The Impact of Board Characteristics on the Disclosure of the Forward-Looking Information
Evidence from the Egyptian Stock Market

Abstract
Purpose - The paper aims to empirically test the impact of the corporate governance mechanisms related to the board characteristics on the forward-looking disclosures of companies listed in the Egyptian stock market.

Design/methodology/approach- This study used Board size, Board independence, Board CEO duality, and gender diversity as measures for corporate governance mechanism in relation to the board characteristics. Forward looking disclosures were investigated using a checklist that included 24 items distributed over 4 categories of disclosure (1- environment around the company, 2- Goals, strategies and business policies, 3- organization, management and corporate structure and 4- Financial issues) through a content analysis where a score was calculated by adding the sum of disclosed items in the company’s annual report and then divide them by the total number of items. Two control variables were used: firm size which was measured by the natural logarithm of total assets and auditor type which is a dummy variable taking a value of 0 for non-Big 4 audit firms and 1 for Big 4). The sample included the most active 30 companies (EGX30) in the Egyptian stock exchange market covering the period from 2010 till 2017. Data were analyzed using regression analysis.
Findings

The research findings showed a positive significant correlation between that CEO duality and the forward-looking disclosure, and a negative significant correlation between Board gender diversity and the disclosure of forward-looking information. The content analysis results for the company’s annual reports indicated that management is disclosing more qualitative forward-looking disclosures than the quantitative forward-looking disclosures. In addition, results showed that the auditor type and board company size have a positive impact on the disclosure of the forward-looking information. In contrast, the results did not show a significant correlation between board independence and the board size with the disclosure of the forward-looking information.

Key words Board Size, CEO Duality, Board Gender Diversity, Board Independence, Board Characteristics, Forward Looking Information, Firm Size, Egyptian Stock Exchange Market.

Introduction

Maximizing the wealth of the shareholders was one of the most crucial goals of the corporate governance (CG) that cannot be ignored. Corporate governance (CG) has a big role in the maximization of shareholders’ wealth; where CG to be defined as the process that intended to allocate corporate resources in all ways that maximize benefits for all stakeholders, for example, the community, employees, creditors, shareholders, suppliers, customers, and the environment (Menicucci, 2018). CG was known as the rules, policies, customs, institutions and laws concerning the way a company was controlled and directed. Also, CG pays attention to different associations among many stakeholders and the goals of the corporation. CG provided a framework for achieving the company objectives, which includes all fields of management such as board characteristics, performance measurement, corporate disclosure, action plans and internal controls. The World Bank defined CG as the political authority exercise and the
institutional resources used to control society's problems and affairs (Atanasova et al., 2016). Good CG aids the business environment to be transparent, fair and held companies responsible for actions happened. on the other hand, weak CG drives to mismanagement, corruption and waste.

The failure of major institutions in the USA (for example: Enron, Commerce Bank, World Com, and XL Holidays) and the financial embarrassments (for example: Nortel, Corel Corporation and Livent Inc.) around the world had rocked the confidence of investors in stock exchange markets and the effectiveness of CG systems in serving accountability and transparency. As a result, a lot of codes and rules were made to frame and improve the CG mechanisms and its practices. (Swastika, 2013)

One of the most significant CG mechanisms is the board characteristics. There are different and various board characteristics such as CEO duality, board size, board independence and gender diversity that have been proved as significant to the effective application of the CG. On the other hand, characteristics like board size did not attain the same agreement as a valid criterion for effective CG implementation (Amran et al; 2014). The board with a large number of members represents a challenge in terms of handling them effectively (Ali, 2018). Board independence can be reflected by a board that is composed of a majority of independent outsiders which is an indicator of board effectiveness (Bertoni et al; 2014). For gender diversity, it was preferable for any company to have males and females in the board of directors’ composition (Agyemang-Mintah and Schadewitz, 2019). Finally, CEO Duality happens when the Chief Executive Officer hold the position of board chairman of the company (Duru et al; 2016).

Investors believe that the financial reporting aims to present useful information which can help in decision making. Forward-looking information is the information disclosed by companies about forecasts such as cash flows, revenues prediction, and sales volume. It also in-
volves data related to non-financial projections such as factors that might influence the performance of the company in the future for example, ambiguity of future business operations, evaluation, agency relationship, risk, analysis and other company’s relevant information (Aljifri and Hussainey, 2007; Kılıç and Kuzey, 2018; Menicucci, 2018; Mousa and Elamir, 2018). This type of information is very helpful because information about the past can be used as an indicator of performance but cannot guarantee future results. Investors need to make right decisions based on useful future information. Disclosures and measurements depending on projections of the current and future values that are more relevant to investment decision making than disclosures depending on historical measures which may be highly reliable but lack relevance because of their disability to provide insight into current or future expectations of cash flows (O’Sullivan et al, 2008, Aljifri and Hussainey; 2007).

The forward-looking disclosure of information within various situations decreases information asymmetry between companies and so can supports interested parties in making better investment decisions. Listed firms had annual reports that are supposed to be the utmost preferred way of communication to report information to involved users especially the part including the forward looking information, as these reports contain different keywords and terms that represent the disclosure of forward-looking information. An example of these keywords is terms such as expecting, predicting, coming period, foreseeing, forecasting, hoping (Alkhatib, 2014; Utami and Wahyuni, 2018).

According to Bravo and Alcaide-Ruiz (2019), Al-Najjar and Abed (2014) CG had attracted much attention since Enron and Barings failures. These failures had raised the requirement for firms to create strong CG structure to protect the rights of the shareholders. Firms with a high quality of CG were expected to provide more informative disclosure. Previous research documented that companies that had high quality CG mechanisms were more likely to provide projected
information (Wang and Hussainey, 2013; O’Sullivan et al., 2008). For instance, Garanina and Dumay (2017) viewed that good CG in companies makes it more probable to disclose forecasts about earnings. An et al., (2011) stated that adding and including disclosure of forward-looking information in companies’ annual reports lead to more informative reports regarding the performance in the future.

Prior literature had provided evidence that more informative stock prices are found as a result of the precise disclosure of forward-looking information and are more capable to improve stockholders’ ability to make earnings’ predictions about the future (An et al., 2011; Abad and Bravo, 2018; Arya et al., 2017). Alqatamin et al., (2017) investigated that companies with good CG made more voluntary disclosures, that caused stock prices to react faster than their counterparts with poor CG. (Wang and Hussainey 2013) added in this respect that firms having strong CG better disclosed forward-looking information that improve the stock exchange market’s capability in forecasting the future earnings. Celik et al., (2006) showed that if the executive director had a chairman role, this can reduce the disclosure of voluntary information. On the contrary, O’Sullivan et al., (2008) found different results, as they argued for an insignificant correlation between the board independence and the disclosure of the forward looking information. The conflicting opinions on the impact of CG mechanisms on disclosure of the forward-looking information motivated our study and accordingly, this study aims to test the relationship between board characteristics and the forward-looking disclosure.

The research is going to explore the impact of corporate governance mechanisms in relation to board characteristics on the disclosure of forward-looking information. The rest of the paper is organized as follows; literature review from previous researches about different mechanisms of corporate governance especially those related to board characteristics and forward-looking information, and the relationship between both variables.
Research Questions

This research aims to provide answers to the following main question:

Q1. Is there a significant correlation between the board characteristics and disclosure of forward-looking information?

The main question can be divided into the following sub-questions:

Q1a. Is there a significant correlation between the board size and disclosure of forward-looking information?

Q1b. Is there a significant correlation between board independence and disclosure of the forward looking information?

Q1c. Is there a significant correlation between duality of CEO and disclosure of the forward looking information?

Q1d. Is there a significant correlation between gender diversity of the board and disclosure of the forward looking information?

Research Objectives

The main objective of the research is:

1. Test the impact of the board characteristics on the disclosure of forward looking information.

The main objective of the research can be achieved through the fulfillment of the following sub-objectives:

Obj1a. Test the impact of the board size on the disclosure of forward looking information.

Obj1b. Test the impact of board independence on the disclosure of the forward looking information.

Obj1c. Test the impact of duality of CEO on the disclosure of the forward looking information.

Obj1d. Test the impact of gender diversity of the board on the disclosure of the forward looking information.
2. Literature Review

2.1 Corporate Governance

Atanasova et al., (2016) defined CG as the systems, rules, processes, and relationships that higher authorities inside the companies exercise to control operations. It is the process of governing the companies in asserting its own laws, systems and procedures to its employees starting from the highest to the lowest levels in the organization. Also, CG was designed to improve the accountability of firms in order to prevent extensive failures before they occur. The shareholders are superior reasons for the importance of reliable CG. A company could also, handle meetings with external members, such as customers, debt holders, shareholders, suppliers, and community leaders to discuss most of the demands and requirements of the concerned parties. After years of research, particularly after the 2008 financial crisis, different studies had been conducted in the area of CG and its impact on the firm performance. The results of these studies had been affected by the industry type and by field of application from country to another, however, they all agreed on the main purpose of CG which is the separation between control and ownership (Swastika, 2013; Ho & Taylor, 2013). [check this sentence, CG aims to protect shareholders' interest due to the separation between ownership and management]

Kamardin and Haron (2011) defined the CG as the guidelines and rules used to control the firm as it oversees the relations among the board of Directors, management, shareholders, and other stakeholders. Subjected to public Information disclosure, accountability and high transparency are primary essential elements of best CG that aims for the sustainability of corporations and the community. To avoid mismanagement, good CG is essential as it allows firms to perform more efficiently, alleviate risk, enhance access to capital and safeguard stakeholders. It also helps firms to be more transparent and accountable to investors so it decreases unfairness and expropriation for shareholders.
The effectiveness of CG practices varied across companies of different sizes. The main duties discussed by different researchers are the selection of CEO, monitoring top management of the company; implementation advices and development of plans about corporate strategy, assessing the skills of the management members; and engaging with other stakeholders. Both monitoring and advising were the most powerful activities; where advising means assisting the top management team in creating and keeping strategies for achieving the goals of the company (Ali, 2018).

Husnin et al., (2016) agreed that the implementation of CG is a crucial factor that helps companies to secure and attain their sustainability and competitiveness within the business environment. The practices of different mechanisms of CG did not only serve the business internal process, but also create external support to stockholders, creditors, and other stakeholders. Practicing such CG mechanisms might be admitted as the social capital, therefore, the strategic asset that supports the company in its business environment. CG with vital greatness reflected in the continuous evaluation of practices of CG by important institutions. Moreover, most of the countries in Asia had independent and local organizations, which are responsible for assessing practices of CG for companies in their country.

Vintila and Gherghina (2012) showed that the important steps needed to advance CG practices are more towards improving investor assurance and transparency of information. This in turn would encourage foreign direct investment and enhance the local capital market development in an attempt to ease the country's economy. But, before complying and adopting best practices of CG, each country has to concentrate on fixing its regulatory standards and best practices. However, another stream of research argued that CG should be an evolutionary process; overemphasis on uniformity would make a conflict with the uniqueness of each country with respect to its local culture, legal system, and corporate structure. From the traditional prospect, there are
considerable difficulties in local governance best practices and uniformity. Different governance cultures are supposed to be found in different countries, supported by different levels of enforcement, and CG rules specificity and practices without recognizing local best practices as a unique method in evaluating the implementation of CG mechanisms in any country.

Elgammal, Hussainey and Ahmed (2018) explained that there were variations in CG circumstances in nations and they might be found to differ across periods. As a result, there are no particular CG mechanisms suitable for all countries and all companies. It could be viewed as a result of specifying the main features of the society that can be used to determine the appropriate governance mechanisms in one country.

CG gives investors the tools to react to legitimate stakeholder interests such as social development and sustainable environmental. Also, good CG makes companies more transparent and accountable to shareholders. It commits to the expansion and improved access to capital supported new investments, provides employment opportunities, and boosts economic growth. CG management was also outlined to limit risk and reduce destructive factors within an organization. A lack of CG might lead to losing profits, an embarrassing image and fraud, not only to the company, but also to the society (Samaha et al., 2012; Yasser et al., 2015).

Kumar and Singh (2012) argued that one of the important principles of CG was stockholder recognition, which was a policy that guarantees that all stockholders had a say in the inner functioning of firms. Stockholders recognition secured the value of a company’s shares. The responsibilities and rules of board members must also be made clear to ensure that everyone shares a consistent vision of the future of the company. Stakeholder interest discusses the demands of participants who were not shareholders. Ethical guidelines of CG are also essential to reach higher profits and save the company away from le-
gal problems. CG rules are applied to employees and board members. Transparency must be visible, which should take the form of consistent records and reports on income.

Husnin et al., (2016) demonstrated that expropriation, potential conflicts of interests and unfair of minority shareholders can result because of poor CG. It only serves the individuals involved but do not affect the value of other stakeholders. Small investors with limited impact on the stock price were brushed away to make way for the interests of majority investors and the executive board. It could decrease public confidence and embarrass the society. According to Mulcahy and Donnelly (2015), CG disclosure and transparency are some of the fields of development and ways used by countries to support their leading position in the financial markets, in order to support minorities, outside shareholders and foreign investors.

2.1.1 Board size

Ali (2018) discussed issues related to the effectiveness and importance of board size in companies. He stated that as corporation expands, the difficulties of its different functions grow exponentially. These complex and large corporations require a more hierarchical structure. The extended difficulties also require members in a larger board to have knowledge and expertise in different fields and areas. A bigger board size helps to guide management in different fields. Finally, large corporations are doing an essential role in the community and, therefore, they need board size to be larger in order to be in connection with a wider investor base.

According to Kumar and Singh (2013), monitoring is concerned with managing the interests of shareholders by ensuring that managers and the top management team are performing the procedures that guide the corporation in the best way to accomplish the settled objectives. So, companies are required to have boards that make sure that management is improving and achieving strategies successfully. As corporations getting bigger, the monitoring role of the board became more
difficult and complex due to the different scope of operations and scale.

Wang and Oliver (2009) discussed the agency theory that explained the conflict of interest between management (agents) and shareholders (principal); where stockholders aim to maximize their revenues, management might be more concerned with their own earnings. Consequently, board members are in need to perform the essential controlling role of management actions that drive to the achievement of goals within the strategic planning process.

The larger the board implementation of the monitoring role in a powerful way, the more directors will be included in this implementation. Boards are operated by making several committees based on the board members’ expertise. The committees could be presented by the compliance committee, governance committee, audit committee, remuneration committee, nomination committee and risk committee. Accordingly, directors in larger boards will have a variety of experiences that can assist them in implementing the different complex functions in a more effective way than directors in smaller boards. Finally, boards with larger size might be more associated with higher performance (Mulcahy & Donnelly, 2015).

2.1.2 Board Independence

Liu et al., (2015) showed that earlier studies had conflicting results with respect to the degree of board structure's impact on companies. This depends on the regulatory and legal environment levels that try to protect stockholders and other stakeholders in the company. Agency theory defenders claimed that board of directors are more powerful in monitoring managers when it was formed of a larger number of non-executive and outside directors. The authors argue that independent directors compete in the workforce market of directors, as they had motives to maintain a good reputation of being experienced in looking after the investors’ best interest.
Bortoni et al., (2014) discussed that CG has many internal mechanisms, board of directors are one of the most crucial and beneficial mechanisms that can protect the investors’ interests. The separation of management from ownership resulted in agency problems and costs due to the conflict of interests between managers and shareholders. The effectiveness of expanding the number of outside directors might be less than expected by the regulatory authorities because of the information asymmetry among the CEOs and the outside directors. For instance, a CEO may choose the timing and content of information presented to the board that makes it challenging for directors especially ones who were independent to afford monitoring with high-quality to stockholders. Also, it was probable that the CEO chooses directors who were by law independent but they were not really independent from the CEO; therefore, these independent directors could not fulfill the responsibilities that stockholders want them to do. Other significant factor that influences the independent directors' performance is that they might lack the business or financial expertise that was needed for rendering advising and monitoring duties with high quality (Chaua & Gray, 2010).

2.1.3 CEO Duality
The CEO duality occur when the Chief Executive Officer had another duty as a chairman of the board. The board of directors settled up to observe the CEO and other managers on behalf of the stockholders. They outline the contracts of compensation, hire and fire CEOs. CEO duality could be beneficial for the company if he/she worked closely with the board to improve value of the company. Setting a command unity at the head of the company allowed the company to send a reassuring image to stockholders but, controlling the board was an easy task for the CEO to perform and consequently make it more difficult for stockholders to discipline and monitor the management. (Shrivastav & Kalsie, 2016)
Duru et al., (2016), showed previous opinions about the participation of the CEO in the boards of directors in their firms as a significant
mechanism of CG that had been known as the CEO duality. The authors stated that CEO membership in the board of directors seemed to be largely accepted in lot of countries. In contrast, Li and Roberts (2018) illustrated that it was almost unacceptable for the Chief Executive Officer of the firm to be one of the members of the board of directors in other companies.

2.1.4 Gender Diversity

Previous literature described the gender diversity as the glass ceiling effect, this expression had been used to express an invisible barrier that restricts women and minorities from proceeding to higher levels in the company hierarchy and the career pathway. Triki (2018) proposed that this impact was the main reason behind the limited proportion of women in boards in companies in many countries. A lot of efforts were done to break the glass ceiling result. In recent years, regulators had used a number of methods to raise and enhance the representation of women on boards of the companies. These methods ranged from the legal conditions of quotas setting, to “if not, why not”, and to voluntary actions. Norway was the first country to require a specific quota in the corporate boards for women. By 2008, Norway established an act that mandated 40 percent of the members in board had to be women. This was followed in 2015 by Spain was 40 percent, France was 40 percent by 2016, Italy in 2015 was 33.3 percent and The Netherlands in 2016 was 30 percent (Bertoni et al; 2014). The European Commission had been controlling the growth of representation of women in board in all countries that in their membership and by 2020 had set a target of 40 percent; nevertheless, no formal mandatory requirements had been established (Agyemang-Mintah & Schadewitz, 2019).

Wang and Oliver (2009) showed that the ASX CG Council in Australia used the “if not, why not” approach to promote gender diversity in all Australian listed companies. During 2009, following the suggestion made by the Australian Markets Advisory Committee and Govern-
ment’s Corporations, the Australian CG Council added the recommendation of gender diversity to be an improvement to the CG Recommendations and Principles, to be effective starting from 1 January 2011. These amendments required all listed companies to disclose and establish a policy for diversity, set objectives which are measurable for achieving gender diversity and measure the women number in leadership positions.

2.2 Information with Forward-Looking nature
Disclosures about non-financial and financial information in corporations’ annual reports of had grasped the attention of a lot of researchers in both developed and developing nations (Garanina & Dumay, 2017). There are many different forms information disclosures by companies in addition to the annual report to help users to take decisions by providing them with valued related data that help in forecasting the future performance of firms. Of these sources; the direct communication with analysts, interim reports, conference calls and press releases (Utami & Wahyuni, 2018).

The information in the company’s annual reports are to be classified into two main categories: forward-looking information and backward-looking information. The disclosure of backward-looking is the information that is related to the past results of the company. On the other hand, disclosure of the forward looking information is related to the forecasted results of the company performance like the expected revenues, earnings of next year and anticipated cash flows for the next year (Aljifri and Hussainey, 2007; Arce, Jerez & Narayanan, 2017). The non-financial data such as uncertainties and risks factors that influence results of the future operations disclosure of forward-looking are also included within the forward looking disclosures. There are some of the indicative sentences that can be found in the annual reports as an indicator for the forward looking information like anticipate, forecast, predict, or any other similar terminologies (Kılıç, & Kuzey, 2018).
It is argued that meanings of backward information and forward-looking are not as easy as many authors claimed; wherein some types of information might be classified as backward-looking information but in reality, they carried messages which had indications about the upcoming periods. For example, if the CEO reported that Research and Development expenditure level was raised by 10 percent in the previous year; this announcement referred to what happened in the past. But, it means that this R&D expenditure was supposed to result in an improvement in the future cash flows (Aljifri and Hussainey, 2007).

There were some debates concerning the utility of having disclosures of forward-looking information in companies’ annual reports. Alkhatab (2014), Menicucci (2018), Bravo and Alcaide-Ruiz (2019) and Hassanein et al., (2019) claimed that disclosure of forward looking information can be valuable in the decision making process by investors. They argued also, that the absence of forward-looking disclosures might drive shareholders to make predictions based on data that are inaccurate and insufficient from other sources. They claimed that the forward-looking disclosures in annual reports of companies is advisory in relation to evaluating the corporate future performance. Also, they found that Forward-looking data improved the capability of the investors to make a better decision regarding companies that drive to higher firm value. Finally, they explained that the market was too powerful to depend on historical data only but on both forward looking and backward information disclosures in order to decrease the amount of asymmetry of information between investors and managers. In contrast, Arya, Mittendorf and Ramanan (2017) and Mousa and Elmamir (2018) argued that there are some debates concerning the disclosure of forward-looking information; Firstly, because of the uncertainties and risks related to the future, it might be very hard and tricky to forecast with certainty, and firms may try to push their actual performance towards their forecasted performance level. Secondly, some inaccurate projections might result in having lawsuits; it was compati-
ble with the hypothesis of litigation risk. The lawsuits might decrease the manager’s motives and incentives to disclose more forward-looking data, this was particularly right when management consider the inability of the legal system to differentiate between failures because of deliberate management bias and risk. Thirdly, forward looking information disclosure could give valuable data to competitors of the company; therefore, this could harm competitive position of company in markets; these comply with the hypothesis of proprietary cost.

Different studies illustrated how forward-looking disclosures were published in the annual reports of the companies showing the kind of information whether it is quantitative, qualitative, financial or non-financial. Kent and Ung (2013), examined the nature of the forward-looking disclosures for 100 Australian companies listed in the Australian stock exchange market. The results of the research indicated that the forward looking information represented 19.2% of the disclosures included in the annual reports. Also, the research indicated that most of the forward-looking information disclosed was qualitative and company-specific. In addition, Utami and Wahyuni (2018), found that the forward-looking information represent 20.9% in 70 Indonesian companies and they examined the impact of this information on firm value where management always try to disclose positive forward-looking information in firms’ annual reports.

### 2-3 Forward looking information and Corporate Governance mechanisms in relation to board characteristics

Numerous numbers of researchers examined the association between disclosures of forward-looking information CG mechanisms. For instance, O’Sullivan et al., 2008 investigated how the characteristics of a firms’ CG (for example; independent ownership, board size, and audit quality) were correlated with the disclosure of the forward-looking information for the periods of 2000 and 2002. The results of the re-
search argued that the relationship between the disclosure of forward-looking information and the CG system efficiency was positive in the year 2000 but it was negative in the year 2002. The research suggested that improving and developing the effectiveness of CG mechanisms had an insignificant impact on improving forward-looking information disclosures (O’Sullivan et al., 2008).

Related and similar to the findings of O’Sullivan et al., (2008) in the year 2002 was Elzahar and Hussainey (2012) who applied the same examination on UK non-financial firms, the results showed that there is an insignificant influence on the disclosure of the forward looking information by the characteristics of CG. Another research study by Wang and Hussainey (2013) investigated the relationship between the forward-looking information disclosure and the application of the CG using a sample of UK companies. In contrast to Elzahar and Hussainey (2012) and O’Sullivan et al., (2008) other studies reached different results as they found that CG mechanisms had a significant impact on the decision of disclosing the voluntary forward-looking information.

Moreover, other researchs had been conducted during the financial crisis period on non-financial UK companies, by reviewing the influence of the CG mechanisms on the disclosure of the forward-looking information. The research concluded that before the financial crisis, block holder ownership and audit committee independence were correlated to the level of voluntary disclosure of forward-looking information (Al Najjar and Abed, 2014). Furthermore, using a sample of Chinese listed firms, Qu et al., (2015), provided evidence that the forward-looking information disclosure quality was enhanced through active CG tools which also decreased the asymmetry of information. With a similar sample, Liu (2015), reported that more financial expertise, more independent directors and high levels of foreign ownership within the audit committee may strengthen the monitoring mechanisms and improve the disclosure motivations of managers, by driving
the firm to publish a wider range of forward-looking information. In addition, Ho and Taylor (2013), showed that well established CG are linked to more expanded corporate sustainability reporting CSR information, forward-looking information, corporate strategies, and financial information. Accordingly, the researchers can assume that there is a significant relation between the board characteristics and the Forward looking information disclosure and that can be stated through the following main hypothesis:

**H1. There is a significant relationship between board characteristics and disclosure of forward looking information**

### 2.3.1 Board size

The failure of many corporations as Xerox, Enron, Tyco and WorldCom had provided more emphasis on the importance of CG mechanisms. The implementation of real CG standards and mechanisms should help in improving the extent of voluntary disclosure, disclosure transparency and financial reporting quality. Board of directors’ size is one of those CG mechanisms; where their responsibility is to set the policies and strategies applied by managers. Due to importance of the effective functions performed by boards of directors, companies with effective board of directors might influence decisions of management to improve disclosure of information. Therefore, the board of directors’ characteristics might impact company disclosures significantly. (Kumar and Singh, 2013)

The board size represents the number of executive and non-executive members on the board of directors. There was no conclusive opinion in the previous literature in relation to impact of board size on the company disclosures. The findings of Wang and Oliver (2009) revealed that smaller board was more effective in general if compared to larger board in relation to coordination and communication-related problems. These problems might embarrass the management’s capability of monitoring and controlling their process and reduce the quality of financial disclosure. Amran et al., (2014) stated that the size of
the board was recognized as an effective mechanism in boards. In this context, the board effectiveness could reduce opportunism done by managers, and might result in higher quality sustainability reporting. Accordingly, large board was supposed to be an effective mechanism of CG in improving voluntary disclosures and transparency in companies. Especially, large boards might afford a larger variety that included experience especially financial expertise that might affect the managers’ decisions and accordingly extend the disclosure of forward-looking information.

Findings related to the correlation between forward-looking information and board size was uncertain. For example, many researchers indicated that the relationship between forward looking disclosures and board size was insignificant (and Elzahar and Hussainey, 2012; Kiliç et al., 2015; Cheng and Courtenay, 2006; Uyar et al., 2014). On the contrary, other studies such as Amran et al., (2014) concluded the existence of a significant positive relationship between the forward-looking information disclosure quality and board size. Accordingly, the researchers propose that larger boards are more powerful and active to direct management toward more disclosures about forward-looking information and that is resulted in the following sub-hypothesis:

**H1a. There is a significant relationship between board size and disclosure of forward looking information**

**2.3.2 Board Independence**
The composition of board of directors’ (executive and non-executive members) assists in overcoming agency problems through the implementation of effective CG mechanisms. The percentage of independent directors to the total number of directors in the board is a widely used measure for board independence in prior literature. According to the agency theory, the higher the number of the independent directors the higher the help the board will get in controlling, monitoring and directing management; independency and guiding management
successfully toward long-term beneficial plans. This is why independent directors' remuneration should not be attached to short-term financial performance, in contrast to the other board members remuneration (Liu; et al, 2015). The independent directors are less attached to the company and its management, this is why they may have a higher capability for supporting the publication of more voluntary forward looking information (Wang and Hussainey, 2013; Michelon and Parbonetti, 2012;).

Conflicting findings have been reached by different researchers through the previous literature regarding the effectiveness of the independent directors and the disclosure level for the voluntary information. For example, Al-Najjar and Abed (2014), Elzahar and Hussainey (2012), O’Sullivan et al., (2008) and Uyar and Kilic (2012) concluded that the boards’ independent proportion had an insignificant impact on the disclosure of forward looking information. On the contrary, Qu et al., (2015), stated that companies with higher board independence proportion publish more accurate sales projections. On the other hand, (Wang and Hussainey, 2013) found a significant correlation between the disclosure of earnings projections and the independence proportion of the board members. Furthermore, it has been concluded that the board independent proportion of directors was positively correlated to disclosure of forward-looking information (Liu, 2015). So, the second sub-hypothesis could be formulated as follows:

**H1b. There is a significant relationship between board independence and disclosure of the forward looking information**

**2.3.3 CEO Duality**

CEO duality existed when the Chief Executive Officer has a dual position as CEO and chair of the board. CEO duality has two sides of positive and negative perspectives. On the negative side, Li and Roberts (2018) explained that CEO duality might decrease the effective control if it was allowed for the CEO to be involved in opportunistic behavior. On the positive side, Shrivastav and Kalsie (2016), suggest-
ed three advantages for the role of CEO duality: timely decisions and more relevant quick actions, and powerful leadership. It was supposed that the advantages of CEO duality can improve the managerial decisions and efficiency but it was not necessary to provide higher level of disclosures. The literature illustrated various results about the effect of CEO duality on forward looking disclosure. For instance, Duru, Iyengar, and Zampelli (2016), concluded that CEO duality and forward-looking information disclosed was insignificantly correlated, while Wang and Hussainey (2013) concluded the presence of a significant correlation between CEO duality and forward-looking disclosure levels. From the previous discussion, the third sub-hypothesis can be formulated as follows:

**H1c:** There is a significant relationship between CEO duality and disclosure of the forward looking information.

### 2.3.4 Board gender diversity

Board diversity means the variations in members of the board related to some different characteristics, like personalities, gender, skills, age, race, expertise, education, and learning styles. Board members with diverse features might have varieties in skills, knowledge and experience that can provide different ideas and perspectives to boards. For example, boards that had gender diversity might provide a lot of opinions and perspectives to discussions in boards meetings, so the board can be directed for having improved plans and better decisions. (Agyemang-Mintah & Schadewitz, 2019)

According to Triki (2018), the participation of women directors in the firm's board encouraged regularly better ideas, communication and participation; therefore, gender diversity might help in serving more needs and demands of wider base of investors and other stakeholders. So, having different points of view on boards could improve the capability of the firm to serve needs of wider base of stakeholders; including stockholders, creditors, lenders, auditors, and analysts. Moreover, Frias-Aceituno et al., (2013) remarked that gender diversity and the
voluntary forward-looking disclosure were positively correlated. Based on this argument, the following sub-hypothesis can be formulated:

**H1d.** There is a significant relationship between gender diversity of the board and disclosure of the forward looking information.

### 2.3.5 Firm size

Firm size has been used extensively by many researches to measure the different variations happened in company disclosures level. Celik et al., (2006), argued that larger companies are facing a higher level of agency costs that are correlated with higher levels of information asymmetry in comparison to smaller companies. Aljifri and Hussainey, (2007), concluded that larger companies had higher cost of information disclosure in comparison to small companies. Another argument by Frias-Aceituno et al., (2013), stated that firms with bigger size should have a higher level of disclosure as a result of having larger range of stakeholders that force them to enhance the quality of disclosure compared with the smaller companies.

### 2.3.6 Auditor Type

The auditor type has been used extensively in many of the previous researches as one of the CGs controlling mechanisms. It played an essential role in developing overall strategies of firms especially those related to reporting. Empirical conclusions suggested that firms audited by big audit firms afford financial statements with higher quality (Aljifri & Hussainey, 2007). Other results by Tai et al., (1990) stated that there is a lower significant relation between the audit type and the level of disclosure by firms. On the contrary, other such as Wallace et al., (1994) assumed that there is no significant relation between the auditor type and forward looking disclosure level.
Statistical Analysis

Variable measurement
The researcher used Board independence, Board gender diversity, Board size, and CEO duality as measures for board characteristics. In addition, a checklist of forward looking disclosures that included 24 items distributed over 4 categories of disclosure (1- environment around the company, 2- goals, strategies and business policies, 3- organization, management and corporate structure and 4- financial issues) have been investigated through a content analysis where a score was obtained by adding the number of disclosed items in the company’s annual report and divided them by the total number of items, in addition to two control variables have been used. Firm size which was measured by calculating the natural logarithm of total assets and auditor type is a dummy variable taking the value of 0 for firms audited by non-Big 4 audit firm and 1 for firms being audited by one of the big 4 audit firms).

Table (1): Variables, measurements and expected relation of the study

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurements</th>
<th>Expected Relation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Independent variable:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Characteristics:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Board independence</td>
<td>No. of independent non-executive members</td>
<td>Positive</td>
</tr>
<tr>
<td>- Board size</td>
<td>No. of members in the board</td>
<td>Positive</td>
</tr>
<tr>
<td>- Board gender diversity</td>
<td>Proportion of females</td>
<td>Positive</td>
</tr>
<tr>
<td>- CEO duality</td>
<td>Dummy variable 1 represents the CEO has a dual position, 0 represents CEO don’t have another position</td>
<td>Positive</td>
</tr>
<tr>
<td><strong>Dependent variable:</strong></td>
<td>Checklist (score is calculated by dividing the</td>
<td>1- Environment around the company.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Forward looking information disclosure | total of the items disclosed by the total number of items) | 2- Goals, strategies and business policies,  
3- Organization, management and corporate structure  
4- Financial issues.  
– Items under each category illustrated in the Appendix of the research.  

| Control Variables | - Natural logarithm of total assets  
- Dummy variable taking the value of 0 for firms audited by non-Big 4 audit firm and 1 for firms being audited by one of the big 4 audit firms |

Sample selection
The sample included the most active 30 non-financial companies within the (EGX30) in the Egyptian stock exchange market for the period 2010 through 2017. The sample included companies from different industries. The sample included 256 observations that are distributed among the main sectors of companies in the EGX30 list of companies.

Results and Discussion:
This part includes the statistical analysis of the research, where group of the statistical techniques had been used to achieve the objectives of the research. The statistical techniques used by the researchers includ-
ed descriptive analysis, Pearson correlation analysis, and regression analysis. The analysis is presented as follows:

Descriptive analysis

Table (2): Descriptive statistics of the research variables

<table>
<thead>
<tr>
<th>NO. of observations</th>
<th>NO. of observations</th>
<th>NO. of observations</th>
<th>NO. of observations</th>
<th>NO. of observations</th>
<th>NO. of observations</th>
<th>NO. of observations</th>
<th>NO. of observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Independence</td>
<td>Board Size</td>
<td>CEO Duality</td>
<td>Board gender diversity</td>
<td>Company size</td>
<td>Auditor type</td>
<td>FLD INDEX</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>Std. Deviation</td>
<td>Std. Deviation</td>
<td>Std. Deviation</td>
<td>Std. Deviation</td>
<td>Std. Deviation</td>
<td>Std. Deviation</td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Minimum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Minimum</td>
<td>Minimum</td>
</tr>
<tr>
<td>Maximum</td>
<td>Maximum</td>
<td>Maximum</td>
<td>Maximum</td>
<td>Maximum</td>
<td>Maximum</td>
<td>Maximum</td>
<td>Maximum</td>
</tr>
</tbody>
</table>

Table (2) shows the results of the descriptive analysis for the research variables. The analysis showed the number of observations tested along with the mean, standard deviation, minimum and maximum of the variables. The result values showed that most of the variables are normally distributed across the sample selected from EGX30 companies over 2010-2017 time periods except for the board gender diversity and the company size due to their nature of data. The forward-looking index (dependent variable) varied among the sample, from 0.4167 to 0.7917 with a standard deviation value 0.0545. The board independence varies from 1 to 17 with standard deviation value 2.84. The board size ranged from 3 to 22 with a standard deviation 5.36. The board gender diversity ranged from 0 to 30% of the total number of board of directors. The research has two control variables, the company size with values ranged from 0 to 11.47(logarithms of total assets) with standard deviation 2.61 and mean of 9.0619, and the auditor type as a dummy variable (0 and 1) with a standard deviation value 0.47. The results were a guide for the researchers to go for the other statistical analysis.
Correlation Analysis

The correlation analysis had been performed to determine the direction and significance of correlation among the variables of the study as follows:

Table (3): Pearson correlation analysis

<table>
<thead>
<tr>
<th></th>
<th>Board Independence</th>
<th>Board Size</th>
<th>CEO Duality</th>
<th>Board gender diversity</th>
<th>Auditor type</th>
<th>Company size (log Assets)</th>
<th>FLD INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Independence</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board Size</td>
<td>.766**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEO Duality</td>
<td>-.074</td>
<td>.262**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board gender diversity</td>
<td>-.187**</td>
<td>-.226**</td>
<td>-.003</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auditor type</td>
<td>.381**</td>
<td>.216**</td>
<td>.023</td>
<td>.147*</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Company size (log Assets)</td>
<td>.033</td>
<td>.013</td>
<td>-.024</td>
<td>.299**</td>
<td>.144*</td>
<td>.361**</td>
<td>1</td>
</tr>
<tr>
<td>FLD INDEX</td>
<td>-.077</td>
<td>-.024</td>
<td>.125*</td>
<td>-.160*</td>
<td>.137*</td>
<td>.361**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at the (.01) level
*Correlation is significant at the (.05) level

Table (3) showed the results of the Pearson correlation analysis. The results showed that there is a significant positive association between the CEO duality, auditor type and company size with the forward-looking disclosure index at level less than 0.05 and 0.01. In addition, the results indicated a significant negative correlation between the board gender diversity and the forward looking disclosure at level less than 0.05. The results showed also, that there is insignificant association between the Board independence and board size with the forward-looking disclosure index at levels above 0.01 and 0.05 and these results are in compliance with the results of some researchers e.g. (Adams & Evans, 2004; Lakhal, 2005)

Regression analysis

The researchers used the regression analysis in order to find out the significance of coefficients of the independent variables in the research model.
FDLI SCOR = \beta_1 Board Independence + \beta_2 Board Size + \beta_3 CEO Duality + \beta_4 Gender Diversity + \beta_5 Auditor type + \beta_6 Company size + e

where:

FDLI SCOR = Percentage of forward looking disclosed items scored for a company

Board Independence = measured by proportion of the independent non-executive members in the board

Board Size = measured by number of members in the board

CEO Duality = dummy variable 1 represents the CEO has a dual position, 0 represents CEO don’t have another position

Gender Diversity = Percentage of females in the board

Auditor type = Dummy variable 1 represents audit firms from the big four firms, 0 represents audit firms which are not from the big four firms

Company size = measured by natural logarithms of total assets of the company

e = represent the error

Table (4): linear regression results for the research variables

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>73.990</td>
<td>1.858</td>
<td>39.829</td>
</tr>
<tr>
<td></td>
<td>Board Independence</td>
<td>-.346</td>
<td>.204</td>
<td>-.179</td>
</tr>
<tr>
<td></td>
<td>Board Size</td>
<td>.152</td>
<td>.107</td>
<td>.147</td>
</tr>
<tr>
<td></td>
<td>CEO Duality</td>
<td>1.857</td>
<td>.775</td>
<td>.163</td>
</tr>
<tr>
<td></td>
<td>Board gender diversity</td>
<td>-</td>
<td>10.117</td>
<td>4.223</td>
</tr>
<tr>
<td></td>
<td>Auditor type</td>
<td>-1.040</td>
<td>.815</td>
<td>-.089</td>
</tr>
<tr>
<td></td>
<td>Company size</td>
<td>.152</td>
<td>.161</td>
<td>.061</td>
</tr>
</tbody>
</table>

R²=5%
Table (4) showed the regression coefficients of the independent variables (Board independence, Board size, CEO duality, board gender diversity) along with the control variables (Auditor type and company size). The adjusted $R^2$ value of the model is 5%. This means that the proposed research variables are only explaining 5% of the forward looking disclosure in the Egyptian stock exchange market. The following regression model is extracted out of table (4) to identify the effect of the board

$$FDLI\ SCOR=73.990 -0.346\ Board\ Independence + 0.152\ Board\ Size + 1.857\ CEO\ Duality -10.117\ Gender\ Diversity -1.040\ Auditor\ type + 0.152\ Company\ size$$

**Results of testing research Hypotheses**

This section is concerned with examining the research hypothesis. To test the research main hypothesis concerned with the significant association between the CG mechanisms related to the board characteristics represented by the independent variables (board independence, board gender diversity, board size and CEO duality) and the forward looking disclosure (FDI). The researchers conducted two main statistical analysis, the first was the Pearson correlation to test direction and the significance of association among the research variables and the second was the regression analysis to construct the regression model of the research.

From table (4), it can be shown that board independence had no significant effect on the disclosure of forward looking information as indicated by the $p$-value $= 0.091>0.05$ resulting in the rejection of the first sub-hypothesis showing the absence of any significant effect for board independence on the extent of disclosing forward looking information. Board size had found to be insignificantly affecting the firm's decision to disclose forward looking information ($p$-value $=0.156>0.05$) which also results in rejecting the second research sub-hypothesis.
In contrast, analysis had found a positive significant effect of CEO Duality on the disclosure of forward looking information as shown by the positive beta coefficients and (p-value of 0.017 < 0.05) resulting in accepting the third research sub-hypothesis. Finally, analysis had also found a positive significant effect of board gender diversity on the disclosure of forward looking information as shown by the positive beta coefficients and (p-value of 0.017 < 0.05) resulting in accepting the fourth research sub-hypothesis.

Conclusion
The purpose of this research was to examine the association between the board characteristics as one of the CG mechanisms and the forward looking disclosure in the companies listed in the Egyptian stock exchange market. The researchers collected data from the annual reports and the websites of the companies listed in the EGX 30 index that includes the most active non-financial companies in the Egyptian stock exchange market during the period 2010-2017. The variables used as a proxy for measuring the CG mechanisms were the board independence, board size, CEO duality and the Board gender diversity and a checklist have been used to measure the level of forward looking disclosure. The researchers also, used two control variables which are the auditor type and the firm size.

The researchers used different statistical methods that included descriptive analysis, Pearson correlation and regression analysis to test the hypothesis of the research. The results of these statistical analysis directed the researchers toward the rejection of the first and the second hypotheses that there is non-significant association between the board size and the board independence and the level of the forward disclosure level. On the other hand, the statistical results showed also, the significant impact of the CEO duality and the board gender diversity on the forward looking disclosure and that was in the contrary to the results of Bravo and Alcaide-Ruiz, (2019) that failed to find an association about the presence of the female members in the audit commit-
tee and the forward looking disclosure. This can be interpreted by the researchers as a result of the culture differences in each country. The regression analysis explain power was represented by the adjusted R² value that was 5%. This can be interpreted by the researchers as a good sign for the quality of the regression model resulted.

The research results contributed to the literature of CG and the forward looking disclosure in a number of ways. First, the research addressed a broader sample of companies included 256 observation along a period of 8 years. Second, the research provided a more thorough category of forward looking disclosure that included 24 items that were divided into 4 categories of disclosure that included both qualitative and quantitative disclosures. Third, the results of the research can be helpful to the CG and forward looking regulators to reconsider the impact of some of the CG mechanism that are related to the board characteristics on the disclosure of forward looking information in the capital market especially in Egypt.
References


Appendix:

**Forward-Looking Information checklist**

<table>
<thead>
<tr>
<th>I</th>
<th>Environment around the company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regulations and legislation that can have effect on the future prospects of the company.</td>
</tr>
<tr>
<td>2</td>
<td>Political factors affecting the future of the business.</td>
</tr>
<tr>
<td>3</td>
<td>Economic prospects affecting the future of the business.</td>
</tr>
<tr>
<td>4</td>
<td>Prospects for the industry in which the company operates.</td>
</tr>
<tr>
<td>5</td>
<td>Competitive factors that can affect the future of the company.</td>
</tr>
<tr>
<td>6</td>
<td>Information about future market share.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II</th>
<th>Goals, strategies and business policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Mission of the company.</td>
</tr>
<tr>
<td>8</td>
<td>Discussion about general corporate strategy and/or its likely effect on the company’s future performance and results.</td>
</tr>
<tr>
<td>9</td>
<td>Broad objectives and strategies to achieve objectives.</td>
</tr>
<tr>
<td>10</td>
<td>Management business plans.</td>
</tr>
<tr>
<td>11</td>
<td>Development of new sales market.</td>
</tr>
<tr>
<td>12</td>
<td>Introduction of new products or services.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III</th>
<th>Organization, management and corporate structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Prospects related to Organizational structure /or Organizational development.</td>
</tr>
<tr>
<td>14</td>
<td>Prospects related to Board organization and management members.</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>-------------</td>
</tr>
<tr>
<td>15</td>
<td>Merger and acquisition/or disposals.</td>
</tr>
<tr>
<td>16</td>
<td>Prospects related to Human capital.</td>
</tr>
<tr>
<td>17</td>
<td>Prospects related to corporate structure</td>
</tr>
<tr>
<td>18</td>
<td>Prospects related to internal control</td>
</tr>
<tr>
<td>IV</td>
<td>Financials</td>
</tr>
<tr>
<td>19</td>
<td>Profit / Profitability ratios /EPS forecasts.</td>
</tr>
<tr>
<td>20</td>
<td>Revenue forecasts.</td>
</tr>
<tr>
<td>21</td>
<td>Information about next year’s share price (i.e. share price estimation).</td>
</tr>
<tr>
<td>22</td>
<td>Expected Share price</td>
</tr>
<tr>
<td>23</td>
<td>New investments and/or expansion plans and/or capital expenditures.</td>
</tr>
<tr>
<td>24</td>
<td>Investments in R&amp;D (i.e. Description of R&amp;D activities/or R&amp;D expenditures).</td>
</tr>
</tbody>
</table>