Impact of Management Control Systems on Sustainability of Agricultural Small and Medium Firms: Mediating Role of Corporate Social Responsibility (CSR) Practices

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ABSTRACT

Purpose: The purpose of this paper is to determine the impact of management control systems such as self-control and organization’s norms on the sustainability of an organization with mediating role of corporate social responsibility (CSR) practices. The study focused on small and medium enterprises in the agricultural sector and how they can be sustainable by using these factors.

Design/Methodology/Approach: This is a primary study based on quantitative data. The non-probability, convenience sampling is used. The research design includes hypotheses testing whether they are accepted or rejected. Data collection was done through closed-ended questionnaires with a Likert scale. The chosen sample size was 200 however, 184 questionnaires were received back after filling. Smart PLS was used for data analysis.

Findings: Based on the analysis, all the hypotheses were accepted which show that there is indeed an impact of management control systems and organizations norms on an organization’s sustainability and CSR practices play the role of mediator.

Implications/Originality/Value: Originality this study is testing the mediating effect of CSR practices on control systems, organizations norms and sustainability of the firm in the agricultural sector of Pakistan where small and medium enterprises related to the agricultural sector are targeted. There are very few researches that focused on SME’S in the agricultural sector of Pakistan, this study provided a detailed insight into this sector. The study will be of great value to agricultural and SME’s owners on how they can create sustainability in their firm.

Introduction
Concerns relate to both management control systems (MCSs) and (CSR) corporate social responsibility have gradually got the devotion of professionals and scholars alike (Rodgers, 2011); (Durden, 2008); (Norris & O'Dwyer, 2004); (Perrini & Tencati, 2006); (Gond et al., 2012); and (Covaleski et al., 2006). But in different researches, the areas of MCSs and CSR very few studies have examined the role management control systems can play in applying corporate social responsibility activities (Zamani-Farahani & Henderson, 2010); (E. A. Pérez et al., 2007); and (Gond et al., 2012). With the changing business environment, there is intense cut-throat competition and organizations must strive hard to compete. For this, the organization has to be sustainable and this sustainability can be achieved with CSR practices and to be ethical in the business world. Organizational sustainability has different meanings to different organizations. “Whereas one company may be overhauling its business models and processes in a real commitment to green practice, another interprets a sustainable business as a company that will survive the next ten years” (Smith & Sharicz, 2011). Organizations that are not sustainable in terms of CSR practices cannot run in the long run and also, it loses their credibility and consumer base and becomes very difficult to survive in the market. To achieve CSR practices, many factors directly affect the CSR of a company which thus increases sustainability. The sector chosen for this study is the agriculture sector and the research will focus on SME’s which are related to the agricultural industry of Pakistan.

This paper aims to develop a significant relationship between the MCS’s (management control systems) in which two factors are chosen i.e., self-control and Organizational norms with the mediating role of CSR and its impact on the sustainability of SME’s companies which are related to agriculture. In Pakistan agriculture is one of the most important sectors in the economy of Pakistan. To create sustainability in the sector, employees must be performing well. Also, being under government control and on a vast scale, there are chances of unsustainability hence CSR practices are important to remain sustainable. The study will focus on small-medium enterprises in the agricultural sector and how they can be sustainable by using these factors.

Research questions
Following are the research questions of this study:
1. What is the impact of self-control on an organization’s sustainability?
2. How organizational norms can impact the sustainability of an organization?
3. How does CSR mediate the relationship between self-control and organizational sustainability?
4. How does CSR mediate the relation between organizational norms and sustainability?
5. What is the impact of CSR practices on organizational sustainability?

Literature Review
Sustainability
In the literature of sustainability about the recent scenario, attention of companies shifted from the problem that how sustainability issues could be incorporated into organizational processes & systems and why these companies face these sustainability issues (Gnanaweera & Kunori, 2018). In the integration of sustainability within the organizational strategy, exploring the role of corporate control systems means focusing on the processes of internal organization. In short and in a wider sense, corporate control systems or corporate PMSs includes all aspects of organizational control (Maas et al., 2016). An extension of traditional MCSs, Sustainability control systems (SCSs) and Management control systems (MCSs), both control systems combined to form the organizational control. In detail, to ensure that all activities and processes of an organization are aligned to the organizational objectives and
strategies which becomes the aims of MCSs (Riccaboni & Luisa Leone, 2010), similarly, to address the interrelationships between environmental, economic and social issues related to the organizational performance becomes the aims of control related to SCSs (Riccaboni & Luisa Leone, 2010).

In the agriculture sector, social enterprises adhere to exclusive challenges with those challenges faced by small and medium enterprises (SMEs) in this sector. They often work in rural, remote or difficult areas, work with different approaches and innovative products, integrate with suppliers having marginalized, poor, or disadvantaged populations, and they serve in the markets having latent demands. In short, in comparison of small enterprises and that of SMEs, the social impact achieved by small enterprises (SEs) is superior to that of small and medium enterprises (SMEs), because they help to achieve better education, good health, and healthy environmental outcomes and they also help to create different jobs and enhances the income of the farmers.

Corporate Social Responsibility

In the business of companies’ corporate social responsibility is a core element of business. Most companies’ concern about corporate social responsibility describes the highlight of their influence on stakeholders socially, environmentally and financially. In this regard, scholars renowned that social, environmental and economic features integrated to the formal side of management control systems (Perrini & Tencati, 2006); (Albelda, 2011) and (Gond et al., 2012). Only these firms are financially successful which can provide a stable workplace for his employees currently working or seeking employment (Maas et al., 2016). (Gond et al., 2012) claimed those firms which have positive strategies regarding corporate social responsibility, the employees of these firms have positive attitudes to the firms. These positive strategies regarding CSRs of the firms increase the job satisfaction of the employees (Valentine & Fleischman, 2008), (Gnanaweera & Kunori, 2018). Through these positive activities regarding CSR, employees receive low wage rates and this should give an impact on firms’ financial performance (Agyeiwaah et al., 2017). The firms revealed strategies that have socially responsible objectives, the stakeholders will want to work with these firms (Magee et al., 2013).

CSR and MCSs are the new and developing theme of the research (Anagnostopoulos et al., 2016) but it creates a lot of difficulty between CSRs goals and MCSs understanding. To assist in improving better economic performance MCSs developed to align with behavioural and organizational structure. The above-mentioned traditional systems are limited to incorporate the interests other than shareholders to the broad range of stakeholders and to address their interrelationships with financial issues as well as environmental and social issues (E. A. Pérez et al., 2007); (Burritt & Schaltegger, 2010); (Bonacchi & Rinaldi, 2007); (Durden, 2008); and (Norris & O’Dwyer, 2004). Moreover, nowadays, the management control system (MCS) is used by the managers to ensure that they are congruent with corporate social responsibility policies that can be instrumental in transforming company practices, therefore, companies are important contributors to socially responsible behaviour (Gond et al., 2012).

Organizational norms

Currently, to ensure the development of healthy organizational norms, different organizational institutions are providing relatively more significant attention which helps to provide valuable productivity (Singh et al., 2016). For the sake of strengthening the workforce in an organization, different organizations and institutions are struggling to encourage employees for effective communication for meeting the standards of those institutions. The thing which fosters the organizational environment, different institutions as well as organizations try to acknowledge the need for effective practices (Marquis & Raynard, 2015). Different types of employees training seminars, as well as training sessions, are being arranged to ensure the efficient performance of the employees and to enhance the hidden abilities of employees of the organization which leads towards individual and organizational success (Parakandi & Behery, 2016). In the development of employees, the role of the organizational norms is very crucial. However, in affecting the level of productivity and performance of the employees, organizational culture is very important. Similarly, in a few literary studies, the
relationship between employees’ age as compared to his performance is also present.

Many times, organizational norms are the main cause for the failure of executing organizational revolution programs. Academics have recommended that though the tools, methods and change approaches may be present, fundamental culture is failure due to the organization remaining the same. Many studies provide evidence support for those claims (Lee & Seo, 2017). Their results suggest that successful culture change may be dependent on the values and norms of the organization.

**Self-Control**
Self-control is dependent on the resources available in the organization for its success and failure. To avoid routinized, automatic, and imprudent acts in the organization, the organization must have the capability of effective self-control for controlling as well as in maintaining psychological behaviours (DeBono et al., 2011). In one scenario of the organization, the success of self-control occurs when the decisions are made by considering their short term as well as long term results (Ratner et al., 2008). According to (Gillebaart, 2018), success in self-control is a supporter of a system having a cold or hot system. He also elaborates the cold system refers to a state of neutral cognitive and emotional neutrality whereas the hot system is described, as affective mental representations which elicit impulsive reactions. To attain long-term objectives (e.g., losing weight by an individual), self-control is the strength to prevent direct benefits (e.g., eating fats and creamy cakes). On the other side, the failure of self-control addresses the state where resources are not available for self-control. Hence, the result of the failure of self-control by the individual in the short term causes different acts like inconsistent, automatic, thoughtless and habitual behaviour (Burritt & Schaltegger, 2010); (Hagger et al., 2010; (Gillebaart, 2018).

Indirectly, self-control has been investigated in the organizational field as a part of higher-order characteristics like conscientiousness. Here we can define conscientiousness as a dutiful, determined, orderly, purposeful, well-disciplined, punctual, highly reliable, and responsible character (Chan et al., 2012), and it is negatively related to counterproductive work behaviour (Tziner et al., 2020), whereas this characteristic is positively related to job performance (Gnanaweera & Kunori, 2018). We can further elaborate on the lower-order personality traits, where self-control can be conceptualized as being a lower-order personality trait or aspect of conscientiousness. The author (Tangney et al., 2014) conscientiously described the characteristic of personality that the important component of behaving is the ability to control oneself.

![Research Framework](image)

**Hypotheses**
1. There is a positive impact of self-control on organizational sustainability.
2. There is a positive impact of organizational norms on organizational sustainability.
3. There is a positive impact of CSR practices on organizational sustainability.
4. There is a positive impact of self-control on CSR practices.
5. There is a positive impact of organizational norms on CSR practices.
6. Corporate social responsibility (CSR) practices mediate the relationship between self-control and organizational sustainability.
7. Corporate social responsibility (CSR) practices mediate the relationship between organizational norms and organizational sustainability.

**Research Methodology**

**Research design**
In this research primary data collection method is used, where first-hand data will be collected from the employees of SME’s related to the agricultural industry of Pakistan. The research will be quantitative as analysis will be done of the collected data.

**Data collection method**
The data will be collected through a questionnaire which will be adapted. The questionnaire will be a closed-ended structured design based on the Liker scale. It will have a part on demographics and items related to the variables.

**Population**
The population of the study, are the employees who are currently working in the small and medium enterprises (SME’s) in the agricultural industry of Pakistan.

**Sample Size**
The sample size of this study was 200 and questionnaires were distributed among 200 people however, 184 questionnaires were received back after filling. Non-probability-based convenience sampling technique under random sampling is used. In this, respondents are randomly chosen based on their availability.

**Data analysis software**
For data analysis using Smart PLS. Co-relation, regression and descriptive analysis tests to check the hypothesis. Barron and Kenny’s test used to be applied for mediation analysis.

**Data Analysis**
Confirmatory Factor analysis was run to drop the unwanted items from the model. The cut-off value for the respective items to drop was 0.4 and the items that were showing a weak loading of 0.4 were dropped while all the other variables which were showing values greater than 0.7 were the part of the model to run the further analysis for more authentic results as also suggested by previous researchers (Adresen, 1988). As for instance the lowest values for each variable were (CSR=0.782, ON=0.778, S=0.766, SC=0.756).

Figure-1
Factor Loadings
Table-1
Confirmatory Factor Analysis

<table>
<thead>
<tr>
<th></th>
<th>CSR</th>
<th>ON</th>
<th>S</th>
<th>SC</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR1</td>
<td>0.864</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR2</td>
<td>0.919</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR3</td>
<td>0.792</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSR4</td>
<td>0.784</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ON5</td>
<td></td>
<td>0.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ON6</td>
<td></td>
<td>0.881</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td></td>
<td></td>
<td>0.766</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td></td>
<td></td>
<td>0.854</td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td></td>
<td></td>
<td>0.850</td>
<td></td>
</tr>
<tr>
<td>SC1</td>
<td></td>
<td></td>
<td></td>
<td>0.814</td>
</tr>
<tr>
<td>SC2</td>
<td></td>
<td></td>
<td></td>
<td>0.887</td>
</tr>
<tr>
<td>SC3</td>
<td></td>
<td></td>
<td></td>
<td>0.756</td>
</tr>
</tbody>
</table>

While the analysis showed the composite reliabilities for each respective variable as (CSR =0.869, ON=0.817, S=0.864, SC=0.861 and it should be noted here that the recommendations suggest that the values must be greater than 0.7 while for average variance extracted the acceptable recommended value was higher than 0.5 and the table shows minimum value 0.674 hence proving the acceptable range for the item.

Table-2
Constructs Reliability & Validity

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSR</td>
<td>0.861</td>
<td>0.869</td>
<td>0.906</td>
<td>0.708</td>
</tr>
<tr>
<td>ON</td>
<td>0.791</td>
<td>0.689</td>
<td>0.817</td>
<td>0.691</td>
</tr>
<tr>
<td>S</td>
<td>0.764</td>
<td>0.764</td>
<td>0.864</td>
<td>0.680</td>
</tr>
<tr>
<td>SC</td>
<td>0.761</td>
<td>0.799</td>
<td>0.861</td>
<td>0.674</td>
</tr>
</tbody>
</table>

Furthermore, the Cronbach’s alpha value range is as (CSR=0.861, ON=0.691, S=0.764 ad SC=0.761), thus providing a model that has the acceptable item and variable loadings as well. The corresponding VIF values were below 2.717 showing that there is no observed problem of multi-collinearity among variables.
Path analysis model Boot Strapping

The above figure presentation shows the AVE values as the centric model while each variable is representing the item loadings as well. Corporate Social Responsibility Practices (CSR) is acting as a mediator between the variables while Self-control (SC) and Organizational Norms (ON) are acting as independent variables.

**Table 3**

|                   | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values | Decision |
|-------------------|---------------------|-----------------|---------------------------|--------------------------|----------|----------|
| CSR -> S          | 0.338               | 0.352           | 0.087                     | 3.861                    | 0.000    | Supported|
| ON -> CSR         | 0.772               | 0.767           | 0.049                     | 15.734                   | 0.001    | Supported|
| SC -> CSR         | 0.166               | 0.173           | 0.070                     | 2.371                    | 0.020    | Supported|

CSR = Corporate Social Responsibility, S = Organizational Sustainability, ON = Organizational Norms, SC = Self-control

From the above table, it is clear that all direct relations corporate social responsibility practices, organizational norms, and self-control have a significant impact on organizational sustainability.

**Table 4**

|                   | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values | Decision       |
|-------------------|---------------------|-----------------|---------------------------|--------------------------|----------|---------------|
| ON -> CSR -> S    | 0.261               | 0.269           | 0.064                     | 4.055                    | 0.000    | Partial Mediation|
| SC -> CSR -> S    | 0.056               | 0.063           | 0.035                     | 1.614                    | 0.110    | Full Mediation |

From the above table indirect relations, it is clear that corporate social responsibility practices partially mediate the relationship between organizational norms and organizational sustainability while corporate social responsibility practices fully mediate the relationship between self-control and organizational sustainability.

**Discussion and Conclusion**

**Discussion**

Corporate Social Responsibility (CSR) is that element of the business where the business organization returns something as their ethical and moral responsibility to the society (S. Pérez et al., 2018). In addition to this, corporate social responsibility (CSR) also helps the business to create and maintain a soft image and goodwill for the business organization (Lee & Seo, 2017). In addition to this, the objectives of corporate social responsibility (CSR) help the business organization to achieve and attain sustainability (Wolff et al., 2019); and (Kong et al., 2019).

This current research study is based on determining the impact of management control systems such as those which are related to self-control and the norms of the organization on the sustainability of the organization. In addition to this, the current research was done in such a manner to determine this impact with the moderating role of corporate social responsibility (CSR) practices. Moreover, for this current research the agricultural sector of Pakistan has been chosen and the

The results of the current study have been obtained by using mathematical and statistical methods and testing on the data that was collected through the survey questionnaire for this research. The results of
the current research study indicate that the relationship between the independent variable self-control of the organization with the dependent variable organizational sustainability is mediated through the moderating variable of Corporate Social Responsibility (CSR). The results also indicate that the second independent variable which is Organizational Norms has a positive relationship with the dependent variable, Organizational Sustainability and this relationship is also mediated by the mediating variable Corporate Social Responsibility. This result was obtained by using the path analysis model and the method of bootstrapping. The results of this current research study indicate that the SMEs which are associated with the agricultural sector of Pakistan contribute towards corporate social responsibility (CSR) and know about its importance.

This means that corporate social responsibility plays a vital role in creating a sustainable organization. In addition to this, it also indicates that the self-control of the organization and the organizational norms of the organization become more effective when the organization has a strong and effective CSR strategy in place (Azaz, 2018). This also indicates that corporate social responsibility (CSR) is not just an element of the corporate business management that helps with the soft image of the organization, but is also one of the vital elements of an organization that help in the sustainability of the organization. In addition to this, it has also been revealed that the agricultural sector of Pakistan is one such business sector of Pakistan that knows the importance of corporate social responsibility and has made efforts to implement corporate social responsibility (CSR) in their business activities so that the agricultural sector of Pakistan can not only play its part in the wellbeing of the society but can also help with the sustainability of the SMEs which are associated with the agricultural sector of Pakistan (Shahzad et al., 2020).

The corporate culture can enhance the performance of the business if the culture of the organization is such which enables and implements such strategies which allow the employees to have room for innovation and growth. This in turn helps the organization to achieve a high level of organizational productivity and organizational sustainability (Manzoor et al., 2019). In addition to this, it has also been observed that a sustainable organizational culture does not only helps with the productivity of the organization but also helps with the element of profitability of the organization. The profitability of an organization is directly related to the financial stability and financial growth of an organization and thus, an organizational culture eventually helps the organization to have better financial stability (Ikram et al., 2019).

The element of achievement of the goals and objectives of the organization are also such which help with creating and maintaining the sustainability of the organization (Kim & Thapa, 2018). This means that properly defined goals and objectives of the organization lead to organizational stability (Ikram et al., 2019).

**Recommendations**

As with any other research, the current research helps in answering some of the most important research questions that were put forward at the start of this current research. In light of the objectives of the current research and the research questions that were answered through the current research. Following are some of the important recommendations that are made by the researcher to the SMEs which are associated with the agricultural sector of Pakistan. These recommendations are made by analysing the results of the current research study.

- It is recommended that the SMEs which are associated with the agricultural sector of Pakistan should firstly consider it as important as any other business sector of the country. This means that the business management practices that apply to any other business sector of the country, also apply to the agricultural sector of Pakistan as well and the organizations and the small businesses which are associated with the agricultural sector of Pakistan should strive to make their business mode more sustainable.
• In addition to this, it is also recommended that the agricultural sector of Pakistan start to implement modern methods of agricultural productivity in the sector. This would not only increase the productivity and the profitability of the businesses which are associated with the agricultural sector of Pakistan but will also help the sector to compete with the international market not only based on product quality but also based on the operations of the business sector.

• It is recommended to the government of Pakistan that the government should put in more efforts toward the element of research in the agriculture sector. This means that the research should be based on the business aspects of the agricultural sector as well. This means that such research should be done on this sector which would help the agricultural sector of Pakistan to adapt to the latest and the international trends of business management and help the agricultural sector of Pakistan to become one of the major sources of economic development in the country.

**Area of Future Research**

There are many areas where this current research can be improved. In addition to this, the same framework of the current research can be used for future research with the addition of more variables. Following are the areas where future research can be done the same research can be carried forwarded and the work can be extended on it.

• Currently there are two independent variables in this current research. For future research, the researcher can use more than these two variables and add more variables such as organizational hierarchy and organizational profitability as the independent variables. This will help in determining the effects of these variables on the sustainability of the SMEs in the agricultural sector of Pakistan.

• The current research uses only organizational sustainability and determines the impact of the independent variables on the organizational sustainability of the organizations in the agricultural sector of Pakistan. However, as an area of future research, the current study can have more than one dependent variable and the impact of the independent variables can be determined on various other elements of the business organization such as productivity and profitability. The elements of productivity and profitability as the dependent variables would help in determining the effects of organizational norms and self-control on these two variables as well.

• The variable, corporate social responsibility has been used as the mediating variable in the current framework of the current research study. However, the same variable can also be used as the moderating variable in the framework and the impact of (CSR) as a moderating variable can also be determined as an area of future research of the current research study.

• The same framework that is used in this current research for the agricultural sector can be used to determine the same impact on the variables on any other business sector of Pakistan and a better understanding can be obtained of the importance of Corporate Social Responsibility (CSR) on any business sector.

**Conclusion**

The current research study helps in understanding how the element of self-control plays a role in the sustainability of the organization. In addition to this, the current research study also helps in determining the impact of organizational norms on the sustainability of an organization in the agricultural sector of Pakistan with the mediating role of (CSR).

CSR is of importance in the relationship between these two variables with the dependent variable of organizational sustainability. This means that corporate social responsibility (CSR) has an important role to play in achieving and maintaining the sustainability of an organization in the agricultural sector of
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