

CHAPTER VII

PRESENTATION AND ANALYSIS OF DATA

1.0 The purpose of this chapter is to provide the results of this study. The results are matched to the research objectives established in Chapter One. In the first section, the survey's results are analyzed to ascertain whether the Carroll construct can be supported. It is also concerned with the social performance matrix. The responding firms are positioned in the various cells which are then examined to see if differences between them exist in terms of financial performance and risk. In the last section ten research issues are investigated and, in particular, focus is on exploring the relationship between profitability and CSR.

2.0 A CORPORATE SOCIAL PERFORMANCE MATRIX

2.1 **One** of the major objectives of this study was to develop a corporate social performance (CSP) matrix. To do this it was necessary to generate univariate data for each CSR category. These data are displayed in Table 6. Each CSR component was broken down by means, variances, high and low scores, and various percentiles. An additional category representing the non-economic components (CS in Table 6) also provided univariate data. The total mean for the four CSR components was only 9.56 since each respondent was permitted to allocate up to ten points per statement. The respondents were not forced to use all ten points in order to accommodate the possibility that no responsibilities were especially valued. This also made it possible to have empty or nearly empty cells in a nine-cell matrix.

TABLE 6

CSR UNIVARIATES

(n =241)

	Economic	Legal	Ethical	Discretionary	CS
Mean	3.50	2.54	2.22	1.30	2.00
Variance	1.20	.35	.36	.21	.11
Hi Score	8.00	4.87	4.00	2.60	2.71
Low Score	1.36	.71	.35	.07	.98
95%	5.82	3.27	3.11	2.07	2.42
90%	4.91	3.13	2.94	1.87	2.35
75%	4.00	2.93	2.59	1.60	2.23
50%	3.27	2.60	2.24	1.33	2.08
25%	2.82	2.20	1.88	1.00	1.83
10%	2.34	1.73	1.39	.73	1.58
5%	2.00	1.37	1.18	.53	1.22

Mean total for the four CSR components = 9.56

2.2 When observing the univariate data, it is possible to discern the relative importance firms actually place on their various responsibilities. In Table 7, the relative CSR weights (the means from Table 6) of the four constructs are displayed. It would appear that Carroll's implicitly suggested weighting for the various components does approximate the findings derived from the sample in this study.

3.0 DEVELOPMENT OF THE CSP MATRIX

Once the univariate data were derived, it was possible to classify firms through a CSP matrix. However, accomplishing this required another CSR category denoted as a "concern for society" (CS). It can be observed from the univariate table (Table 6) that a concern for society was a composite of the non-economic CSR categories. However, by simply comparing the cumulative mean scores of the three components with that of one component, a weighting problem could result. It then became necessary that the CS univariate data be obtained by summing the three non-economic components and dividing the total by three. Such a procedure provided comparable and balanced data in comparison to the economic component known as a "concern for economic performance" (CEP). A matrix was derived, using the two CSR categories (see Table 8). The CS dimension was represented along the y-axis while CSP was positioned along the x-axis. In following the conceptual logic of Blake and Mouton (1964), a high concern for economic performance and a low concern for society would place a firm in the bottom, right-hand corner of the matrix (9,1). Just the opposite perspective would place a firm in the top, left-hand corner of the matrix (1,9).

In order to more adequately perform statistical tests and examine various relationships from matrix data, it was decided that a nine-cell matrix would be more functional than the four-cell conceptual framework described in Chapter

TABLE 7

Relative CSR Weights

(Residual)	.44
Discretionary	1.30
Ethical	2.22
Legal	2.54
Economic	3.50

NOTE : A residual exists because respondents were not required to allocate all ten points to the four statement CSR sets.

Three. The CSP matrix in Table 8 illustrates the basic approach used. The existence of a middle row and middle column made it easier to test for differences between the high and low performers in CS and CEP.

This framework also facilitates partitioning the 241 respondent firms on the basis of their CSR orientation, and testing for cell differences in terms of financial performance and risk. (Table 9)

Research Issue Two : Respondent Type

Research Issue Two was similar to the first research issue. Here the concern was whether particular types of respondents (e.g., CEOs vs. Public Affairs Officers) differed in their CS orientations. An actual breakdown of respondent types is presented in Table 10.

Research Issue Three : Firm Visibility

Another research issue believed to merit attention was whether high visibility firms were more or less concerned about CS. It was hypothesized that greater visibility would enhance their dependence on the external environment and, accordingly, require a more socially responsive attitude.

Determining who was or was not visible proved to be a difficult task and eventually required a somewhat subjective determination. The researcher classified firms as highly visible if they fell into one of three criteria by being : among the top 100 advertisers (in dollars spent), an international oil firm, or having received heavy media coverage of a general type. From the responding firms, there were 24 which met one of these criteria - (Table 11).

Research Issue Four - Firm Size

Research Issue Four was interested in assessing the relationship between firm size and CS.

TABLE 8

CORPORATE SOCIAL PERFORMANCE MATRIX

Concern for Society (CS)	1,9 Low/High		9,9 High/high
		5,5 Medium	
	Low/low 1,1		High/Low 9,1
	Concern for Economic Performance (CEP)		

TABLE 9

THE PARTITIONING OF 241 FIRMS INTO A CSP
MATRIX BASED ON THE SURVEY DATA

CONCERN FOR SOCIETY CS	40	19	0	59
	22	74	15	111
	1	20	50	71
	63	113	65	241

CONCERN FOR ECONOMIC PERFORMANCE

CEP

Of particular importance was the finding that assets or firm size played a small role in affecting CS. A stronger and more significant relationship existed in regard to risk propensities. Size and risk were, to some extent, inversely related, which is what would be predicted. The relationship between assets and financial performance was also interesting. Only when the long-term ROA was adjusted for risk was a significant but weak relationship found (Table 12).

Research Issues Five, Six and Seven : Financial Performance and Risk

The concern of Research Issues Five, Six and Seven was in discerning the relationship of CS with corporate financial performance. This was a particularly important research area, since much has been made of the linkage between social responsibility and the economic financial performance of firms. It was observed that contradictory findings were reported from the various research efforts. While many studies suggest a strong linkage between social responsibility and profitability, the studies with seemingly greater methodological rigor did not support the linkage.

The research conducted in this study has attempted to eliminate or minimize a number of the methodological flaws associated with the previous studies. For example, earlier studies had problems with the performance criteria used, the population sampled, and the means used to classify a firm responsible or irresponsible.

Research Issue Eight : Social Forecasting

A major consideration of Research Issue Eight was following up an empirical finding of Newgren and Carroll (1979) who had extensively researched social forecasting. From their 1975 survey of firms in the Fortune Directory and the Standard and Poor's Register, it was discovered that 42.6% of the responding firms formally employed social forecasting.

TABLE 10

FREQUENCIES BY RESPONDENT'S POSITION

RESPONDENT'S POSITION	RESPONDENT'S NUMBER	FREQUENCY	CUMULATIVE FREQUENCY	PERCENT	CUMULATIVE PERCENT
Chief Executive Officer	1	72	72	30.38	30.38
Senior Line Officer	2	16	88	6.75	37.13
Senior Staff Officer	3	56	144	23.63	60.76
Aide to CEO	4	25	169	10.55	71.31
Corporate Planning Officer	5	19	188	8.02	79.33
Public Affairs Officer	6	37	225	15.61	94.94
Secretary	7	5	230	2.11	97.05
Other	8	7	237	2.95	100.00

Another finding was the expectation on the part of the respondents that social forecasting was likely to increase in the future.

The Newgren and Carroll findings do differ somewhat from those derived in this study. This current research effort found that only 35.1% of the firms formally utilized social forecasting (Table 13). However, such differences may be negligible because the two survey samples varied from one another in composition. In addition, it is possible that the two surveys viewed or defined social forecasting differently. Still, it would appear Newgren and Carroll's respondents were overly optimistic about social forecasting's future popularity and use.

Research Issue Nine : Social Issues and Strategic Planning

The nature of inquiry in regard to this issue was in observing the importance corporations placed on integrating social issues into their strategic planning. This issue was labeled ISPASI. Firms scored the importance of this integration on a five-point Likert Scale (with 1 very unimportant and 5 very important); the resulting frequencies are produced in Table 14.

Despite the potential social desirability bias likely to envelope such a scale, nearly 13% of the firms placed little importance on the integration of social issues with strategic issues. In addition, another 38.5% of the firms viewed such integration as only mildly important. However, 49% of the firms thought such integration was important and the overall mean scale score was 3.5.

Of particular interest in this research area was the relationship of ISPASI with a number of other variables such as CS, CEP and profitability.

TABLE 11

Visibility and CS

Firms	N
Highly Visible Firms	24
Remaining Firms	204

TABLE 12

SOCIAL FORECASTING AND ASSET SIZE

Firms	N	Mean
Social Forecasting Firms	86	9526.20
Remaining Firms	153	2738.77

TABLE 13

SOCIAL FORECASTING AND PROFITABILITY

Firms	N	
Social Forecasting Firms	69	LTROA
Remaining Firms	111	LTROA
Social Forecasting Firms	68	ALTROA
Remaining Firms	103	ALTROA

Key:

LTROA : Long Term ROA

ALTROA : Adjusted Long Term ROA

TABLE 14

ISPASI FREQUENCIES

Scale Point	Frequency	Cumulative Frequency	Percent	Cumulative Percent
1	3	3	1.26	1.26
2	27	30	11.30	12.56
3	92	122	38.50	51.05
4	79	201	33.05	84.10
5	38	239	15.90	100.00

NOTE : The mean scale score was 3.5

Key

ISPASI : Importance of Social Issues

Research Issue Ten : CSR Board Committees

The last major issue to be explored involved an inquiry into whether or not a firm's board of directors possessed a social responsibility committee. It was found that only 24.8% of the responding firms had such a committee. The industries with the highest CSR board frequencies by percent were the public utilities and the industrial firms. The industry with the lowest frequencies was the energy related firms. (Appendix E)

A major concern in this research area was in determining whether CSR board firms differed in profitability from other firms. The results in Table 15 show no statistically significant differences in regard to adjusted or unadjusted profitability. As a result, it could not be concluded that firms with a CSR board committee were any different in profitability than other firms.

A Final Research Issue

An issue of related interest in this study was the role firms believed strategic planning played in their success. On a five-point Likert scale, firms were asked how important strategic planning was to their success over the past five years. The mean scale score was 4.1 with scale point 5 representing the level of most importance. This issue was labelled STRIMP.

While strategic planning was generally viewed to be of considerable importance, it was revealing that nearly a fourth of the firms did not view strategic planning as playing a strong role in their success. In addition, no relationship between STRIMP and financial performance was found. When co-relating STRIMP with CS, as well as with CEP

TABLE 15

CSR BOARD FIRMS AND PROFITABILITY

Firms	N	Mean
CSR Board Firms	53	10.43 (LTROA)
Remaining Firms	127	11.39 (LTROA)
CSR Board Firms	53	14.60 (ALTROA)
Remaining Firms	118	14.63 (ALTROA)

Key ;

LTROA : Long Term ROA

ALTROA : Adjusted Long Term ROA

no significant relationships were found to exist. It is highly likely that this research issue is confounded with a high level of social desirability bias. Perhaps the growing popularity of strategic planning over the years has enabled this management practice to become an official objective rather than an operating objective for some firms.

SUMMARY

This chapter was concerned with the presentation and analysis of data generated through survey research. The research sections of the chapter involved partitioning of the corporate social performance (CSP) matrix, and exploring research issues in corporate social responsibility (CSR).

While it was concluded that three factors existed in the 80 item instrument, this at first appeared to challenge the four-part CSR conceptual construct developed by Carroll (1979). However, upon closer inspection, it was discovered that one factor consisted of highly negative economic loadings and highly positive ethical loadings. This made it possible to conclude that Carroll's four CSR components existed. In addition, the dual loading of the economic and ethical components produced the interesting revelation that an inverse relationship existed between the two components. The internal consistency of the four-part CSR construct was established.

The data analysis illustrated the relative weight the responding firms placed on each CSR component. It was observed that these weights were a good approximation to what Carroll had implicitly suggested in his CSR construct. As a result it was concluded that Carroll's conceptual construct could be empirically supported.

The major concern of this section was in partitioning the 241 respondent firms into a nine cell CSP matrix which demonstrated a concern for society (CS) on one dimension and a concern for economic performance (CEP) on the other dimension. It was found that significant differences existed for high and low scoring firms on both the CS and CEP categories. However, when looking for statistical significant differences between the nine cells in terms of financial performance or risk, there was little to conclude except that the cell reflecting a high CS or low CEP

displayed the most risk among the nine cells.

In the final section numerous research issues were explored. Research issues one and two focused on whether CSR differences existed by firm type or by respondent type (e.g. CEOs vs Public Affairs Officers). Utilities and retail firms demonstrated statistical differences and possessed the highest and lowest CS scores, respectively. While public affairs officers and senior line officers had the highest and lowest CS scores respectively, no statistical differences could be claimed.

Research issues three and four examined whether visibility or asset size had an impact on CS. It was found that high visibility firms had higher CS scores and were statistically different from other firms. However, asset size appeared to have very little relationship with CS.

Research issues five, six and seven were concerned with ascertaining the relationship of CS with financial performance. A statistically significant but slightly negative relationship between CS and risk was observed. However, it was clear that ROA - both short-term and long-term, adjusted and unadjusted risk - demonstrated no statistically significant relationship with CS. In other words, no relationship was found to exist between profitability and social responsibility. This finding contrasts with much of the research in this area.

Research issue eight focused on social forecasting. Thirty-five percent of the firms indicated they formally used social forecasting.

Firms employing social forecasting were not found to be more profitable than other firms. Other statistically significant findings did result. Social forecasting firms registered a higher CS score and were more likely to be larger in terms of asset size than other firms not utilizing social forecasting.

The nature of inquiry in research issue nine was in the importance corporations placed on integrating social issues into their strategic planning. Only 13% of the firms placed little importance on this integration. Significant but moderately weak relationships were found to exist between this variable and both CS and CEP. The latter relationship was negative.

Research issue ten involved identifying whether or not the board of directors of the responding firms relied upon a formal CSR committee. Twenty-five percent of the responding firms possessed such a committee. These firms were found to be statistically different from other firms in their CS orientation and asset size. Their CS mean score was higher and their asset base was much larger.

The implications of these research findings are discussed in the next chapter as are further potential research areas of inquiry.