

Journal of Finance and Accounting Research (JFAR)

Volume 4 Issue 2, Fall 2022


ISSN_(P): 2617-2232 ISSN_(E): 2663-838X

Homepage: <https://ojs.umt.edu.pk/index.php/jfar>



Article QR



- Title:** Do the Financial Slacks Improve the Performance of Agribusiness? A Mediating Role of Corporate Social Responsibility Activities
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- DOI:** <https://doi.org/10.29145/jfar.42.04>
- History:** Received: June 12, 2022, Revised: September 14, 2022, Accepted: November 28, 2022, Published: December 28, 2022
- Citation:** Ayub, H., & Nawaz, H. (2022). Do the financial slacks improve the performance of agribusiness? A mediating role of corporate social responsibility activities. *Journal of Finance and Accounting Research*, 4(2), 76–98. <https://doi.org/10.29145/jfar.42.04>
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- Conflict of Interest:** Author(s) declared no conflict of interest



A publication of

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Do the Financial Slacks Improve the Performance of Agribusiness? A Mediating Role of Corporate Social Responsibility Activities

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Abstract

Increasing environmental issues are demanding substantial attention toward corporate social responsibility (CSR) activities particularly in developing countries. Agribusiness firms can take advantage of their excess financial resources by investing them in CSR activities which may improve their performance. This study aims to empirically analyze the utilization of the financial slack in CSR activities which can enhance the performance of agribusiness in Pakistan. This study used a sample of sixty-two (62) Agribusiness firms of Pakistan for a period of six years i.e. from 2013 to 2018. The study employed the Content Analysis technique to measure the CSR index of the agribusiness firms whereas the available and potential slack were used as financial slack indicators. Panel data set is used with Structural Equation Modeling (SEM) Path analysis in Statato test the proposed hypotheses. The results show that investing a firm's available slack resources in CSR initiatives positively affects the performance (RCE) of agribusiness firms in the short run as indicated by partial mediation. Available slack turned out to have a significant negative impact on the long-term performance measures (Tobin's Q) of the agribusiness firms in Pakistan. The impact of potential slack is insignificant on CSR and RCE, showing the reluctance of firms to take additional debt for the CSR initiatives. The findings can serve as a robust empirical base for policymakers to initiate an improved level of CSR activities by the agribusiness firms in Pakistan as well as for the managers and regulators to understand the importance of slack organizational resources in CSR investment decision making. The study emphasizes the use of financial slack for the short run by introducing CSR activities that curtail agency conflicts and costs and improve the performance of agribusiness.

Keywords: Corporate Social responsibility, Availab Slack resources, Potential Slack, CSR Investments, Firm Performance.

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Introduction

The use of financial slack is still an inconclusive issue for improving a firm's performance (Alessandri et al., [2014](#); Shahzad et al., [2016](#); Picolo et al., [2018](#)). Availability of slack resources does not guarantee better firm performance, the available resources should be carefully invested in resolving the environmental issues. Several studies build the foundation to understand how firm performance is affected by utilizing slack resources and highlight the role in engaging a firm in competitive behavior (Ndofor et al., [2011](#)) by linking the use of financial slack for the CSR initiatives related to the environment and society (Chang et al., [2015](#)). One strand of the literature proposes the use of a firm's slack resources in CSR investments as a value creation process for the company as well as society (Lin et al., [2019](#)). Contrary to it, another strand of literature on slack is uncertain about the utilization and transformation of slack for competitive purposes (Tsang, [2006](#)). Although there has been extensive work in literature on the slack-performance relationship, limited work is available in the context of agribusiness industry of developing countries.

CSR has emerged as a highly debated issue in recent years in the context of agribusiness. Agribusiness comprises the group of industries relevant to agricultural production and services which are seen as a synonym for the food industry; supply of seeds, agrochemicals, agricultural machinery, distribution, processing, retail, and marketing (Mello et al., [2020](#)). The agribusiness industry is criticized and pressurized by diverse stakeholders through scandals and information asymmetries concerning food production. Fertilizers and seed companies are accused of contaminating the environment and being engaged in the field of genetic engineering (Jansen & Vellema, [2004](#)). Therefore, agribusiness firms need to pursue CSR activities to overcome the stakeholder's reservations. So far, in the field of agribusiness, the concept of CSR has been paid less attention to incorporate practice and academic studies (Heyder & Theuvsen, [2012](#); Luhmann & Theuvsen, [2016](#)). Consequently, the concept remained to some extent vague. Only a few research studies have been undertaken in this field concerning society. The relationship between CSR and performance of companies has been studied extensively offering conflicting results (Marín et al., [2012](#)); some studies show a positive relationship (Briones Peñalver et al., [2018](#)) while the others reflect negative as well as time-dependent relationships (Muñoz et al., [2015](#)). Some studies (Heyder & Theuvsen,

[2012](#)) suggest that there is no direct relationship between them. Despite the importance of the sector, the research related to the integration of CSR in the agribusiness sector is still in its infancy (Dahlsrud, [2008](#); Sheehy, [2014](#); Luhmann & Theuvsen, [2016](#)). Thus, the absence of empirical work analyzing CSR in agribusiness, and its integration in the company through the use of financial slack justified its completion of the present study and adds a research supplement to the studies related to CSR.

Promotion and commitment of CSR activities in agribusiness through financial slack may lead to new areas of academic research (Aguinis & Glavas, [2012](#); Zhu & Lai, [2019](#)). Agribusiness has been one of the most important sectors of the economic system of Pakistan. Instead of relying on the production of raw agricultural commodities, agro-industries are growing in the country due to a greater emphasis on the production of value-added agricultural products. Technological advancements enable the agriculture sector to be gradually commercialized. Currently, a wide range of agro-industry such as cotton and textiles, sugar, wheat, rice, fruit processing, dairy, poultry, seed, fertilizers, etc. are operating in Pakistan to meet the domestic needs of the consumers and other industries for further processing, many of them are exporting the products. The majority of the large agribusiness companies listed on the Pakistan Stock Exchange have an important role in terms of agricultural products and are the biggest players in driving this part of the economic system (Badar et al., [2016](#)). There is a need to investigate the relationship between financial slack and firm performance employing CSR in Pakistan. Investing in CSR has become the need of the hour in Pakistan due to bad environmental conditions. Therefore, agribusiness companies must pay attention to investing the slack resources in CSR as it is a need of the current situation to make socially responsible investments to satisfy the concerns of stakeholders.

There are gaps in the previous researches regarding the utilization of financial slack that may be transformed into a useful CSR investment to improve firm performance. Therefore, this study intends to reduce the research gap by investigating how the transformation of financial slack into CSR investments can improve the performance of agriculture-based manufacturing firms listed on the Pakistan Stock Exchange and have an important role in terms of agricultural products. In this study, we condense the uncertainty in the slack-performance relationship by introducing CSR as a mediator. Therefore, the study investigates the problem of how

effective utilization of financial slack in CSR investments may improve agri-based firm performance.

This study highlights one of the very crucial aspects of firm performance where we propose the use of financial slack for the improvement of agribusiness's firm performance by considering CSR activities. This topic is still the most neglected and uncovered area of research and limited studies are available even in the context of developed countries context. Therefore, this study is the pioneering study to highlight the missing mediating effect of CSR activities in the agribusiness sector. Another novelty of this study is to use rigorous methodology by considering two dimensions of financial slack i.e. Available and potential slack for short and long-run performance improvement of agribusiness firms. The construction of a CSR index for agribusiness firms in the context of a developing country is another unique contribution of the study.

The research paper has been structured as follows; section 2 presents the literature review; Section 3 illustrates the theoretical framework; Section 4 discusses methodology; section 5 depicts the results and discussions followed by conclusion and recommendations.

Literature Review

Financial Slack and Firm Performance

The firms may utilize financial slack to achieve their objectives. The concept of financial slack gains momentum from the seminal work of Cyert and March (1963) where it is applied to management models and practices. Nevertheless, the researchers have conflicting views related to the slack-performance relationship. Therefore, the relationship between financial slack and firm performance deserves stern attention. Resource-based and behavioral theories claimed the favorable effect of slack on performance (Cyert & March, 1963). Several empirical studies support the positive relationship between slack and firm performance (Vanacker et al., 2013; Marlin & Geiger, 2015; Picolo et al., 2018). Financial slack helps firms in gaining a competitive advantage by capitalizing on strategic options to exploit different opportunities in a dynamic environment (Chiu & Liaw, 2009). In economic downturns and crises, the strategic advantage is extremely valuable. Findings of meta-analyses in the literature have also revealed a positive relationship between slack resources and performance (Daniel et al., 2004; Carnes et al., 2019). However, the effects vary

according to the type of slack, the measurement of performance, and other contingent variables like the sector or the nature of the company. The results provide interesting conclusions that allow advancing the knowledge of the role of slack resources on performance. Contrarily, the conflicting/negative relationship is also evident in the literature justifying it on basis of agency theory (Jensen, [1986](#), Picolo et al., [2018](#), Shahzad et al., [2016](#), Argilés-Bosch et al., [2016](#)). The arguments are directed to expect a positive relationship between financial slack and firm performance. Therefore, a hypothesis is stated as:

H1: Financial slack has a significant positive impact on the Agribusiness firm performance of Pakistan.

H1a: Available slack has a significant positive impact on the Agribusiness firm performance of Pakistan.

H1b: Potential slack has a significant positive impact on the Agribusiness firm performance of Pakistan.

Financial Slack and CSR Investments

Businesses irrespective of their sizes have a certain level of carbon footprint that needs to be reduced by using novel technologies for decreasing pollution, energy consumption, and waste which may have a constructive effect on the firm and society. Thus, the companies with higher financial slack resources can engage in CSR activities to meet their sustainability objectives (Bourgeois, [1981](#); Orlitzky et al., [2003](#); Chang et al., [2015](#)). CSR acts like advertisements for a firm as it can increase the demand for the services and products or lower the consumer price sensitivity which helps the organizations to produce intangible assets (Hull & Rothernberg, [2008](#)). Availability of slack resources indicates that the firm has sufficient finance for investments in CSR-related activities without sacrificing the main demands of its key economic claimants (Lin et al., [2019](#)). Similarly, it is observed that firms with fewer financial resources emphasize activities with greater direct effects on corporate profits, over participation in CSR-related initiatives. Clarkson et al. ([2011](#)) found that the financial slack is a primary factor of firms' involvement in CSR-related environmental activities. From the literature, it can be derived that the use of valuable resources in CSR-related activities can provide firms with greater access to key resources. CSR-related investments in the long term are, therefore, not only responses to external pressures but also as internal

strategic choices about future development and growth. However, Lin et al. (2019) suggest that managers must recognize the need to exploit slack in financial resources wisely and carefully by considering CSR investment. From the arguments given above, it may be assumed that financial slack will have a positive impact on corporate social responsibilities. Therefore, the second hypothesis of this study is hypnotized as:

H2: Financial slack has a significant positive impact on CSR in the Agribusiness firm of Pakistan.

H2a: Available slack has a significant positive impact on CSR in the Agribusiness of Pakistan.

H2b: Potential slack has a significant positive impact on CSR in the Agribusiness of Pakistan.

CSR and Agribusiness Performance

Corporate social responsibility (CSR) has been a focus of both research and practice in the management literature. However, recent studies focusing on agribusiness have found that CSR influences a company's reputation positively (Heyder & Theuvsen, 2012). CSR in agribusiness refers to environmental issues like the use of pesticides and the impact of these practices on the employees' health. For the effective commitment in the implementation of CSR actions and practices, a company must not only comply with legal objectives but also promote actions and make investments around CSR (Chiles et al., 2020). CSR can arise from favoring new business opportunities with a variety of agricultural production. Thus, a sustainable improvement will occur with the transfer of technological knowledge to this sector (Briones Peñalver et al., 2018). It is believed that a firm's CSR commitment can contribute to achieving an improved reputation and a higher financial performance (Heyder & Theuvsen, 2012; Mazur-Wierzbicka, 2015). Expanding CSR to agribusiness is vital for realizing sustainable development. The existing research shows that consumers generally lack knowledge about the CSR activities of agribusiness firms. Therefore, agribusiness firms should focus on the communication of environmental topics such as energy efficiency, climate protection and environmental standards, and social topics including staff welfare, job security, and compliance with social guidelines.

A recent work of Lin et al. (2019) suggests that CSR and corporate financial performance relationship is complicated and tends to be

inconclusive (Hull & Rothenberg, [2008](#)). The inconclusive relationship can be attributed to the fact that organizations carry out their CSR activities without clear financial outcomes. However, managers must also remember that investment in CSR does not pay off immediately; improvements in CFP may be a result of years of CSR engagement. The inconclusive results of the CSR–CRP relationship have led to calls for more studies on this topic (McWilliams & Siegel, [2006](#); Orlitzky et al., [2003](#)). Based on the above discussions, it is hypothesized that:

H3: CSR investments have a significant positive impact on Agribusiness performance in Pakistan.

Mediating Role of CSR Investments between Financial Slack and Firm Performance

There has been extensive research on the slack-performance relationship during the last few decades, but mechanisms linking the variables are ambiguous. There is less research work on the effective utilization of slack resources which may result in positive performance outcomes.

This study intends to reduce the gap between the financial slack and firm's performance by introducing CSR as an intervening variable between the relationships. Tsang ([2006](#)) states that there is a need to test the key drivers as CSR can be a source of competitive aggressiveness of the firms because, now, customers are demanding more environment-friendly products. Therefore, involvement in CSR activities would provide a firm an edge over the others which are less concerned about environmental and social issues.

There are divergent opinions on the accumulation of slack resources for CSR investments. For this study, we have proposed that the performance of a firm can improve if the available financial slack resources are invested in CSR activities.

The resource-based view argues that investments of slack resources in CSR can be a source of competitive advantage for the firms which can help them in improving their performance. Financial slack provides a financial base for CSR initiatives. As such, we propose that CSR investments are mediating mechanisms that direct, transform, and utilize slack for performance gains. Finally, it is considered that CSR investments may have

a mediating effect on the financial slack and firm's performance relationship.

One of the most studied aspects of the role of slack resources is their effect on performance. However, despite several investigations carried out (Gral, [2013](#)), there is still no precise knowledge of how companies make use of the resources to achieve higher returns (Daniel *et al.*, [2004](#); Tsang, [2006](#)). Some recent studies (Carnes *et al.*, [2019](#); Leyva-de la Hiz *et al.*, [2019](#)) have attempted to complete the model by introducing mediating variables. However, the results are not conclusive and leave an opportunity for their deeper analysis. The present study focuses on the missing links in theoretical literature by examining the relationship between financial slack and firm performance by, indirectly, analyzing the role of CSR activities in a developing country like Pakistan.

The findings provide empirical support that CSR does lead to improved financial performance under certain conditions. Accordingly, our findings support the view that CSR would lead to it only if the firm had surplus resources because the financial slack encourages strategic behavior, eases adaptation to a new environment, fosters long-term thinking, and allows the exploration of new investment opportunities that would, otherwise, never be used (Lin *et al.*, [2019](#)). Studies examining the influence of slack resources on CSR engagement have been much limited, and this study can provide a starting point for further researches.

In this study, we propose that companies that have accumulated financial slack resources can improve their performance to the level which would allow them to invest the accumulated resources in CSR activities.

H4: CSR investments positively mediate the relationship between financial slack and Agribusiness firm performance in Pakistan.

H4a: CSR meditates the relationship between available slack and Agribusiness firm performance in Pakistan.

H4b: CSR meditates the relationship between potential slack and Agribusiness firm performance in Pakistan.

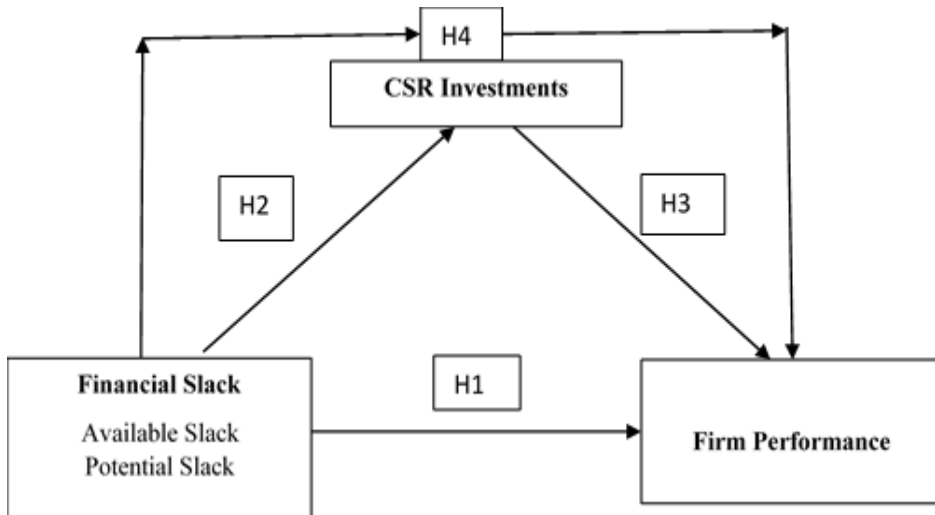
Theoretical Framework

The relationship between the financial slack and the firm performance takes the center stage: we hypothesize that the more the financial slack, the better the firm performance. Subsequently, this study adds to the mediating

variable of CRS activities which intermediates the financial slack and firm performance. The financial slack impacts the CSR activities which, in turn, have an impact on the firm performance.

Figure 1

Theoretical Framework with a Mediator Variable



Methodology

This study uses a sample of sixty-two (62) agricultural production and services firms like agrochemicals, sugar, fertilizers, supply of seeds, agricultural machinery, distribution, processing, retail, and marketing, food and personal care products manufacturing sector listed on the Pakistan Stock Exchange from 2013 to 2018. The study uses secondary data of the companies' annual financial statements. It also takes into account two proxies of financial slack i.e. available and potential slack (Daniel et al., 2004; Gral, 2013). CSR disclosure is measured through the Content Analysis technique by using diverse unit analyses including sentences, word count, and pages. (Majeed & Saleem, 2015). A CSR instrument has been generated for this purpose using previous research in a similar area (Parker et al., 1998). The instrument contains 40 items and has been divided, for carrying out content analysis, into categories like environment-related issues, activities for employees, product/ services statements, other contributions, health sector contribution, and education sector contribution, and work during natural calamities.

The data of 6 years of all the firms are coded under seven categories and 40 items in total. If a certain item reported in the CSR disclosure is disclosed in the annual reports of the firms in a particular year, it is coded as “1” and “0” otherwise and, in the end, all the scores were added to compute the final score of that company. Firm performance is measured through both market and accounting-based measures. Return on capital employed (REC) is used as accounting performance and Tobin’s Q is used as a market base indicator of firm performance (Kyeré & Ausloos, [2021](#)).

In addition to financial slack, firm performance is affected by other factors. To consider them, additional control variables are used. The study used firm size and leverage as control variables. Previous researches agree on a positive effect of firm size on CSR reporting (Lin, Ho, Ng & Lee, 2019). Table 1 presents the operationalization of variables of the study. This study uses Structural Equation Modeling (SEM) to test the theoretical mediation model. The mediation decision is made following four conditions proposed by Baron and Kenney ([1986](#)).

$$RCE_{it} = \alpha + \beta_1 FS_{it} + \beta_2 CSR_{Dit} + \beta_3 S_{it} + \beta_4 LEV_{it} + \varepsilon_i \quad (1)$$

$$TQ_{it} = \alpha + \beta_1 FS_{it} + \beta_2 CSR_{Dit} + \beta_3 S_{it} + \beta_4 LEV_{it} + \varepsilon_i \quad (2)$$

Table 1

Operationalization of Variables

| Variables | Measurement Proxies | Sources |
|--|--|---|
| Financial Slack (FS) | Available slack= current ratio and working Capital Potential slack= Debt to equity and interest coverage ratio | (Daniel et al., 2004 ; Gral, 2013) |
| Firm Performance (FP) (market and accounting-based measures) | Return on capital employed (RCE) accounting performance measure= EBIT/Capital employed Tobin’s Q (market base indicator)= Market value of equity + Preferred Stock +Debt/Assets | (Kyeré & Ausloos, 2021) |

| Variables | Measurement Proxies | Sources |
|--|----------------------------------|---------------------------------------|
| Corporate Social Responsible Investments (CSR) | CSR Disclosure | (Godil et al., 2014) |
| Firm Size (Size) | Natural Logarithm of Total Sales | (Lin et al., 2019) |
| Leverage of Firm (LEV) | Total Debt/ Total Assets | |

Results and Discussion

Table 2 shows the summary statistics i.e. mean, the standard deviation of variables of the study. The values of skewness and kurtosis show that the data is normally distributed. Variance inflation factor (VIF) and tolerance values show that there is no issue of multicollinearity in the data.

Table 2

Descriptive Statistics

| Variables | Mean | S. D | Skewness | Kurtosis | VIF | (1/VIF) |
|-----------|-------|-------|----------|----------|------|---------|
| TQ | 0.169 | 0.34 | -0.02 | 2.38 | - | - |
| RCE | 16.83 | 19.48 | 0.34 | 1.30 | - | - |
| CR | 0.85 | 0.95 | 0.29 | 1.16 | 2.27 | 0.44 |
| WCS | 1.63 | 0.67 | -1.59 | 2.06 | 1.52 | 0.65 |
| DE | 1.42 | 0.83 | -0.92 | 2.06 | 1.71 | 0.58 |
| IC | 0.65 | 0.92 | 0.74 | 1.58 | 1.24 | 0.80 |
| CSR | 0.25 | 0.21 | 1.31 | 2.62 | 1.87 | 0.53 |
| FS | 15.48 | 1.47 | -0.25 | 1.16 | 1.76 | 0.56 |
| Lev | 0-.04 | 0.03 | -0.26 | 2.45 | 2.29 | 0.40 |

Table 3 shows Pearson correlation analysis to check the correlation among the variables. The correlation between available slack and CSR is significant and positive (0.13, $p < 0.05$) which provides initial support for our hypothesis 2a that available slack has a significant positive impact on CSR. However, concerning potential slack, the relationship between debt to equity ratio and CSR is significant but negative (-0.15, $p < 0.01$).

Table 4

Model A: Path analysis coefficients estimating the mediating role of CSR between financial slack and firm performance with RCE as a measure of performance

| | CSR(Med) | RCE | CSR(Med) | RCE | CSR(Med) | RCE | CSR(Med) | RCE | | | |
|----------------|----------|----------|----------------|---------|----------|----------------|----------|----------|----------------|---------|----------|
| | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | | | |
| CR (a) | 0.031*** | 0.50*** | WCS(a) | 0.06*** | 4.59*** | DE(a) | -0.01 | -0.28 | IC (a) | 0.03 | 0.40 |
| CSR(b) | | 0.80*** | CSR (b) | | 0.92*** | CSR(b) | | 0.73*** | CSR(b) | | 0.90*** |
| a*b=c' | | 0.45*** | a*b=c' | | 0.79** | a*b=c' | | -0.14 | a*b=c' | | 0.04 |
| FS | 0.08*** | 0.24** | FS | 0.05** | 0.47** | FS | 0.08*** | 0.28** | FS | 0.08*** | 0.17*** |
| Lev | | -0.61*** | Lev | | -0.45*** | Lev | | -0.53*** | Lev | | -0.59*** |
| R ² | 0.507 | | R ² | 0.537 | | R ² | 0.499 | | R ² | 0.498 | |

Note. *** $p < 0.01 = 99\%$, ** $p < 0.05 = 95\%$, * $p < 0.1 = 90\%$. (a) and (b) are direct effects, a*b=c' is indirect effect

Table 5

Model B: Path Analysis Coefficients Estimating the Mediating Role of CSR between Financial Slack and Firm Performance with Tobin's Q as a Measure of Performance

| | CSR (Med) | TQ | CSR(Med) | TQ | CSR (Med) | TQ | CSR (Med) | TQ | | | |
|----------------|-----------|---------|----------------|---------|-----------|----------------|-----------|---------|----------------|---------|---------|
| | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | Coeff. | | | |
| CR (a) | 0.21*** | -0.68** | WCS(a) | 0.63*** | -0.32** | DE(a) | -0.01 | -0.03 | IC (a) | 0.03 | -0.04** |
| CSR (b) | | 0.61*** | CSR (b) | | 0.56*** | CSR (b) | | 0.21 | CSR (b) | | 0.04 |
| a*b=c' | | 0.24*** | a*b=c' | | 0.14*** | a*b=c' | | -0.04 | a*b=c' | | 0.01 |
| FS | 0.08*** | | FS | 0.08*** | | FS | 0.08*** | | FS | 0.08*** | |
| Lev | | 0.81*** | Lev | | 0.94*** | Lev | | 0.94*** | Lev | | 0.93*** |
| R ² | 0.842 | | R ² | 0.837 | | R ² | 0.422 | | R ² | 0.432 | |

Note. *** $p < 0.01 = 99\%$, ** $p < 0.05 = 95\%$, * $p < 0.1 = 90\%$. (a) and (b) are direct effects, a*b=c' is indirect effect

Table 3
Correlation Matrix

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----|----------|----------|----------|----------|---------|----------|---|
| CR | 1 | | | | | | |
| WCS | 0.47*** | 1 | | | | | |
| DE | 0.49*** | 0.24*** | 1 | | | | |
| IC | 0.39*** | 0.07 | 0.28*** | 1 | | | |
| CSR | 0.05 | 0.13** | -0.15** | 0.01 | 1 | | |
| FS | -0.13** | -0.12** | -0.19*** | -0.08 | 0.58*** | 1 | |
| Lev | -0.67*** | -0.53*** | -0.54*** | -0.20*** | -0.01 | -0.24*** | 1 |

Note. *** $p < 0.01 = 99\%$, ** $p < 0.05 = 95\%$, * $p < 0.1 = 90\%$.

Model A in Table 4 shows the results of Path analysis by considering accounting-based measures of short-run firm performance i.e. return on capital employed (RCE). The result shows both the proxies of available slack i.e. CR and WCS have a significant positive impact on the performance (RCE); when measured with WCS, the value of the coefficient is (4.59, $P < .001$) and the coefficient value of CR is (0.50, $P < .001$). So, hypothesis H1a is supported. However, the results show that both the proxies of potential slack i.e. DE and IC have an insignificant impact on the firm performance (RCE). So, hypothesis H1b is rejected.

The results in Table 4 show a significant positive relationship between proxies of available slack i.e. CR and WCS and CSR as the value of the coefficient is (0.031, $P < .001$) and (0.06, $P < .001$) respectively. The positive relationship between available slack i.e. CR and WCS and CSR activities shows that availability of slack resources will increase the investment in CSR activities in agribusiness firms in Pakistan. Therefore, hypothesis H2a is supported. The results in Table 4 show a significant positive relationship between CSR and accounting-based firm performance (RCE) in the available slack model as the value of the coefficient is (0.80, $P < .001$) and (0.92, $P < .001$) with CR and WCS proxies respectively. The results also pinpoint a significant relationship between CSR and firm performance (RCE) in the potential slack model. The coefficient value is (0.73, $P < .001$) and (0.90, $P < .001$) with DE and IC proxies respectively. The finding is in concordance with the literature (Waddock & Graves, 1997). The positive relationship between CSR activities and firm performance (RCE) shows

that investing in CSR will improve the profitability of agribusiness in Pakistan. Therefore, hypothesis H3 is supported.

Model A in Table 4 shows that the direct effects of CR and WCS on REC and CSR are significant and the indirect effects of CR and WCS on REC in presence of CSR are also significant but the value of the coefficient has been reduced from (0.50, $P < .001$) to (0.45, $P < .001$) in CR model which indicates a partial mediation. Therefore, CSR partially mediates the relationship between available slack and firm performance (REC) in the short run. The findings of path analysis show that the direct effects of available slack (CR and WCS) and CSR on firm performance (RCE) are positive and significant. Moreover, the direct effect of CSR on firm performance is also significant and positive. So, to test the mediation, our conditions are fulfilled that the direct relations among the variables must be significant. Then, we investigated the indirect effect of CR and WCS on RCE in the presence of CSR and it was also significant, but the value of the coefficient was reduced which depicted a partial mediation in our model. Therefore, H4a is accepted. As CSR does not mediate the relationship between the potential slack and firm performance, hypothesis H4b is rejected. They indicate that the short-term performance of the agribusiness firms in Pakistan can be improved using available slack resources from operating activities while the level of debt to equity and interest coverage will not be beneficial. The findings of the study also indicate that, if financial slack is held for a long time, it will affect the performance of Pakistan's agribusiness companies in a negative way. The findings of the study concur with the previous studies which show divergent results related to the slack-performance relationship. The size of the firm and the level of the slack held by the company also influence the slack-performance relationship (Rafailov, 2017). Firm size was controlled for CSR and performance (RCE) and leverage was controlled for just performance (RCE).

The results in Table 5 model B are robust with the market-based long-term performance measure i.e. Tobin's Q where a significant negative relationship exists between financial slack proxies (CR and WCS) and firm performance (Tobin's Q), the value of the coefficient is (-0.68, $P < 0.05$) and (-0.32, $P < 0.05$) respectively. Jensen (1986), using an agency theory standpoint, claimed for an inverse relationship between slack and performance, and pointed out that managers may exploit slack resources

fruitlessly. There can be certain reasons for this negative relationship as, according to the agency, theorist's firms can face agency costs for keeping the resources idle and can create a conflict of interests between shareholders and managers.

Similarly, the results of the relationship between CSR and market-based firm performance (Tobin's Q) in the available slack model and potential slack model are robust. The positive relationship between CSR activities and firm performance (Tobin's Q) in the available slack model shows that investment in CSR will improve the profitability of agribusiness firms in Pakistan. The relationship between available slack i.e. CR and WCS and CSR activities is also robust shows that availability of slack resources will increase the investment in CSR activities in agribusiness firms in Pakistan. Hence, the direct effects of CR and WCS on Tobin's Q and CSR are significant. Further, the indirect effects of CR and WCS on Tobin's Q in presence of CSR are also significant but the value of the coefficient has been reduced from (-0.68 $P < 0.05$) to (0.24, $P < .001$) in the CR model which indicates a partial mediation. So, CSR partially mediates the relationship between available slack and firm performance in the long run. However, CSR does not mediate the relationship between potential slack and firm performance.

The results specify no relationship between CSR and firm performance in the potential slack model in the long run in the agribusiness sector of Pakistan. So, our hypothesis H3 is not supported concerning Tobin's Q. For this model, the firm size was controlled concerning CSR, and leverage was controlled concerning firm performance (Tobin's Q). To avoid the suspected autocorrelation and heteroscedasticity problem, we performed VCE robust tests which made the significance levels more appropriate.

Furthermore, there has been less research on the antecedents of CSR activities in developing countries like Pakistan. Our results are consistent with other studies conducted in developed countries (Orlitzky et al., [2003](#); Waddock & Graves, [1997](#)). Available slack (CR and WCS) has a significant positive impact on CSR while the results of potential slack (DE and IC) are insignificant. It indicates that agribusiness firms of Pakistan having a high level of available financial resources invest in CSR activities but are not interested in taking loans to invest in CSR activities as the impact of potential slack (IC and DE) is insignificant. There can be several reasons behind not taking additional debt by the Pakistani firms. The results of this

study depict that investing cash from operating activities in CSR activities has a significant impact on the performance of agribusiness firms in Pakistan. It was the gap in a slack-performance relationship that this study has tried to reduce, and the results of the study are also supporting our presented model based on the resource-based view.

Table 6
Summary of Hypothesis

| Hypothesis | Statements | Results |
|------------|---|----------|
| H1 | Financial slack has a significant positive impact on the Agribusiness performance of Pakistan. | |
| H1a | Available slack has a significant positive impact on the Agribusiness performance of Pakistan. | Accepted |
| H1b | Potential slack has a significant positive impact on the Agribusiness performance of Pakistan. | Rejected |
| H2 | Financial slack has a significant positive impact on CSR in the Agribusiness of Pakistan. | |
| H2a | Available slack has a significant positive impact on CSR in the Agribusiness of Pakistan | Accepted |
| H2b | Potential slack has a significant positive impact on CSR in the Agribusiness of Pakistan. | Rejected |
| H3 | CSR investments have a significant positive impact on the Agribusiness of Pakistan | Accepted |
| H4 | CSR investments positively mediate the relationship between financial slack and the Agribusiness of Pakistan. | |
| H4a | CSR meditates the relationship between available slack and the Agribusiness of Pakistan. | Accepted |
| H4b | CSR meditates the relationship between potential slack and the Agribusiness of Pakistan. | Rejected |

Conclusion and Recommendations

The study concludes that investing financial slack in CSR activities has a significant positive impact on firm performance as measured by return on the capital employed in agribusiness companies listed in the Pakistan Stock Exchange. It has answered the question of how financial slack can be utilized to improve firm performance because of the fact that keeping the slack resources idle increases agency cost faced by firm. The results show

that the short-term performance of Pakistani agribusiness companies can be improved with the help of available financial slack if invested in CSR activities whereas the long-term performance cannot be improved if financial slack is invested in CSR-related projects in the context of Pakistan. The reason behind short-term and long-term differences can be the opportunity cost of holding financial slack for a long period resulting in a negative relationship in the long run as Tobin's Q is used as a long-term performance indicator. The effect of potential slack is insignificant on CSR which indicates that Pakistan's agribusiness firms are not willing to take extra loans and external funds to make socially liable investments. The findings of the study also indicate that CSR investments partially mediate the relationship between available slack and firm performance in the short run. So, utilizing available financial resources to make environment friendly and socially liable investments can help agribusiness firms to improve their performance. Such investments will create a positive image of the firms in the society as there exist many environmental hazards of agribusiness firms and people will appreciate the CSR initiatives in Pakistan taken by the agribusiness companies.

Managers should explore new and different ways of making CSR investments like community development programs using available excess financial resources. Agribusiness firms can also take advantage of different incentives from the government by showing active participation in the welfare of society. In addition to this the companies can take initiative to manage their waste materials and polluted water without harming the external environment by using slack resources available to them. Agribusiness firms operating in Pakistan must take initiatives to invest their excess financial resources in CSR activities e.g. good working environment for the workers, contribution to education, producing environmentally friendly products, preventing carbon emission to protect the external environment from pollution, taking initiatives towards plantation, free health facilities for the workers and considering the social impact of their investments. This study would help the managers in making rational investment decisions having a positive impact on society as its results show that making CSR investments of financial slack can improve firm performance and it would be a win situation. Slack resources can also be used to provide the employees with better working conditions which will enhance their reputation.

Suggestions for Future Research

Currently, Pakistan is facing critical environmental and sustainability issues. In this context, this study paves the way for other studies to understand the significance of CSR investments for sustainable firm performance. Future studies may be designed to introduce intervening/moderating variables between CSR and firm performance like governance system. Future researchers may also use different performance indicators like EVA to check the impact of investing excess resources in CSR in the long run. They may also explore the kind of risks the firms would face while making CSR investments.

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