A Systematic Review of Relationship between Financial Sustainability and Share Price

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ABSTRACT
One of the most critical problems faced by companies in today’s corporate universe world is financial sustainability, which can influence firms’ overall profitability, efficiency and performance. Financial growth is thought to be one of the most important value drivers of equity shares, requiring adequate control. Since the issues of sustainable financial growth in the contemporary market are gradually becoming severe, i.e., if businesses have unrestrained income growth, this can lead businesses to major financial difficulties. Therefore, this research aims to determine the effect of financial sustainability on the share price. While financial sustainability is a less developed and new topic in the subject of corporate finance, but it is now becoming increasingly important. The present study explores systematically the relationship between financial sustainability and share price in 16 related articles published between 2011 to 2020. The findings reveal that the interest in the subject of financial sustainability and its impact on shareholder wealth is growing. This paper attempts to classify and cover the systematic review by critically evaluating the findings through analyzing the selected articles, which highlights the emerging business-related theories of financial sustainability and sets out a range of directions for future studies.

JEL Classification: D53, E44, G1

Keywords: Share Price, financial sustainability, systematic review, theories.

INTRODUCTION
The share price is a paradoxical and puzzling phenomenon, impacted by numerous factors. The empirical studies Al-Shubiri (2010); Almumani (2014); Bhattarai (2014); Enow and Brijlal (2016); Irfan and Nishat (2002); Malhotra and Tandon (2013); Malik, Qureshi, and Azeem (2012); Piotroski and Roulstone (2004); Sharma (2011); Srinivasan (2012); Zahir and Khanna (1982) among others assert that a lot of factors determine the share price in different markets. Therefore, it is revealed that understanding the effect of several fundamental determinants on share price is important for investors as well as corporations.

The management of a firm cannot directly affect the stock price but the mechanism through which the stock price can perform depends on the willingness of investors (Raza, Ramakrishnan, Gillani, & Ahmad, 2018). As investors considered investing in equity stocks as one of the prime potential opportunities for investment because share price acts as a gauge for investors to choose whether to invest in a particular stock or not. This is specifically true as the stock price is utilized as a proxy to indicate the overall financial health and strength of a firm (Enow & Brijlal, 2016). Additionally, it is a source of finance for companies to fulfill

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their capital requirements. However, return from such equity investments may change, contingent upon the enactment of specific stock and variation in the share price. Variation in the share price may happen due to the demand and supply forces of a particular stock in the market (Piotroski & Roulstone, 2004; Sharma, 2011; Zahir & Khanna, 1982). Though, there is no perfect technique that specifies the precise movement of the share price. Prior research shows that there are numerous factors behind the variation of share prices (Irfan & Nishat, 2002; Oyama, 1997; Sharma, 2011; Srinivasan, 2012). The knowledge of these factors and their probable influence on the stock price is highly considered because it would assist investors in taking investment decision wisely and facilitate companies to improve their market value (Bhattarai, 2014; Enow & Brijlal, 2016) and firm’s financial sustainability is one of these factors gaining importance nowadays. This concept is gaining importance as serious financial problems occurred due to unrestrained growth of revenue and the firm's operations can affect the financial performance of the companies (Gomez-Bezares, Przychodzen, & Przychodzen, 2017). Moreover, financial sustainability is a prime concern for every firm because the major priority of the firms is to enhance their financial position to achieve their objective of “going concern” (Nikolaou, Tsalis, & Evangelinos, 2019). It has become a concern and challenge for all natures and sizes of the firms as it affects the overall financial system (Acemoglu, Ozdaglar, & Tahbaz-Salehi, 2015; Al-Dirawi & Dahash, 2018). Thus, an appropriate balance between financial policies and operation is essential from a long-term viewpoint (Haigh, 2012; Przychodzen & Przychodzen, 2013). The prior studies documented that the financial sustainability of the firm affects their financial performance (Amouzesh, Moefifar, & Mousavi, 2011; Przychodzen & Przychodzen, 2013; Rahim, 2017; Subbareddy & Reddy, 2017). Moreover, Przychodzen and Przychodzen (2013), examined the influence of corporate sustainability practices on share price volatility. The findings of these studies suggest that the unsustainable growth of firms may exert tremendous pressure on a firm's operational and financial characteristics, which may lead to affect the firm’s share price.

The main purpose of this article is to offer a systematic literature review that emphasizes the link between financial sustainability and stock price or firm value based on seminal studies contributed to the subject of share price literature. The significance of the study is to assess the work of researchers during the last 10 years i.e. 2011 to 2020. The structure of the article is as follows. First, the screening process is performed using the PRISMA flowchart and inclusion/exclusion of literature articles is completed following the PRISMA process. Secondly, the literature is classified based on theories. Finally, the conclusion is discussed in the last part of this article.

**METHODOLOGY**

This is mainly a systematic review paper that assesses the link between financial sustainability and share price. As mentioned in the section above that financial sustainability is a new concept that is gaining importance in the corporate finance literature. Since financial sustainability is a less developed and new topic in the field of corporate finance, but our search came out with few associated papers. Therefore, this review summed up all the seminal studies in the literature and provides a deeper insight into this vital research area. The PRISMA flowchart is used to describe the overall process of selection and rejections of papers as described by Moher, Liberati, Tetzlaff, Altman, and Group (2009). This review only includes published literature.
LITERATURE SEARCH

This study used the Scopus database to find out the literature and the keywords used to search out the titles and abstracts of the papers in this literature review are: "Financial Sustainability" AND "Stock Prices" OR "Share Prices" OR "Shareholders Wealth" OR "Firm Value" and "Corporate Sustainability" AND "Stock Prices" OR "Share Prices" OR "Shareholders Wealth" OR "Firm Value". Additionally, a hand search method is also performed to conduct the review. For this purpose, an extensive hand search was conducted by searching Google Scholar, which is frequently used and famous among researchers across numerous disciplines (Xiao & Watson, 2017). In the process of searching for literature, we found different related financial blogs but these blogs were excluded as this type of source is considered prejudiced and unreliable.

Figure 1: PRISMA flowchart for the literature selection process.

By applying the keywords mentioned above in the Scopus database, the initial articles identify 39 articles. The result of the above keyword search was imported into excel sheets. The hand search articles screened out to be 16 articles. After combining all the articles, few papers were overlap the results of the above keywords and hand search. After removing the duplicates, the remaining articles are 48. The next step consists of a screening of articles based on titles and abstracts according to the criteria for inclusion/exclusion explained below in section 4 and articles were eliminated, which do not fulfill the criteria and related to the objective of the
study. The studies related to the link between financial sustainability which is the subpart of corporate sustainability and share price/shareholder wealth are included. The last step involves reviewing the full-text of the articles and papers were selected for further analysis and classification as presented in figure 1. These all steps for systematic literature review have been done relative to the PRISMA statement mentioned by Moher et al. (2009), which includes these stages already explained above.

Inclusion and Exclusion Criteria

The inclusion and exclusion criteria are essential and absolute ways of finding the best possible papers for the study. The inclusion and exclusion criteria for the refinement are as follows: The papers published from the year 2011 to 2020 and published in the English language only were included. The research paper from the database is limited to only one subject of social science. The open-access papers were considered. The book chapters, master / doctoral theses and unpublished working articles were eliminated, and missing record papers were also excluded. The articles, review papers and conference papers are included for the review.

Studies Included for Analysis

The final 16 selected papers are used for the analysis process. The analysis includes year-based analysis, journal wise and the nature of the articles.

Year-wise Publication

Figure 2 shows the publications of articles per year from 2011 to 2020 as every year there is a variation in the number of papers published. The figure reflects a steady and gradual rise of studies during this period and reaching the highest in 2019.

Figure 2: Year-wise Publication
Journal Base Publication

The percentage of the journal indicates that in which journal most of the studies related to this study topic is published. Table 1 portrays the journal which addresses this issue is Sustainability (Switzerland) obtaining 19% (3 articles). The remaining articles were published in over 13 journals having one article each.

Table 1. Journal base Publication

<table>
<thead>
<tr>
<th>Journal Name</th>
<th>Number of articles</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sustainability (Switzerland)</td>
<td>3</td>
<td>19%</td>
</tr>
<tr>
<td>Journal of Business Ethics</td>
<td>1</td>
<td>6.25%</td>
</tr>
<tr>
<td>International Journal of Psychosocial Rehabilitation</td>
<td>1</td>
<td>6.25%</td>
</tr>
<tr>
<td>Investment Management and Financial Innovations</td>
<td>1</td>
<td>6.25%</td>
</tr>
<tr>
<td>International Journal of Accounting and Information Management</td>
<td>1</td>
<td>6.25%</td>
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<tr>
<td>Journal of Financial Economics</td>
<td>1</td>
<td>6.25%</td>
</tr>
<tr>
<td>Business Ethics: A Eur Rev</td>
<td>1</td>
<td>6.25%</td>
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</tbody>
</table>

Nature Base Publication

Figure 3 demonstrates the type of publication, whether the nature of the publication is either a journal article or conference paper. The figure indicates that the trend of journal publication is highly ranked (88%) followed by conference papers (12%). The reason behind is that the information and outcomes of the papers published in the journal are considered more important by researchers and academicians (Hanafizadeh, Keating, & Khedmatgozar, 2014; Nord & Nord, 1995).

Figure 2: Nature of Publication
Classification Based on Theories

Literature is classified based on theories related to financial sustainability, which are identified from the literature articles are explained in the following subsections.

Agency / Shareholder Theory

Agency/shareholder theory has been developed to study an agency relationship (Greenwood & Jovanovic, 1990). This theory was initially developed by Jensen and Meckling (1976) and they state an agency relationship as "a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some on their behalf which involves delegating some decision making authority to the agent". This suggests that the interest of owners (principals) and their executives (agents) are mostly not aligned which addresses the firm's management. Although various approaches and theories have been developed to resolve the executive management issue, but the theory given by Jensen and Meckling (1976), is the perfect contracting technique of agency theory that yet dominates the field. It argues that in a large corporation, the estrangement of ownership and control forms a source of authority in the executive management (Green, 2008).

According to Fama and Jensen (1983), agency/shareholder theory emphasizes on agency problems and risk sharing between the management and the shareholders and the associated three types of agency cost (residual, monitoring and bonding) which are anticipated by the shareholders. In the perspective of agency theory, ethical hazards arise due to the existence of inappropriate information where management (agent) performing duties on the behalf of shareholders (principal) knows better concerning their activities and intents than the shareholders does because of a dearth of monitoring of the agent (Rezaee, 2016). Although, both parties have one collective intention of desiring the company to survive, the involvement of numerous principals will create different actions to confirm that their management (agents) perform task closer to interests of their own. As some shareholders might have interests related to sustainability that way pawn to the interests of executive management (Aras & Crowther, 2008). Therefore, managers should be aware of the perspective of principal opportunism, as some principals might have short-term interests. This is further discussed by Rezaee (2016) which states that management actions and incentives are mostly centered towards temporary remunerations objectives which are generally related to management compensation and distract from attaining the long-term and sustainable performance for principals (shareholders).

Agency/shareholder theory highlights the significance of incentives structuring so that managers should be aware of these long-term principal interests and it also emphasizes that boards should be responsible for assuring that executives should take decisions that deliver sustainable value (David, Bloom, & Hillman, 2007). If managers do not defend the interest of shareholders, the agency cost arises, which makes a bad influence on firm performance (Gillani, Ramakrishnan, Raza, & Ahmad, 2018). Therefore, the main purpose of agency theory is to design an ideal strategy to resolve the agency problem (Abarbanell & Bushee, 1998) and to align the objectives/goals between agents and principals (Jensen & Murphy, 2010). Agency theory also exposes the principals that have a conflict of interests with other stakeholders and does not promote sustainable practice. As some investors (principals) have more focus on current earnings so they quickly move in and out of their investments, as these investors have no concern with the firm’s long-term prospects (Abarbanell & Bushee, 1998). These
shareholders also have the ability to impact managers (decision-makers) and can detract them from strategic actions and activities that are often related to sustainability (Connelly, Hoskisson, Tihanyi, & Certo, 2010).

The ability to implement sustainability initiatives becomes limited, when executives are confronted with conflicting interests of shareholders as their commitment is distributed (Hoskisson, Hitt, Johnson, & Grossman, 2002). Christensen, Perce, Hartman, Hoffman, and Carrier (2007), suggest that short-term shareholders are the worst type of principals as they avail opportunities by sacrificing sustainable practices. The manager’s real concern should be to perform in the best interest of principals whose interests match with the company’s long-term notions (Arthurs, Hoskisson, Busenitz, & Johnson, 2008). However, this theory has been challenged by (Becht, Bolton, & Röell, 2003), which states that the most commonly used incentive systems which were originally developed to reduce the agency problem do not associate with the agents and principals, because of the incorrect supposition that stock prices and earnings of the organizations cannot be manipulated.

Agency/shareholder theory indicates that managers can maximize the shareholder's interest by investing in attractive projects that have positive net present value and forthcoming cash flows that increase the value of shareholders. The maximization of shareholder wealth theory denotes that "shareholders are the owners of the firm and managers have a fiduciary duty to act in their best interests to maximize their wealth" (Rezaee, 2016; Shleifer & Vishny, 1997). This theory also explains that the firm resources which are allocated to the non-financial sustainability activities are not in the best concern of the shareholders, while they may increase other stakeholders' value. Therefore, firms should emphasize on value creation of shareholders and should leave the social responsibility decision to their shareholders (Rezaee, 2016). Argandoña (1998), highlights that the main objective of the company is to maximize the returns to its shareholders by maximizing the market value of the company.

In conclusion, agency/shareholder theory has usually been the most dominant theory in the field of corporate finance, governance and management research (Jensen & Meckling, 1976). This theory mainly focuses on the financial/economic sustainability performance related information for shareholders and narrows the business sustainability aspect (Rezaee, 2016).

**Signaling Theory**

Spence (1973) was the first researcher who introduced and explained the signaling theory in the job market and officially named the model “signaling equilibria”. This theory was an effort to decrease information asymmetry. Whenever there exists inappropriate information between two parties, one of the parties can use the signal to reduce this information asymmetry. A signal can be defined as “an action taken by a high-type manager that would not be rational if that manager was a low-type” (Scott, 2015; p. 503). Signaling theory can also be used in situations where the quality of the firms differs. The signal can be used by the managers of the companies to disclose the category of their company. Therefore, signaling models practice quality as a distinctive characteristic that the company desires to signal (Connelly, Certo, Ireland, & Reutzel, 2011). There are different ways through which this quality can be interpreted. Connelly, Certo, et al. (2011), indicates quality as “the underlying, unobservable ability of the signaler to fulfill the needs or demands of an outsider observing the signal”. The sustainability reports that are provided externally by the company can be understood as a
signal that managers employ it to disclose that their firm bears high quality. Here, the meaning of high quality is well financial, social and environmental performance. Through this signal, firms can get a competitive benefit as the shareholders, receivers and other stakeholders can be aware of the company's accurate performance/condition and they will make better decisions accordingly. For companies to take advantage of the signal, it should be observable and costly to reproduce and imitate. As there might be some individuals or institutions that can attempt to send dishonest signals to deceive if they have the chance to do so by spending a little cost (Connelly, Ketchen, & Slater, 2011). Another alternative to costliness can be if the penalty is imposed on dishonest signaling. For example, if a company spread preannouncement news of new product development and introduction as this may not be so costly and might trigger short-term abnormal returns (Sorescu, Shankar, & Kushwaha, 2007), but the penalty connected to this false signal can harm the credibility of company among buyers and restrict companies to do so (Connelly, Ketchen, et al., 2011).

Signaling theory enables companies to communicate information regarding organizational activities related to sustainability. This information is communicated through different company’s reports i.e. compulsory annual reports (financial) and voluntary sustainability reports (non-financial). Though, the probable connection between basic annual reports (financial) and voluntary sustainability reports (non-financial) used to communicate signals (good news) is ambiguous (Rezaee, 2016). Healy and Palepu (2001) argue, “the firm’s voluntary reporting my act as a complement to signal information about expected future financial performance”. The companies with good performance related to sustainability (financial and non-financial) have more motivation and advantage to signal their sustainability achievement by issuing voluntary sustainability reports above basic financial statements as per signaling theory (Lys, Naughton, & Wang, 2015). Moreover, this theory is the way to correspond with all stakeholders about the accomplishment of all sustainability performance dimensions i.e. economic, social, environmental and governance (Connelly, Certo, et al., 2011; Connelly, Ketchen, et al., 2011; Dainelli, Bini, & Giunta, 2013). Therefore, concerning the signaling theory, the corporations having high sustainability performance (good firms) distinguish themselves from low sustainability performance (bad firms) and signal their sustainability as moral corporate citizens (Rezaee, 2016, 2017).

The “receivers” of the information are also very significant in signaling theory. The degree to which signaling is efficient depends on whether receivers are alertly looking for the signals in the environment (Janney & Folta, 2006). From the sustainability viewpoint, this is noteworthy to focus whether or not sustainability is vital to investor, consumers or suppliers (Jones, Clarke-Hill, Comfort, & Hillier, 2008; Schueth, 2003). For example, a dishwashing detergent advertised as phosphate-free by Colgate-Palmolive shows a signal of their commitment to sustainability, but this signal will be effective if the receivers (consumers) are interested in observing for the signal. Likewise, companies will be more willing to capitalize on the expensive signals once they recognize that investors (receivers) are noticing those signals and are prepared to act on them (Connelly, Ketchen, et al., 2011). The entire signaling process can be improved when receivers can involve in feedback to signalers (Gupta, Govindarajan, & Malhotra, 1999). Therefore, signaling theorists believe that firms will struggle and signal a commitment to improving sustainable practices when consumers and other stakeholders will give feedback about the effectiveness of those practices (Connelly, Ketchen, et al., 2011).
The notion of resources was first introduced by Wernerfelt (1984) who invited scholars and business leaders to see the products of companies in the perspective of resources in turn to create management tactics. Prahalad and Hamel (1990), highlighted that during the process of planning business strategies; the companies should make most of the essential capabilities as the sustainable competitive advantage rather than focusing on the products and markets. The resource-based view (RBV) theory was developed by Hart (1995), who presented the idea of a "natural resource-based view", which denotes the theory of competitive advantage. His study suggested that companies could expect improvement in financial performance when strategies for proper allocation and utilization of resources are performed. The present central view of this theory is established on the notion of "economic rent and view "of a firm as a group of competencies. This theory suggests critical and basic perceptions that why companies with unique, valuable and well-structured resources may experience better performance (Barney, 1995). In brief, this theory attempts to enlighten "firm sustainable competitive advantage as stemming from firm resources that are rare, valuable, hard or impossible to imitate or duplicate, and hard to substitute" (Bromiley & Rau, 2016).

The main role of RBV lies in the idea of “competitive advantage”. According to Barney and Arikan (2001), resource-based view theory imagines companies as a collection of resources. This theory is perhaps the major theory for describing the performance differences among companies nowadays. The resource-based view theorists have defined "resources" in many different ways, which can include assets, financial capital, organizational processes, technologies and human knowledge/skills (Carmeli, 2001).

The RBV theory proposes that a company may get a sustainable competitive advantage by evolving its inimitable capabilities and resources (Barney, 2001). “The difference between providing short-term competitive advantage and that, which is sustainable, resides in the notion that these resources are heterogeneous in nature and perfectly mobile” (Barney, 1991). According to Sirmon, Hitt, and Ireland (2007), managers are active in the resource-based view (RBV) because they are responsible to maximize their contribution in delivering sustainable advantage by collecting, structuring and leveraging their valuable resources in inimitable ways. The RBV states that companies should focus on their internal resources (intellectual and physical) for the competitive advantage which results in the enhancement of corporate financial performance (Boxall, Purcell, & Wright, 2007).

Slack Availability of Resources Theory
Barnard (1938) described the notion of slack resources and its origins can be found out in organizational theories. He argued that executives might get more incentives than their efforts towards their company. Slack is "the difference between total resources and total necessary payments" (Cyert & March, 1963, p. 39). Bourgeois and Singh (1983, p. 29) suggested that organizational slack could be defined as “since organizations do not always optimize, they accumulate spare resources and unexploited opportunities which then become a buffer against bad times. Although the buffer is not necessarily intended, slack produces performance smoothing, reducing performance during good times and improving it during bad times”. Nohria and Gulati (1997, p. 604) also defined slack resources as “the pool of resources in an organization that is over the minimum necessary to produce a given level of organizational
Stakeholder Theory

The stakeholder approach came up in the mid-1980. One main contribution was the publication of Freeman (1984). He is credited for introducing this concept. Clarkson (1994), define stakeholder theory, as “the firm is a system of stakeholders operating within the larger system of the host society that provides the necessary legal and market infrastructure for the firm's activities”. Friedman and Miles (2006), mentioned that the corporation is considered, as a clustering of stakeholders and a corporation would aim to cope with their needs, interests and perspectives. Managers of the firm are responsible for stakeholder management. This opinion is supported by Phillips (2003), who suggests that goal of management and directors of the firm would be to maximize the total wealth creation. This theory has also its roots in management literature. Stakeholder theory proposes that the motive of the company should be to create maximum value for stakeholders. In turn, to achieve this motive and remain sustainable in long run, managers must align the interests of communities, employees, suppliers, customers and stockholders in the same direction.
CONCLUSION

The share price is a complex and contradictory topic in the field of corporate finance. Numerous studies had already been performed on share price but factors affecting share price are inconclusive, which shows that share price remains a debatable topic among researchers to date. Many researchers affirm that different factors determine the share price in different markets (Al-Shubiri, 2010; Almumani, 2014; Bhattarai, 2014; Enow & Brijlal, 2016; Irfan & Nishat, 2002; Malhotra & Tandon, 2013; Malik et al., 2012; Piotroski & Roulstone, 2004; Sharma, 2011; Srinivasan, 2012; Zahir & Khanna, 1982). Therefore, the understanding of these different factors affecting share price is important for investors as well as corporations. Investors considered share price as a barometer to decide whether to invest in a particular stock or not. This is specifically true as stock prices are utilized as a proxy to indicate the overall financial health and strength of a firm (Enow & Brijlal, 2016). The financial health of a firm is affected if the firm is facing serious financial problems occurred due to unrestrained growth of revenue and the firm's operations, which may impact the financial performance of the companies (Gomez-Bezares et al., 2017). Though, there were fewer studies that directly measure the connection between financial sustainability and the share price of the corporation. However, by critically inspecting the related seminal studies it is revealed help-seeking that financial sustainability is one of the vital factors that impact the share price of the company. Financial sustainability is a significant factor that affects share price as financial sustainability is a top priority for every firm. It seeks to strengthen the financial position of firms to achieve its aim of "going concern" (Nikolaou et al., 2019). Inline, Rezaee (2017), suggest that examining the impact of financial sustainability performance on management decisions and market attribute (stock prices) can be beneficial for the companies in a long-term perspective. The main purpose of this paper was to examine the relationship between financial sustainability and share price and draw a holistic picture of prevailing literature concerning the topic of this study. To achieve the objective of this study, a systematic literature review was performed on a specific topic with 16 related seminal papers as a sample published from 2011 to 2020. This paper attempts to classify and cover the systematic literature review by critically evaluating the findings through analyzing the selected articles, which highlights the emerging business-related theories of financial sustainability and sets out a range of directions for future studies.
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