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## OSSREA Attends the Second African Think Tank Summit

OSSREA attended the 2<sup>nd</sup> African Think Tank Summit, held in Addis Ababa, Ethiopia, 6<sup>th</sup> – 8<sup>th</sup> April 2015. The theme was “*The Rise of Africa’s Think Tanks— Practical Solutions to Practical Problems*”. Another central theme of the Summit was “*Building a Sustainable Future for Think Tanks in Africa*”.

The Summit explored ways in which Africa’s Think Tanks have been making a difference in the continent’s transformation and how they could become increasingly relevant and important contributors as Vision 2063 rolls out. The Summit also featured successful

strategies and models employed by Think Tanks to shape key areas of public policy.

OSSREA as a prominent sub-regional Think Tank participated in two panels, the first being the young professionals group where Mr. Siraj Akmel, the Research and Training Assistant, presented his paper entitled “Environmental Impacts of Agricultural Extensification in Southern Ethiopia”. Dr. Abiye Daniel participated in the second panel *The Knowledge Mela* which was developed by the UN’s “Solution Exchange” peer-to-peer knowledge facilitation service as an opportunity to showcase resource persons around topics of interest to the community.



Participants of the Summit

## **OSSREA Takes Part in the ELLA II Project Group Meeting**

The A/Executive Director of OSSREA attended the Evidence and Lessons from Latin America Phase 2 (ELLA II) project group meeting held in IDS, Brighton, UK.

He said the meeting involved pairing 6 Think Tanks from Latin America and 6 from Africa for a three-year project that started in 2014 and runs through 2017. OSSREA is paired with CIPPEC (Centre for Implementation of Public Policy for Promoting Equity and Growth) of Argentina. The pair is analyzing determinants of gaps in horizontal accountability of executive bodies to the legislative authorities in Africa and Latin America.

According to AED, the group involving OSSREA dwelt on updates, evidence synthesis and REPs, thematic support, and parallel methods sessions.

He also noted that OSSREA presented its progress in implementing the project and discussed with the Latin American counterparts on issues of harmonization. The meeting also offered an opportunity to firm up a comparative research work. Outputs of the meeting include:

1. outline of the regional evidence paper;
2. document and detailed approach of a case study in a way of a state-owned enterprise;
3. initial design of the comparative evidence paper which will be common.

OSSREA AED indicated that, as a way forward, the teams have been advised to

embark on a regional evidence paper until September 2015.

## **OSSREA Attends a Workshop on Publications Quality, Engagement, Reputation and Impact**

OSSREA attended a workshop on *publications quality, engagement, reputation and impact*, held in Cape Town, South Africa on March 24, 2015. At this event, organised and sponsored by the Taylor and Francis group, Dr. Abiye Daniel, the OSSREA Director of Publications and Dissemination then, presented a paper entitled “*Growth and Development of African Scholarship*” with reference to the OSSREA experience.

Dr. Abiye indicated that the workshop began with a welcome message from Mariette Enslin, Managing Editor for Taylor and Francis, followed by a keynote address on “*Staying Ahead of the Curve!*” by Dr. David Green, the Global Publishing Director for Taylor and Francis. Dr. Green talked about the global picture of publishing in Africa and the various scenarios in the continent and worldwide. The participants attended presentations and deliberated on the “Future of Peer Review”, focusing on some of the strengths and weaknesses of the system and what is being done to address the gaps, the role of policy in guiding development, African perspectives on research ethics, integrity and peer review.

The workshop ended with closing remarks by Dr. David Green who emphasised that African publishers need to network with each other and understand the global and African challenges and opportunities.

## **OSSREA Receives IPAR Rwanda Team Visit to Ethiopia-Based Think Tanks**

OSSREA facilitated experience sharing visits for a team of staff members from the Institute of Policy Analysis and Research (IPAR)-Rwanda, which visited and discussed with the staff of OSSREA itself, the Horn Social Policy Institute (HESPI) and the Ethiopian Economic Association (EEA) during May 12–15, 2015.

Concerned professionals of the Think Tanks visited, as well as the visiting team, presented about a range of issues that traverse initiation and establishment, structure, functioning, finance and fund raising, human resources and staffing, partnerships and collaboration, links with different public, private and parastatal entities, and use, contribution and impact of the researches of their respective organisations. The parties involved reflected that the visits were quite informative as they learned a lot from each other. The heads of the respective think tanks said that the lessons would benefit their organisations. Experiences commendably shared among the members of the four think tanks include the following:

- OSSREA's capability of doing and delivering much with small financial resources and limited human resources;
- its experience of producing and disseminating publications;
- its network with big organisations and use of internet-based electronic communication for dissemination and facilitation of day-to-day activities;

- IPAR-Rwanda's and HESPI's good experiences of working with the government organs;
- EEA's and HESPI's experiences of using commissioned research and consultancy as alternative fundraising modalities;
- EEA Board Member's passion and commitment to serve for free to leverage the Association from the traps of dwindling donor support to a more vibrant one, with a say in broader socio-economic aspects in the country, and with its own complex building that is planned to host the proposed Ethiopian Economic Policy Research Institute; and
- The disadvantages of relying on few donors for financial support.

## **East African Business and Economic Watch 1<sup>st</sup> Annual Conference Kicks-off**

The University of Rwanda in collaboration with Jonkoping University of Sweden held the East African Business and Economic Watch First Annual Conference on *Recent Trends in Economic Development, Finance and Management Research in Eastern Africa*. OSSREA Acting Executive Director indicated that the event was convened in Kigali, Rwanda May 5–6, 2015. He said he also delivered a keynote speech and attended the Business summit that involved scholars from Universities in the region, Sweden and regional bodies.

## Determinants of Demand for Non-Life Insurance in Harare, Zimbabwe

Henry Nyararai Chikova\* , Nyasha Kaseke  
and Stewart Mashingaidze

### Abstract

Literature has shown that the demand for insurance in general, and for non-life insurance in particular, is explained by demographic, social, cultural and institutional factors. Most of the research on non-life insurance has been carried out in settings of more developed countries. This study sought to find out factors that determine the demand for non-life insurance in Harare, Zimbabwe. One hundred and twenty people, who were holders of non-life insurance products were interviewed. Results show that all demographic factors included in the model, except marital status, explained the demand for non-life insurance. There was weak correlation between the demand for non-life insurance and social, cultural and institutional factors. Non-life insurance companies should consider integrating these factors when they develop their marketing strategies.

**Keywords:** Non-life insurance demand, demographic, social, cultural, institutional, factors, Harare

### Introduction

The role of insurance in economic growth and its prospects for expansion have been discussed (Swiss Re 2012; Rani 2007). IPEC (2009–2012) reports show an increasing trend of the Gross Written Premiums (GWP) for non-life insurance in Zimbabwe. Because of the increasing prominence of non-life insurance as an

enabler of business and therefore economic growth, it becomes important to understand the factors that drive the demand for it. Non-life insurance has tended to attract less research interest compared to life insurance (Feyen, Lester and Rocha 2011). This is the case for developing countries in general, and for Zimbabwe in particular. In addition, where studies on the demand for insurance have been carried out, they tend to focus on the developed world (Outreville 1996; Beck and Webb 2003). Realising the important role non-life insurance plays in the economy, this article reports finding of research on the determinants of its demand in Zimbabwe, focusing on Harare. The proposition of this study is that personal traits, such as background factors, shape consumer behaviour, and hence demand for goods and services. Consumer behaviour sums up the acts of individuals directly involved in the acquisition and utilization of economic goods and services (Lancaster and Reynolds 2005). Consumer behaviour studies borrow heavily from other fields of demography, economics, psychology and sociology. The study seeks to find out how individual background factors, as constructed in these fields, determine the demand for non-life insurance products.

### Objective

The objective of the study is to ascertain the factors that determine the demand for non-life insurance in Zimbabwe.

### Study Hypotheses

From the objective above, the following four hypotheses were tested:

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1.  $H_{01}$ : Demographic factors of respondents and their demand for non-life insurance are independent;
2.  $H_{02}$ : Social factors of respondents and their demand for non-life insurance are independent;
3.  $H_{03}$ : Cultural factors of respondents and their demand for non-life insurance are independent;
4.  $H_{04}$ : Institutional factors and respondents' demand for non-life insurance are independent.

### Literature Review

An insurance market is a special case of markets for contingent claims (Kunreuther and Pauly 2005). The fact that one is insured does not alter the probability of occurrence of an event insured against, but it reduces the probability of financial loss connected with the event. Basically, there are two branches of insurance— life and non-life insurance. Life insurance covers for contingencies like critical illness or death. Non-life insurance covers anything other than human life. This study focuses on non-life insurance, especially on the determinants of its demand.

The elasticity of demand for non-life insurance has been tested for different wealth classes by Nakata and Sawada (2007). They showed that wealth elasticity of insurance demand is smaller than unity for the upper, middle and high wealth countries. In low wealth countries, the wealth elasticity of insurance demand is greater than unity. This suggests that beyond certain thresholds of wealth, the demand for insurance is not responsive to wealth changes.

Affordability of insurance products has placed income at the centre of almost all models of insurance demand. The argument is that higher income increases the demand for insurance because consumers can afford to purchase insurance products (Feyen, Lester, and Rocha 2011). At higher levels of GDP per capita, non-life insurance becomes more affordable (Treerattanapun 2011), thereby increasing its demand. Treerattanapun (2011) also demonstrates that the consumption of insurance products is not uniform across the lines of business and across individuals.

Investigations of the demand for insurance have been carried out at the macro-level. Enz (2000) argued that insurance demand displays income elasticity because of the existence of restrictions on insurance penetration growth. He looked at the relationship between demand for insurance and economic development, and for insurance penetration constraints, he analysed the tax system, regulation and other macroeconomic variables. Enz (2000) showed an S-curve relationship between insurance penetration and income per capita level and concluded that the consumption of insurance grows with economic growth to the level of developed countries after which the insurance consumption slumps.

Besides other factors, income and wealth have been singled out as the major determinants of the demand for insurance (Browne, Chung and Frees 2000; Rani 2007). Further studies in emerging economies by Enz (2000) and Akotey, Osei and Gemegah (2011) and Awunyu-Vitor (2012) in Ghana support the notion that income is an important determinant of the demand for non-life insurance.

Harrington and Niehaus (1992), Szablicki (2002), Beck and Webb (2003), Li, *et al* (2007), Vadlamannati (2008) and (Feyen, Lester and Rocha (2011) studied the influence of income on insurance consumption at the macro-level and concluded that it is the most determining factor for the demand of individual insurance consumption. They regressed GNI per capita on the penetration levels of non-life insurance for selected countries. Other studies that confirmed the dominance of income as a determinant of insurance demand were by Hwang (2003), Feyen, Lester and Rocha (2011) and Park and Jean (2011).

Curak, Dzaja, and Pepur (2013) proposed that risk aversion increases with education; hence higher educational attainment encourages people to buy non-life insurance, suggesting a positive relationship between education and the demand for non-life insurance. The importance of education to insurance has also been explained by Treerattanapun (2011) and Outreville (1996) who suggested that it increases the awareness of risk and threats to financial stability, facilitating the understanding of insurance benefits and the demand for insurance. A positive relationship between risk aversion and insurance knowledge has also been proposed by Ofoghi and Farsangi (2013), especially in auto insurance.

While Elango and Jones (2011) and Ulbinaite, Kucinskiene and Moullec (2013) showed that income, age, sex, marital status and education influence buying traits, prior studies by Ferber and Lee (1980), Burnett and Palmer (1984), Browne and Kim (1993), and Outreville (1996) do not show evidence of the effect of education on life

insurance consumption. Other studies have however found education to be important (Szablicki 2002; Hwang 2003). Akotey, Osei and Gemegah (2011) explains that what is important is knowledge about insurance products and not an individual's education. Counter arguments have been presented by Feyen, Lester and Rocha (2011) and Treerattanapun (2011) who insist that education should be more important than knowledge because of its pervasiveness.

Marital status has been shown to influence the demand for micro-insurance; with married couples demanding more micro-insurance services (Akotey, Osei and Gemegah 2011). Curak, Dzaja, and Pepur (2013) did not find a relationship between marital status and the demand for insurance. Their explanation is that unmarried individuals buy life insurance because they have more of their income available in comparison with married ones who spend more on supporting their families. They, however, pointed to a reverse influence where married persons would also buy life insurance products because in this way they can ensure resources for their families in case of their early death.

Invariably, theoretical literature on the demand for insurance starts with the life-cycle hypothesis (Ando and Modigliani 1963), which ties saving behaviour to an individual's age. If this holds, it should also hold for the demand for non-life insurance, whose demand is for insuring assets, as age has been shown to be related to wealth and asset accumulation (Jappelli 1999). For the younger ages, say 18 to 30 years, Curak, Dzaja, and Pepur (2013) note that insurance demand varies considerably because of the



heterogeneity of the age group, although (Jappelli 1999) shows that most wealth accumulation is done by the young and the middle-aged.

Cultural, social, physical and personal factors have been identified as having a major influence on consumer behaviour (Lancaster and Reynolds 2005; Kotler and Armstrong 2007; Yakup and Jablonsk 2012; and Furaiji, Latuszynska and Wawrzyniak 2012). These behaviours ultimately influence the demand for consumer goods and services.

Culture is embodied in a people's attitudes, beliefs, values, language and religion (Lancaster and Reynolds 2005). Some authors identify culture as the most fundamental force and enduring influence on human buyer behaviour (Wilson and Gilligan 2005). Cultural practices, such as religion, have been found to have strong influence on the demand of insurance products (Zelizer 1979; Beck and Webb 2003). Some religions are fatalist and construe insurance as a sign of mistrust in God (Lemaire and McBeth 2010), indicating the negation of economic rationality to responses to insurance solicitation (Treerattanapun 2011). Park and Jean (2011) tested the effect of religion on non-life insurance demand. They used a large international panel data from 82 countries over a ten-year period, and found that the impact of cultural variables is significant in the development of insurance markets.

Lancaster and Reynolds (2005) identify social class, as defined by income, as a profiler of consumer behaviour. Social class can construct one's lifestyle and exerts a strong influence on consumers'

behaviour (Wilson and Gilligan 2005). Reference groups, which establish conformity of a person's attitudes, opinions and values to a social group, are a type of social factors (Lancaster and Reynolds 2005), so is the family (Wilson and Gilligan 2005) and the bandwagon phenomenon (Kunreuther and Pauly 2005), where individuals buy insurance because it is fashionable to do so.

Other drivers of the demand for insurance have been classified into economic, demographic and institutional factors (Elango and Jones 2011). Demographic and socio-cultural factors have been ascribed to the macro-level whilst institutional factors (meso-level factors) capture the role of governmental and legal systems in supporting consumption. At the micro level, income influences the means to acquire the services.

Institutional factors facilitate the ease or difficulty with which consumers access insurance compensation. This includes the legal system, property rights and the rule of law. Institutional factors reduce levels of uncertainty amongst companies and individuals transacting in the markets (Peng 2000). A positive relationship between per capita consumption of property insurance and legal system that promote its consumption has been demonstrated (Syverud *et al.* 1994). A correlation has also been established between the protection of property rights and insurance consumption (Beck and Webb 2003). Esho *et al.* (2004) found that common law countries had greater consumption of motor insurance services than statutory-law countries.

Place of residence has been proposed to influence the demand for insurance via the impact of risk concentration. For example, for non-life insurance such as car accidents and thefts, its demand is perceived to be higher in urban areas than rural (Sherden 1984). Browne, Chung, and Frees (2000) regarded the higher interaction of individuals in urban areas as a factor that increases the probability of loss leading to the increased demand for non-life insurance. Consequences of increasing delinquency as a result of concentration of assets in urban areas have been cited as increasing the demand for non-life insurance (Esho *et al.* 2004).

### Methodology

This study uses a positivist philosophy and deductive approach where hypotheses are generated and then tested. The study explores the relationships between cultural, personal, social, and institutional variables and the demand for non-life insurance. The survey strategy was used to collect data through the use of a structured questionnaire. The sampling frame for this research consisted of all non-life insurance policyholders in Harare, obtained from insurers' lists of clients.

Insurance companies were stratified into three strata according to their balance sheet sizes (Big, Medium and Small), based on the IPEC (2012) market report. Two insurers were randomly selected from each category. The policyholder names were then arranged in alphabetical order and respondents selected using the systematic random sampling technique to get a sample of 180 respondents (30 per insurer). A total of 180 questionnaires were issued out. From these, 120 were correctly filled in, giving a 67 per cent response rate.

The questionnaire was divided into three sections. Section A collected information on the background characteristics of the respondent, Section B on ownership of various types of insurance and reasons for buying and not buying non-life insurance, and Section C contained questions on factors that affected the insurance purchase decisions.

Data was collected on *social factors*; income, social class, involvement in association and the importance of family in the decision to purchase insurance. Factors classified as *cultural factors* include societal norms and traditions, religious beliefs and values, and area of residence. *Institutional factors* include laws relating to compulsory insurance, adherence to obligations and strictness of laws. Some of the questions were of a Likert scale type, where respondents were asked to rank whether social, cultural and institutional factors influenced their level of expenditure on non-life insurance, on a scale of 1 to 5, where 1 = Strongly non-influential, 2 = Non-influential, 3 = Neutral, 4 = Influential and 5 = Strongly influential. The dependent variable was the demand for non-life insurance, measured by the level of expenditure on it.

### Data Analysis

Since the data collected using the Likert scale falls within the ordinal level measurement, the Chi-Square statistic was used to test the hypothesis i.e. to investigate the statistical independence of the relationship between selected factors and demand for non-life insurance. The Chi-Square statistic is appropriate because it is a non-parametric measure of independence and is suitable for the kind of data collected for the study. The advantages of using non-

parametric tests are that normality of data is not assumed, they are suitable for small sample sizes, they are available to treat data which are simply classificatory or categorical, i.e. data measured in nominal or ordinal scale and that most nonparametric statistics are exact probabilities, regardless of the shape of the

population distribution from which the random sample was drawn (Siegel and Castellan 1988, 35). Figure 1 shows that the Chi-square technique is suitable for the data collected in this research since both the dependent and independent variables are categorical.

|                      |             | Dependent variable |                |
|----------------------|-------------|--------------------|----------------|
|                      |             | Categorical        | Continuous     |
| Independent variable | Categorical | Chi Square         | t-test, ANOVA  |
|                      | Continuous  | LDA, QDA           | OLS Regression |

Figure 1. How to treat different data types for inferential statistical analysis

SOURCE: [http://www-users.cs.umn.edu/~ludford/stat\\_overview.htm](http://www-users.cs.umn.edu/~ludford/stat_overview.htm)

The p-value associated with the test statistic is used to test the hypotheses. The p-value is the probability of observing a sample statistic as extreme as the test statistic. If the sample findings are unlikely, given the null hypothesis, the researcher rejects the null hypothesis. This involves comparing the p-value to the significance level. When the p-value is less than the significance level, i.e.  $\alpha < 0.05$ , the null hypothesis is rejected.

## Results

Table 1 presents the results of the analysis. The demand for insurance is measured by annual expenditures on non-life insurance.

## Background Factors

### Age

The relationship between age and non-life insurance demand is presented in Table 1. The Chi-Square test was conducted, at the significance level of 5 per cent. Since the Chi-square test results give a p-value less than 0.05, we reject the null hypothesis and conclude that age and demand for non-life insurance are not independent. In other words the demand for non-life insurance varies by age of buyer. This is a confirmation of the life cycle theory (Ando and Modigliani 1963) which postulates a relationship between age and saving, and consumption behaviour.

Table 1. How much respondents spend annually on no-life insurance policies, age cross tabulation

|   |                 | Age (years) |       |       | Total |
|---|-----------------|-------------|-------|-------|-------|
|   |                 | 20–29       | 30–39 | 40–59 |       |
| How much do you spend annually on no-life insurance policies? | Below \$250     | 21          | 28    | 10    | 59    |
|   | \$250 to \$499  | 8           | 16    | 7     | 31    |
|   | \$500 and above | 0           | 11    | 19    | 30    |
| Total   |                 | 29          | 55    | 36    | 120   |

$\chi^2$  p-value = 0.000

*Sex of respondent*

Generally, more males than females purchased non-life insurance across all expenditure levels (Table 2). The Chi-Square test results lead us to reject the null hypothesis and conclude that sex is correlated with demand for non-life

insurance. Men and women demand non-life insurance differently. This result agrees with Elango and Jones (2011) and Ulbinaite, Kucinskiene and Moullec's (2013) findings that sex influences non-life insurance buying traits.

Table 2. How much respondents spend annually on no-life insurance policies, gender cross tabulation

|   |                | Gender |      | Total |
|---|----------------|--------|------|-------|
|   |                | Female | Male |       |
| How much do you spend annually on no-life insurance policies? | Below \$250    | 23     | 36   | 59    |
|   | \$250 to \$499 | 15     | 16   | 31    |
|   | \$500 to \$749 | 5      | 25   | 30    |
| Total   |                | 43     | 77   | 120   |

$\chi^2$  p-value = 0.028

*Education*

The relationship between education and non-life insurance demand is presented in Table 3. The results show that holders of at least an undergraduate degree spent more on insurance than those with inferior educational qualifications, irrespective of the expenditure level on non-life insurance. Results presented in Table 3 show that educational attainment is significantly related to demand for non-life insurance, so we reject the null hypothesis. This finding is consistent with findings by Curak, Dzaja,

and Pepur (2013), Szablicki (2002) and Hwang (2003) who found education to be a significant determinant of the demand for insurance. It is however important to note that literature opines the importance of education in the demand for insurance via its arousal of risk awareness, which leads to risk aversion (Ofoghi and Farsangi 2013). This finding is however contrary to Outreville's (1996), which does not show evidence of the effect of education on insurance consumption.

Table 3. How much respondents spend annually on no-life insurance policies, highest qualification cross tabulation

|   |                | Highest Qualification |          |               | Total |
|---|----------------|-----------------------|----------|---------------|-------|
|   |                | Secondary             | Graduate | Post Graduate |       |
| How much do you spend annually on no-life insurance policies? | Below \$250    | 19                    | 33       | 7             | 59    |
|   | \$250 to \$499 | 9                     | 17       | 5             | 31    |
|   | \$500 to \$749 | 4                     | 13       | 13            | 30    |
| Total   |                | 32                    | 63       | 25            | 120   |

$\chi^2$  p-value = 0.010

*Income*

The higher the level of income, the higher the number of respondents who had non-life insurance (Table 4). The results of the Chi-Square test, at  $p = 0.05$  significance level, lead us to reject the null hypothesis and conclude that income is not independent of the demand for non-life

insurance. As read in the literature, this result might point to the issue of affordability to insure, which increases with higher levels of income (Feyen, Lester, and Rocha 2011). This could also be explained by the fact that higher income individuals have high value assets, which require insurance.

Table 4. How much respondents spend annually on no-life insurance policies, level of income cross tabulation

|   |                 | Level Of Monthly Income |                |                  | Total |
|---|-----------------|-------------------------|----------------|------------------|-------|
|   |                 | Below \$500             | \$500 to \$999 | \$1000 and above |       |
| How much do you spend annually on no-life insurance policies? | Below \$250     | 10                      | 21             | 28               | 59    |
|   | \$250 to \$499  | 1                       | 4              | 26               | 31    |
|   | \$500 and above | 0                       | 0              | 30               | 30    |
| Total   |                 | 11                      | 25             | 84               | 120   |

$\chi^2$  *p-value* = 0.000

*Marital Status*

Of the 120 respondents, 71.7 per cent were married; the rest were not in any marital union. The results of the Chi-Square test show that there is no significant relationship between marital status and life insurance demand (Table 5). This result still obtains after controlling for the sex of

the respondent. Similar results were reported by Curak, Dzaja, and Pepur (2013), who explained the phenomenon through the neutralising effect of being single and being married on the demand for insurance. Contrary results, though for the demand of micro-insurance, were found by Akotey, Osei and Gemegah (2011).

Table 5. How much respondents spend annually on no-life insurance policies, Marital Status Cross tabulation

|   |                | Marital Status |         | Total |
|---|----------------|----------------|---------|-------|
|   |                | Single         | Married |       |
| How much do you spend annually on no-life insurance policies? | Below \$250    | 20             | 39      | 59    |
|   | \$250 to \$499 | 10             | 21      | 31    |
|   | \$500 to \$749 | 4              | 26      | 30    |
| Total   |                | 34             | 86      | 120   |

$\chi^2$  *p-value* = 0.108

**Other Factors**

The influence of factors other than background factors, i.e. social factors, cultural and institutional factors, was also analysed. The results are presented in Table 6. All the hypotheses were tested at a 5% level of significance.

Of the social factors analysed, only “involvement in association” was significantly related to the demand for non-life insurance. Respondents’ families did not influence their decision to buy non-life insurance, neither did their social class. This finding is largely opposed to the theoretical posture of Lancaster and Reynolds (2005) and Wilson and Gilligan (2005) who underlined the influence of social class, reference groups and the family on consumer behaviour.

Cultural factors, including social norms, religious beliefs and area of residence all

did not show significant relationship with the demand for non-life insurance. This is

regardless of theoretical discourse which presented culture as having enduring influence on human buyer behaviour (Wilson and Gilligan 2005). Religion has particularly been singled out as having a strong influence on the demand of insurance products (Zelizer 1979; Beck and Webb 2003).

This study shows that institutional factors are not significantly related to the demand for non-life insurance. This result does not agree with Peng (2000), who argues that institutional factors influence levels of uncertainty amongst companies and individuals transacting in the markets, and also refutes Beck and Webb’s (2003) study which established a correlation between the protection of property rights and insurance consumption.

Table 6. Chi-square p-values on how much respondents spend annually on no-life insurance policies, rating of the importance of (social factors, cultural factors, institutional factors) on your decision to spend on non-life insurance

| <b>FACTORS</b>               | <b>Chi-Square (<i>p-values</i>)</b> |
|------------------------------|-------------------------------------|
| <b>Social Factors</b>        |                                     |
| Social Class                 | 0.385                               |
| Involvement in association   | 0.028                               |
| Family                       | 0.975                               |
| <b>Cultural Factors</b>      |                                     |
| Social Norms                 | 0.426                               |
| Religious beliefs            | 0.913                               |
| Area of residence            | 0.148                               |
| <b>Institutional Factors</b> |                                     |
| Adherence to obligations     | 0.063                               |
| Requirements of the law      | 0.209                               |
| Strictness of laws           | 0.066                               |

\*\*Significant at  $\alpha = 0.05$

## Conclusion

This paper analysed demographic, social and cultural determinants of non-life insurance demand. The research is based on data collected from 120 respondents in Harare, Zimbabwe. Results have shown that demographic factors; age, sex, education and income have statistically significant influence on the demand for non-life insurance. Only marital status did not show a statistical significant relationship with the demand for non-life insurance even after controlling for the sex of the respondent. All selected cultural and institutional factors did not impact on the demand for non-life insurance. Of the social factors included in the model, social class and family did not show a significant relationship with demand for non-life insurance although “involvement in association” did.

The major implication of this study is that non-life insurance companies in Zimbabwe should target their clientele as it has emerged that expenditure patterns of non-life insurance are associated with demographic characteristics. While in general social, cultural and institutional factors did not show significant relationship with demand for non-life insurance companies should pay particular attention to the place of residence of their prospective clients in their marketing programmes. Currently the Zimbabwean economy is depressed and characterised by low incomes and sluggish economic growth. Results of this study should therefore play an important role in guiding non-life insurance companies to develop relevant strategies for growth when the economy starts to turn around.

Future studies should consider integrated models that link demand for non-life insurance and the demand for other variants of insurance, and saving activities of individuals. This is important since the demand for non-life insurance competes with that for other forms of insurance.

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# Sustainability Responsibility Centre: A Framework for Structuring Sustainability Management Control System in Socially-Responsible Organizations in Saudi Arabia Basic Industries Corporation

*Abdalla El Khidir Abdalla\**

## Abstract

This study is attempted to develop Sustainability Responsibility Centre as a new framework for structuring Sustainability Management Control System and test its applicability in real world. The study realized the limited use of the traditional financial responsibility centres for structuring sustainability management control system that takes into account the multiple expectations and needs pursued by the different parties and stakeholders involved in an organization. The financial measures alone are inappropriate to judge the performance of the organization pursuing sustainability objectives. The applicability of Sustainability Responsibility Centre is tested in the Saudi Arabia Basic Industries Corporation. The results proved that the Centre would help socially responsible company to structure sustainability management control system that can really integrate economic, social and environmental concerns in a well-balanced and consistent framework. The application of the Sustainability Responsibility Centre would highlight the significance of aligning financial and non-financial information for a lasting and successful implementation of sustainability principles.

**Keywords:** Sustainability, Responsibility Centre, management control system, Corporate Social Responsibility

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## 1. Introduction

Today's companies, as economic entities acting in a specific social and environmental setting, face challenges from new community expectations about the role they play in society. Companies are in the middle of a complex web of relations with various and different groups of people who have interest and influence in the way businesses act (Atkinson, Waterhouse and Wells 1997).

Businesses should accept the idea that they play more than just an economic role in society, that firms have a wider responsibility for their own impact on society and on the natural environment. The key word, in the international debate about the role of businesses in the society, is "Sustainability". This buzzword involves a new way of doing business that extends legal and economic responsibilities to satisfy the legitimate social and environmental expectations of multiple groups of stakeholders.

The implementation of Corporate Social Responsibility (CSR) frequently begins with the disclosure of economic, social and environmental information within triple bottom line (TBL) external reports (Elkington 1997). This reflects the growing interest shown by the academic and business world and the large number of publications on social, environmental and sustainability accounting and reporting (Mathews 1997; Gray 2002; Parker 2005).

Incorporating social and environmental issues, as well as stakeholders' needs, into corporate strategy (Porter and Kramer 2006; Werther and Chandler 2005; Molteni 2006), culture, management systems, business

processes and day-to-day decision making is the only way to remain competitive in the current global context and to ensure long-term business success. Companies must be conscious of the strategic importance of developing systematic and integrated responses to stakeholders' expectations as being crucial to long term competitive advantage and wealth creation.

Management control systems (MCS) and performance measurement systems (PMS) in particular, play a major role in the effective integration of sustainability concerns into business management (Rouse and Putterill 2003; Norris and O'Dwyer 2004; Durden 2008).

## **2. The Meaning of CSR and Sustainability**

With the explosion of interest in this subject on the part of the business, academic and policy communities, a huge number of definitions have been proposed (Carroll 1999). There is no agreed definition, but one of the most important and frequently used (Dahlsrud 2008) defines CSR as "...a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with stakeholders on a voluntary basis" (Commission of the European Communities 2001, 6). This definition encompasses the key features of the CSR concept. Social responsibility begins where the law ends. "A firm is not being socially responsible if it merely complies with the minimum requirements of the law, because this is what any good citizen would do" (Davis 1973, 313).

The concepts of corporate social responsibility (CSR) and sustainability will be used here synonymously.

## **3. Aim of the Study**

This study is attempted to develop and test a new framework for structuring Sustainability Management Control System (SMCS) in Socially Responsible Organizations.

## **4. Literature Review: Models and Frameworks for Developing Sustainability Management Control Systems (SMCS)**

### **4.1. Balance Scorecard Models and Frameworks**

Different approaches to the design of a sustainability balanced scorecard (SBSC) have been suggested (Johnson 1998; Bieker, *et al.* 2001; Epstein and Wisner 2001; Figge, *et al.* 2002; Dias-Sardinha, Reijnders and Antunes 2002).

First, economic, social and environmental issues, as well as stakeholders' needs, could be included in some (partial approach) or all (transversal approach) pre-existing perspectives through the identification of consistent strategic objectives, targets and performance indicators. Second, in order to strategically deal with sustainability concerns, an additional non-market perspective could be added. This "additive SBSC" could be implemented in companies actually exposed to sustainability issues or those in which CSR concerns are strategic imperatives (Bieker, *et al.* 2001; Epstein and Wisner 2001). These two approaches are not mutually exclusive; rather they could be done together. Finally, a company could build an appropriate scorecard to deal with social and

environmental aspects as new tool to complement the traditional BSC. This “derived environmental and social scorecard” (Figge, *et al.* 2002) could be useful for business units, departments or other functions truly committed and concerned with strategically relevant social and environmental issues. The process of SBSC formulation can lead to drawing a sustainability strategy map able to depict hierarchical causal chains for the attainment of strategic goals.

#### **4.2. The Integrated Models and Frameworks**

Rouse and Putterill (2003) and Durden (2008) developed two interesting contributions concerning the integration of MCS and performance management system (PMS) with social and environmental aspects, as well as with stakeholders’ needs.

The “integral framework for performance measurement” (IFPM) proposed by Rouse and Putterill (2003) highlights the importance of stakeholders’ requirements and expectations when evaluating corporate performance in a balanced and holistic way. According to the authors, stakeholders’ claims define the organisation’s constraints and affect the company’s vision, mission and strategic goals. An appropriate performance measurement system should encompass stakeholder contributions (considered as the input of the company’s production processes) and stakeholder benefits (that are the values company delivers to satisfy stakeholders’ expectations). One of the main merits of Rouse and Putterill’s framework is the fitting together of the stakeholder’s view with a strategic analysis of the company processes

and activities. This is done through the adoption of a comprehensive and balanced performance measurement system. This recognizes the need to design management control systems that help the company to operate coherently, given stakeholder needs and sustainability goals.

The literature in the CSR area is too focused on sustainability accounting for external reporting purposes, with still much left to be said about the alignment of social and environmental external reporting with management accounting and management control systems (Parker 2005; Durden 2008).

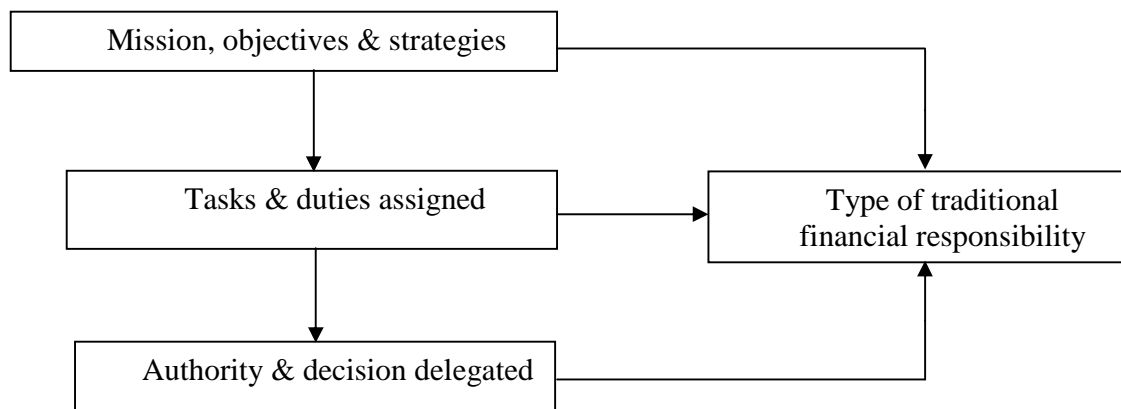
Many of the management and measurement models found in the MCS literature are still too focused on the economic and financial dimension of performance; and they are not differentiating between corporate and managerial performance; they consider social and environmental concerns to be subordinate to economic results and to the maximization of shareholder value.

Abdalla (1999) shows that organization and management studies developed through two common approaches called the macro-approaches and the micro approaches. Macro-level approaches typically draw from the disciplines of anthropology, sociology, political science, and economics. The resultant body of knowledge is referred to as management or organization theory. The major issues here are inter-organization relations, organization structure, and management process. In contrast, micro level approaches tap the disciplines of psychology, social psychology, group dynamics, and communication theory. The resultant body of knowledge is known as organizational

behaviour. The major issues in this approach are motivation, communication and group process.

Central to the two approaches of designing control, information and responsibility accounting systems in organizations is the concept of responsibility centres. The traditional financial and management planning and control literature classifies responsibility centres into five types i.e. profit, revenues, investment, engineered costs and discretionary expenses centres. Any unit or project within an organization is classified

as one of these responsibility centres; according to: (1) the vision, mission and strategic objective(s) pursued by the unit, (2) the nature of the task performed to achieve the vision, mission and the objective and, (3) the type of responsibility and authority allocated or assigned to carry out the tasks (see for example, Vancil 1973; Dermer 1977; Anthony, Deordem, and Bedford 1984 and Abdalla 1999). Classification bases (2) and (3) above are referred to in the literature as organizational structure (see Figure 1).



**Figure 1. Framework for Designing the Different Types of Traditional Responsibility Centres**

**SOURCE:** Abdalla (1999)

The assumption underlying this approach to identify responsibility centres is that in any setting, goals and tasks can be measured in money term. This approach ignores stakeholders' expectation, environmental and social issues. Hence, it does not provide non-financial information.

It has been argued for many years that, for managerial and strategic purpose, financial evaluation of organization by itself is inadequate. This dissatisfaction with the use of conventional measures of profitability is due in part to the assumption made that a

single performance criterion can access an organization's performance. Such methodology focuses on outcomes to the exclusion of transformation process involved within the organization.

Based on the above discussion we can argue that the traditional financial responsibility centres and the related financial measures of performance adopted at the divisional and organizational levels are not in congruence with the CSR and sustainability issues. In addition, the financial measures alone are not appropriate to judge the performance of the

organization pursuing sustainability objectives.

Realizing the multiple and conflicting objectives pursued by the different parties and stakeholders involved in an organization, the financial measures alone will not enhance goal congruence and conflicts resolution between the different parties.

Therefore, what is needed is a comprehensive approach for structuring Sustainability Management Control Systems (SMCS) that takes into account the factors involved in the business environment in simultaneous fashion. Hence, bridging the gap between the CSR and sustainability issues, on one hand, and business processes at the different organizational levels, on the other, in order to encourage behaviour which would resolve conflict between the different stakeholders involved in an organization in a win-win fashion. Hence, enhancing goals and risk congruence between the different parties and stakeholders.

What is needed to adopt and reflect CSR and sustainability issue, is to incorporate key stakeholders and environmental and social issues to develop an integrated framework for designing SMCS.

## 5. The Framework

The starting point to design any system is to develop an appropriate structure for the system. In our case what we need is to adopt the concept of **Sustainability Responsibility Centre (SRC)** as a structure of SMCS to provide, with the aid of the related planning and control processes, the information required by internal and external stakeholders.

SRC could be a project, programme, activity or an event designed or established to tackle or handle any issue or aspect with an aim to enhance CSR and sustainability within an organization. The social or the sustainability project, programme, activity or an event cover the following CSR and sustainability main areas/subjects. These areas/subject reflect the expectations and desires of the key stakeholders:

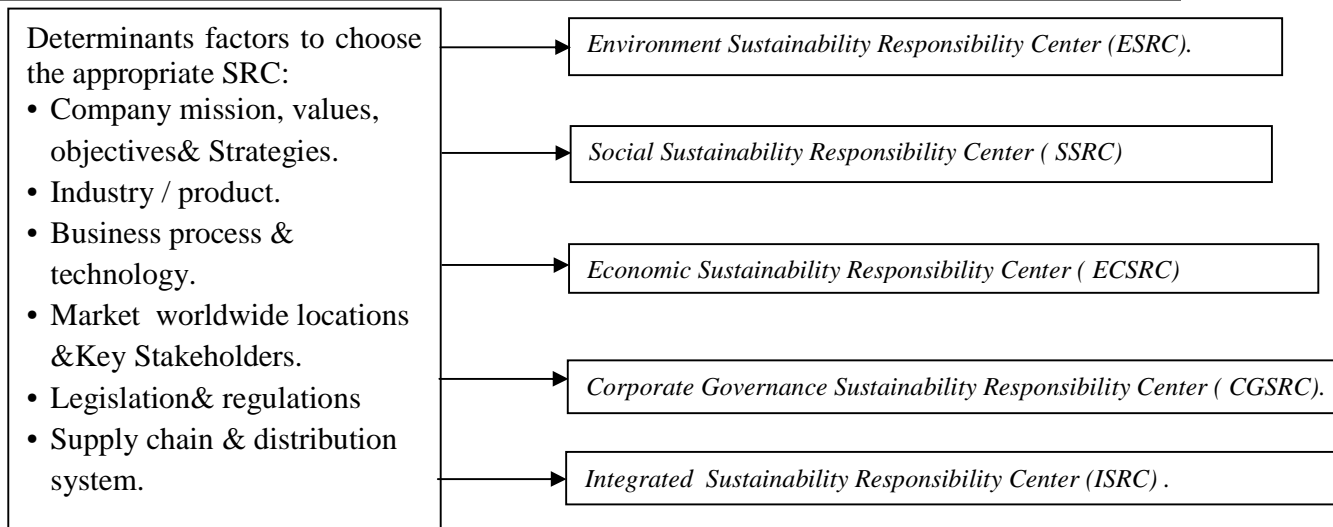
1. Social
2. Economic
3. Environment
4. Corporate governance

A manager or a supervisor usually assigned the responsibility and delegated the necessary authority to ensure the achievement of goals and objectives set for each social or sustainability project, programme, activity or event.

Since it incorporates stakeholders expectations, environmental and social issues in a holistic and complementary fashion, the proposed approach, we can argue would generate a comprehensive and integrated social and sustainability control systems and information systems appropriate to enhance the achievement of sustainability strategies in a win-win fashion because it would consider the interest of the key stakeholders through the provision of financial and non- financial information.

Having accepted this conceptualization, we can say that SRC is an integrated responsibility centre with the following features or characteristics:

It is a social or sustainability project, programme, activity or an event within an



organization assigned to a manager or supervisor to ensure the achievement of goals and objectives set for each of them. Such an organizational unit/activity we will refer to, in this paper, as **Sustainability Responsibility Centre (SRC)**.

- Tasks and duties assign to the SRC`s manager reflect CSR and sustainability aspects and issues.
- Authority (decisions) delegated to the SRC`s manager facilitate the achievement of sustainability and CSR objectives.
- The main activities and processes carried out by the SRC focus on sustainability and CSR aspects and strategies.
- The activities and processes carried out by the SRC focus on at least one of the non-financial capitals i. e. human, natural, social or intellectual capital.
- The SRC`s manager performance is evaluated, motivated and rewarded mainly on how he achieved sustainable objectives.

### 5.1 Types of SRCs

Figure 2: Determinant factors of Sustainability Responsibility Centers

- Based on the company mission , values , objectives , strategies , social and sustainability subjects, aspects and issues ( i.e.environmental, social , economical or goverence) pursued by the project, programme, activity or event, product, industry,business processes, technology, legislation, regulations and key stakeholders involved, the SRCs can be classified as follows:  
Social Sustainability Responsibility Center ( SSRC).
- Environment Sustainability Responsibility Center ( ESRC).
- Economic Sustainability Responsibility Center ( ECSRC).
- Corporate Governance Sustainability Responsibility Center ( CGSRC).
- Integrated Sustainability Responsibility Center (ISRC).ISRC is found when the SRC is envolved in more than one core subjects of sustainability and CSR.

## 6. Application of Sustainability Responsibility Centers: The case of SABIC – Saudi Arabia (KSA)

### 6.1. About SABIC

SABIC is the Saudi Basic Industries Corporation, one of the world's leading manufacturers of chemicals, fertilizers, plastics and metals. SABIC supplies these materials to other companies, who use them to make the products on which the world has come to depend. SABIC is the largest and most reliably profitable public company in the Middle East with sound investor relations. This success is the result of its focus (SABIC argues) on three things: investment in local partnerships, the best research and technology programmes, and an ambitious global growth strategy.

When it comes to making business decisions, SABIC believes that their ethical commitments are just as important as economic factors. SABIC is committed to good practices throughout its offices in the Middle East/Africa, Americas, Europe and Asia.

### 6.2. SABIC Sustainability Programme

SABIC formal Sustainability Programme has two broad goals for each SBU:

- First, goals are focused on continuously reducing the intensity of SABIC global operational footprint, including: reducing carbon intensity, improving energy and water use, and increasing material efficiency. Reducing these elements of SABIC's footprint will protect the environment, improve operating cost, divert more gas from energy production to products, and make SABIC's products

more attractive to customers who, are aiming to protect their environment.

- Second, goals focused on the marketplace, where SABIC is committed to sharing its expertise and working even more closely with its customers to develop products, applications and solutions that respond to their sustainability needs. Examples include cutting energy costs during the customer's manufacturing processes and applications, reducing the weight of their products and using materials that are more recyclable or include post-consumer.

### 6.3 SABIC's Sustainability Management Control System Structure– SRC approaches

Recalling the new concept we developed and introduced in this paper, namely **Sustainability Responsibility Centres (SRC)**, this section is attempted to test the applicability of the proposed approach to structure a Sustainability Management Control Systems (SMCS) in SABIC and, in turn, determine the processes and activities such a system structure can incorporate to produce the outcomes and information needed by internal and external stakeholders to understand and evaluate the achievement of the organization's sustainability mission, strategies and objectives.

SABIC's CSR and sustainability reports for the years 2010, 2011, 2012 and 2013 show that SABIC is heavily involved in social and environmental and economic sustainability activities, projects and programmes which reflect SABIC's CSR and sustainability strategies.



Based on SABIC's 2010, 2011, 2012 and 2013 sustainability projects, programmes and activities accomplishment (see SABIC annual sustainability reports), we can say that the following **Sustainability Responsibility Centres (SRCs)** can be regarded as a structure for designing an appropriate SMCS in SABIC:

**6.3.1 Social Sustainability Responsibility Centre (SSRC): covers the following sustainability and CSR programmes and, project**

- Educational and Research
- Drug Prevention
- Volunteering
- Sponsorship
- Donations and Support

**6.3.2. EHSandS Sustainability Responsibility Centre (EHS and SS RC)**

EHSandSS RC covers the following projects, programmes, initiatives and activities:

- Product Stewardship,
- SAFER (SABIC Assurance programme For EHSandS Risks),
- Responsible Care,
- Crisis Management,
- EHSandS IT Solution,
- Clean Development Mechanism Project,
- SABIC Integrated Enterprise Security Solution,
- EHSandS Award Programme,
- American Society of Safety Engineers Conference,
- EHSandS Performance Indicators,

**6.3.3. Environmental Sustainability Responsibility Centre (ESRC):** include the following projects, programmes and initiatives:

- CO 2 emission and greenhouse control SRC
- Energy reduction SRC
- Recycle SRC
- SABIC laboratories

**6.3.4. Economic Sustainability Responsibility Centre (ECSRC):** include the following projects, programmes and initiatives:

- New capacities
- New products
- Manpower and employment
- Financial performance
- Competitor support
- National technology training

**6.3.5. Integrated Sustainability Responsibility Centre (ISRC):** this cover more than one core Sustainability areas (i.e. Social, environment and economic). With regard to SABIC, the following programmes can be identified as Integrated Sustainability Responsibility Centres: ISRC include the following:

**1. Socio-environmental Sustainability Responsibility Centre (SESRC)**

Volunteering in the Americas:

- SABIC Innovative Plastics' largest site, at Mount Vernon, Indiana, celebrated its 50th anniversary by conducting 60 additional volunteer projects over and above its usual volunteering programme, resulting in a year total exceeding 1300 volunteer hours.

- SABIC in the Americas undertook a wide range of volunteer activities and events: helping the needy, cleaning up rivers and lakes, building and repairing community centers and much more.
- Volunteers in Chile supported local earthquake victims, while, in Mexico, donations of food, clothing and water were made to victims of flooding in Veracruz and Chiapas.

## **2. Eco-environmental Sustainability Responsibility Center (EESRC)**

Red Palm Weevil workshop: A two day workshop on “Red Palm Weevil: The Challenge” was held at SABIC corporate headquarters in Riyadh, with leading scientists, researchers and experts from the Kingdom of Saudi Arabia and around the world coming together to look at ways to deal with the red palm weevil, which has become a major problem, infecting over 80,000 palm trees in Saudi Arabia alone, and threatening date, coconut and oil palms worldwide.

## **3. Soc-Envoy-Eco Sustainability Responsibility Centre (SEESRC).**

ISRC is represented by programmes which covers more than one area of CSR and sustainability (i.e. society, environment and economic). Example is Boao Forum for Asia.

Boao Forum for Asia: SABIC was Diamond Sponsor for this year’s Boao Forum for Asia in Boao, Hainan Province, China. The Forum aims to bring together great minds and ideas from governments, businesses and academia from across Asia and indeed around the world, under the theme “Green Recovery: Asia’s Realistic Choice for Sustainable Growth.”

Based on the above description, we can say that the following are the major sustainability responsibility centre which can be used to develop the structure for sustainability management control systems in SABIC.

Table (1) shows SABIC’s Sustainability Responsibility Centre (SRCs) and summarizes their CSR and sustainability aspects, Key success factors and Key performance indicators (KPIs). The table also shows whether the KPIs are qualitative, commentary, quantitative or financial in nature.

Table (1): SABIC's Sustainability Responsibility Centre (SRCs), CSR and sustainability aspects , Key success factors and Key performance indicators (KPIs)

| SRC  | CSR and sustainability aspects  | CSR and Sustainability Key success factors   | Measurements ( KPIs)   |              |           |
|--|---|--|------------------------|--------------|-----------|
|  |   |  | Qualitative/Commentary | Quantitative | Financial |
| Social Sustainability Responsibility Center ( SSRC)        | <ul style="list-style-type: none"> <li>• Education and research</li> <li>• National Drug Prevention.</li> <li>• Volunteer activities and events.</li> <li>• Sponsorship initiatives</li> <li>• Donations and support</li> <li>• Workplace enhancement</li> <li>• Orphan care</li> <li>• Religious affairs support</li> <li>• Drinking water supply</li> </ul> | <ul style="list-style-type: none"> <li>• Impacts of operations on communities, including prevention and mitigation for potential or actual negative impacts</li> <li>• Percentage of employees trained in organization's anti-corruption policies and procedures</li> <li>• Product Responsibility</li> <li>• Type and size of product and service disclosed information</li> <li>• Responsible marketing behaviour</li> </ul> | √                      | √            | √         |
| EHSandS Sustainability Responsibility Center ( EHSandSSRC) | <ul style="list-style-type: none"> <li>• EHSS IT Solution.</li> <li>• Clean Development Mechanism Projects</li> <li>• Safety and health</li> <li>• EHSS alerts and awareness.</li> <li>• EHSS Award Programme.</li> <li>• Responsible Care.</li> </ul>  | <ul style="list-style-type: none"> <li>• Health and safety impacts of products and services.</li> <li>• Employee's health and medical services.</li> <li>• Community health and medical services.</li> </ul>   | √                      | √            |           |

|   |  |   |          |          |          |
|---|--|---|----------|----------|----------|
| <p>Environmental Sustainability Responsibility Center (ESRC):</p> | <ul style="list-style-type: none"> <li>• CO 2 emission and greenhouse control SRC:</li> <li>• Energy consumption</li> <li>• Recycle</li> <li>• Research laboratories</li> <li>• Green Chemistry</li> <li>• Product innovation</li> <li>• Supply chain</li> <li>• Compliance with government regulations</li> <li>• Red Palm Weevil workshop</li> <li>• SABIC Innovative Plastics' programme</li> </ul> | <ul style="list-style-type: none"> <li>• Materials used by weight or volume</li> <li>• Energy consumption</li> <li>• Initiatives to reduce energy consumption</li> <li>• Total water withdrawal by source</li> <li>• Managing impacts on biodiversity</li> <li>• Significant air emissions and initiatives to reduce them</li> <li>• Weight and type of waste and disposal method</li> <li>• Initiatives to mitigate environmental impacts of products and services</li> <li>• Significant environmental impacts of transporting products, workforce, and other goods and materials</li> <li>• Sustainable Materials Solutions</li> </ul> | <p>√</p> | <p>√</p> | <p>√</p> |
| <p>Economic Sustainability Responsibility Center (ESRC):</p>      | <ul style="list-style-type: none"> <li>• Expansion</li> <li>• Product innovation</li> <li>• Supply chain</li> <li>• Manpower and employment.</li> <li>• Economic contribution</li> </ul>   | <ul style="list-style-type: none"> <li>• New capacities.</li> <li>• New products</li> <li>• Manpower and employment.</li> <li>• Financial performance.</li> <li>• Competitor support.</li> <li>• National technology training</li> </ul>  |          | <p>√</p> | <p>√</p> |
| <p>Integrated Sustainability Responsibility Center (ISRC)</p>     | <ul style="list-style-type: none"> <li>• Two or more of the Social, environmental and economic CSR and sustainability aspects described above</li> </ul>   | <ul style="list-style-type: none"> <li>• Two or more of the social, environmental and economic Key success factors described above.</li> </ul>  | <p>√</p> | <p>√</p> | <p>√</p> |

The following business environment factors seem determine the CSR and sustainability aspects and issues reported by SABIC and , in turn, determine the type of SCR appropriate for structuring sustainability planning and control system, key success factors and KPIs:

1. Internal environment:

- Sustainability Mission, objectives and Strategies
- Type of products and services provided (Industry).
- Business processes and the use of energy and water.
- The supply chain and the distribution system.
- Technology adopted.

- Market worldwide locations.

2. External environment:

- Concerned country`s legislation and regulations.
- Accessibility to company information by stakeholders and NGOs.
- The awareness of the concerned stakeholders about the environmental and social issues.

Figures (3) depict the integration and the determinant factors of Sustainability Responsibility Centres

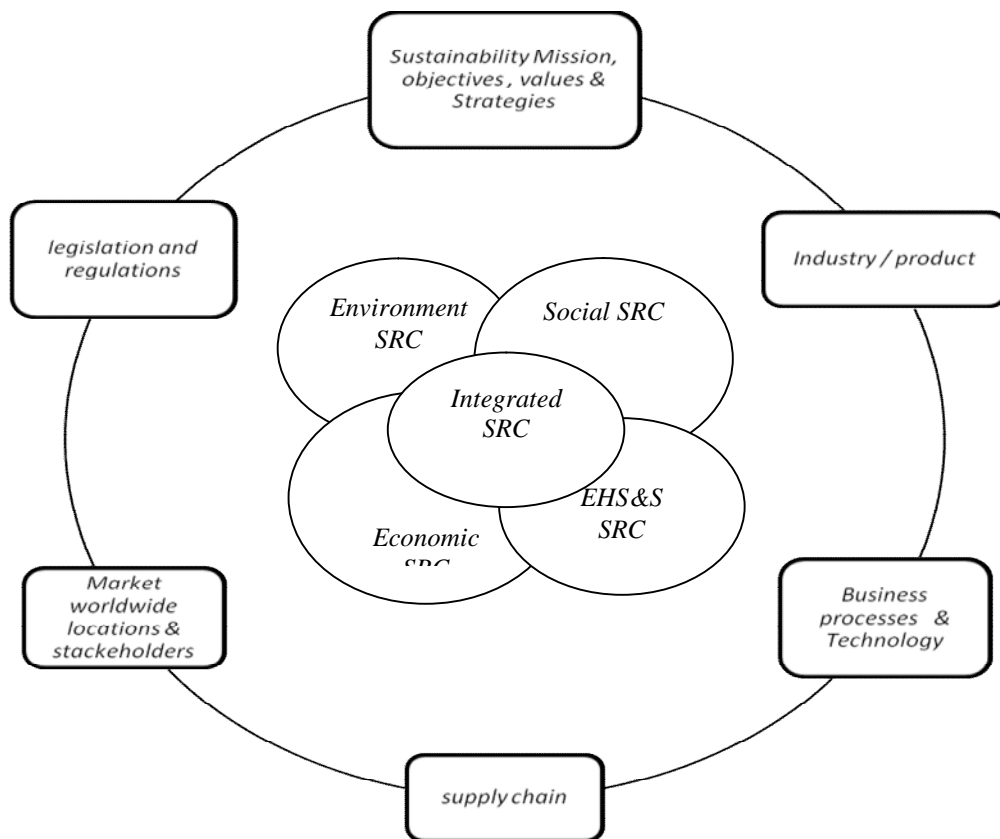


Figure 3. The Framework to Develop the SRC

Based on the above description, we can say that the following are the major sustainability responsibility centre which can be used to develop the structure for

sustainability management control systems in SABIC:

- Social Sustainability Responsibility Centres (SSRCs),

- EHS and S Sustainability Responsibility Centre (EHS and SSRC),
- Environment Sustainability Responsibility Centres (ESRCs),
- Economic Sustainability Responsibility Centres (ECSRCs),
- Integrated Sustainability Responsibility Centre (ISRC).

Having accepted this conceptualization to design the structure of SMCS in SABIC through the adoption of our developed new concept **Sustainability Responsibility Centre (SRC)**, the next step (for SABIC) is to develop the planning and control processes (i.e. budgeting, measuring performance, audit, report, motivation, incentives etc) appropriate for each type of sustainability responsibility centre. Thus serving sustainability “scorekeeping”, “attention directing” and “problem solving”.

## 7. Conclusion

This study shows that SRC might be a project, programme, activity or an event designed or established to tackle or handle any issue or aspect with an aim to enhance CSR and sustainability within an organization. The applicability of SRC is tested in the Saudi Basic Industries Corporation (SABIC). SABIC is one of the world’s leading manufacturers of chemicals, fertilizers, plastics and metals. SABIC is the largest and most reliably profitable public company in the Middle East with sound investor relations. The test of the framework in SABIC proved that SRC would help socially responsible company to structure SMCS that can really integrate economic, social and environmental concerns in a well-balanced and consistent framework. The application of SRC would highlight the significance of

aligning financial and non- financial information for a lasting and successful implementation of sustainability principles.

The framework highlights the importance of considering the internal and the external factors that shape the business environment when designing sustainability planning and control system because these factors would reflect the nature of risks and opportunities related to CSR and sustainability facing the company and, in turn, helps defining the main components of proposed framework.

Since it incorporates stakeholders expectations, environmental, economical and social issues in a holistic and complementary fashion, the SRC for structuring SMCS, we can argue would generate a comprehensive and integrated social and sustainability control systems and information systems appropriate to enhance the achievement of sustainability strategies in a win – win fashion because it would consider the interest of the key stakeholders through the provision of financial and non- financial information (i.e. integrated reports).

Having recognized and accepted the outcomes and information that can be provided by our SRC approach to design SMCS in SABIC, we can fairly argue that present set up in SABIC with regard to sustainability issues and management fairly satisfies and meets the requirements identified in this paper as criteria to judge the fitness of the SRC approach to the set up. Therefore, we can conclude that the SRC approach would enhance sustainability “scorekeeping”, “attention directing” and “problem solving”. This allows sustainability performance to be appreciated in a holistic, systematic and balanced sense, helping managers to guide

decision-making and corporate behaviour. The SRC approach would help socially responsible company to implement management, measurement and communication systems that can really integrate economic, social and environmental concerns in a well-balanced and consistent framework.

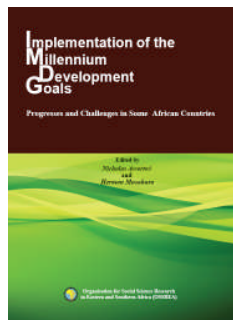
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## NEW PUBLICATIONS



This book brings together results of studies on progresses and challenges in the implementation of the MDGs in Lesotho, Kenya, Botswana, Madagascar, Tanzania, Ghana, Uganda and Nigeria. The authors focus on selected goals as cases. The book also presents lessons that can inform the post-2015 development agenda.



Vol. XXXI No 2 of EASSRR Journal contains the following peer-reviewed articles:

- Trade Intensity Analysis of South Africa-BRIC Economic Relations
- From Migration Regime to Regional Citizenry: Migration and Identity

Implications of the East African Common Market

- “I Know How to Handle My Husband”: Intra-household Decision-Making and Urban Food Production in Kenya, and
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- The Role of Ethiopia’s Hydro Dams in Boosting the Horn of Africa Regional Relations, and
- Voter Registration and Education: The Critical Variables during the 2013 Harmonised Elections in Zimbabwe.

It also presents two policy briefs that came out from the CBHI project, which is hosted at the OSSREA Secretariat. The briefs are entitled:

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