis. One of the adverse phenomena associated with the stock splits is the increase of the return volatility from 7% to 12%. The researchers explicated this fact by boosted trading activity. Likewise previous research studies on split factor, Leung et al. (2006) stated positive and statistically significant relation between the split factor and abnormal gains in the event window [–10;+10]. Sequentially, it can be concluded that the choice of an explicit split factor signals splitting firms' value to the capital market participants. Furthermore, it is further claimed that stock splits make up a comparatively superior tool of signaling to the market for small firms instead of larger ones. In summary, Leung et al. (2006) provided three hypotheses on stock splits: signaling, [optimal] trading range, and liquidity.

In summary, this section discussed the importance of stock split policy and its motives; in addition to splitting specifications and consequential impacts; in addition to the most important variance reasons in the market value after stock split; thus clarifying accounting and economic dimensions of splitting; moreover clarifying the informative content of splitting policy and its psychological impact of splitting on shareholders. Based on this discussion, the research hypotheses are formulated

The study hypotheses are as follows:
1. No significant effect was a significant for an event stock split on the price of the stock market.
2. There is no different than the average change in market price variability among coefficient stock split.
3. There is no different than the average change in market price according to the type in which sector the company belongs to the split shares.
4. There is no different than the average change in the value of trading stock variability among coefficient stock split.
5. There is no different than the average change in the value of trading stock according to the type in which sector the company belongs to the split shares.

3. Research Methodology

A researcher faces a number of complex issues and problems in relation to his/her research activities and plans. The design of research is affected by issues relating to the nature of reality and the nature of knowledge. These philosophical questions must be addressed explicitly, because they determine the choice of research tools and strategies. According to Denzin and Lincoln (1994), paradigm is a set of serial beliefs and actions which consist of three main inter-related elements: ontology, epistemology and methodology. Therefore, matching particular ontology and epistemology with suitable methodology practices is a common tradition in social science (Neuman, 1994; Decrop, 1999).

However, more recently, researchers have demonstrated a growing recognition of the benefits of mixed methods research. Both Bowen (2003) and Massey (2003) reported that the mixed methods approach represents a poly-vocal approach to research, where the use of methodological strategies means that the researcher does not necessarily favour a particular location of the social world over another. Researchers continuously move between the research questions and research objectives, regardless of the methods adapted for the sake of achieving the research aim.

Even though there are some paradigmatic conflicts between quantitative and qualitative research, some researchers justify the usage of mixed methods on the basis that there are some common beliefs between the two paradigms. For instance, both qualitative and quantitative researchers use empirical observations to meet research objectives. Sechrest and Sidani (1995) noted that the two methods "*describe their data, construct explanatory arguments from their data, and speculate about why the outcomes they observed happened as they did*" (p. 78). In addition, both types of research incorporate safeguard activities in order to minimise the lack of trustworthiness that potentially exists in all research studies (Sandelowski, 1986). The two paradigms have a common objective which understands the world in which we live (Haase and Myers, 1988). Both paradigms share a common commitment to understanding and improving human welfare, and to apply a common goal of spreading knowledge and practices (Reichardt and Rallis, 1994). Today, research is becoming increasingly dynamic and complex. Consequently, many researchers need to complement one approach with the use of another in order to achieve a solid understanding of their research problem, and to provide high-quality research by means of triangulations (Johnson and Onwuegbuzie, 2004). When the two approaches are combined together, the advantages of each methodology complement those of the other, resulting in a more solid research design which yields more reliable and valid results (Decrop, 1999).

Therefore, by using a mixed method methodology in this study, the researcher combines both approaches in order to answer the specific research questions of the study. The shortcomings of the individual methods are minimised, and threats to internal validity are recognised and addressed.

This aim of this study is to propose an accounting framework for measuring the impact of stock split

policy on stock prices in the stock market of Egypt. A mixed methods design is employed, by means of which different but complementary data is collected. In this study, some financial indicators for inspecting the impact of policy on the share split by market value are quantitatively analysed, in order to investigate the validity of hypotheses, through the work of the statistical study. Concurrent with this, qualitative content analysis are used to explore the intellectual framework of the stock split policy.

In summary, the benefits of both methodologies were considered, and the researcher considered that combining elements of both quantitative as well as qualitative data was more beneficial, thus making triangulation possible. In short, through integrating both approaches together one is able to determine how the stock slit policy affects the market value of Egyptian stocks and to formulate an accounting framework assess the impact of such policy on the performance of the stock market, and it is possible to gather the requisite data to ensure that the questions of the study are successfully answered.

3.1 The sample and period of the study
The applied study of this research covers the period as of January 2006 till the end of November 2014; an interval that witnessed a relative recovery of the stock market; with most of stock split transactions, as many companies applied stock split policy for their shares throughout this period of time, the said transactions' data are available at Egypt for Information Dissemination (SAE). The sample of the study is selected of Egyptian stock market enlisted companies undergone stock split; representing the study population; with relative representation of various sectors[1] to which such companies belong; data were obtained from stock market shares trading movement statement in terms of value and quantity, within six months before and after stock split event, except for two companies, the said period reached four months for one and the other took only one month. , the insurance and banking sectors are not included in this study as the features of these companies are different from the companies in other industrial sectors in terms of financial statement liquidity assessment and profitability measures. Moreover, they were focussed naturally and were bound by different accounting rules, tax and regulations (Zeitun and Tian, 2007; Masry, 2015b). This gave the study a sample of 22 firms[2].

3.2 The research design
The study fieldwork provides answers to the "how" and" why" of the matters under study by presenting a wide range of evidence through historical documents and official accounting statements. Eisenhardt (1989) indicated that a combination of data may perhaps be highly synergetic. Quantitative approach can indicate relationships that may be salient to researchers. Quantitative approach can also protect researchers from getting carried away by false impressions from qualitative data, and it can strengthen results when it is matched with qualitative evidence. Qualitative approach is useful for understanding the theory and underlying relationships exposed by the quantitative data, or may propose directly theories that can be strengthened by quantitative support.
3.2.1 The qualitative approach
Content analysis is a broadly used qualitative research method. Instead of being a single method, the present applications of content analysis display three different methods: *directed, conventional, or summative*. All three methods are used to understand meaning from the content of documents text data and, therefore, be devoted to the mixed method approach. The major variances between the approaches are threats to trustworthiness, origins of codes, and coding schemes. In conventional content analysis, coding categories are resultant directly from the text data. Through a directed approach, the analysis starts with a relevant research findings or theory as guide for primary coding. A summative content analysis involves comparisons and counting, normally of content or keywords, after that the clarification of the fundamental context.

In this research, a *summative approach* is employed. The qualitative content analysis starts with quantifying and identifying certain content or words in documents text to understanding the contextual use of the content or words. This quantification is an attempt not to deduce meaning but, relatively, to discover usage. Investigating for the presence of a particular content or word in textual documents material is referred to as manifest content analysis (Potter and Levine-Donnerstein, 1999). Accordingly, the analysis goes beyond mere word counts to include latent content analysis. Latent content analysis refers to the method of interpretation of content (Holsti, 1969). In this analysis, the emphasis is on realising fundamental meanings of the content or the words (Morse and Field, 1995; Babbie, 1992; Catanzaro, 1988).

In this research, the initial part of the qualitative analysis technique taking into account the stock split policy that spread sporadically lately; specifically after the tendency of many companies to a justified or non-justified adoption of this policy; in addition to the extent of effect related to this said onto the interests of shareholders due to the application of such policy. Throughout the last year; there were around 67 stock split

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[1] The division of sectors is obtained via the monthly bulletin issued by the stock market.
[2] In accordance with the published data found at the Egyptian stock market website on that date, and the Egyptian Financial Supervisory Authority; and in accordance with the data obtained from Egypt for Information Dissemination Company.

announcements in the Egyptian stock market; action resulting in negative outcomes adversely affecting the stability of the stock market. Thus, it becomes necessary to clarify the accounting illustrative framework of stock split policy by reflecting its illustration, importance and motives which companies follow the stock split. In this analysis, data were extracted from audited annual firm statements, company records, statistical reports, and publications. Data collected from sources outside the case firms included documents on stock splits, government reports and regulations, and newspaper publications on the progress of the stock splits process. Multiple data collection methods provide a method for triangulation, which increase the research scope, depth and consistency. In addition, the use of triangulation generates materials for discourse analytical studies, thereby improving their coherence and fruitfulness.

3.2.2 The quantitative approach

The research applies the quantitative approach, which is generally located in the positivist social sciences paradigm, which mainly reflects the scientific method of social sciences (Jennings, 2001; Creswell, 2003). The positivist paradigm espouses a deductive approach to the research process. It thus begins with theories and hypotheses on a particular phenomenon, collects data from the real-world site and subsequently analyses the data statistically to reject or support the initial hypotheses (Blanche and Durrheim, 1999; Welman and Kruger, 2001; Masry, 2015c).

Researchers who implement a deductive approach draw on theory to direct the design of the study and the subsequent explanation of their results (Neuman, 1994). The aim is to verify or test a proposed theory, rather than to construct one. Therefore, it can be seen that the identified theory proposes a framework for the whole study, also serving as an organising model for the research hypotheses and for the whole data collection process (Masry, 2015a).

The analysis would start with *descriptive analysis* (mean and standard deviation) in order to reflect characteristics and basic features of data sets for comparison purposes. The mean is obtained by dividing sum of values by their numbers; one of the best measures of central tendency in case of quantitative variables not including any extreme values; while standard deviation is one of the dispersion measures; it is to be calculated by average root mean square.

Consequently, the *T-test* is used in order to test the sample means significance of the following:

- Testing means difference of two dependent or independent samples.
- Testing correlation coefficient significance.

Under this test; the sample would be used to calculate the T value (Calculated T), then to conclude the probability value of (T) stated in schedules at an significance level 5% , in case the calculated T is higher than the probability value of T (T-schedule) , the null hypothesis would be rejected. If otherwise occurs, null hypothesis would be accepted and the alternative rejected.

There is another alternative for accepting or rejecting the null hypothesis by comparing the calculated probability of Sig value to the calculated value of T test value. Which is considered one of the outputs of the Statistical Package for the Social Sciences (SPSS), with the significance level 5% (theoretical probability); if Sig value is less than (0,05) therefore, the null hypothesis would be rejected. If the opposite happened then the null hypothesis is accepted.

Accordingly, the *analysis of variance* is performed to determine the significance of differences between multiple samples means; of naturally distributed populations of equal variance, to assess whether the test samples are withdrawn from populations of the same mean. The analysis of variance constitutes a suitable tool to test differences between various data groupings in order to determine its consistency. In accordance to the research sample available data; (one way ANOVA) test is applied; as the effect of one independent variable taking numerous values due to multiple samples is tested.

Differences may be statistically significant or related to difference in sample setting, however the matter is depending on the calculated F based on the research samples; the scheduled F at specified degrees of samples of significance and differences. If the calculated F value is equal to the scheduled F or exceeds it; therefore the significance level occur; in other words the samples are not withdrawn from the same community therefore, the null hypothesis shall be rejected and the alternative one shall be accepted. If the calculated F is less than the scheduled F; would mean that the results are not included as a significance level and refers to some coincidental factor, thus the null hypothesis would be accepted in this time.

There is another alternative to accept or reject the null hypothesis, which is made by comparing the accounted probability Sig value of calculated F with a significance level 5% (theoretical probability); if the Sig. is less than 5% then the null hypothesis is to be rejected, if the opposite happens then the null hypothesis is to be accepted.

4. The Analysis

This section describes the process of analysing the multiple data collection gathered by the study. The first sub-section describes the qualitative data analysis, while the second sub-section focuses on the method of quantitative

data analysis employed by the study

4.1 Qualitative analysis
The suggested accounting frame for the Stock split policy can be described as a specific well-formed frame; this frame is to be organised and collected in a manner determining the basic criteria for adopting the stock split ' policy. The said frame clarifies the characteristics and basis governing stock split policy and the consequences results and effects; which makes this policy as a tool benefiting all its participates in the stock market as investors, economic units concerned to apply such policy.

The splitting policy is one of the policies adopted by corporation's management which must be disclosed along with its related surroundings adhering to principles of disclosure and transparency; taking into consideration the shareholders' equity more specifically the minority in application of the rules of corporate governance.

The basic purpose of the said frame is to develop financial statements and related clarifications to include the effects and consequences of applying the stock split' policy. It is recommended to determine the accounting frame of stock split whereas it shall include all the necessary accounting and non-accounting information as well the financial and technical analysis to avail estimating the future profits and foretelling the price of share after stock split and its profit; thus determining all the consequences of such effect whether accounting or non-accounting resulting from adopting the stock split ' policy; therefore enabling the management to achieve its goals related to decisions of splitting. In order to achieve the above stated; it is recommended to clarify the suggested frame through displaying the below themes of the qualitative analysis:

First: Basic criteria of stock split policy
The basic criteria is represented in the vital basis that shall be determined and studied carefully by companies interested in splitting their shares before taking this decision; taking into consideration that it represents that structural frame of splitting such as:

1- Determining the objective of stock split
It is a must for the accounting frame to determine the basic target of splitting shares; through such determination of splitting the nominal value of shares in order to decrease the price of share (is it expansion of ownership basis, or increase of free trading or achieving an ideal range of trading or to attract investors' attention to issue new capital funding), in order to perform the required structuring to such splitting and determine its steps; based on the purpose, it is to determine the targeted price of share after stock split and to design the performance of management as well determining future plans for the corporation after applying such splitting.

2- Determining adequate splitting rate:
It is to be determined based on the purpose or target of splitting, through determining the fair value of share after stock split to reach to adequate splitting values through determining the nominal value of share after stock split in a way adapting with the corporation's capital as well the sector it belongs to; in addition to strength of its shares' performance, the ability of the management to achieve future profits and performance improvement; in order to avoid any drop in the profit value of share in a way affecting negatively the investors' decisions; taking into consideration the consequences of such impact onto the share market value after stock split.

3- Adequate timing of splitting:
By determining the adequate timing to take the stock split ' decision; before the corporation's issuance of shares with new values after applying the splitting process; requires the availability of sufficient information pertaining the market and the competitive companies listed in market; such process shall take place through studying the financial indicators of the corporation as well the indicators of the sector it belongs to; in addition to the risks emerging from the market due to Inconstancies and fluctuations in the market's indicators entirely; determining the quantity of shares' trading process after applying splitting; whereas if such indications of both the corporation and the market kept ascending; thus it marks the adequate time to take the splitting decision and vice versa. Since the corporation follows the previously stated criteria; thus the splitting shall be of a positive effect onto the share market value s; enabling the issuance of splitting decision where it shall be vital to determine the relativity importance of stock split ' policy.

Determining the relativity importance of Stock split policy is considered one of the vital matters that impacts the stock market and the organizations concerned with issuance and structuring the accounting criteria; hence the assertion of such importance, it became necessary to search for its impacts through clarifying the effects of such splitting and reporting on the informational content of financial reports. Moreover, it shall be essential to highlight the percentages of splitting through studying this important matter and its positive effect reflected upon the market value; in addition to determining the relativity importance of Stock split policy and its echo onto the quantity of shares' trading.

Second: Accounting standards of stock split policy
To measure the impact of applying the Stock split policy onto the share market value ; it is recommended that the economic frame shall determine the economic impacts as a consequence of applying the Stock split policy and to

adopt the required disclosure; by adhering to the following themes:

1-Disclosure and Transparency

This matter is represented in the information that shall be disclosed in order to achieve the informative ability in a detailed, quantitative and descriptive way specifically in regards to the information that concerns that old and new investors related to the splitting policy of the corporation's shares. Knowing that the splitting decision required high degree of disclosure that shall result in effects onto the shares' performance in the market; as in determining the targeted price after applying the stock split in a way that shall achieve a sort of balance between the risks and revenues formed by such shares; in addition to the liquidity's percentage as anticipated after stock split, capitalised profits as anticipated to happen.

The good level of disclosure shall have an impact in increasing the efficiency of the financial markets through its contribution in similar information; whereas such information shall be similar between both the internal and external parts in order to avoid achieving capitalized profits for the internal parts over the external parts; thus controlling any manipulative actions taking place within the splitting policy. The companies must abide by applying disclosure in accordance with the suggested frame of adopted policies; taking into consideration the reasons and motives they state as well the future financial and non-financial consequences resulting of such decisions. Therefore, one can divide the consequential impacts onto the Stock split policy into two sections:

A-Impacts related to the operational performance of the corporation

Such impacts are represented in all the information related to the management's performance in the future, future investment plans, extent of stock split ' policy's contribution in obtaining the required capital funding as desired by the corporation; specifically such splitting has an effect related to the increased requests onto the corporation's shares.

The frame shall also clarify the board's structure, contribution percentage of board members in the ownership structure; clarifying the managerial performance of the corporation's board in order to estimate whether such action is in favor of the corporation's shareholders or not; in addition to determining the extent of corporation's abidance to apply the corporate governance's rules in accordance with what shall lead into achieving shareholders' interests; that shall avail the shareholders further assertion that such decision emerges from a wise management where no manipulation is detected.

B-Impacts related to performance of shares after stock split

The accounting frame shall abide by the required disclosure in regards to all the data and information pertaining the items of share as affected by such splitting; through adopting a technical analysis covering the shares' trading and movements after stock split thus, clarifying the variance in the market value as well the liquidity percentage and profitability of share besides to calculating the earning multiplier. Moreover, it shall clarify the extent of Stock split policy impact in limiting and controlling any fluctuations in shares' prices; in addition to the number of shares, nominal value with capital being distributed accordingly after stock split. For the purpose of achieving the required disclosure, the corporation has to develop the informational content of its financial reports.

2- Developing the informational content of the corporation's financial reports for adapting with the Stock split policy impacts

Investors need to rely on data and information to enable them estimate the future flowing financial position of the corporation represented in the distributions as rendered by the investor; and to evaluate the degree of market risks related to the trading of shares; clarifying the movement of shares' prices especially after applying splitting.

The financial reports as well the concluded clarifications must contain the entire information and data that reflect the impacts of splitting policy; for instance the nominal value and market value before and after stock split; it shall include the basic criteria of splitting whereas the structure of splitting is determined based on. Moreover, such financial reports shall have to contain the items of shares as affected by splitting for instance; profitability of share, trading volume, liquidity percentage before and after stock split; in addition to the relativity importance of the splitting policy; consequential variance s in the operational performance of the corporation in order to support the investors' decision in the stock market by enabling all the requirements such as necessary information related to the splitting policy serving the purpose of taking the correct and adequate economic decision.

Such information is represented in a set of lists, reports, analytical samples in both quantitative and descriptive ways; that shall reflect an actual reality of the corporation's performance in the market; besides to the extent of its competitive position; and clarifying the availed investment opportunities; in addition to any matter linked to the management's plans in the future.

It is recommended to highlight the financial and technical analysis as well the future anticipations of the share's movement; in addition to forming a variance list pertaining the shareholders' suggested equity to could contain such variance in the capitalised structure of corporation after stock split; moreover variance in the market capital and the profitability of share and consequently the earning multiplier indicator – in order to inform financial statements' users with all the related matters to the Stock split policy impacts. Figure 1
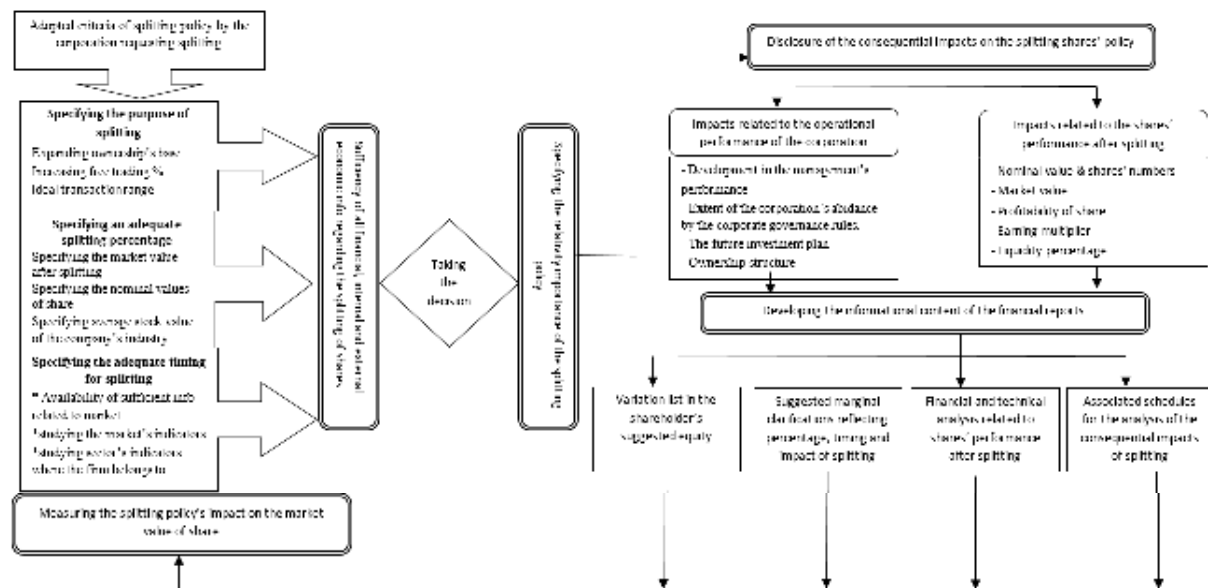
summarises the above mentioned discussion.

Figure (1): The suggested accounting frame for calculating the stock split policy impact on the market value

4.2 The quantitative analysis
In this section the five mentioned hypotheses are examined.
4.2.1 First hypothesis testing
There is no statistically significant impact as a result of the stock split event on the share market value.
In order to examine the above hypothesis; the researcher used paired T-Test of two associated samples to compare between market value means within ten days before and after stock split and within five months before and after stock split. A comparison was made between value mean within ten days before and after stock split for all sample companies as a short term study representing Two weeks of trading before and after stock split event, while the ten-month-period surrounding the stock split event is used as a medium term study.

Table (1) reflects the statistical description of variance in the market value within ten days before and after stock split of companies performing splitting to their shares. This table displays difference in the share market value on a short term before and after stock split; it is noticed that the variance in the market value after stock split is higher than before stock split in ten companies of the sample; whereas the variance percentage turns negative in twelve companies; reflecting the impact of the split process on the short-term market value. To study the significance level of this impact; the results of T-test shall be displayed.

Table (2) shows T-test results of variance in share market value within ten trading days before and after stock split. In this table, the calculated Significance (Sig.) is less than significance level of more than 90% of the companies' sample (5%); that is to say that there are statistically significant differences affecting the share market value before and after stock split; i.e., the stock split policy has an effect on the share market value; therefore the null hypothesis would be rejected and the alternative would be accepted. There is a statistical significance impact related to the stock split policy and its effect onto the share market values on the Egyptian stock market in a short term.

Table (1): T- test variance between two share trade value means

Co	Share value mean		Standard deviation		Variance %
	before stock split	After stock split	before stock split	After stock split	
1	78.840	64.720	3.265	4.288	-------
2	70.150	66.580	0.950	1.863	0.051
3	45.340	42.400	1.631	1.547	0.065
4	61.310	56.660	5.005	2.105	-0.076
5	315.250	210.780	55.076	14.818	-0.331
6	61.670	41.160	1.937	11.112	0.333
7	72.450	114.140	5.692	16.462	0.575
8	184.070	198.560	12.064	10.109	0.079
9	392.860	290.440	9.676	51.362	-0.261
10	398.970	403.170	7.425	6.423	0.011
11	686.990	780.580	46.097	39.012	0.136
12	115.670	114.000	1.474	2.055	-0.014
13	224.290	1039.820	20.629	58.326	3.636
14	143.170	146.640	4.178	12.983	0.024
15	100.350	99.180	2.313	2.199	-0.012
16	88.820	107.790	1.201	14.091	0.214
17	124.470	87.940	4.427	22.921	-0.293
18	122.900	185.780	9.002	25.291	0.512
19	136.870	132.500	2.523	6.094	-0.032
20	44.430	67.430	2.609	9.468	0.518
21	168.520	153.070	7.593	7.966	-0.092
22	135.360	147.870	2.136	1.661	0.092

o   **Share price after stock split equals share price following split multiplied by split ratio**

Table (2): T- test variance between two share trade value means

Co	Share value mean		T value	df	Sig. (2-tailed)
	Before stock split	After stock split			
1	78.840	62.720	7.287	18	0.000
2	70.150	63.580	4.398	18	0.000
3	45.340	52.400	4.136	18	0.001
4	61.310	37.360	2.508	18	0.014
5	315.250	214.780	4.792	18	0.000
6	61.670	44.160	6.334	18	0.000
7	72.450	117.140	-7.569	18	0.000
8	184.070	198.560	-2.911	18	0.009
9	392.860	290.440	6.197	18	0.000
10	398.970	403.170	-1.353	18	0.193
11	686.990	780.580	-4.901	18	0.000
12	115.670	114.000	2.088	18	0.051
13	224.290	1039.820	-41.686	18	0.000
14	143.170	146.640	-0.805	18	0.432
15	100.350	99.180	1.159	18	0.262
16	88.820	107.790	-4.242	18	0.000
17	124.470	87.940	4.948	18	0.000
18	122.900	185.780	-7.407	18	0.000
19	136.870	132.500	2.095	18	0.051
20	44.430	67.430	-7.406	18	0.000
21	168.520	153.070	4.44	18	0.000
22	135.360	147.870	-14.619	18	0.000

   Table (3) shows the share market value variance statistical description within six months before and after split for the companies who had undergone stock split. The table further displays the variances in the share market value in a medium-term before and after stock split of shares; whereas the variance in the share market

value after stock split is bigger than before in fourteen companies representing the sample of study; provided that the variance result came negative in eight companies; such matter reflects the impact of splitting on the share market value in a medium term. It is moreover noticed that the average of positive variance is remarkably bigger than the negative variance in the set comparison in a short term.

Table (3): Descriptive statistics and variance % of share market value before and after split

Co	Share value mean		Standard deviation		Variance %
	Before stock split	After stock split	Before stock split	After stock split	
1	76.920	30.940	8.742	12.177	-0.598
2	79.320	98.340	5.289	16.948	0.240
3	46.300	38.820	--	6.028	-0.162
4	30.000	31.560	21.572	6.122	0.052
5	334.260	142.320	43.795	48.036	-0.574
6	97.840	27.040	32.943	6.223	-0.724
7	25.620	52.620	20.965	16.184	1.054
8	118.160	160.720	42.674	104.382	0.360
9	525.280	166.180	54.42	45.558	-0.684
10	378.880	372.340	39.887	15.537	-0.017
11	578.620	613.620	25.491	75.352	0.060
12	96.700	124.150	8.758	17.094	0.284
13	170.400	1049.480	18.201	147.141	5.159
14	141.820	160.100	12.593	3.143	0.129
15	103.000	97.320	7.287	7.791	-0.055
16	86.760	116.867	3.543	1.914	0.347
17	146.220	51.580	23.854	2.418	-0.647
18	63.480	186.680	27.226	126.406	1.941
19	177.400	213.580	19.247	31.175	0.204
20	36.000	60.400	13.986	11.651	0.678
21	77.240	163.240	29.027	75.982	1.113
22	109.940	193.580	21.019	52.795	0.761

Table (4): T-test (variance in share trade value within five months before and after stock split)

Co	Share trade value mean		T value	df	Sig. (2-tailed)
	Before stock split	After stock split			
1	76.920	30.940	6.859	8	0.000
2	79.320	98.340	-2.395	8	0.043
3	46.300	38.820	1.133	4	0.321
4	30.000	31.560	-0.156	8	0.880
5	334.260	142.320	6.603	8	0.000
6	97.840	27.040	4.722	8	0.001
7	25.620	52.620	-2.280	8	0.052
8	118.160	160.720	-0.844	8	0.423
9	525.280	166.180	10.909	8	0.000
10	378.880	372.340	0.342	8	0.741
11	578.620	613.620	-0.984	8	0.354
12	96.700	124.150	-3.147	7	0.016
13	170.400	1049.480	-13.258	8	0.000
14	141.820	160.100	-2.397	8	0.053
15	103.000	97.320	1.191	8	0.268
16	86.760	116.867	-13.312	6	0.000
17	146.220	51.580	9.106	8	0.000
18	63.480	186.680	-2.130	8	0.066
19	177.400	213.580	-2.208	8	0.580
20	36.000	60.400	-2.997	8	0.017
21	77.240	163.240	-2.364	8	0.046
22	109.940	193.580	-3.291	8	0.011

Table (4) displays the examination results of T-Test for studying the difference of variance in the market value by studying a long-term around the splitting occurrence which is represented in five month before and after stock split of shares. It is noticed in table (4) that the calculated Significance (Sig.) is less than the significance level 5% for 12 companies of the study sample; whereas there are three other companies with an accepted difference at a higher significance level by 10%; that is to say there are different levels of a statistical significance related to the market variance on a medium range; which means that stock split policy has an effect on the share market value on a medium range; therefore the null hypothesis is rejected whereas the alternative hypothesis is accepted.

Based on the above, it can be concluded that there is an emergent effect of a statistical significant of the stock split policy on the share market value in the Egyptian stock market on both short term and medium range.

4.2.2 Second hypothesis testing

The variance mean in the share market value does not differ in relation to the difference in split ratio

To examine the previous hypothesis; the researcher used One Way ANOVA test to study the variance in the market value means due to the difference in the split ratio. Such percentage reflects quantity or ration of dividing the value of the one share through using the medium range solely; such application avails calculating the extent of impact in a more accurate way. An examination of LSD (Least Significant Difference) is also applied to study the source of variance; if any – in order to specify the splitting percentage of more effect on the share market value.

Table (5) displays the results of variance analysis in *One Way ANOVA* to avail studying the variance in the market value means resulting o the difference in the split ratio

Table (5): Split ratio One Way ANOVA test results

	Root sum square	df	Root mean square	F	Calculated significance
Between means	1314849.2	5	262969.834	6.798	0.000
within means	25879698	669	38684.153		
Sum	27194547.2	674			

Results displayed in table (5) reflect the existence of substantial variance in the average share market value on a medium range along with a variance in the splitting percentage; whereas the F value reached to be 6.798 and the calculated hypothesis became less than 5%.

For the purpose of specifying the source of difference; the researcher made a LSD test presented in table (6) by conducting various comparisons to study the difference between each dual of variant split ratios.

Table (6): Trade value multiple comparisons LSD test results

Split ratio	Comparative split ratio	Variance mean	Standard deviation	Calculated significance
2:1	4:1	42.714	28.338	0.132
	5:1	-3.694	19.732	0.852
	10:1	-8.314	20.863	0.690
	15:1	149.083*	37.775	0.000
	29:1	143.902*	37.775	0.000
4:1	2:1	-42.714	28.338	0.132
	5:1	-46.408	28.882	0.109
	10:1	-51.027	29.667	0.086
	15:1	106.369*	43.264	0.014
	29:1	101.189*	43.264	0.020
5:1	2:1	3.694	19.732	0.852
	4:1	46.408	28.882	0.109
	10:1	-4.62	21.597	0.831
	15:1	152.777*	38.185	0.000
	29:1	147.596*	38.185	0.000
10:1	2:1	8.314	20.863	0.690
	4:1	51.027	29.667	0.086
	5:1	4.62	21.597	0.831
	15:1	157.397*	38.782	0.000
	29:1	152.216*	38.782	0.000
15:1	2:1	-149.083*	37.775	0.000
	4:1	-106.369*	43.264	0.014
	5:1	-152.777*	38.185	0.000
	10:1	-157.397*	38.782	0.000
	29:1	-5.181	49.957	0.917
29:1	2:1	-143.902*	37.775	0.000
	4:1	-101.189*	43.264	0.020
	5:1	-147.596*	38.185	0.000
	10:1	-152.216*	38.782	0.000
	15:1	5.181	49.957	0.917

* refers to test significance at Sig. level: 0.05

Therefore, one can conclude that achieved split ratios are (15:1); (29:1) that made the best impact on the share market value and share trade value.

4.2.3 Third hypothesis testing

The variance mean in the share market value does not differ in relation to the sector of the stock splitting company.

To test the above hypothesis; the researcher used Kruskal- Wallis test as an alternative to analyse the One Way ANOVA where the condition of equal variance is absent; which is one of the conditions required to apply variance analysis. Thus, an application is made through an alternative test to study the variance in the market value means resulting of the variant economic sectors of companies that performed splitting; in addition to finding a descriptive statistic in regards to the level of companies at each sector.

Table (7): Descriptive statistics & variance % of share trade value before and after stock split

Co	Average share trade value		Standard deviation		Variance %	Sector
	Before stock split	After stock split	Before stock split	After stock split		
1	76.920	30.940	8.742	12.177	-0.598	Foods & beverages
2	79.320	98.340	5.289	16.948	0.240	
7	25.620	52.620	20.965	16.184	1.054	
3	46.300	38.820	--	6.028	-0.162	Financial services other than Banking
6	97.840	27.040	32.943	6.223	-0.724	
16	86.760	116.867	3.543	1.914	0.347	Construction and building materials
17	146.220	51.580	23.854	2.418	-0.647	
18	63.480	186.680	27.226	126.406	1.941	
22	109.940	193.580	21.019	52.795	0.761	
5	334.260	142.320	43.795	48.036	-0.574	Chemicals
15	103.000	97.320	7.287	7.791	-0.055	
13	170.400	1049.480	18.201	147.141	5.159	Tourism & entertainment
14	141.820	160.100	12.593	3.143	0.129	
21	77.240	163.240	29.027	75.982	1.113	
10	378.880	372.340	39.887	15.537	-0.017	Communications
11	578.620	613.620	25.491	75.352	0.060	
9	525.280	166.180	54.42	45.558	-0.684	Real Estate
19	177.400	213.580	19.247	31.175	0.204	
12	96.700	124.150	8.758	17.094	0.284	Household and personal products
20	36.000	60.400	13.986	11.651	0.678	
4	30.000	31.560	21.572	6.122	0.052	Industrial and services
8	118.160	160.720	42.674	104.382	0.360	Gas and Petroleum

Table (8): K-W test results – study of economic sectors effect on share trading value mean

Sector	Mean Rank	Stock price	
Foods & beverages	150.82		
Financial services other than Banking	138.44		
Construction and building materials	404.40		
Chemicals	404.96	337.3	Chi-square
Tourism & entertainment	482.15	9	df
Communications	473.58	.000	Asymp. Sig
Real Estate	448.36		
Household and personal products	445.99		Kruskal-Wallis Test
Industrial and automotive services and products	43.80		Grouping Variable : Sector
Gas and Petroleum	389.70		

Table (7) reflects the descriptive statistics of the impact related to stock split policy on the average share market value within the various sectors (through a medium range of five months before and after stock split of shares). Table (7) shows also that there is a variance in the average share market value before and after stock split. Such quantity of variance is related to the variant sectors that companies of the studying sample belong to. It is noticed that there is a negative impact resulting of splitting on the price of share in the financial services' sector notwithstanding banks and chemical sector whereas; other sectors show some difference varying between increased and decreased results (in regards to share market values). This reflects that the type of sector affects somehow the share market value due to splitting.

Table (8) shows Kruskal-Wallis Test (K-W test) results in examining variance in market value mean in relation to economic sectors .Table (8) displays the significance value against Chi-square calculated value, which is less than 5%; this refers that the variance of share market value differs by the variant type of sector upon the occurrence of stock split ; thus the type of sector which the corporation belongs to and performed splitting to its shares affects the variance mean in the share market value ; such occurrence leads to rejecting the null hypothesis and accepting the alternative one. Therefore; the variance mean in the share market value differs by the variant type of sector which the corporation belongs to while performing splitting to its shares.

In the Mean Rank column; it is clear that communication sectors followed by real estate sector then chemicals sector are the most affecting sectors on the variance of the market value of the companies belonging to

such sectors; which performed splitting to their shares; it is also noticed that the least affecting sectors are related to industrial and automotive services and products, financial services other than banking.

From the previous discussions, it can be concluded that there is an effect related to split ratios on the share market value ; whenever the splitting percentage increases, the more effect it makes for instance; (29:1) & (15:1) of the recorded percentages/ratios which reflect more positive effect on the share market value . Besides, there is a resulting effect due to stock split on the variance of share market value s which occurs along with the type of sector a corporation belongs to. The results reflected the substantial variance s between share value mean before and after stock split which is accompanied with the variant sector that the corporation belongs to. Moreover, by applying Kruskal- Wallis test; it is confirmed that there is an effect on the share market value after stock split, in correlation to the sector to which the company belongs. The results reflect that communication sectors followed by real estate sector then chemicals sector are the most affecting sectors on the variance of share market value; whereas the least affecting sectors are industrial and automotive services and products as well financial services other than banking.

4.2.3 The fourth hypothesis testing

The variance mean in share trading value does not differ in relation to the difference in split ratio

In order to examine the above hypothesis, the researcher used One Way ANOVA test to study the variance of the average share trade value as a result of the variance of splitting percentage; such percentage reflects a quantity or a percentage of dividing the value of the one share through using the medium range only to avail calculating the effect in a more accurate way; moreover a test is conducted to study the source of variance, if any – in order to specify the splitting percentage of more effect on the share trade value .

Table (9) displays the results of variance analysis test (One Way ANOVA) to study the variance of the average share trade value as a result of the variance of split ratio

Table (9): Split ratio One Way ANOVA test results

	Root sum square	df	Root mean square	F	Calculated significance
Between means	1.73E+ 16	5	3.431E+ 15		
within means	5.76E+ 17	649	7.332E+ 14	6.798	0.000
Sum	5.93E+ 17	654			

Table (9) reflects the results which indicate the existence of substantial variance in the average share trade value on a medium range along with the variance in the split ratios; whereas the calculated F value reached 6.798; as the calculated hypothesis indicated smaller than 0.05, in order to specify the source of variance the researcher applied LSD test.

Table (10): Trade value multiple comparisons LSD test results

Split ratio	Comparative split ratio	Variance mean	Standard deviation	Calculated significance
2:1	3:1	-3481518.2	5965767	0.509
	4:1	-4498513.8	3761673	0.438
	10:1	-62874.304	3908908	0.783
	15:1	-19161343*	5286461	0.000
	29:1	12431214*	5286461	0.019
4:1	2:1	1481518.2	3965767	0.709
	5:1	-2616995.5	4042060	0.518
	10:1	1418643.9	4144051	0.732
	15:1	-17679825*	6054592	0.04
	29:1	13912732*	6054592	0.022
5:1	2:1	4098513.8	2761673	0.138
	4:1	2616995.5	4042060	0518
	10:1	4035639.5	3012089	0.181
	15:1	-15062830*	5343932	0.005
	29:1	16529728*	5343932	0.002
10:1	2:1	62874.304	2908908	0.983
	4:1	-1418643.9	414451	0.732
	5:1	-4035639.5	3012089	0.181
	15:1	-19098469*	5421487	0.000
	29:1	12494088*	5421487	0.022
15:1	2:1	19161343*	5286461	0.000
	4:1	17679825*	6054592	0.004
	5:1	15062830*	5343932	0.005
	10:1	19098469*	5421487	0.000
	29:1	31592558*	6991240	0.000
29:1	2:1	-12431214*	5286461	0.019
	4:1	-13912732*	6054592	0.022
	5:1	-16529728*	5343932	0.002
	10:1	-12494088*	5421487	0.002
	15:1	-31592558*	6991240	0.000

* refers to test significance at Sig. level: 0.05

Table (10) indicates that there are no substantial variances between the split ratios/ratios (2:1), (4:1), (5:1), (10:1) in regards to their impact on the share trade value whereas; there are some substantial variances between the previous rations and the splitting rations (15:1), (29:1) which means that whenever splitting percentage increases, the more effect this causes on the share trade value ; in other words the increased percentage splitting has an impact on the share trade value.

4.2.4   The fifth hypothesis testing

The variance mean in in share trading value does not differ in relation to the sector of the stock splitting company.

In order to examine the above hypothesis, the researcher used Kruskal- Wallis test as an alternative to analyse the variance and study the variance in the share trade value as a result of variance of economic sectors for companies performing stock split; in addition to obtaining the descriptive statistics to all the companies belonging to each related sector. Table (11) reflects the descriptive statistics of the impact of stock split policy on the average share trade value within the various sectors (throughout an average range represented in five months before and after stock split).

Table (11) displays that there is a difference in the share value mean before and after stock split. the quantity of variance differs due to difference in sectors that the companies of the sample belong to, whereas it is shown that the household, personal, tourism, recreational, industrial and automotive services and products , gas and petroleum products and sectors witnessed an increase in the prices of shares due to splitting. However, there is only one company with a decreased shares trading as a result of splitting. On the other hand, there is a negative impact of splitting on shares trade value mean on financial services other than banking and chemicals sectors. Communications and real estate sectors varied between increased and decreased results in the share trade value, such matter reflects that the sector's type has an effect on the share trade value as a result of splitting.

Table (11) :Descriptive statistics & variance % of share trade value before and after stock split

Co	Average share trade value		Standard deviation		Variance %	Sector
	Before stock split	After stock split	Before stock split	After stock split		
1	32151086	12267414	8306329	4988042	-0.618444802	Foods & beverages
2	2278335	13520530	1064530	6536899	4.934390684	
7	779730	4224092	950101.7	2245604	4.41737781	
3	2105250	462278.8	177195.7	201009.7	-0.780416198	Financial services other than Banking
6	25880047	8284305	17562674	6675088	-0.67989606	
16	1377582	14277569	1055921	20190620	9.364224416	Construction and building materials
17	490527	61925.6	383942.3	21719.36	-0.873757	
18	492104.6	8386223	431610.5	5967409	16.04154564	
22	8052495	26905969	6489492	13312766	2.341320796	
5	32013084	13628649	7519923	4811568	-0.574278786	Chemicals
15	29063023	28430517	22408357	17148523	-0.021763256	
13	478132	576792.2	154598.1	442108.8	0.20634511	Tourism & entertainment
14	1064601	2028409	602976.8	31269.42	0.905323215	
21	26454261	82253558	20137151	37553718	2.109274457	
10	48325123	52761348	17761819	7851044	0.091799559	Communications
11	58360390	42408850	12942733	15480335	-0.273328194	
9	11271190	10463537	10620312	7494965	-0.071656409	Real Estate
19	931645.8	3049168	545410.6	1023825	2.272883321	
12	541544.2	572070	309221.8	251993.2	0.056368067	Household and personal products
20	1401818	5786400	814402.7	2636053	3.127782637	
4	20779156	25432792	17090691	13867129	0.223956931	Industrial and products
8	2449611	4538081	1448662	3618378	0.852572102	Gas and Petroleum

Table (12): K-W test results – study of economic sectors effect on share trading value

Sector	Mean Rank	Trade value	
Foods & beverages	332.88		
Financial services other than Banking	315.19		
Construction and building materials	206.23		
Chemicals	484.03	Chi-Square	288.4
Tourism & entertainment	321.43	df	9
Communications	579.52	Asymp. Sig.	.000
Real Estate	247.35		
Household and personal products	157.80		
Industrial and automotive services and products	525.87	Kruskal Wallis Test Grouping Variable: SECTOR	
Gas and Petroleum	327.57		

Table (12) displays the results of applying K-W test to study the variance in the share trade value as a result of various economic sectors. Table (12) reflects the hypothesis value against the calculated Chi-Square value to be less than 5%; i.e., the variance in trade value differs in relation to sector upon the application of stock split ; in other words the type of sector that the stock splitting corporation belongs to, affects the variance mean of shares trading; such application results in rejecting the null hypothesis and accepting the alternative one; provided that the variance mean in the share trade value differs by the variance of the sector's type which the corporation belongs to while performing the required splitting to its shares.

Table (12) reflects the hypothesis value against the calculated Chi-Square value to be less than 5%; i.e., the variance in trade value differs in relation to sector upon the application of stock split ; in other words the type of sector that the stock splitting corporation belongs to, affects the variance mean of shares trading; such application results in rejecting the null hypothesis and accepting the alternative one; provided that the variance mean in the share trade value differs by the variance of the sector's type which the corporation belongs to while performing the required splitting to its shares. By checking the average of Mean Rank column; it is reflected that the communication sectors followed by services and then industrial, vehicle and chemical sectors are the most effective sectors on the variance of share trade value for the companies belonging to such sectors while performing splitting to their shares; it is moreover noticed that the least affected sectors are household, personal products and construction sectors.

In summary, through conducting the previous examinations to study the impact of stock split on the share trade value; it is clear that:

o There is an impact of stock split on the share trade value , the results reflect that all companies that performed splitting got affected in their share trade value by splitting on short term and medium range with various percentages and rations; whereas the number of companies affected positively by splitting reached to (5) companies that represent 23% of the companies sample; such positive effect resulted on a short term; in addition to (14) companies that represent 70% of the sample are affected positively by splitting on a medium range; which means that the stock split has a negative impact on the share trade value on short term whereas; such shares trading has a positive impact on a medium range.

o There is an impact of the splitting percentage on the share trade value ; whenever the splitting percentage increase, the more positive impact will be – the percentages/ratios recorded are: (29:1), (15:1) reflects a more positive impact on the share trade value .

o There is an impact of splitting share on the variance of the share trade value before and after stock split which differs according to the variance of the sector's type that the corporation belongs to; whereas there is a difference in the substantial variance s between the average share trade value according to the sector's type which the corporation belongs to.

o By applying K-W test, it is noticed that communication sectors followed by industrial and automotive services and products   and chemicals sectors are the most affecting sectors on the variance s of the share trade value related to companies that belong to these sectors while performing splitting to their shares; it is further noticed that the least affecting sectors are household and personal products as well to the construction sector.

5. Conclusion and Recommendations

Due to the variant results of studies and scientific researches in regards to the impact of stock split policy on the share market value ; in addition to the existence of manipulation with the splitting decree by some companies, and in the light of concern of the international controlling institutions to the stock markets which reflect the extent of responsiveness of stock markets to the splitting policy and its consequences; moreover the requirement of the emerging markets to more studies in regards to the impact of splitting policy on the shares trading, activating markets, and the requirements of the small investors to acquire sufficient awareness of stock split policy; such requirements are vital due to the scarcity of scientific researches and articles that tackle the calculations and standards of stock split policy' effect on the share market value s in the emerging markets especially the Egyptian stock market.

More specifically after many of the Egyptian companies are directed lately towards adopting such policy due to its active role in attracting small investors for contributing in stock markets, as well the consequences of this said on the expansion of ownership of shares basis of companies and activation of stock market. Thus, it becomes necessary to clarify the illustrative frame of stock split policy by reflecting its illustration, importance and motives which companies follow the stock split.

Moreover, to specify the best splitting percentage that is compatible with the competitive corporation's position; in addition to the nature of sector a corporation belongs to. Such stated aspects are called for in order to specify the accounting and economic dimensions related to splitting of the nominal value of shares policy; as well studying the legislative frame of rules that govern the splitting of nominal value of shares in Egypt; therefore it is recommended to display the rules and measures set by the Egyptian Financial Supervisory Authority to regulate stock split policy of companies aiming to apply splitting to their shares in order to protect interests of the investors; in addition to highlight the most important criteria and procedures followed by the Authority in evaluating the submitted requests of splitting by companies and to perform comparisons between splitting policy and dividend stock distributions policy, as well as clarifying the informative content of splitting share policy. In addition to clarifying the role of application of rules and corporate governance basis in forming the required governance decision to the companies aiming to perform splitting to their shares; in order to set an accounting frame suggested to calculate and measure the impact of stock split policy on the share market value, as well for the purpose of achieving the previous targets of research.

The researcher findings in the light of the aforementioned quantitative analysis and qualitative analysis highlighted in this study:

1- An accounting framework is suggested to set criteria and basics that companies have to follow upon taking the splitting decision; some lists are suggested to reflect the splitting impact to achieve the basic target of research.

2- Prices of the market shares are affected by application of stock split on short term and medium range; whereas it is shown that, the majority of companies that performed splitting achieved increased prices in their shares after stock split.

3- Achieved split ratios are (15:1); (29:1) that made the best impact on the share market value and share trade value.

4-   Impact of the sector's type that a corporation belongs to on the variance of the share market value and the share trade value after stock split; whereas a variance of the effect of stock split policy is noticed on the share market value and the share trade value according to the sector's type that a corporation belongs to.

5-   The share trade value is affected by stock split on short term and medium range.

6-   The study shows that rules and basis of corporate governance are logical rules governing the splitting share issued decision; such rules include governance basis related to disclosure and transparency factors; in addition to its concern and attention directed towards shareholders' equity and the interests of other individuals.

Based on the results of theoretical and applied studies; the researcher recommends the following:

1-   Companies may apply suggested frame of stock split policy.

2-   Observing the criteria and rules of splitting before taking the splitting decision; in addition to adding the suggested lists to the financial reports as well the concluded clarifications related to the corporation.

3-   Financial Supervisory Authority amending stock split measures in order to regulate and govern the split process for companies desiring to split their shares; such amendment shall remedy the gap of time since the date of splitting announcement and the date of issued approval by the Authority; in order to avoid any manipulations by corporation to the splitting policy.

4-   Financial Supervisory Authority not approving stock split transactions unless sure of the accurate application of corporate governance.

5-   Companies of high share market value exceeding LE 600 or more performing stock split; such splitting shall have a positive impact on share price in a way that shall be adequate to its position in market and within the sector it belongs to.

References

Babbie, E. (1992). *The practice of social research*. New York: Macmillan.

Baker M., Greenwood R., and Wurgler J.,(2009). Catering through Nominal Share Prices. *The Journal of Finance*, 64 (6), 2559 – 2590.

Bowen, G. A. (2003). Social funds as a strategy for poverty reduction in Jamaica: An exploratory study (Doctoral dissertation, Florida International University, 2003). Dissertation Abstracts International, 65, 1557

Catanzaro, M. (1988). Using qualitative analytical techniques. In N. F. Woods & M. Catanzaro (Eds.), *Nursing research: Theory and practice* (pp. 437-456). St. Louis, MO: C. V. Mosby.

Chern K., Tandon K., Yu S., Webb G. (2008). The information content of stock split announcements: Do options matter? *Journal of Banking & Finance*", 32, 930– 946.

Decrop, A. (1999). Triangulation in qualitative tourism research. *Tourism Management*, 20, 157-161.

Denzin, N. K. and Lincoln, Y.S. (Eds.) (1994). *Handbook of Qualitative Research*. Sage Publications, Inc., Thousand Oaks, CA.

Dyl E.A., Elliott W.B., (2006). The Share Price Puzzle. *The Journal of Business*, 79(4), 2045–2066.

Forjan J.M., McCorry M.S. (1997). Evidence on the behavior of bid–ask spreads surrounding stock split announcements. *Journal of Applied Business Research*, 11(4).

Grinblatt M.S., Masulis R.W., Titman S.(1984). The Valuation Effects of Stock Splits and Stock Dividends. *Journal of Financial Economics*, 13(4), 1984, 461–490.

Haase, J. E. & Myers, S. T. (1988). Reconciling paradigm assumption of qualitative and quantitative research. Western *Journal of Nursing Research*, 10, 128–137.

Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Reading,MA:Addison-Wesley.

Johnson, R. B., Meeker, K. M., Loomis, E. J., & Onwuegbuzie, A. J. (2004). Development of the philosophical and methodological beliefs inventory. Paper presented at the annual meeting of the American Educational Research Association, San Diego, CA.

Lamoureux C.G., Poon P.(1987). The Market Reaction to Stock Splits .*Journal of Finance*, 42(5), 1347–1370.

Leung T.Y., Rui O.M., Wang S.S.(2006). Do Stock Splits Really Signal?, working paper.

Masry, Mohamed, (2015a). Measuring Transparency and disclosure in Egyptian Stock Exchange. *Journal of Finance and Bank Management*. June 2015, Vol. 3, No. 1, pp. 25-36. ISSN: 2333-6064 (Print), 2333-6072 (Online).

Masry, Mohamed, (2015b). The impact of ownership duality on firm performance in Egypt. *International Journal of Accounting and Taxation*. June 2015, Vol. 3, No. 1, pp. 54-73. ISSN: 2372-4978 (Print), 2372-4986 (Online).

Masry, Mohamed, (2015c). The role of economic stability in achieving economic development. *Journal of Economics and Sustainable Development* .www.iiste.org. ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online) Vol.6, No.16, 2015,,pp.134-153.

Massey, J. E. (2003) .Managing organisational images: Crisis response and legitimacy restoration. *Managerial*

and Decision Economics, 22(2), 245-257.

Morse, J. M., & Field, P. A. (1995). *Qualitative research methods for health professionals* (2nd ed.). Thousand Oaks, CA: Sage

Neuman (1994). *Social Research Methods*: Qualitative and Quantitative Approaches. Allyn and Bacon.

Potter,W. J.,&Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, *27*, 258-284.

Reichardt, C. S. & Rallis, S. F. (1994). Qualitative and quantitative inquiries are not incompatible: A call for a new partnership'. *New Directions for Program Evaluation*, 61,85–91.

Sandelowski, M. (1986). The problem of rigour in qualitative research. *Advances in Nursing Science*, 8, 27–37.

Sechrest, L., Sidana, S. (1995). Quantitative and qualitative methods: Is there an alternative?. *Evaluation and Program Planning*, 18, 77–87.

Weld W.C., Michaely R., Thaler R.H., and Benartzi S,(2009). The Nominal Share Price Puzzle. *Journal of Economic Perspectives*, 23(2), 121–142.

Wulff C.(2002). The Market Reaction to Stock Splits – Evidence from Germany . *Business Review*, 54 (3), 2002, 270–297.