

CHAPTER 8 : THE RESEARCH RESULTS

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8.1 INTRODUCTION

In this Chapter tests of the association between national cultural values and consolidation accounting disclosures in corporate annual reports are reported and the results discussed. First, in Section 8.2 the methodology for testing the hypotheses using multiple regression analysis is described. Second, in Section 8.3 tests of the hypothesised relationships between national cultural values and ECD and DVECD are reported. Third, in Section 8.4 tests of the hypothesised relationships between the

national cultural values and EPCD and DVEPCD are reported. Fourth, in Section 8.5 tests of the hypothesised relationships between national cultural values and EGF and DVEGF are reported. Finally, the results of the analysis are summarised in Section 8.6.

8.2 METHODOLOGY FOR TESTING THE HYPOTHESES

In this Section the methodology used to test the hypotheses developed in Chapter 5 is outlined. Multiple regression analysis is used to estimate the association between national cultural values and the various measures of the extent of consolidation disclosure by the CDI, $CDI_{A \rightarrow J}$ and GFI because this approach enables the greatest amount of information to be extracted from the data set. The square of the residuals from each of the above multiple regression equations is then used as a dependent variable in a second multiple regression equation to assess the relationship between the degree of variation in the various disclosure indices and national cultural values. The sign and significance of the coefficients of the national cultural value variables in the multiple regression equation, which has squared residuals as the dependent variable, is used to test the hypotheses concerned with the association between national cultural values and the degree of variation observed on the CDI, $CDI_{A \rightarrow J}$ and GFI.

8.2.1 TESTING EXTENT OF DISCLOSURE IN THE INDICES

In this sub-Section the model used for testing the association between national cultural values and the extent of disclosure is outlined. The model assumes the extent of disclosure, measured by the various disclosure indices, is a function of industry type, size of the corporation (as measured by total assets) and the national cultural values of the country of the headquarters of the corporation. This relationship can be expressed in the following equation:

Equation 8.1:

INDEX = f (Industry type, Corporation size, National cultural values)

where:

INDEX is one of the disclosure indices described in Chapter 6;

Industry type is one of the four industry groups into which corporations were classified in Section 7.2;

Corporation size is measured by the total assets as described in Section 7.2;

National cultural values are those hypothesised in Chapter 5 to be associated with the various disclosure indices outlined in Chapter 6.

The focus of the analysis is to test for the relationship between the index and national cultural values. The industry type and corporation size variables are included to control for these possible influences.

Multiple regression analysis is used to test the hypotheses concerning the association between national cultural values and the extent of disclosure on the following indices: CDI, $CDI_{A \rightarrow J}$ and GFI. The model for the multiple regression equation is:

Equation 8.2:

$$\text{INDEX}_i = \beta_0 + \delta_2 \text{IND2}_i + \delta_3 \text{IND3}_i + \delta_4 \text{IND4}_i + \beta_1 \text{TOASSET1}_i \\ + \alpha_1 \text{PD}_i + \alpha_2 \text{UA}_i + \alpha_3 \text{ID}_i + \alpha_4 \text{LTO}_i + \mu_i$$

where;

i = 1, 2, ..., N and indicates the i -th corporation in the $N = 184$ sample;

IND2 = Dummy variable for industry group 2;

IND3 = Dummy variable for industry group 3;

IND4 = Dummy variable for industry group 4;

TOASSET1	= Total assets of the corporation (a measure of size);
PD	= National cultural value 1 (Power distance);
UA	= National cultural value 2 (Uncertainty avoidance);
ID	= National cultural value 3 (Individualism);
LTO	= National cultural value 4 (Long term orientation);
μ	= Residual error;

The β 's, δ 's and α 's are parameters to be estimated.

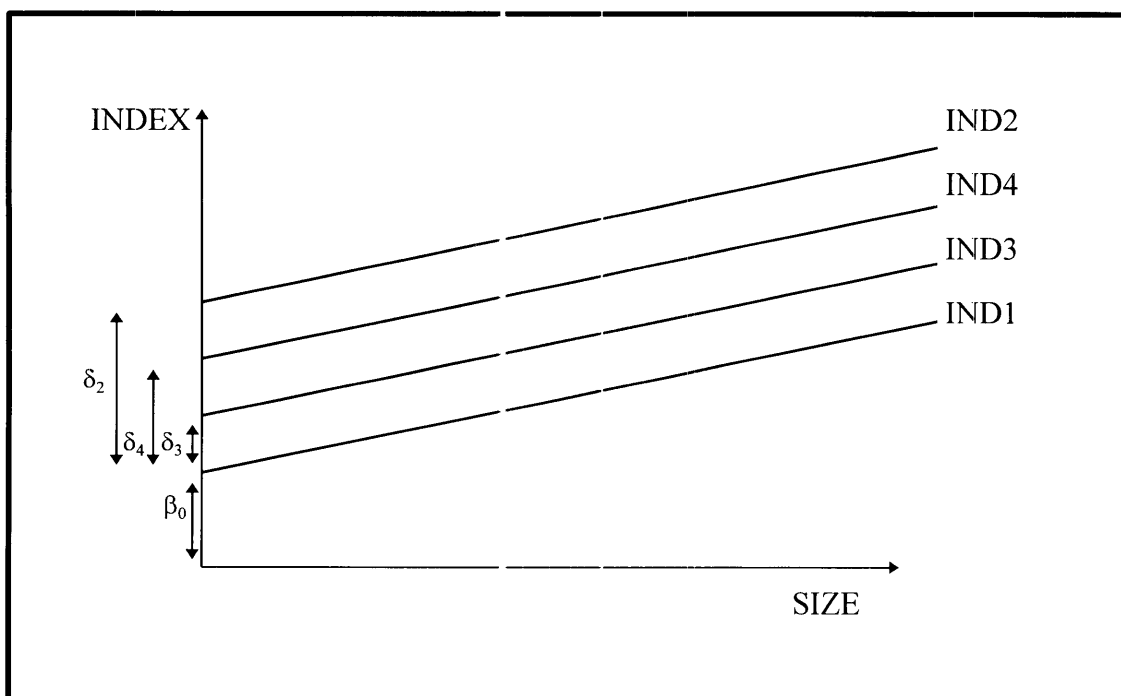
The signs of the α coefficients indicate the direction of the association between national cultural values and the extent of disclosure. **The result of the t test on the α coefficient determines the level of significance of the association between national cultural values and the extent of disclosure measured by the relevant index. If the α coefficient is significant and in the predicted direction the hypothesis is accepted.**

The value of β_0 indicates the intercept for Industry Group 1 which is the base industry group. The δ coefficients indicate the amounts by which the intercepts for Industry Groups 2 to 4 differ from that of Industry Group 1. The null hypothesis is that industry groups have no significant impact on the extent of consolidation disclosure. That is: $H_0 : \delta_2 = \delta_3 = \delta_4 = 0$.

The above model incorporates three dummy variables for industry groups. The use of dummy variables in multiple regression analysis is described by Doran and Guise (1984, pp.149-73). In the above regression model it is assumed that for any given industry group the disclosure index may vary. For example, manufacturing corporations may make more or less disclosures than finance corporations. However, the marginal effects of changes in the other variables (national cultural values and total assets) that affect the extent of disclosure are assumed to be the same for all industry groups. Using dummy variables one industry group is selected as the base

and the intercepts for the other industry groups are expressed relative to this intercept. The use of dummy variables enables all data to be pooled from each industry group and thus '...there are more degrees of freedom from the combined model and hence greater efficiency' [Doran and Guise (1984, p.152)]. The use of dummy variable as described above is illustrated in Figure 8.1.

Figure 8.1: Illustration of the Multiple Regression Equation Using Dummy Variables.



From Figure 8.1 it can be observed that the intercept of Industry Group 1 is β_0 ; the intercept of Industry Group 2 is $\beta_0 + \delta_2$; the intercept of Industry Group 3 is $\beta_0 + \delta_3$; and the intercept of Industry Group 4 is $\beta_0 + \delta_4$.

The value of β_1 measures the marginal effect of a change in total assets upon disclosure. For example, as reported in Table 7.3 corporations in Japan were much larger in terms of total assets than corporations in other countries. This measure has

been included in the regression model to allow for any impact that total assets may have on the extent of a corporation's consolidation disclosures. It is expected that total assets should have no significant influence upon ECD in the corporate annual reports in this sample because all of the corporations included in the sample were selected on the criteria of being classified in surveys of the largest corporations in their country of headquarters. The variation in corporation size (see Table 7.3) has, however, been included as a variable in the model to be sure that its influence, if any, is taken into account.

Two transformations of the data were made to provide more easily interpretable results. First, TOASSETS was converted to a number using billions of dollars as the unit. This was achieved by dividing TOASSETS by 1,000,000 and creating a new variable TOASSET1. Second, the CDI index was converted to a range between 0 and 100 by multiplying the CDI by 100. A new variable was created called CDI1 which is in the same scale as the national cultural value indices. Similar transformations were made for each of the ten partial consolidation disclosure indices and the GFI. These two transformations enable the results of the multiple regression to be interpreted in terms of what effect a one unit change in a national cultural value has on the relevant disclosure index.

8.2.2 TESTING DEGREE OF VARIATION IN THE INDICES

In this sub-Section the procedure for testing the association between national cultural values and the degree of variation in the extent of disclosures on the various indices is outlined. The procedure followed is a variation of the Breusch-Pagan test for heteroskedasticity [Judge, Hill, Griffiths, Lutkepohl and Lee (1988, p.372)]. The Breusch-Pagan test is used when '... the variance is some function (but not necessarily multiplicative) of more than one explanatory variable' [Judge et al (1988, p.372)]. In

this study the variance is assumed to be a function of the national cultural values of the country of headquarters of the corporation.

The hypotheses concerning the association of national cultural values with the degree of variation in the extent of disclosure in the CDI, $CDI_{A \rightarrow J}$ and GFI are tested using the residual of the respective multiple regression equations. The square of the residual (μ^2) represents the degree of variation in each of the indices once the effects of industry type, corporation size and national cultural values have been removed. That is, the amount by which the multiple regression equation does not predict the exact extent of disclosure by a corporation. The residual is squared because some errors will be below (negative) and others above (positive) the predicted extent of disclosure by the multiple regression equation. The square of the residuals are all positive values. The square of the residuals are used to represent the DVECD, DVEPCD and DVEGF on each of the respective indices. The suggested model can be expressed in the following form:

Equation 8.3:

$$\mu^2 = f(\text{National cultural values})$$

where;

$$\mu^2 = \text{Residual squared (res_x)}^2$$

National cultural values are those hypothesised in Chapter 5 to be associated with the degree of variation in disclosure indices outlined in Chapter 6.

The model for the multiple regression equation is:

Equation 8.4:

$$\mu^2 = \gamma_0 i + \gamma_1 PD_i + \gamma_2 UA_i + \gamma_3 ID_i + \gamma_4 LTO_i + \epsilon_i$$

where;

$i = 1, 2, \dots, N$ and indicates the i -th corporation in the $N = 184$ sample;

- PD = National cultural value 1 (Power distance)
 UA = National cultural value 2 (Uncertainty avoidance);
 ID = National cultural value 3 (Individualism);
 LTO = National cultural value 4 Long term orientation);
 ε = Residual error;

and the γ 's are parameters to be estimated.

The sign of the γ coefficients indicate the direction of the association between national cultural values and the degree of variation in the extent of disclosure on the various indices. **The result of the t test on the γ coefficient determines the level of significance of the association between national cultural values and the degree of variation in the extent of disclosure measured by the relevant index. If the γ coefficient is significant and in the predicted direction the hypothesis is accepted.**

In this Section the methodology for testing the hypotheses has been outlined. The methodology for investigating the association between national cultural values and consolidation accounting disclosures involves the use of multiple regression analysis. The significance of the t-statistic for the multiple regression coefficients for national cultural values provides a measure of the strength of their association with the extent of consolidation disclosures measured using various indices. In the multiple regression equation between the squares of the (first stage) residuals and national cultural values, the significance of the t-statistic for the coefficients for national cultural values provides a measure of the strength of their association with the degree of variation in the extent of consolidation disclosures.

8.3 THE ASSOCIATION BETWEEN NATIONAL CULTURAL VALUES AND THE CDI

In this Section the results of the tests of the association between national cultural values and the ECD and DVECD as measured by the CDI are reported. These tests are reported separately. First, the results of the multiple regression equation concerning the association between national cultural values and ECD are discussed. These results concern the following hypotheses: H₁, H₃, H₅ and H₇. Second, the results of the multiple regression equation concerning the relationship between national cultural values and DVECD are discussed. These results concern the following hypotheses: H₂, H₄, H₆ and H₈.

8.3.1 NATIONAL CULTURAL VALUES AND ECD

In this sub-Section the results of the tests of the association between national cultural values and ECD on the CDI are reported. First, the univariate correlation coefficients between national cultural values and the CDI are reported. Second, the multiple regression coefficients for all the variables in the equation are discussed.

The association of national cultural values with the CDI using univariate correlation analysis as part of the descriptive statistics for the multiple regression analysis resulted in the following correlation coefficients and their associated significance.

Power distance:	-.313 (p-value = .000)
Uncertainty avoidance:	-.305 (p-value = .000)
Individualism:	.616 (p-value = .000)
Long term orientation:	-.429 (p-value = .000)

The signs of each of the associations are in the hypothesised direction and each is significantly associated with the CDI at the .000 level. [Unless otherwise stated all tests for significance and comments concerning significance are at the 0.05 level of

confidence using a one tailed test.] The above statistics provide support for the hypotheses concerning the association between national cultural values and ECD outlined in Chapter 5.

The influence of industry group, corporation total assets and national cultural values, and the ECD, as measured by the CDI, is expressed in the following estimated multiple regression equation:

Equation 8.5:

$$\begin{aligned} \text{CDI} = & 19.271 + 1.380 \text{ IND2} - 2.866 \text{ IND3} + 5.092 \text{ IND4} + .0508 \text{ TOASSET1} \\ & (11.208) \quad (2.792) \quad (3.234) \quad (3.417) \quad (.033) \\ & + .074 \text{ PD} - .307 \text{ UA} + .496 \text{ ID} + .051 \text{ LTO} \\ & (.085) \quad (.042) \quad (.071) \quad (.054) \end{aligned}$$

(F = 30.315, p-value = .000, R-Square = .581, Adjusted R-Square = .561)

[Figures in brackets below the estimates of the coefficients are the standard errors.]

The F-statistic and p-value of the F-statistic indicate that the ECD as measured by the CDI is significantly associated with the variables in the multiple regression equation.

This equation can be interpreted in the following way:

In the above equation dummy variables for all but Industry Group 1 have been included. The constant in the equation is therefore interpreted as the intercept for Industry Group 1. Industry Group 1 is thus referred to as the base group. The coefficients of the dummy variables of the other industry groups indicate the amounts by which the intercepts of each group differ from the base group.

The estimate of the intercept coefficient for Industry Group 1 (resources) is 19.271 (t = 1.719, p-value = .087). This may be interpreted as the disclosure level when total assets and all national cultural values are zero, which is not a meaningful value.

Corporations in Industry Group 2 (manufacturing) disclose 1.379 ($t = .494$, $p\text{-value} = .621$) additional units of disclosure on the CDI, implying an intercept of 20.651. Corporations in Industry Group 3 (finance) disclose 2.866 ($t = -.886$, $p\text{-value} = .376$) less units of disclosure on the CDI, implying an intercept of 16.404. Corporations in Industry Group 4 (services) disclose 5.092 ($t = 1.490$, $p\text{-value} = .137$) additional units of disclosure on the CDI, implying an intercept of 24.363. Thus, on average corporations in the service industry group have the greatest ECD, all other things being equal.

Overall, the classification of corporations into industry groups does not significantly influence the ECD on the CDI. This is observed in two ways. First, by examining the significance of the t-statistic associated with each industry group. In each case the p-value of the industry group dummy variable coefficient is not less than .05 indicating the coefficient is not significant at the .05 level. Second, a joint test of the impact of the industry group variables on the multiple regression can be carried out by comparing the R-square with and without the industry group variables. This test is described by Tabachnick and Fidell (1989, p.157). The incremental F-ratio (F_{inc}) attributed to the inclusion of the industry group variables was calculated to be 2.53. This ratio is not significant at the .05 level. Thus, it can be concluded that the influence of industry groups on the ECD (measured using the CDI) is not significant.

The coefficient for TOASSET1 indicates a positive relationship of .0508 ($t = 1.548$, $p\text{-value} = .123$) between the total assets of a corporation and ECD. This indicates that for every \$1 billion increase in total assets the ECD increases by approximately .05 units of disclosure. Alternatively, an increase in total assets of approximately \$20 billion dollars would result in one additional unit of disclosure on the CDI. The test of significance of this relationship indicates that total assets does not significantly affect the CDI. This is consistent with the null hypothesis that total assets are not associated with ECD as measured by the CDI.

The regression coefficients for the four national cultural values are as follows:

Power distance:	.074 (t = .875, p-value = .191)
Uncertainty avoidance:	-.307 (t = -7.318, p-value = .000)
Individualism:	.496 (t = 6.956, p-value = .000)
Long term orientation:	.051 (t = .951, p-value = .171)

These coefficients indicate that the ECD, as measured by the CDI, is significantly associated with the national cultural values of uncertainty avoidance and individualism. The national cultural values of power distance and long term orientation are not significantly associated with the ECD. Uncertainty avoidance is negatively associated with ECD and for approximately every 3 units of increase in the uncertainty avoidance measure the CDI decreases by 1 unit. Individualism is positively associated with the ECD and for approximately every 2 units of increase in the measure of individualism the CDI increases by 1 unit.

The above results provide strong support for H₃ and H₅. That is:

H₃: The higher a country ranks in terms of uncertainty avoidance the lower the ECD in corporate annual reports.

H₅: The higher a country ranks in terms of individualism the higher the ECD in corporate annual reports.

The relationship between the national cultural values of power distance and long term orientation are not significant in the regression equation.

The multiple regression analysis does not provide significant support for H₁ and H₇. However, recall that the univariate correlation analysis did provide support for these hypotheses. This observation is most likely a consequence of the univariate correlations being more susceptible to the influence of spurious correlations than the multivariate analysis.

In conclusion it can be argued the national cultural values of uncertainty avoidance and individualism are significantly associated with the ECD as measured by the CDI using both univariate and multivariate analyses. The national cultural values of power distance and long term orientation appear to be significantly associated with the ECD (as measured by the CDI) using univariate analysis. The reason for these national cultural values not being significantly associated with ECD using multiple regression analysis is most likely due to correlations between the national cultural values providing misleading results in the univariate analysis.

8.3.2 NATIONAL CULTURAL VALUES AND DVECD

In this sub-Section the results of the examination of the association between national cultural values and the DVECD are reported. The procedure followed for testing this association is a variation of the Breusch-Pagan test for heteroskedasticity [Judge, et al (1988, p.372)] and was discussed in Section 8.2.2. The relationship between national cultural values and DVECD is expressed in the following estimated multiple regression equation:

Equation 8.6:

$$\text{DVECD} = 370.276 - 1.525 \text{PD} + .110 \text{UA} - .910 \text{ID} - 1.990 \text{LTO}$$

$$(195.860) \quad (1.566) \quad (.725) \quad (1.304) \quad (.981)$$

(F = 1.5930, p-value = .1781, R-Square = .0344, Adjusted R-Square = .0128)

The F-statistic and the p-value of the F-statistic indicate that as a group the national cultural values are not significantly associated with DVECD. The coefficients in the equation had the following statistics:

Power distance:	$\beta = -.974$ (p-value = .166)
Uncertainty avoidance:	$\beta = .152$ (p-value = .440)
Individualism:	$\beta = -.698$ (p-value = .243)
Long term orientation:	$\beta = -2.028$ (p-value .022)

The only national cultural value with a significant association with the DVECD was long term orientation. This provides significant support for H₈. That is:

H₈: The higher a country ranks in terms of long term orientation the lower the DVECD in corporate annual reports.

The evidence from the above analysis is that the national cultural value of long term orientation is significantly associated with DVECD. However, there appears to be no significant association between the national cultural values of power distance, uncertainty avoidance and individualism, and DVECD.

8.4 THE ASSOCIATION BETWEEN NATIONAL CULTURAL VALUES AND PARTIAL CONSOLIDATION DISCLOSURE INDICES

In this Section the results of the tests of the association between national cultural values and the EPCD and DVEPCD, as measured by the ten partial consolidation disclosure indices, are discussed. The results in this Section represent a dissection of the CDI into its ten categories to examine the influence of national cultural values on the disclosure of different types of information in the CDI. The methodology used is the same as in the tests of the relationship between the ECD and DVECD on the CDI. First, for each partial consolidation disclosure index correlation coefficients and their associated t-statistic and significance are reported. Second, a multivariate regression model is constructed to examine the sign and significance of the coefficients for industry group, corporation total assets and national cultural values. Third, the residuals from this multiple regression model are used to investigate the association between the DVEPCD and national cultural values. The sign and significance of the coefficients for the national cultural values are used to determine the relationship between the DVECD and national cultural values.

8.4.1 NATIONAL CULTURAL VALUES AND EPCD

In this sub-Section the results of the tests concerning the relationships between the national cultural values and EPCD on each of the ten partial consolidation disclosure indices are discussed. First, in Table 8.1 the correlation coefficients and one-tailed tests of significance are reported for each of the ten partial consolidation disclosure indices. All results printed in bold are significant at the .05 level of confidence and in the predicted sign.

Table 8.1: Correlation coefficients 1-tailed p-value for National Cultural Values and Ten Partial Consolidation Disclosure Indices

Index	Power Distance	Uncertainty Avoidance	Individualism	Long Term Orientation
CDI _A	-.378 .000*	-.292 .000*	.588 .000*	-.361 .000*
CDI _B	-.407 .000*	-.300 .000*	.658 .000*	-.401 .000*
CDI _C	-.215 .001*	-.329 .000*	.512 .000*	-.507 .000*
CDI _D	.007 .232	-.476 .000*	.227 .001*	-.302 .000*
CDI _E	-.253 .000*	-.144 .013*	.496 .000*	-.299 .000*
CDI _F	-.118 .028*	.488 .000*	.073 .082	.146 .012*
CDI _G	-.388 .000*	-.094 .051	.637 .000*	-.448 .000*
CDI _H	-.378 .000*	.127 .022*	.536 .000*	-.298 .000*
CDI _I	.134 .018*	-.484 .000*	.157 .009*	-.215 .001*
CDI _J	-.269 .000*	-.155 .009*	.351 .000*	-.182 .004*

* = significant at the 0.05 confidence level

The first number in each cell is the univariate correlation coefficient. The second number in each cell is the 1-tailed p-value.

All the correlation coefficients are significant at the .05 level and in the hypothesised direction for the following partial consolidation disclosure indices:

CDI_A : Accounting policies, standards and legislation

CDI_B : Definition of the economic entity

CDI_C : Financial statements published

CDI_E : Outside equity interests

CDI_J : Joint ventures and other arrangements

For each of the following partial consolidation disclosure indices the following correlation coefficients were significant at the .05 level of confidence and in the predicted direction:

CDI_D : Subsidiaries and inter-entity transactions (uncertainty avoidance, individualism and long term orientation).

CDI_F : Exclusions from consolidation (power distance).

CDI_G : Goodwill (power distance, individualism and long term orientation).

CDI_H : Treatment of goodwill (power distance, individualism and long term orientation).

CDI_I : Associated companies (uncertainty avoidance, individualism and long term orientation).

In summary, the above analysis of the univariate correlation coefficients between the national cultural values and disclosures on the partial consolidation disclosure indices reveals that long term orientation was significantly correlated at the .05 level with ten of the partial indices, while power distance, uncertainty avoidance and individualism were each significantly correlated at the .05 level with nine of the indices. The analysis of these correlation coefficients provides support for the hypotheses concerning the association between national cultural values and the EPCD outlined in

Chapter 5. However, as indicated in Section 8.3.1 univariate correlation analysis is more susceptible to the influence spurious correlations than multivariate analysis.

The next stage in the analysis of the association between national cultural values and the EPCD on the ten partial consolidation disclosure indices involves the application of multiple regression using the form of Equation 8.2. The results of the multiple regression equations for each of the ten partial consolidation disclosure indices are summarised in Table 8.2. In this Table the coefficients for each of the variables in the multiple regression equation are reported together with the t-statistic and the p-value. Each of the national cultural values where the p-value of the t-statistic was 0.05 or lower and the association was in the hypothesised direction the result is printed in bold. The national cultural values of individualism and uncertainty avoidance were respectively significantly associated with the EPCD on nine and eight of the partial consolidation disclosure indices in the hypothesised direction. However, the national cultural values of power distance and long term orientation were each significantly associated with only one partial consolidation disclosure index in the hypothesised direction.

Table 8.2: Multiple Regression Coefficients, t-Statistic and p-value of t-statistic for EPCD on Ten Partial Consolidation Disclosure Indices

Variable	Cons-	IND2	IND3	IND4	TOAS-	PD	UA	ID	LTO
Index	stant				SET1				
CDI _A	42.820	7.008	4.509	11.645	.112	-.121	-.417	.484	.017
	2.933	1.931	1.072	2.622	2.624	-1.098	-7.624	5.222	.237
	.004*	.055	.285	.010*	.010*	.137	.000*	.000*	.407
CDI _B	26.969	1.763	-.198	-.682	-.013	-.087	-.558	.783	.104
	1.548	.406	-.039	-.128	-.260	-.657	-8.531	7.061	1.243
	.123	.685	.969	.898	.795	.256	.000*	.000*	.108
CDI _C	82.859	4.900	3.572	6.777	-.028	-.029	-.353	.411	-.157
	4.968	1.179	.742	1.333	-.577	-.232	-5.646	3.875	-1.966
	.000*	.240	.459	.184	.565	.409	.000*	.000*	.025*
CDI _D	45.985	-1.321	-3.702	5.223	.042	.070	-.457	.288	-.001
	2.529	-.292	-.706	.942	.788	.509	-6.695	2.493	-.016
	.012*	.771	.481	.347	.432	.306	.000*	.007*	.494
CDI _E	-14.930	10.367	-1.326	21.090	.243	.366	-3.89	.990	.173
	-.508	1.416	-.156	2.354	2.830	1.647	-3.528	5.292	1.225
	.612	.159	.876	.020*	.005*	.051	.001*	.000*	.111
CDI _F	-24.818	.356	-2.279	-1.907	.032	.155	.214	.108	.082
	-2.549	.147	-.811	-.643	1.110	2.108	5.859	1.741	1.750
	.012*	.883	.418	.521	.268	.018*	.000*	.042*	.041*
CDI _G	8.997	7.864	4.146	9.066	.022	-.023	-.181	.480	-.078
	.588	2.065	.940	1.945	.486	-.201	-3.141	4.938	-1.063
	.557	.040*	.349	.053	.628	.421	.001*	.000*	.145
CDI _H	-6.536	11.686	1.652	27.279	.128	.052	.084	.842	-.082
	-.179	1.285	.157	2.452	1.197	.188	.613	3.629	-.470
	.858	.200	.876	.015*	.233	.426	.271	.000*	.320
CDI _I	-23.097	3.968	-7.950	9.726	.109	.705	-.683	.808	.348
	-.902	.622	-1.076	1.246	1.452	3.643	-7.111	4.963	2.829
	.368	.535	.283	.214	.148	.000*	.000*	.000*	.003*
CDI _J	46.490	-20.197	-20.243	-14.896	-.024	-.260	-.211	.151	.019
	2.525	-4.402	-3.809	-2.653	-.447	-1.870	-3.056	1.293	.213
	.013*	.000*	.000*	.009*	.656	.032*	.002*	.060	.416

* = significant at the 0.05 level of confidence

The first number in each cell is the estimate of the regression coefficient. The second number in each cell is the t-statistic. The third number in each cell is the p-value of the t-statistic.

The multiple regression equations for each of the ten partial consolidation indices are discussed below together with conclusions concerning the association of national cultural values and the EPCD.

A. CDI_A : Accounting policies, standards and legislation.

The relationship between national cultural values and the EPCD as measured by the CDI_A is expressed in the following estimated multiple regression equation:

Equation 8.7:

$$\begin{aligned}
 CDI_A = & 42.820 + 7.008 IND2 + 4.509 IND3 + 11.645 IND4 + .112 TOASSET1 \\
 & (14.571) (3.630) \quad (4.2(5) \quad (4.442) \quad (.043) \\
 & -.121 PD - .417 UA + .484 DD + .017 LTO \\
 & (.110) \quad (.055) \quad (.092) \quad (.070)
 \end{aligned}$$

(F = 27.350, p-value = .000, R-Square = .556, Adjusted R-Square = .535)

The F-statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD, as measured by the CDI_A . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is 42.820 (t = 2.933, p-value = .004). Corporations in Industry Group 2 (manufacturing) disclose 7.008 (t = 1.931, p-value = .055) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose 4.509 (t = 1.072, p-value = .285) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 (services) disclose 11.645 (t = 2.622, p-value = .010) additional units of disclosure relative to Industry Group 1.

Overall, the classification into industry groups influences the EPCD on the CDI_A . This can be observed in two ways. First, the difference between Industry Group 4 and

Industry Group 1 is significant at the 0.05 level of confidence. This result indicates that corporations in the service industries disclose significantly more information on the CDI_A than corporations in resource industries. Corporations in the other industry groups do not have an EPCD that is significantly different from Industry Group 1. Second, a joint test of the impact of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be 2.62 and is not significant at the 0.05 level of confidence. Thus, it can be concluded that the influence of industry groups on the EPCD (measured using the CDI_A) is not significant.

The coefficient for TOASSET1 indicates a significant positive relationship of .112 ($t = 2.624$, $p\text{-value} = .010$) between the total assets of a corporation and the EPCD as measured on the CDI_A . This indicates that for every \$1 billion increase in the total assets the EPCD on the CDI_A increases by approximately .11 units of disclosure. Alternatively, an increase in total assets of approximately \$9 billion would result in one additional unit of disclosure. This association is not consistent with the null hypothesis that total assets should not affect EPCD. This association would indicate that larger corporations significantly disclose more information concerning accounting policies, standards and legislation than smaller corporations.

The regression coefficients for the four national cultural values are as follows:

Power distance:	.121 ($t = -1.098$, $p\text{-value} = .137$)
Uncertainty avoidance:	-.417 ($t = -7.624$, $p\text{-value} = .000$)
Individualism:	.484 ($t = 5.222$, $p\text{-value} = .000$)
Long term orientation:	.017 ($t = .237$, $p\text{-value} = .407$)

These coefficients indicate that the EPCD as measured by the CDI_A is significantly associated with the national cultural values of uncertainty avoidance and individualism. The national cultural values of power distance and long term orientation are not significantly associated with the EPCD on the CDI_A . Uncertainty avoidance is negatively associated with the EPCD and for approximately every 2 1/2

units increase in the uncertainty avoidance measure the CDI_A decreases by 1 unit. Individualism is positively associated with the EPCD and for approximately every 2 units of increase in the measure of individualism the CDI_A increases by 1 unit.

The above results provide support for H_{3A} and H_{5A} . The analysis does not provide support for H_{1A} and H_{7A} .

B. CDI_B : Definition of the economic entity.

The relationship between national cultural values and the EPCD as measured by the CDI_B is expressed in the following estimated multiple regression equation:

Equation 8.9:

$$\begin{aligned}
 CDI_B = & 26.969 + 1.763 IND2 - .198 IND3 - .682 IND4 - .013 TOASSET1 \\
 & (17.422) \quad (4.340) \quad (5.037) \quad (5.311) \quad (.051) \\
 & -.087 PD - .558 UA + .783 ID + .104 LTO \\
 & (.132) \quad (.065) \quad (.111) \quad (.084)
 \end{aligned}$$

($F = 36.099$, $p\text{-value} = .000$, $R\text{-Square} = .623$, $Adjusted\ R\text{-Square} = .605$)

The F-statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_B . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is 26.969 ($t = 1.548$, $p\text{-value} = .123$). Corporations in Industry Group 2 (manufacturing) disclose 1.763 ($t = .406$, $p\text{-value} = .658$) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose -.198 ($t = -.039$, $p\text{-value} = .969$) less units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 (services) disclose -.682 ($t = -.128$, $p\text{-value} = .898$) less units of disclosure than Industry Group 1.

Overall, the classification into industry groups does not significantly influence the EPCD on the CDI_B. This can be observed in two ways. First, by observing the significance of the t-statistic associated with each industry group. None of these were significant. Second, a joint test of the impact of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be 0.176 and is not significant at the 0.05 level of confidence. Thus it can be concluded that the influence of industry groups on the EPCD (measured using the CDI_B) is not significant.

The coefficient for TOASSET1 indicates a relationship of -.013 ($t = .260$, $p\text{-value} = .795$) between the total assets of a corporation and the EPCD as measured on the CDI_B. This indicates that for every \$1 billion increase in the total assets the EPCD on the CDI_B decreases by approximately .01 units of disclosure. Alternatively, an increase in total assets of approximately \$100 billion would result in one less unit of disclosure. This relationship is not significant and is consistent with the null hypothesis that total assets should not affect EPCD.

The regression coefficients for the four national cultural values are as follows:

Power distance:	-.087 ($t = -.675$, $p\text{-value} = .256$)
Uncertainty avoidance:	-.558 ($t = -8.531$, $p\text{-value} = .000$)
Individualism:	.783 ($t = 7.061$, $p\text{-value} = .000$)
Long term orientation:	.104 ($t = 1.243$, $p\text{-value} = .108$)

These coefficients indicate that the EPCD as measured by the CDI_B is significantly associated with the national cultural values of uncertainty avoidance and individualism. The national cultural values of power distance and long term orientation are not significantly associated with the EPCD on the CDI_B. Uncertainty avoidance is negatively associated with the EPCD and for approximately every 2 units increase in the uncertainty avoidance measure the CDI_B decreases by 1 unit.

Individualism is positively associated with the EPCD and for approximately every 3 units of increase in the measure of individualism the CDI_B increases by 2 units.

The above results provide for H_{3B} and H_{5B} . There is no support from the analysis for H_{1B} and H_{7B} .

C. CDI_C : Financial statements published.

The relationship between national cultural values and the EPCD as measured by the CDI_C is expressed in the following estimated multiple regression equation:

Equation 8.10:

$$\begin{aligned}
 CDI_C = & 82.859 + 4.900 IND2 + 3.572 IND3 + 6.777 IND4 - .028 TOASSET1 \\
 & (16.677) (4.155) \quad (4.812) \quad (5.084) \quad (.049) \\
 & - .029 PD - .353 UA + .411 ID - .157 LTO \\
 & (.126) \quad (.063) \quad (.106) \quad (.080)
 \end{aligned}$$

(F = 19.612, p-value = .000, R-Square = .473, Adjusted R-Square = .449)

The F-statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_C . The equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is 82.859 (t = 4.968, p-value = .000). Corporations in Industry Group 2 (manufacturing) disclose 4.900 (t = 1.179, p-value = .240) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose 3.572 (t = .742, p-value = .460) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 (services) disclose 6.777 (t = 1.333, p-value = .184) additional units of disclosure relative to Industry Group 1.

Overall, the classification into industry groups does not significantly influence the EPCD on the CDI_C . This can be observed in two ways. First, by observing the significance of the t-statistic associated with each industry group. None of these were significant. Second, a joint test of the impact of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be 2.090 and is not significant at the 0.05 level of confidence. Thus, it can be concluded that the influence of industry groups on the EPCD (measured using the CDI_C) is not significant.

The coefficient for TOASSET1 indicates a relationship of -.028 ($t = -.577$, P-value = .565) between the total assets of a corporation and the EPCD as measured by the CDI_C . This indicates that for approximately every \$1 billion increase in the total assets the EPCD on the CDI_C decreases by approximately .03 units of disclosure. Alternatively, an increase in total assets of approximately \$33 billion would result in one less unit of disclosure. This relationship is not significant. This is consistent with the null hypothesis that total assets would not be significantly associated with the EPCD as measured by the CDI_C .

The regression coefficients for the four national cultural values are as follows:

Power distance:	-.029 ($t = -.232$, p-value = .409)
Uncertainty avoidance:	-.353 ($t = -5.646$, p-value = .000)
Individualism:	.411 ($t = 3.875$, p-value = .000)
Long term orientation:	-.157 ($t = -1.966$, p-value = .025)

These coefficients indicate that the EPCD as measured by the CDI_C is significantly associated with the national cultural values of uncertainty avoidance, individualism and long term orientation. The national cultural value of power distance is not significantly associated with the EPCD on the CDI_C . Uncertainty avoidance is negatively associated with the EPCD and for approximately every 3 units increase in the uncertainty avoidance measure the CDI_C decreases by 1 unit. Individualism is

positively associated with the EPCD and for approximately every 2 1/2 units increase in the individualism measure the CDI_C increases by 1 unit. Long term orientation is negatively associated with the EPCD and for approximately every 6 units increase in the long term orientation measure the CDI_C decreases by 1 unit.

The above results provide support for H_{3C} , H_{5C} and H_{7C} . The analysis does not provide support for H_{1C} .

D. CDI_D : Subsidiaries and inter-entity transactions.

The relationship between national cultural values and the EPCD as measured by the CDI_D is expressed in the following estimated multiple regression equation:

Equation 8.11:

$$\begin{aligned}
 CDI_D = & 45.985 - 1.322 IND2 - 3.703 IND3 + 5.223 IND4 + .042 TOASSET1 \\
 & (18.183) (4.530) \quad (5.247) \quad (5.543) \quad (.053) \\
 & + .070 PD - .457 UA + .238 ID - .001 LTO \\
 & (.137) \quad (.068) \quad (.116) \quad (.087)
 \end{aligned}$$

(F = 11.431, p-value = .000, R-Square = .343, Adjusted R-Square = .313)

The F statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_D . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is 45.985 (t = 2.529, p-value = .012). Corporations in Industry Group 2 (manufacturing) disclose -1.322 (t = -.292, p-value = .771) less units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose -3.703 (t = -.706, p-value = .481) less units of disclosure relative to Industry Group 1. Corporations in

Industry Group 4 (services) disclose 5.223 ($t = .942$, $p\text{-value} = .347$) additional units of disclosure relative to Industry Group 1.

Overall, the classification of corporations into industry groups does not significantly influence the EPCD on the CDI_D. This is observed in two ways. First, by observing the significance of the t-statistic associated with each industry group. The differences between industry groups are not significant. Second, a joint test of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be 1.171 and is not significant at the 0.05 level of confidence. Thus, it can be concluded that the influence of industry groups on the EPCD (measured using the CDI_D) is not significant.

The coefficient for TOASSET1 indicates a relationship of .042 ($t = .788$, $p\text{-value} = .432$) between the total assets of a corporation and the EPCD as measured on the CDI_D. This indicates that for every \$1 billion increase in total assets the EPCD on the CDI_D increases by approximately .04 units of disclosure. Alternatively, an increase in total assets of approximately \$25 billion would result in one additional unit of disclosure. This is consistent with the null hypothesis that total assets would not be significantly associated with the EPCD as measured by the CDI_D.

The regression coefficients for the four national cultural values are as follows:

Power distance:	.070 ($t = .509$, $p\text{-value} = .306$)
Uncertainty avoidance:	-.457 ($t = -6.695$, $p\text{-value} = .000$)
Individualism:	.288 ($t = 2.493$, $p\text{-value} = .007$)
Long term orientation:	-.001 ($t = -.016$, $p\text{-value} = .494$)

These coefficients indicate that the EPCD as measured by the CDI_D is significantly associated with the national cultural values of uncertainty avoidance and individualism. The national cultural values of power distance and long term orientation are not significantly associated with the EPCD on the CDI_D. Uncertainty

avoidance is negatively associated with the EPCD and for approximately every two units increase in the measure of uncertainty avoidance the CDI_D decreases by 1 unit. Individualism is positively associated with the EPCD and for approximately every 3 1/2 units of increase in the measure of individualism the CDI_D increases by 1 unit.

The above results provide support for H_{3D} and H_{5D} . The analysis does not provide support for H_{1D} and H_{7D} .

E. CDI_E : Outside equity interest.

The relationship between national cultural values and the EPCD as measured by the CDI_E is expressed in the following estimated multiple regression equation:

Equation 8.12:

$$\begin{aligned}
 CDI_E = & -14.930 + 10.367 IND2 - 1.326 IND3 + 21.090 IND4 + .234 TOASSET1 \\
 & (29.389) \quad (7.322) \quad (8.480) \quad (8.959) \quad (.086) \\
 & + .366 PD - .389 UA + .589 ID + .173 LTO \\
 & (.222) \quad (.110) \quad (.187) \quad (.141)
 \end{aligned}$$

(F = 12.985, p-value = .000, R-Square = .373, Adjusted R-Square = .344)

The F statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_E . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is -14.930 (t = -.508, p-value = .612). Corporations in Industry Group 2 (manufacturing) disclose 10.367 (t = 1.416, p-value = .159) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose -1.326 (t = -.156, p-value = .876) less unit of disclosure relative to Industry Group 1.

Corporations in Industry Group 4 (services) disclose 21.090 ($t = 2.354$, $p\text{-value} = .020$) additional units of disclosure relative to Industry Group 1.

Overall, the classification into industry groups influences the EPCD on the CDI_E . This can be observed in two ways. First, the difference between Industry Group 4 and Industry Group 1 is significant at the 0.05 level of confidence. This result indicates that corporations in the service industries disclose significantly more than information on the CDI_E than corporations in the resource industries. Second, a joint test of the impact of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be 3.510 and is significant at the 0.05 level of confidence. Thus, it can be concluded that the influence of industry groups is significantly associated with the EPCD measured using the CDI_E .

The coefficient for TOASSET1 indicates a significant positive relationship of .243 ($t = 2.830$, $p\text{-value} = .005$) between the total assets of a corporation and the EPCD as measured on the CDI_E . This indicates that for every \$1 billion increase in the total assets the EPCD on the CDI_E increases by approximately .24 units of disclosure. Alternatively, an increase in total assets of approximately \$4 billion would result in one additional unit of disclosure on the CDI_E . This association is not consistent with the null hypothesis that total assets should not affect EPCD. This association would indicate that larger corporations significantly disclose more information concerning outside equity interests than smaller corporations measured in terms of total assets.

The regression coefficients for the four national cultural values are as follows:

Power distance:	.366 ($t = 1.647$, $p\text{-value} = .051$)
Uncertainty avoidance:	-.389 ($t = -3.528$, $p\text{-value} = .001$)
Individualism:	.990 ($t = 5.292$, $p\text{-value} = .000$)
Long term orientation:	.173 ($t = 1.225$, $p\text{-value} = .111$)

These coefficients indicate that the EPCD as measured by the CDI_E is significantly associated with the national cultural values of uncertainty avoidance and individualism. The national cultural values of power distance and long term orientation are not significantly associated with the EPCD on the CDI_E . Uncertainty avoidance is negatively associated with the EPCD and for approximately every 2 1/2 units increase in the uncertainty avoidance measure the CDI_E decreases by 1 unit. Individualism is positively associated with the EPCD and for approximately every 1 unit of increase in the measure of individualism the CDI_E increases by 1 unit.

The above results provide support for H_{3E} and H_{5E} . The analysis does not provide support for H_{1E} and H_{7E} .

F. CDI_F : Exclusions from consolidation.

The relationship between national cultural values and the EPCD as measured by the CDI_F is expressed in the following estimated multiple regression equation:

Equation 8.13:

$$\begin{aligned}
 CDI_F = & -24.818 + .356 IND2 - 2.279 IND3 - 1.907 IND4 + .032 TOASSET1 \\
 & (9.735) (2.425) \quad (2.309) \quad (2.976) \quad (.025) \\
 & + .155 PD + .214 UA + .108 ID + .082 LTO \\
 & (.074) \quad (.037) \quad (.062) \quad (.047)
 \end{aligned}$$

($F = 8.342$, $p\text{-value} = .000$, $R\text{-Square} = .276$, $\text{Adjusted } R\text{-Square} = .243$)

The F statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_F . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is -24.818 ($t = -2.549$, $p\text{-value} = .012$). Corporations in Industry Group 2 (manufacturing)

disclose .356 ($t = .147$, $p\text{-value} = .883$) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose -2.279 ($t = -.811$, $p\text{-value} = .418$) less units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 (services) disclose -1.907 ($t = -.643$, $p\text{-value} = .521$) less units of disclosure relative to Industry Group 1.

Overall, the classification of corporations into industry groups does not significantly influence the EPCD on the CDI_F . This can be observed in two ways. First, by observing the significance of the t -statistic associated with each industry group. There were no significant differences between industry groups. Second, a joint test of the impact of industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be .693 and is not significant at the 0.05 level of confidence. Thus, it can be concluded that the influence of industry groups on the EPCD (measured using the CDI_F) is not significant.

The coefficient for TOASSET1 indicates a relationship of .032 ($t = 1.110$, $p\text{-value} = .268$) between the total assets of a corporation and the EPCD as measured by the CDI_F . This indicates that for every \$1 billion increase in the total assets the EPCD on the CDI_F increases by approximately .03 units of disclosure. Alternatively, an increase in total assets of approximately \$33 billion would result in one additional unit of disclosure. The test of significance of the of this relationship indicates that total assets does not significantly affect the CDI_F . This is consistent with the null hypothesis that total assets would not be significantly associated with the EPCD as measured by the CDI_F .

The regression coefficients for the four national cultural values are as follows:

Power distance:	155 ($t = 2.108$, $p\text{-value} = .018$)
Uncertainty avoidance:	214 ($t = 5.859$, $p\text{-value} = .000$)
Individualism:	108 ($t = 1.741$, $p\text{-value} = .042$)
Long term orientation:	082 ($t = 1.750$, $p\text{-value} = .041$)

These coefficients indicate that the EPCD as measured by the CDI_F is significantly associated with the national cultural values of power distance, uncertainty avoidance, individualism and long term orientation. Power distance is positively associated with the EPCD and for approximately every 6 1/2 units increase in the power distance measure the CDI_F increases by 1 unit. Uncertainty avoidance is positively associated with the EPCD and for approximately every 5 units increase in the uncertainty avoidance index the CDI_F increases by 1 unit. Individualism is positively associated with EPCD and for approximately every 9 units increase in the individualism index the CDI_F increases by 1 unit. Long term orientation is positively associated with EPCD and for approximately every 12 units increase in the long term orientation index the CDI_F increases by 1 unit. Only the association with individualism is in the predicted direction.

The above results provide support for H_{5F} . The analysis does not provide significant support for H_{1F} , H_{3F} and H_{7F} .

G. CDI_G : Goodwill.

The relationship between national cultural values and the EPCD as measured by the CDI_G is expressed in the following estimated multiple regression equation:

Equation 8.14:

$$\begin{aligned}
 CDI_G = & 8.997 + 7.864 IND2 + 4.146 IND3 + 9.066 IND4 + .022 TOASSET1 \\
 & (15.289) (3.809) \quad (4.412) \quad (4.661) \quad (.045) \\
 & - .023 PD - .180 UA + .480 ID - .078 LTO \\
 & (.116) \quad (.057) \quad (.097) \quad (.073)
 \end{aligned}$$

(F = 19.785, p-value = .000, R-Square = .475, Adjusted R-Square = .451)

The F statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_G . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is 8.997 ($t = .588$, $p\text{-value} = .557$). Corporations in Industry Group 2 (manufacturing) disclose 7.864 ($t = 2.065$, $p\text{-value} = .040$) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose 4.146 ($t = .940$, $p\text{-value} = .349$) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 (services) disclose 9.066 ($t = 1.945$, $p\text{-value} = .053$) additional units of disclosure relative to Industry Group 1.

Overall, classification of corporations into industry groups influences the EPCD on the CDI_G . This can be observed in two ways. First, the difference between Industry Group 2 and Industry Group 1 is significant at the 0.05 level of confidence. This indicates that corporations in the manufacturing industry group disclose significantly more information on the CDI_G than corporations in the resource industry group. Corporations in the other industry groups do not have an EPCD that is significantly different from Industry Group 1. Second, a joint test of the impact of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry group variables was calculated to be 1.980 and is not significant at the 0.05 level of confidence. Thus, it can be concluded that the overall influence of industry groups on the EPCD (measured using the CDI_G) is not significant.

The coefficient for TOASSET1 indicates a positive relationship of .022 ($t = .486$, $p\text{-value} = .628$) between the total assets of a corporation and the EPCD on the CDI_G . This indicates that for every \$1 billion increase in the total assets the EPCD on the CDI_G increases by approximately .02 units of disclosure. Alternatively, an increase in total assets of approximately \$50 billion would result in one additional unit of disclosure. The test of significance of this relationship indicates that total assets does

not significantly affect the CDI_G . This is consistent with the null hypothesis that total assets would not be significantly associated with the EPCD as measured by the CDI_G .

The regression coefficients for the four national cultural values are as follows:

Power distance:	-.023 (t = -.201, p-value = .421)
Uncertainty avoidance:	-.180 (t = -3.141, p-value = .001)
Individualism:	.480 (t = 4.938, p-value = .000)
Long term orientation:	-.078 (t = -1.063, p-value = .145)

These coefficients indicate that the EPCD as measured by the CDI_G is significantly associated with the national cultural values of uncertainty avoidance and individualism. The national cultural values of power distance and long term orientation are not significantly associated with the EPCD on the CDI_G . Uncertainty avoidance is negatively associated with the EPCD and for approximately every 5 units increase in the uncertainty avoidance measure the CDI_G decreases by 1 unit. Individualism is positively associated with the EPCD and for approximately every 2 units of increase in the measure of individualism the CDI_G increases by 1 unit.

The above results provide support for H_{3G} and H_{5G} . The analysis does not provide support for H_{1G} and H_{7G} .

H. CDI_H : Treatment of goodwill.

The relationship between national cultural values and the EPCD as measured by the CDI_H is expressed in the following estimated multiple regression equation:

Equation 8.15:

$$\begin{aligned}
 \text{CDI}_H = & -6.537 + 11.686 \text{ IND2} + 1.652 \text{ IND3} + 27.279 \text{ IND4} + .128 \text{ TOASSET1} \\
 & (36.490) \quad (9.091) \quad (11.529) \quad (11.124) \quad (.107) \\
 & + .052 \text{ PD} + .084 \text{ UA} + .842 \text{ ID} - .082 \text{ LTO} \\
 & (.276) \quad (.137) \quad (.232) \quad (.175)
 \end{aligned}$$

(F = 10.657, p-value = .000, R-Square = .572, Adjusted R-Square = .297)

The F statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_H . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is -6.537 ($t = -.179$, $p\text{-value} = .858$). Corporations in Industry Group 2 (manufacturing) disclose 11.686 ($t = 1.285$, $p\text{-value} = .200$) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose 1.652 ($t = .157$, $p\text{-value} = .876$) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 (services) disclose 27.279 ($t = 2.452$, $p\text{-value} = .015$) additional units of disclosure relative to Industry Group 1.

Overall, the classification of corporations into industry groups influences the EPCD on the CDI_H . This can be observed in two ways. First, the difference between Industry Group 4 and Industry Group 1 is significant at the 0.05 level of confidence. This results indicates that corporations in the service industry group disclose significantly more information on the CDI_H than corporations in the resource industry group. Corporations in the other industry groups do not have an EPCD that is significantly different from Industry Group 1. Second, a joint test of the impact of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be 3.013 and is significant at the 0.05 level of confidence. Thus, it can

be concluded that the influence of industry groups on the EPCD (measured using the CDI_H) is significant.

The coefficient for TOASSET1 indicates a positive relationship of .128 ($t = 1.197$, p -value = .233) between the total assets of a corporation and the EPCD as measured on the CDI_H . This indicates that for every \$1 billion increase in the total assets of a corporation the EPCD on the CDI_H increases by approximately .12 units of disclosure. Alternatively, an increase in total assets of approximately \$8 billion would result in one additional unit of disclosure. The test of significance of the relationship indicates that total assets is not significantly associated with the EPCD on the CDI_H . This is consistent with the null hypothesis that total assets would not be significantly associated with the EPCD on the CDI_H .

The regression coefficients for the four national cultural values are as follows:

Power distance:	.052 ($t = .188$, p -value = .426)
Uncertainty avoidance:	.084 ($t = .613$, p -value = .271)
Individualism:	.842 ($t = 3.629$, p -value = .000)
Long term orientation:	-.082 ($t = -.470$, p -value = .320)

These coefficients indicate that the EPCD as measured by the CDI_H is significantly associated with the national cultural value of individualism. The national cultural values of power distance, uncertainty avoidance and long term orientation are not significantly associated with the EPCD on the CDI_H . Individualism is positively associated with the EPCD and for approximately every 1.2 units increase in the individualism measure the CDI_H increases by 1 unit.

The above results provide support for H_{5H} . The analysis does not provide support for H_{1H} , H_{3H} and H_{7H} .

I. CDI_1 : Associated companies.

The relationship between national cultural values and the EPCD as measured by the CDI_1 is expressed in the following estimated multiple regression equation:

Equation 8.16:

$$\begin{aligned}
 CDI_1 = & -23.097 + 3.968 IND2 - 7.950 IND3 + 9.726 IND4 + .109 TOASSET1 \\
 & (25.097) \quad (6.377) \quad (7.386) \quad (7.803) \quad (.075) \\
 & + .705 PD - .683 UA + .818 ID + .348 LTO \\
 & (.193) \quad (.096) \quad (.163) \quad (.123)
 \end{aligned}$$

(F = 13.529, p-value = .000, R-Square = .618, Adjusted R-Square = .354)

The F statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_1 . This equation can be interpreted in the following way:

The estimate of the coefficient for Industry Group 1 (resources) is -23.097 (t = -.902, p-value = .368). Corporations in Industry Group 2 (manufacturing) disclose 3.968 (t = .622, p-value = .535) additional units of disclosure relative to Industry Group 1. Corporations in Industry Group 3 (finance) disclose -7.950 (t = -1.076, p-value = .283) less units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 disclose 9.726 (t = 1.246, p-value = .214) additional units of disclosure relative to Industry Group 1.

Overall, the classification of corporations into industry groups influences the EPCD on the CDI_1 . This can be observed in two ways. First, by observing the significance of the t-statistic associated with each industry group. There were no significant differences between industry groups. Second, a joint test of the impact of the industry group variables was carried out using the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was

calculated to be 2.69 and is significant at the 0.05 level of confidence. Thus, it can be concluded that the influence of the industry group variable on the EPCD (measured using the CDI_I) is significant.

The coefficient for TOASSET1 indicates a relationship of .109 ($t = 1.452$, $p\text{-value} = .148$) between the total assets of a corporation and the EPCD as measured on the CDI_I. This indicates that for every \$ billion increase in the total assets the EPCD on the CDI_I increases by approximately .11 units of disclosure. Alternatively, an increase in total assets of approximately \$9 billion would result in one additional unit of disclosure on the CDI_I. The test of the significance of the relationship indicates that total assets does not significantly affect the CDI_I. This is consistent with the null hypothesis that total assets would not be significantly associated with the EPCD as measured by the CDI_I.

The regression coefficients for the four national cultural values are as follows:

Power distance:	.704 ($t = 3.643$, $p\text{-value} = .000$)
Uncertainty avoidance:	-.683 ($t = -7.111$, $p\text{-value} = .000$)
Individualism:	.808 ($t = 4.963$, $p\text{-value} = .000$)
Long term orientation:	.348 ($t = 2.829$, $p\text{-value} = .003$)

These coefficients indicate that the EPCD as measured by the CDI_I is significantly associated with each of the national cultural values. First, power distance is positively associated with EPCD and for approximately every 1.4 units increase in the power distance measure the CDI_I increases by 1 unit. The sign of this association is not consistent with H₁₁. Second, uncertainty avoidance is negatively associated with the EPCD and for approximately every 1.4 units increase in the measure of uncertainty avoidance the CDI_I decreases by 1 unit. This supports H₃₁. Third, individualism is positively associated with EPCD and for approximately every 1.25 unit increase in the measure of individualism the CDI_I increases by 1 unit. This supports H₅₁. Fourth, long term orientation is positively associated with EPCD and

for approximately every 3 units of increase in the measure of long term orientation the CDI_I increases by 1 unit. The sign of this association is not consistent with H_{71} .

The above results provide support for H_{31} and H_{51} . The analysis does not provide support for H_{11} and H_{71} .

J. CDI_J : Joint ventures and other arrangements.

The relationship between national cultural values and the EPCD as measured by the CDI_J is expressed in the following estimated multiple regression equation:

Equation 8.17:

$$\begin{aligned}
 CDI_J = & 46.490 - 20.197 IND2 - 20.243 IND3 - 14.896 IND4 - .024 TOASSET1 \\
 & (18.415) \quad (4.588) \quad (5.314) \quad (5.614) \quad (.054) \\
 & - .260 PD - .211 UA + .151 ID + .019 LTO \\
 & (.139) \quad (.069) \quad (.117) \quad (.088)
 \end{aligned}$$

($F = 8.350$, $p\text{-value} = .000$, $R\text{-Square} = .276$, $Adjusted\ R\text{-Square} = .243$)

The F statistic indicates that the explanatory variables in the above equation are significantly associated with the EPCD as measured by the CDI_J . This equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is 46.490 ($t = 2.525$, $p\text{-value} = .0125$). Corporations in Industry Group 2 (manufacturing) disclose -20.197 ($t = -4.402$, $p\text{-value} = .000$) less units of disclosure relative to Industry Group 1. Corporation in Industry Group 3 (finance) disclose -20.243 ($t = -3.809$, $p\text{-value} = .000$) less units of disclosure relative to Industry Group 1. Corporations in Industry Group 4 (services) disclose -14.895 ($t = -2.653$, $p\text{-value} = .009$) less units of disclosure relative to Industry Group 1.

Overall, the classification of corporations into industry groups influences the EPCD on the CDI_j. This can be observed in two ways. First, the differences between Industry Groups 2, 3 and 4 and Industry Group 1 are all significant at the 0.05 level of confidence. The result indicates that corporations in the resource industry group disclose significantly more information about joint ventures than do corporations in the manufacturing, finance and service industry groups. Second, a joint test of the impact of the industry group variables was carried out following the procedure described by Tabachnick and Fidell (1989, p.157). F_{inc} attributed to the inclusion of industry variables was calculated to be 6.84 and is significant at the 0.05 level of confidence. Thus, it can be concluded that the impact of industry groups on the EPCD (measured using the CDI_j) is significant.

The coefficients for TOASSET1 indicates a relationship of -.024 ($t = -.447$, $p\text{-value} = .656$) between the total assets of a corporation and the EPCD as measured on the CDI_j. This indicates that for every \$1 billion increase in the total assets the EPCD as measured by the CDI_j decreases by approximately .025 unit of disclosure. Alternatively, an increase in total assets of approximately \$40 billion would result in a decrease of one unit of disclosure. The test of significance of this relationship indicates that total assets does not significantly affect the CDI_j. This is consistent with the null hypothesis that total assets would not be significantly associated with the EPCD as measured by the CDI_j.

The regression coefficients for the four national cultural values are as follows:

Power distance:	-.260 ($t = -1.870$, $p\text{-value} = .032$)
Uncertainty avoidance:	-.211 ($t = -3.056$, $p\text{-value} = .002$)
Individualism:	.151 ($t = 1.293$, $p\text{-value} = .060$)
Long term orientation:	.019 ($t = .213$, $p\text{-value} = .416$)

These coefficients indicate that the EPCD as measured by the CDI_j is significantly associated with the national cultural values of power distance and uncertainty avoidance. The national cultural values of individualism and long term orientation are

not significantly associated with the EPCD on the CDI_J. Power distance is negatively associated with EPCD and for approximately every 4 units increase in the power distance index the CDI_J decreases by 1 unit. Uncertainty avoidance is negatively associated with the EPCD and for approximately every 5 units increase in the measure of uncertainty avoidance index the CDI_J decreases by 1 unit. Both these associations are in the hypothesised direction.

The above results provide support for H_{1J} and H_{3J}. The analysis does not provide significant support for H_{5J} and H_{7J}.

In summary the results of the multiple regression analysis provide support for the following hypotheses:

H_{1J}: The higher a country ranks in terms of power distance the lower the EPCD in corporate annual reports.

H_{3A,B,C,D,E,G,I,J}: The higher a country ranks in terms of uncertainty avoidance the lower the EPCD in corporate annual reports.

H_{5A,B,C,D,E,F,G,H,I}: The higher a country ranks in terms of individualism the higher the EPCD in corporate annual reports.

H_{7C}: The higher a country ranks in terms of long term orientation the lower the EPCD in corporate annual reports.

The results of the multiple regression analysis do not provide support for the following hypotheses:

H_{1A,B,C,D,E,F,G,H,I}: The higher a country ranks in terms of power distance the lower the EPCD in corporate annual reports.

H_{3F,H}: The higher a country ranks in terms of uncertainty avoidance the lower the EPCD in corporate annual reports.

H_{5J}: The higher a country ranks in terms of individualism the higher the EPCD in corporate annual reports.

H_{7A,B,D,E,F,G,H,I,J}: The higher a country ranks in terms of long term orientation the lower the EPCD in corporate annual reports.

Thus, overall it appears that the national cultural values of uncertainty avoidance and individualism are most closely associated with the extent of consolidation disclosures in corporate annual reports. The national cultural values of power distance and long term orientation have a less important association with the extent of consolidation disclosure in corporate annual reports

8.4.2 NATIONAL CULTURAL VALUES AND DVEPCD

In this sub-Section the results of the analysis of the relationship between national cultural values and DVEPCD are discussed. First, the relationship between national cultural values and the DVEPCD as measured by the ten partial consolidation disclosure indices are reported in Table 8.3. In this Table all coefficients that are significant and in the hypothesised sign are printed in bold. For each variable the coefficient is reported together with the t-statistic and the p-value of the t-statistic.

The procedure followed for testing the relationship between variability in the partial $CDI_{A \rightarrow J}$ and national cultural values is a variation of the Breusch-Pagan test for heteroskedasticity [Judge et al (1988, p.372)] and was discussed in Section 8.2.2. The estimated multiple regression equations for each of the ten partial consolidation disclosure indices are discussed below together with conclusions concerning the association of national cultural values and the DVEPCD.

Table 8.3: Multiple Regression Coefficients, t-statistic and p-value of t-statistic for DVEPCD and National Cultural Values on Ten Partial Consolidation Disclosure Indices

Index	Constant	Power Distance	Uncert. Avoidance	Individualism	Long Term Orient.
CDI _A	798.637	-3.747	2.083	-6.074	-3.668
	2.632	-1.544	1.857	-3.007	-2.413
	.009*	.062	.033*	.002*	.009*
CDI _B	1461.402	-8.121	-6.030	-.845	-5.051
	2.724	-1.893	-3.039	-.236	-1.880
	.007*	.030*	.002*	.407	.031*
CDI _C	1278.202	-5.105	6.540	-11.567	-9.395
	3.517	-1.757	4.866	-4.781	-5.161
	.006*	.041*	.000*	.000*	.000*
CDI _D	916.195	-2.673	6.358	-7.519	-7.549
	1.760	-.642	3.302	-2.170	-2.895
	.080*	.261	.001*	.016*	.002*
CDI _E	792.486	1.788	-2.942	4.708	-1.484
	.767	.217	-.770	.685	-.287
	.444	.415	.221	.248	.388
CDI _F	-83.377	.344	2.315	1.167	-.124
	-.271	.140	2.032	.569	-.081
	.787	.445	.022*	.285	.468
CDI _G	177.809	1.264	-.582	3.693	-2.391
	.467	.415	-.413	1.457	-1.254
	.641	.340	.340	.074	.106
CDI _H	925.625	4.758	18.073	-1.523	-13.020
	.561	.360	2.960	-.139	-1.574
	.576	.360	.002*	.445	.059
CDI _I	562.305	1.282	-9.517	9.954	1.897
	.695	.198	-3.182	1.782	.468
	.488	.422	.001*	.038*	.320
CDI _J	619.260	-3.945	-8.877	9.297	1.013
	1.055	-.841	-4.089	2.379	.345
	.230	.201	.000*	.009*	.366

Bold print indicates significant support for hypothesised association.

* = significant at the 0.05 level of confidence.

The first number in each cell is the estimate of the regression coefficient. The second number in each cell is the t-statistic. The third number in each cell is the p-value of the t-statistic.

A. CDI_A : Accounting policies, standards and legislation.

The relationship between national cultural values and $DVEPCD_A$ is expressed in the following estimated multiple regression equation:

Equation 8.18:

$$DVEPCD_A = 798.637 - 3.747 PD + 2.084 UA - 6.074 ID - 3.668 LTO$$

$$(303.319) \quad (2.426) \quad (1.122) \quad (2.020) \quad (1.520)$$

(F = 3.374, p-value = .011, R-Square .070, Adjusted R-Square .049)

The F-statistic and the p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with $DVEPCD_A$. The t-statistic and p-value of the t-statistic for each national cultural value are reported in Table 8.3.

The national cultural values of uncertainty avoidance, individualism and long term orientation each had a significant association with the $DVEPCD_A$. However, only the sign of the association between long term orientation and $DVEPCD_A$ was in the hypothesised direction. Thus, the results of this test provides support for hypothesis H_{8A} . The analysis therefore does not provide support for hypotheses H_{2A} , H_{4A} and H_{6A} .

B. CDI_B : Definition of the economic entity.

The relationship between national cultural values and $DVEPCD_B$ is expressed in the following estimated multiple regression equation:

Equation 8.19:

$$DVEPCD_B = 1461.403 - 8.121 PD - 6.030 UA - .845 ID - 5.051 LTO$$

$$(536.444) \quad (4.290) \quad (1.984) \quad (3.571) \quad (2.687)$$

(F = 6.060, p-value = .000, R-Square = .119, Adjusted R-Square = .010)

The F-statistic and the p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with the DVEPCD_B. The t-statistic and p-value of the t-statistic for each national cultural value are reported in Table 8.3.

The national cultural values of power distance, uncertainty avoidance and long term orientation each had significant negative associations with the DVEPCD_B. These associations are consistent with hypotheses H_{2B}, H_{4B} and H_{8B}. This analysis does not provide support for hypothesis H_{6B}.

C. CDI_C : Financial statements published.

The relationship between national cultural values and the DVEPCD_C is expressed in the following estimated multiple regression equation:

Equation 8.20:

$$\text{DVEPCD}_C = 1278.202 - 5.106 \text{ PD} + 6.540 \text{ UA} - 11.567 \text{ ID} - 9.395 \text{ LTO}$$

$$(363.400) \quad (2.906) \quad (1.344) \quad (2.419) \quad (1.820)$$

(F = 13.144, p-value = .000, R-Square = .227, Adjusted R-Square = .210)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with the DVEPCD_C. The t-statistic and p-value of the t-statistic for each national cultural value are reported in Table 8.3.

The national cultural values of power distance, uncertainty avoidance, individualism and long term orientation are significantly associated with the DVEPCD_C. However, only the relationships between power distance, long term orientation and DVEPCD_C were in the hypothesised direction. The signs of the association for uncertainty

avoidance and individualism were not in the hypothesised direction. The above analysis provides support for H_{2C} and H_{8C}. There is no support for H_{4C} and H_{6C}.

D. CDI_D : Subsidiaries and inter-entity transactions.

The relationship between national cultural values and DVEPCD_D is expressed in the following estimated multiple regression equation:

Equation 8.21:

$$\text{DVEPCD}_D = 916.196 - 2.672 \text{ PD} + 6.359 \text{ UA} - 7.519 \text{ ID} - 7.549 \text{ LTO}$$

$$(520.570) \quad (4.163) \quad (1.926) \quad (3.466) \quad (2.608)$$

(F = 4.384, p-value = .002, R-Square = .089, Adjusted R-Square = .069)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with the DVEPCD_D. The t-statistic and p-value of the t-statistic for each national cultural value are reported in Table 8.3.

The national cultural values of uncertainty avoidance, individualism and long term orientation each had a significant relationship with DVEPCD_D. However, only long term orientation had a relationship with DVEPCD_D in the hypothesised direction. The signs of the association between uncertainty avoidance, individualism and DVEPCD_D were not in the hypothesised direction. The above analysis provides support for H_{8D}. The analysis does not provide support for H_{2D}, H_{4D} and H_{6D}.

E. CDI_E : Outside equity interest.

The relationship between national cultural values and DVEPCD_E is expressed in the following estimated multiple regression equation:

Equation 8.21:

$$\text{DVEPCD}_E = 792.486 + 1.789 \text{ PD} - 2.942 \text{ UA} + 4.708 \text{ ID} - 1.484 \text{ LTO}$$

$$(1032.957) \quad (8.261) \quad (3.821) \quad (6.877) \quad (5.175)$$

(F = .787, p-value = .535, R-Square = .017, Adjusted R-Square = -.005)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are not significantly associated with the DVEPCD_E. The t-statistic and p-value of the t-statistic for each national cultural value are reported in Table 8.3.

None of the national cultural values were significantly associated with DVEPCD_E. The analysis does not provide support for H_{2E}, H_{4E}, H_{6E} and H_{8E}.

F. CDI_F : Exclusions from consolidation.

The relationship between national cultural values and DVEPCD_F is expressed in the following estimated multiple regression equation:

Equation 8.22:

$$\text{DVEPCD}_F = -83.3770 - .344 \text{ PD} + 2.315 \text{ UA} + 1.167 \text{ ID} - .124 \text{ LTO}$$

$$(308.010) \quad (2.464) \quad (1.140) \quad (2.051) \quad (1.543)$$

(F = 1.733, p-value = .145, R-Square = .037, Adjusted R-Square = .016)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are not significantly associated with the DVEPCD_F. The t-statistic and p-value of the t-statistic for each national cultural value are reported in Table 8.3.

The national cultural value of uncertainty avoidance had a significant positive relationship with DVEPCD_F. The sign of this association is not in the hypothesised

direction. The analysis does not provide support for hypotheses H_{2F} , H_{4F} , H_{6F} and H_{8F} .

G. CDI_G : Goodwill.

The relationship between national cultural values and $DVEPCD_G$ is expressed in the following estimated multiple regression equation:

Equation 8.23:

$$DVEPCD_G = 177.809 + 1.264 PD - .582 UA + 3.693 ID - 2.390 LTO$$

$$(380.740) \quad (3.045) \quad (1.408) \quad (2.535) \quad (1.907)$$

(F = 4.397, p-value = .002, R-Square = .089, Adjusted R-Square = .069)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with the $DVEPCD_G$. The t-statistic and p-value of the t-statistic for each national cultural value is reported in Table 8.3. None of the national cultural values are individually significantly associated with the $DVEPCD_G$. The analysis does not provide support for H_{2G} , H_{4G} , H_{6G} and H_{8G} .

H. CDI_H : Treatment of goodwill.

The relationship between national cultural values and $DVEPCD_H$ is expressed in the following estimated multiple regression equation:

Equation 8.24:

$$DVEPCD_H = 925.625 + 4.757 PD + 18.073 UA - 1.523 ID - 13.020 LTO$$

$$(1650.858) \quad (13.203) \quad (6.107) \quad (10.991) \quad (8.270)$$

(F = 2.815, p-value = .027, R-Square = .059, Adjusted R-Square = .038)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with the DVEPCD_H. The t-statistic and p-value of the t-statistic for each national cultural value is reported in Table 8.3.

The national cultural value of uncertainty avoidance had a significant positive association with DVEPCD_H. However, the sign of this association is in the opposite direction to that which was predicted in H_{4H}. None of the other national cultural values had a significant association with DVEPCD_H. The analysis does not provide support for hypotheses H_{2H}, H_{4H}, H_{6H} and H_{8H}.

I. CDI_I : Associated companies.

The relationship between national cultural values and DVEPCD_I is expressed in the following estimated multiple regression equation:

Equation 8.25:

$$\text{DVEPCD}_I = 562.305 + 1.282 \text{ PD} - 9.518 \text{ UA} + 9.594 \text{ ID} + 1.897 \text{ LTO}$$

$$(808.523) \quad (6.466) \quad (2.991) \quad (5.383) \quad (4.050)$$

(F = 4.680, p-value = .001, R-Square = .095, Adjusted R-Square = .075)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with the DVEPCD_I. The t-statistic and p-value of the t-statistic for each national cultural value are reported in Table 8.3.

The national cultural values of uncertainty avoidance and individualism each has a significant association with the DVEPCD_I. Uncertainty avoidance has a negative association whereas individualism has a positive association. Both these associations are in the hypothesised direction. These associations provide support for hypotheses H_{4I} and H_{6I}. The analysis does not provide support for H_{2I} and H_{8I}.

J. CDI_J : Joint ventures and other arrangements.

The relationship between national cultural values and $DVEPCD_J$ is expressed in the following estimated multiple regression equation:

Equation 8.26:

$$DVEPCD_J = 619.260 - 3.946 PD - 8.877 UA + 9.297 ID + 1.013 LTO$$

$$(586.865) \quad (4.693) \quad (2.171) \quad (3.907) \quad (2.940)$$

(F = 11.366, p-value = .000, R-Square = .203, Adjusted R-Square = .185)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with the $DVEPCD_J$. The t-statistic and significance of the t-statistic for each national cultural value are reported in Table 8.3.

The national cultural value of uncertainty avoidance is significantly and negatively associated with the $DVEPCD_J$. This supports H_{4J} . The national cultural value of individualism is significantly and positively associated with the $DVEPCD_J$. This supports H_{6J} . Neither power distance nor long term orientation were significantly associated with $DVEPCD_J$. The results do not provide support for H_{2J} and H_{8J} .

This completes the discussion of the relationship between national cultural values and $DVEPCD$ observed on the ten partial consolidation disclosure indices.

In summary the results of the multiple regression analysis provide support for the following hypotheses:

$H_{2B,C}$: The higher a country ranks in terms of power distance the lower the $DVEPCD$ in corporate annual reports.

$H_{4B,I,J}$: The higher a country ranks in terms of uncertainty avoidance the lower the $DVEPCD$ in corporate annual reports.

H_{6I,J}: The higher a country ranks in terms of individualism the higher the DVEPCD in corporate annual reports.

H_{8A,B,C,D}: The higher a country ranks in terms of long term orientation the lower the DVEPCD in corporate annual reports.

The results of the multiple regression analysis do not provide support for the following hypotheses:

H_{2A,D,E,F,G,H,I,J}: The higher a country ranks in terms of power distance the lower the DVEPCD in corporate annual reports.

H_{4A,C,D,E,F,G,H}: The higher a country ranks in terms of uncertainty avoidance the lower the DVEPCD in corporate annual reports.

H_{6A,B,C,D,E,F,G,H}: The higher a country ranks in terms of individualism the higher the DVEPCD in corporate annual reports.

H_{8E,F,G,H,I,J}: The higher a country ranks in terms of long term orientation the lower the DVEPCD in corporate annual reports.

Thus, overall it appears that the national cultural value of uncertainty avoidance, individualism and long term orientation are the most closely associated with the degree of variation in the extent of partial consolidation disclosures in corporate annual reports. These respectively had 8, 5 and 4 significant associations as reported in Table 8.3. However, not all of these associations were in the hypothesised directions as seen from the summary of the results above. The national cultural value of power distance was only significantly associated with two measures of DVEPCD and therefore appears to be less important.

8.5 THE ASSOCIATION BETWEEN NATIONAL CULTURAL VALUES AND THE GFI

In this Section the results of the test of the association between national cultural values and the EGF and DVEGF measured using the GFI are reported. These tests are reported separately. First, the results of the multiple regression equation concerning the association between national cultural values and EGF are discussed. These results concern the following hypotheses: H_{1GF} , H_{3GF} , H_{5GF} , H_{7GF} and H_{8GF} . Second, the results of the multiple regression equation concerning the relationship between national cultural values and DVEGF are discussed. These results concern the following hypotheses: H_{2GF} , H_{4GF} , H_{6GF} and H_{9GF} .

8.5.1 NATIONAL CULTURAL VALUES AND EGF.

In this sub-Section the results of the tests of the association between national cultural values and EGF on the GFI are reported. First, the univariate correlation coefficients between national cultural values and the GFI are reported. Second, the multiple regression coefficients for all the variables in the equation are discussed.

The association between national cultural values and the GFI using univariate correlation analysis as part of the descriptive statistics for the multiple regression analysis resulted in the following correlation coefficients and their associated significance.

Power distance:	.144 (p-value = .013)
Uncertainty avoidance:	-.108 (p-value = .037)
Individualism:	-.028 (p-value = .177)
Masculinity:	.383 (p-value = .000)
Long term orientation:	-.036 (p-value = .158)

The national cultural values of uncertainty avoidance and masculinity each had univariate correlation coefficients that were significant and in the predicted direction. The national cultural value of power distance was significant but was not in the predicted direction. Neither individualism nor long term orientation had correlation coefficients that were significantly associated with the EGF. As was indicated in Section 8.3.1, univariate correlation analysis is more susceptible to the influence of spurious correlations than multivariate analysis.

The influence of industry group, corporation total assets and national cultural values, and the EGF, as measured by the GFI, is expressed in the following estimated multiple regression equation:

Equation 8.27:

$$\begin{aligned} \text{GFI} = & 68.508 + 4.240 \text{ IND2} + .450 \text{ IND3} + 12.501 \text{ IND4} + .063 \text{ TOASSET1} \\ & (19.551) \quad (4.473) \quad (5.123) \quad (5.418) \quad (.053) \\ & - .412 \text{ PD} - .344 \text{ UA} - .684 \text{ ID} + 1.084 \text{ MA} - .433 \text{ LTO} \\ & (.161) \quad (.072) \quad (.153) \quad (.126) \quad (.106) \end{aligned}$$

(F = 12.438, p-value = .000, R-Square = .391, Adjusted R-Square = .360)

The F-statistic indicates that the explanatory variables in the above equation are significantly associated with EGF as measured by the GFI. The equation can be interpreted in the following way:

The estimate of the intercept coefficient for Industry Group 1 (resources) is 68.508 (t = 3.504, p-value = .001). Corporations in Industry Group 2 (manufacturing) have a 'global fit' score 4.240 (t = .948, p-value = .345) units higher than Industry Group 1. Corporations in Industry Group 3 (finance) have a 'global fit' score .450 (t = .088, p-

value = .930) units higher than Industry Group 1. Corporations in Industry Group 4 (services) have a 'global fit' score 12.501 ($t = 2.307$, $p\text{-value} = .022$) units higher than Industry Group 1. Thus, on average corporations in the service industry group have the greatest EGF.

The classification of corporations into industry groups partly influences the EGF. This can be observed in two ways. First, the difference between Industry Group 4 and Industry Group 1 is significant. This is observed by examining the significance of the t -statistic for Industry Group 4. Second, a joint test of the impact of industry group variables on the multiple regression was carried out by comparing the R square with and without the industry variables using the procedure described by Tabachnick and Fidell (1989, p.157). The F_{inc} attributed to the inclusion of the industry group variables was calculated to be 2.63. This ratio is not significant at the .05. Thus, it can be concluded that overall industry groups do not influence the EGF measured using the GFI.

The coefficient for TOASSET1 indicates a positive relationship of .063 ($t = 1.186$, $p\text{-value} = .237$) between the total assets of a corporation and EGF. This indicates that for every \$1 billion increase in total assets the EGF increases by approximately .06 units of disclosure. Alternatively, an increase in total assets of approximately \$16 billion dollars would result in one additional unit of disclosure on the GFI. The test of significance of this relationship indicates that total assets does not significantly affect the GFI. This is consistent with the null hypothesis that total assets are not associated with EGF as measured by the GFI.

The regression coefficients for the five national cultural values are as follows:

Power distance:	-.412 ($t = -2.554$, $p\text{-value} = .006$)
Uncertainty avoidance:	-.344 ($t = -4.772$, $p\text{-value} = .000$)

Individualism:	-.684 (t = 4.449, p-value = .000)
Masculinity:	1.084 (t = 8.613, p-value = .000)
Long term orientation:	-.433 (t = -4.076, p-value = .000)

These coefficients indicate that the EGF, as measured by the GFI is significantly associated with each national cultural value. In all cases hypothesised signs of the relationship were confirmed. Power distance is negatively associated with EGF and for approximately every 2 1/2 units increase in the power distance measure the GFI decreases by 1 unit. Uncertainty avoidance is negatively associated with EGF and for approximately every 3 units increase in the uncertainty avoidance measure the GFI decreases by 1 unit. Individualism is negatively associated with EGF and for approximately every 1 1/2 units increase in the individualism measure the GFI decreases by 1 unit. Masculinity is positively associated with EGF and for approximately every 1 unit increase in the masculinity measure the GFI increases by 1 unit. Long term orientation is negatively associated with the EGF and for approximately every 2 1/2 units increase in the long term orientation measure the GFI decreases by 1 unit.

The above results provide strong support for the following hypotheses:

H_{1GF}: The higher a country ranks in terms of power distance the lower the EGF of consolidation disclosures in corporate annual reports.

H_{3GF}: The higher a country ranks in terms of uncertainty avoidance the lower the EGF of consolidation disclosures in corporate annual reports.

H_{5GF}: The higher a country ranks in terms of individualism the lower the EGF of consolidation disclosures in corporate annual reports.

H_{7GF}: The higher a country ranks in terms of masculinity the higher the EGF of consolidation disclosures in corporate annual reports.

H_{8GF} : The higher a country ranks in terms of long term orientation the lower the EGF of consolidation disclosures in corporate annual reports.

In conclusion it can be argued that each national cultural value is significantly associated with the EGF as measured by the GFI.

8.5.2 NATIONAL CULTURAL VALUES AND DVEGF.

In this sub-Section the results of the examination of the association between national cultural values and the DVEGF are reported. The procedure followed for testing this association is a variation of the Breusch-Pagan test for heteroskedasticity [Judge, et al (1988, p.372)] and was discussed in Section 8.2.2.

The relationship between national cultural values and DVEGF is expressed in the following estimated multiple regression equation:

Equation 8.28:

$$\text{DVEGF} = 753.884 - .871 \text{ PD} + 1.145 \text{ UA} - 5.631 \text{ ID} - 3.861 \text{ LTO}$$

$$(386.834) \quad (3.094) \quad (1.431) \quad (2.575) \quad (1.938)$$

(F = 3.115, p-value = .017, R-Square = .065, Adjusted R-Square = .044)

The F-statistic and p-value of the F-statistic indicate that as a group the national cultural values are significantly associated with DVEGF. The coefficients in the equation had the following statistics:

Power distance:	$\beta = -.282$ (p-value = .390)
Uncertainty avoidance:	$\beta = .800$ (p-value = .213)
Individualism:	$\beta = -2.186$ (p-value = .030)
Long term orientation:	$\beta = -1.992$ (p-value = .024)

The national cultural values of individualism and long term orientation each had a significant negative association with DVEGF. However, only the association with long term orientation was in the hypothesised direction. This supports H_{9GF}.

H_{9GF}: The higher a country ranks in terms of long term orientation the lower the DVEGF of consolidation disclosures in corporate annual reports.

The national cultural values of power distance and uncertainty avoidance were not significantly associated with DVEGF. In conclusion the above analysis does not provide significant support for hypotheses: H_{2GF}, H_{4GF} and H_{6GF}.

8.6 SUMMARY

In this Chapter the results of the analysis concerning the hypothesised association between national cultural values and ECD, DVECD, EPCD, DVEPCD, EGF and DVEGF have been presented. Multiple regression analysis was the methodology used to test the hypothesised relationships. This enabled the influence of the industry group and total assets of each corporation in the sample to be controlled when assessing the significance of national cultural values.

The observed association between national cultural values and the extent of disclosure and degree of variation in the extent of disclosure on the various indices provided significant support for many of the hypotheses. The results concerning the association between national cultural values and the extent of disclosure on the various indices are summarised in the Table 8.4. The results concerning the association between national cultural values and the degree of variation in the extent of disclosure on the various indices are summarised in Table 8.5. In these Tables all results that are significant and in the hypothesised direction are indicated by 'S'. Significant association not in the hypothesised direction are indicated by 'S'. The directions of the significant

associations are indicated by '+' and '-'. If an association is not significant this is indicated by 'ns'. If there was no hypothesised relationship this is indicated by 'na'.

Table 8.4: Significant Multiple Regression Coefficients Concerning the Extent of Disclosure on the Various Indices.

Index	F Sig	IND F _{inc}	TOAS -SET1	PD	UA	ID	LTO	MA
CDI	S	ns	ns	ns	S-	S+	ns	na
CDI _A	S	ns	S+	ns	S-	S+	ns	na
CDI _B	S	ns	ns	ns	S-	S+	ns	na
CDI _C	S	ns	ns	ns	S-	S+	S-	na
CDI _D	S	ns	ns	ns	S-	S+	ns	na
CDI _E	S	S	S+	ns	S-	S+	ns	na
CDI _F	S	ns	ns	S+	S+	S+	S+	na
CDI _G	S	ns	ns	ns	S-	S+	ns	na
CDI _H	S	S	S+	ns	ns	S+	ns	na
CDI _I	S	S	ns	S+	S-	S+	S+	na
CDI _J	S	S	ns	S-	S-	ns	ns	na
GFI	S	ns	ns	S-	S-	S-	S-	S+

In Table 8.4 the following results are summarised.

1. In the column headed 'F Sig' the significance of the multiple regression equation is reported. In every case the multiple regression equation was significant.

2. In the column headed 'IND F_{inc}' the incremental significance gained by including the industry group variables in the regression model over their exclusion is reported. The null hypothesis was that industry group variables should not be significant because consolidation accounting is not industry specific. In only four indices was the industry group variable significant. These were, CDI_E (outside equity interest), CDI_H (treatment of goodwill), CDI_I (associated companies) and CDI_J (joint ventures and other arrangements).

3. In the column headed 'TOASSET1' the significance of the coefficient for total assets is reported. The null hypothesis was that total assets should not be significantly associated with consolidation disclosures because the sample of corporations was drawn from surveys of the largest corporations in each of the ten countries. In only three indices was total assets positively and significantly associated with the extent of disclosure. These were: CDI_A (accounting policies standards and legislation), CDI_E (outside equity interest) and CDI_H (treatment of goodwill).

4. In the column headed 'PD' the significance of power distance in the multiple regression equation is reported. In only two cases was power distance found to be significant and in the hypothesised direction. These were: CDI_J (joint ventures and other arrangements) and GFI (global fit). Power distance was significantly and positively related to the CDI_F (exclusions from consolidation) and CDI_I (associated companies). In all other indices power distance was not significant.

5. In the column headed 'UA' the significance of uncertainty avoidance in the multiple regression equation is reported. In all but two indices uncertainty avoidance was significantly and negatively associated with the extent of disclosure. In the case of CDI_F (exclusions from consolidation) there was a significant positive

relationship. In the case of CDI_H (treatment of goodwill) there was no significant relationship.

6. In the column headed 'ID' the significance of individualism in the multiple regression equation is reported. In all but two of the indices individualism was significant and positively associated with the extent of disclosure. In the case of the GFI individualism was significant and negatively associated with the EGF which supports the hypothesis. In the case of the CDI_J (joint ventures and other arrangements) there was no significant association.

7. In the column headed 'LTO' the significance of long term orientation in the multiple regression equation is reported. Long term orientation was significant and negatively related with two indices. These were: CDI_C (financial statements published) and GFI. Long term orientation was significant and positively associated with CDI_F (exclusions from consolidation) and CDI_I (associated companies). These associations were in the hypothesised direction. Long term orientation was not significantly associated with the other indices.

8. In the column headed 'MA' the significance of masculinity in the multiple regression equation for the EGF on the GFI is reported. Masculinity was found to be significant and positively associated with this index. Masculinity was not hypothesised to be associated with any other index.

Table 8.5: Significant Multiple Regression Coefficients Concerning the Degree of Variation in the Extent of Disclosure on the Indices.

Index	F Sig	PD	UA	ID	LTO
CDI	ns	ns	ns	ns	S-
CDI_A	S	ns	S+	S-	S-
CDI_B	S	S-	S-	ns	S-
CDI_C	S	S-	S+	S-	S-
CDI_D	S	ns	S+	S-	S-
CDI_E	S	ns	ns	ns	ns
CDI_F	S	ns	S+	ns	ns
CDI_G	S	ns	ns	ns	ns
CDI_H	S	ns	S+	ns	ns
CDI_I	S	ns	S-	S+	ns
CDI_J	S	ns	S-	S+	ns
GFI	S	ns	ns	S-	S-

In Table 8.5 the following results are summarised.

1. In the column headed 'F Sig' the significance of the multiple regression equation is reported. In every case except that involving the CDI the multiple regression equation was significant.
2. In the column headed 'PD' the significance of power distance in the multiple regression equation is reported. Power distance was significantly and negatively associated with the degree of variation in the following two indices: CDI_B (definition of the economic entity) and CDI_C (financial statements published). These associations were in the hypothesised direction.

3. In the column headed 'UA' the significance of uncertainty avoidance in the multiple regression equation is reported. Uncertainty avoidance was significant and negatively associated with the following three indices: CDI_B (definition of the economic entity), CDI_I (associated companies) and CDI_J (joint ventures and other arrangements). These associations are consistent with the hypotheses. Uncertainty avoidance was significant and positively associated with the following five indices: CDI_A (accounting policies standards and legislation), CDI_C (financial statements published), CDI_D (subsidiaries and inter-entity transactions), CDI_F (exclusions from consolidation) and CDI_H (treatment of goodwill). These associations are not in the hypothesised direction.

4. In the column headed 'ID' the significance of individualism in the multiple regression equation is reported. Individualism was significant and positively related in the following two indices: CDI_I (associated companies) and CDI_J (joint ventures and other arrangements). These associations are in the hypothesised direction. Individualism was significant and negatively associated with the following four indices: CDI_A (accounting policies, standards and legislation), CDI_C (financial statements published), CDI_D (subsidiaries and inter-entity transactions) and GFI (global fit). These associations are not in the hypothesised direction.

5. In the column headed 'LTO' the significance of long term orientation in the multiple regression equation is reported. Long term orientation was significant and negatively associated with the following six indices: CDI , CDI_A (accounting policies, standards and legislation), CDI_B (definition of the economic entity), CDI_C (financial statements published), CDI_D (subsidiaries and inter-entity transactions) and GFI (global fit). These associations are in the hypothesised

direction. Long term orientation was significant and positively associated with CDIF (treatment of goodwill). This association was not in the hypothesised direction.

In conclusion the results of the tests of significance summarised above provide evidence that national cultural values are significantly associated with both the extent and degree of variation in the extent of disclosure in the various indices of disclosure constructed in this study. These results provide evidence to support the theory of the association of national culture values with accounting subcultural values that was proposed by Gray (1988) and Perera (1989).