THE IMPACT OF INCLUSIVE BUSINESS ON ETHICAL VALUES & INTERNAL CONTROL QUALITY: AN ACCOUNTING PERSPECTIVE

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Abstract

The objective of this paper is to examine the impact of inclusive business on the internal ethical values and the internal control quality while conceiving the accounting perspective. I construct the hypothesis for this paper based on the potential impact on the organizations' awareness to be directed to the inclusive business approach that will significantly impact the culture of the organizations then the ethical values and the internal control quality. I use the approach of the expected value and variance of random variable test in order to analyze the potential impact of inclusive business. I support the examination by discrete probability distribution and continuous probability distribution. I find a probability of 85.5% to have a significant potential impact of the inclusive business by 100% score on internal ethical values and internal control quality. And to help contribute to sustainability growth, reduce poverty and improve organizational culture and learning.

Keywords: Inclusive Business, Ethical Values, Internal Control Quality, Accounting

1. INTRODUCTION

This paper generates the awareness of organizations to direct their cognition to the perspectives of current efforts of accounting and accounting boards to implicitly improve the ethical values and the internal control quality of organizations (See, e.g., APESB 2012; AICPA 2015; IESBA 2015). I construct my point in this paper on the hypothesis that, if organizations awareness are directed to aid the society and contribute to it, particularly to the poor people, there will be a significant impact on the internal ethical values and the internal control quality in such organizations, which is resulting from the expected alteration of internal culture in the organizations about ethics to the awareness about poor and problems of the societies whilst conceiving the accounting perspectives.

As a demand to change and develop organizational culture, I find the perspective of IFC&OECD a value-add to improve and develop such organizational culture. By analyzing the studies in this regard of so called inclusive business, I find several evidences, WBCSD & SNV (2006) state that inclusive business is the one which seeks to contribute to the poverty alleviation by including lower - income communities within its value chain while not losing sight of the ultimate goal of business, which is to generate profits.

Researchers also provide evidences in this context. Gradl and Knobloch (2010) states that inclusive business integrates people living in poverty into the value chain as consumers or producers, UNDP (2008) states that inclusive business models build bridges between business and the poor for mutual benefits, and WBCSD & SNV (2011) state that inclusive business models integrate low-income communities in its value chain for the mutual benefit of both the company and the community.

Moreover, BIF (2011) states that inclusive business goes further in creating new economic opportunities for people living in poverty, perhaps as workers or consumers of affordable goods or services, or as participants in low carbon and climate resilient growth. Besides, Hahn (2012) demonstrates that the idea of inclusive business is mainly derived from the observation that business activities can contribute to the long-term goal of poverty alleviation by embedding the neglected poor part of the world population into efficient value chains and market structures both as consumers and as producers or distributors, which in turn can affect the economic outcomes as facilitator of human-well-being.

In this regard, financial crisis and ethical issues, notably arose from accounting ethical dilemmas, have contributed to the change of various concepts in regard to how the business models are arranged and planned. In the past decades, the organizational culture has led to introducing new perspectives, and to recommend a rethinking and reshaping of the business and the economic development (See, e.g., Heskett 1992; Syvanterk & Bott 2004; Hislop 2013; Vasenska 2013; Kambiz & Aslan 2014).

Hislop (2013) assumes that organizational culture is a significant factor to effective innovation and learning, because organizational culture forms values, beliefs, and work systems that could boost or impede both learning and knowledge sharing. I support in this study that organizations will require different organizational culture to contribute to the accounting perspective of accounting boards and the accounting studies to improve the ethical values and internal control quality of organizations.
This is a concept that can be growing by the organization learning to improve organizational culture. Moreover, inclusive business is interesting for companies because it can offer new opportunities for innovation, growth, and competitiveness at the same time as positive social and development impact, and also interesting for the poor because it brings greater access, choice, and opportunity in their lives and future (See, e.g., Jenkins & Eriko 2010; BIF 2011; Virginié & Filippo 2011; Golja & Pozega 2012).

In regard to inclusive business recognition and definition, appears the innovation initiatives, and empirical evidence suggests that organizational culture should consider paying more attention to the factors which affect corporate innovation while at the same time developing ethical codes and values and higher quality of internal control (See, e.g., Homburg & Pflesser 2000; Gregory et al. 2009; Hogan & Coote 2013; LI2 & LIU3 2014; Serpa 2015).

Accounting perspective addressed in this study is based on improving the ethical values and internal control quality and can be concluded from empirical results revealing problems in the area of the code of ethics for professional accountants and also in the area of applying accounting standards and principles, for instance, such as conservatism and its subsequent problems of earnings quality, accounting estimates, and risk management (See, e.g., APESB 2010; AICPA 2014; IESBA 2015; Choi and Pai 2011; Simon et al. 2015; Ferraro et al. 2015).

On the other hand, I hypothesize that, inclusive business approach impacts the internal culture of organizations about ethics values in general, as by applying the approach, it is probable that the business awareness for ethical values will improve to the degree of attaining high quality internal control and avoiding ethical fraud dilemmas, as a result for directing the organizations' staff and managers for community awareness rather than self-awareness.

This paper's major question is: "Is there an impact of inclusive business on ethical values and internal control quality, whilst conceiving the accounting perspective?". To that effect, this paper examines the expected value of the impact of inclusive business on improving ethical values and internal control quality, using a probability distribution of inclusive business scores indicating their significant impact and based on the number of associated variables of inclusive business, as to result in estimating the probabilities and to show the quality of the expected impact of inclusive business on ethical values and internal control quality.

This paper uses the expected value and variance of a random variables test to analyze the impact of inclusive business. The Empirical results as for the current stage of this paper shows that 0.858 is the highest probability for the impact of inclusive business by 100% to help assure my estimated findings that there is a significant impact of inclusive business on the improvement of ethical values and internal control quality.

2. LITERATURE REVIEW

Increasing awareness about sustainability has directed the business environment to the alertness of the significant negative influences. As, business encounters low performance and problematic organizational culture, society encounters poverty and high level of ignorance due to corruption, educational problems, lack of career opportunities, gendered problems, that all contribute negatively to the approaches of sustainability growth and their role in livelihood.

In the context of studies related to organizational culture, this study hypothesizes an impact on organizations' learning and organizations' capabilities and can provide suitable environment for innovation (See, e.g., Skerlavaj et al. 2010; Cameron & Quinn 2011).

Consequently, providing an expected improvement in the internal ethics values and internal control quality as an accounting perspective. IFC & OECD (2015) address how to overcome most of these problems through the perspective of inclusive business, as to address the problem of how to interact with others, with clients and stakeholders by expanding the studies and their results, and to expect an improvement in the organizational culture and subsequently to impact creating and improving the perspective of inclusive business. On the other hand, I hypothesize a potentiality of a significant impact of inclusive business on business offering new opportunities for innovation and entrepreneurial initiatives. Therefore, it has become an option for most of the problematic organizational culture as to improve it and assist in the growth of ethical values and strengthening internal control quality and the consciousness of the organization from the accounting perspective.

Few studies highlight the potential of impact of innovations on the short-term and long-term economic growth and sustainability which are negatively affected by global financial and economic crisis (See, e.g., OECD 2010; LI2 & LIU3 2014; Stoffers et al. 2015). Also, few studies show the way an organization learns and adapts (Vasenska 2013).

Kambiz & Aslan (2014) reveals that organizational culture exerts a complete mediating effect on organizational innovation through organization learning. Therefore, organizational culture has a significant impact on employees, people and groups in a variety of ways by interacting with each other, stakeholders and clients (Ahmed et al. 2014), whereas, organizations are affected by their culture, and consequently expecting to improve internal ethical values and internal control quality from the accounting perspective.

In this regard, awareness has contributed to study the relations among inclusive business, sustainability, innovation, and accounting perspective for internal ethical values and internal control quality. Studies that have contributed to the regard of inclusive business are promising for the expected future of this accounting perspective in the organizations. Thus far, the inclusive business studied in the literatures suggest that business can contribute to alleviating poverty in economically feasible ways (See, e.g., Prahalad & Hammond 2002; Prahalad 2005 & 2009; UNDP 2008).

Halme et al. (2012) state that for this approach of inclusive business, organizations should seek to utilize whatever scarce sources are available, as for instance, substantial amounts of their free time, private-life roles and networks, or previously discarded technologies. Also, in order to promote
their inclusive innovation, and to mobilize internal and external resources, Halmé et al. (2012) also, find an implication that intrapreneurial bricolage may be of fundamental importance in multinational corporations innovation for inclusive business.

Sano (2014) shows that disability - related knowledge of entrepreneurs with disabilities could contribute to business performance according to the key success factors to enhance added value among the elements of the value chain of organizations as a method for disability - inclusive business. Hahn (2012) focuses on the influence of inclusive business approaches on various aspects of human dignity and provides exploration insights as bases for future theory buildings, his analysis culminates insight that dignity can be if not already, assured and promoted by deliberately including the poor into relevant value-added business processes.

On the other hand, innovations preserve to promote the influence of inclusive business. George et al. (2012) find considerations of inclusive innovation points to inequalities that may arise in the development and commercialization of innovations, and also acknowledges the inequalities that may occur as a result of value creation and capture.

In few studies, challenges and issues of inclusive business are represented by respective points, Phrahalad and Hammond (2002) also Esposito et al. (2012), argue that the base of the pyramid segment living in the developing economies poses an untapped opportunity for global organizations to design and implement inclusive business models for solving the real problems of energy, healthcare, education, water, sanitation, in formation, finance, housing, and transportation and other issues as well.

Nevertheless, Jenkins and Erik (2012) states challenges to inclusive business as lack of infrastructure, low levels of knowledge, and skills, and limited access to finance for low income consumers and producers. Also, other studies can show challenges as associated with poverty on top of the usual uncertainty associated with and business endeavor (See; e.g. Virgins and Filippo 2011; Halmé et al. 2012; Wach 2012).

Halmé et al. (2012) finds indications that these challenges may be engaged in acting like entrepreneurs within their organization and try to bundle scarce resources in creative ways in order to further their innovations. Furthermore, Wach (2015) finds that whilst challenges, organizations are unable to provide information about the actual impacts of business activities, and more higher quality, and less partial inclusive business evaluations are needed to better enable harnessing the potential for business to contribute positively to the development.

Afterwards, I address the major issue for challenges facing inclusive business in a more propounded manner in respect to the organizational culture about internal ethical values and the subsequent internal control quality from the accounting perspective as a challenge questioning their expected improvement and their association with inclusive business. The considerable studies in this context of accounting perspective are presented in their various contribution to impact the improvement of ethical values and internal control quality.

Wang et al. (2014) demonstrates that companies which have enhanced their internal control are more conservative, and in the context of accounting literature and perspective, the conservatism is driven from accounting ethics to apply the GAAP and IFRS. Thus, Wang’s results show that the quality of internal control and accounting conservatism is positively correlated. So, the conclusion is directed to the ethical values.

Schroeder and Shepardson (2014) find that internal control audits initially provided internal control quality benefits. And to my view, this provides evidence for ethical values when applying the GAAS in organizations. Defond (2015) finds auditing boards’ ability to remediate deficiencies in auditors’ internal control audit procedures. This also, to my view is subjected to ethical values for applying the GAAS. On the other hand, Wang et al. (2016) find that the high quality of internal control significantly promoted the fulfillment of corporate social responsibility in the levels of shareholders and government, which I hypothesize as a probable driver to expand the principles of corporate social responsibility to grow into the approach of inclusive business, as to, expect its contribution and impact on improving the business internal ethical values and internal control quality.

Herein, Floyd (2016) finds internal control weakness indicates an elevated risk of material misstatement, and there is evidence that additional disclosures attenuate the negative information environment effects of an internal control weakness. To my view and in this regard, the organizations should avoid such risk by growing their internal ethical values and subsequently internal control quality, and in the meantime, disclose the contributions to the society through inclusive business approaches, and methods used by the organization in this regard.

To my view, if internal control quality has a significant correlation to ethical values, consequently, this will promote the business and corporations to expand the contribution and impact to community and the poor levels in the societies as one of the major accounting perceptive in the organization following the standards of sustainability.

Moreover and formerly, IFC (2015) shows their investment in hundreds of companies using the inclusive business approaches as these companies have achieved commercial sustainability and growth while benefiting the poor, and recommend lessons to learn by organizations worldwide.

My study mainly recommends among other things, to study the impact of inclusive business on ethical values and internal control quality, from an accounting perspective as to provide evidence for expected significant impact based on a probability approach of study. Which I find a little lack in the previous literature in this regard of study.

In this essence, this paper examines the expected value of inclusive business for a probability distribution of inclusive business scores for a sample of associated variables subjected to ethical values improvement and internal control quality, based on estimate of their probabilities to show the potentiality of the impact of inclusive business on the organizational culture perceived by the improvement of ethical values and internal control quality.
3. METHODOLOGY

This paper studies whether there will be an impact of inclusive business on the improvement of internal ethical values and internal control quality from the accounting perspectives. I use estimations of probabilities to help predict this potential impact. Therefore, the two hypotheses of this paper are as follow: H1: There is a potential impact of inclusive business on the improvement of internal ethical values and internal control quality, and H2: There is no potential impact of inclusive business on the improvement of internal ethical values and internal control quality.

3.1 Data

The optimistic estimation of data of this paper is clear in the selection of data to help predict the idea of this paper. Thus, in the essence of estimations subjected to conclusions from interviews, discussions, searching and readings in the business community in various fields, I suggest sitting the data based on the inclusive business percentages of impact to contribute to improving ethical values and internal control quality (\( x \)). Whereas, I assign the impact percentages for a major 6 estimations ranging from 0 to 100%, as, 0%, 20%, 40%, 60%, 80% and 100%. Subsequently, the significance of expected number of variables (\( n \)) to contribute to the impact of inclusive business are estimated based on interviews, discussions, searching and readings, these variables are estimated to be 15 significant variable related to organization engagement with multi stakeholders, regoverning the market, the business models to use for alleviating poverty, intrapreneurial bricolage in multinational corporations, innovations and inequalities, inclusive development, new opportunities for innovations, positive social and development impact, including low-income community in the value chain, creating jobs and livelihood opportunities for low income people and households, expansion of employment, entrepreneurial opportunities, innovate-operate and grow, create new markets, and disability inclusiveness, that all are expected to attain the inclusive business impact to the contribution to improving ethical values and internal control quality.

These 15 variables are associated to the inclusive business percentage of impact as there is an estimation that with zero variables there is a \( P(x) = 0.00 \) probability of contribution to the impact of inclusive business by 0%, with 1 variable there is \( P(x) = 0.07 \) probability of contribution to the impact of inclusive business by 20%, with 2 variable there is \( P(x) = 0.13 \) probability of contribution to the impact of inclusive business by 40%, with 3 variable there is \( P(x) = 0.20 \) probability of contribution to the impact of inclusive business by 60%, with 4 variable there is \( P(x) = 0.33 \) probability of contribution to the impact of inclusive business by 80%, with 5 variable there is \( P(x) = 0.33 \) probabilities of contribution to the impact of inclusive business by 100%.

Table (1) presents the sample observations by percentage of impact of inclusive business (\( x \)) and the probability distribution \( P(x) \) based on the estimations of expected number of variables (\( n \)) to contribute to the expected impact.

3.2 The Model

To predict the impact of inclusive business on improving ethical values and internal control quality, I examine the expected value of inclusive business percentage of impact for a probability distribution of inclusive business scores (\( x \)) for a sample of associated variables (\( n \)) subjected to ethical values and internal control improvements and organization culture and based on estimation to their probabilities to show the appearance of prediction impact.

Therefore, I use the MINITAB statistical package, to run the expected value and variance of random variables test in order to analyze the potential impact of the inclusive business, and then I support this examination by discrete probability distribution and continuous probability distribution. This analysis to obtain takes the following formats:

\[
E(x) = \sum xP(x) 
\]

Where:
\( E(x) \) = the expected value of the inclusive business percentage of impact
\( x = \) Inclusive Business Percentage of impact to Contribute to improving ethical values and internal control.

\[ P(x) = \text{The probability distribution of the number of variables that will contribute to the impact of the inclusive business.} \]

\[ Var(x) = \sum (x - \mu)^2P(x) \]

Where:
\( Var(x) \) = the variance summary of the variability in (\( x \))
\( x = \) Inclusive business percentage of impact to contribute to the ethical values and internal control
\( \mu \) = the mean

\( P(x) \) = The probability distribution of the number of variables that will contribute to the impact of the inclusive business.

4. RESULTS

Table 2 shows the results of the expected value of the inclusive business percentage of impact to contribute to the ethical values improvement and internal control quality (\( x \)), the table shows the calculations as the expected value of (\( x \)) = \( \sum xP(x) \) and \( P(x) = 73.2 \) as the percentage of impact of using the inclusive business to contribute to the ethical values and internal control quality for all variables. Therefore, I can initially predict that 73.2% to be the percentage of the impact of the inclusive business. Thus, over the time and by the development of inclusive business, the percentage of inclusive business success can be predicted using the 73.2% expected value and to predict average number of variables (\( n \)) that would contribute to the impact of inclusive business, and as I estimated 15 variables (\( n \)), so, (15 \times 73.2\%) = 11 variables approximately and can be predicted as to help contribute to the impact of inclusive business, and their importance can be ranked based on the highest probability in the probability distribution.
Table 1. Sample Observations By Percentage of impact of Inclusive Business & the Probability Distribution

<table>
<thead>
<tr>
<th>The Percentage Impact on Improving Ethical Values &amp; Internal Control Quality, from the Accounting Perceptive.</th>
<th>Expected Number of Variables to Contribute to the Impact of the Inclusive Business*</th>
<th>The Probability Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>(x)</td>
<td>(n)</td>
<td>P(x)</td>
</tr>
<tr>
<td>0%</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>20%</td>
<td>1</td>
<td>0.07</td>
</tr>
<tr>
<td>40%</td>
<td>2</td>
<td>0.13</td>
</tr>
<tr>
<td>60%</td>
<td>3</td>
<td>0.20</td>
</tr>
<tr>
<td>80%</td>
<td>4</td>
<td>0.27</td>
</tr>
<tr>
<td>100%</td>
<td>5</td>
<td>0.33</td>
</tr>
<tr>
<td>15</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>


Table 2. Results of Expected Value of Inclusive Business Percentage of Impact

<table>
<thead>
<tr>
<th>x</th>
<th>P(x)</th>
<th>xP(x)</th>
<th>Ex(x) = Σ(x)P(x)</th>
<th>x-Ex(x)</th>
<th>(x-Ex(x))^2</th>
<th>[x-Ex(x)]^2 × P(x)</th>
<th>Var(x)</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>0.00</td>
<td>0.00</td>
<td>73.2</td>
<td>-73.2</td>
<td>5358.24</td>
<td>0.00</td>
<td>625.76</td>
<td>25.02</td>
</tr>
<tr>
<td>20%</td>
<td>0.07</td>
<td>1.4</td>
<td>-53.2</td>
<td>1102.24</td>
<td>198.117</td>
<td>143.291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40%</td>
<td>0.13</td>
<td>5.2</td>
<td>-33.2</td>
<td>174.24</td>
<td>34.848</td>
<td>12.485</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60%</td>
<td>0.20</td>
<td>12.0</td>
<td>-13.2</td>
<td>46.24</td>
<td>12.485</td>
<td>625.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80%</td>
<td>0.27</td>
<td>21.6</td>
<td>6.8</td>
<td>46.24</td>
<td>12.485</td>
<td>143.291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td>0.33</td>
<td>33.0</td>
<td>26.8</td>
<td>718.24</td>
<td>237.019</td>
<td>552.56</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 also shows the variability summarized by the variance Var(x) which = 625.76 to indicate how far a particular percentage of inclusive business impact from the expected value Ex(x), and in this regard it is 625.76 - 73.2 = 552.56 and the standard deviation = 25.02 indicating low variability and significant prediction for the impact of inclusive business. Figure 1 shows the normal probability distribution for the inclusive business percentages of success, as it is optimal to have the percentage of success 100% with the Ex(x) = 73.2 and standard deviation = 25.02, where it shows the expected percentage of inclusive business impact for each percentage in the range of 0%, 20%, 40%, 60%, 80% and 100%. The Minitab shows the normal probability distribution as the area of P(x ≤ 100%) = 0.8580 and the shaded area on the scale = 0.05.

Figure 1. The Normal Probability Distribution For The Inclusive Business Percentages of impact
The normal probability distribution for the inclusive business percentages of impact, as it is optimal to have the percentage of success 100% with the Ex (x) = 73.2 and standard deviation = 25.02, where it shows the expected percentage of inclusive business impact for each percentage in the range of 0%, 20%, 40%, 60%, 80% and 100%.

Table 3 shows the overall normal probability distribution as an indication for the highest probability of inclusive business success.

<table>
<thead>
<tr>
<th>Inclusive Business Percentage of impact to Contribute to Ethical Values &amp; Internal Control Quality</th>
<th>The Normal Probability Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>(x)</td>
<td>P (x)</td>
</tr>
<tr>
<td>60%</td>
<td>0.299</td>
</tr>
<tr>
<td>100%</td>
<td>0.858</td>
</tr>
<tr>
<td>0%</td>
<td>0.002</td>
</tr>
<tr>
<td>80%</td>
<td>0.607</td>
</tr>
<tr>
<td>20%</td>
<td>0.017</td>
</tr>
<tr>
<td>40%</td>
<td>0.092</td>
</tr>
</tbody>
</table>

On the other hand, continuous probability distribution can also assure and confirm the percentage of impact to inclusive business as the results show that \( P (x = 100) = 0.858 \), which is identical to the normal probability distribution at percentage of the 100% impact. This paper results are supportive to the expected impact of inclusive business on the improvement of ethical values and internal control quality, as it is potential that 0.858 is the probability of the impact of inclusive business by 100% to help attain the \( H_0 \) of this paper. This can be interpreted by the significant impact this perspective is expected to help as to contribute to internal ethical values and internal control, which is encouraged by the majority of mangers and economic regulatory parties in the international economy and organizations of high quality ethical values and internal control quality.

5. CONCLUSIONS

I support my point in this paper to examine the expected impact of inclusive business on the improvement of the ethical values and internal control quality of organizations to help contribute to the sustainability, economic growth, reduce poverty and improve organizational culture by learning and providing suitable environment for innovation and entrepreneurship. I find an empirical evidence that 0.858 is the highest probability for the potential impact of the inclusive business by 100% that is based on my estimation to the expected significance of this paper’s perspective.

In this paper I find the appropriate method to examine my hypothesis by using the expected value and the variance tests for analysis. Followed by a confirmation test, as I use more probability analysis for more confirmation to the empirical evidence, I find additional empirical evidence to support and confirm the paper’s perspective. The outcomes of this paper lead to the expected impact of inclusive business to help assure my estimated findings of the expected impact on the ethical values and internal control quality.

My analysis is based on optimistic estimation for the probability distribution that this perspective will have a significant impact, based on the rationality and necessity of sustaining an economic growth and solving problematic aspect resulted from economic and financial crisis and problematic organizational culture raised by ethical issues and internal control issues.

Future experimental research could attempt to restudy my findings in a different manner for the expected variables to be associated to the future studies, and their numbers to measure and predict the probabilities of their impact on the inclusive business impact. Future researches also can encompass the appropriate prediction analysis and methods to predict the inclusive business impact, and consequently, the impact on the ethical values and the internal control quality over organizations of different types and nature, moreover, it is recommended to use this study’s empirical results not only to fulfill corporations but to fulfill the governmental organizations and not– for – profits organizations.

REFERENCES


