PART II : THE THEORETICAL FRAMEWORK

CHAPTER 2 : THE THEORETICAL FRAMEWORK OF INTERNATIONAL COMPARATIVE FINANCIAL ACCOUNTING RESEARCH

2.1 INTRODUCTION

In this Chapter the theoretical framework of international comparative financial accounting, of which this study is part, is outlined. First, Section 2.2 reviews the background and current status of various research programs that have been directed towards investigating reasons why accounting measurement and disclosure practices vary among countries. This type of research was described by Wallace and Gernon (1991, p.209) as 'international comparative financial accounting research'. The discussion examines three issues. First, the approaches that have been used to study the association between national environmental factors and diversity in national accounting principles and practices. Second, the sources of the data used to measure accounting principles and practices. Third, the focus of the research studies reviewed.

Section 2.3 discusses the framework introduced by Wallace and Gernon (1991) for selecting and evaluating appropriate research methodologies for the investigation of diversity in national accounting principles and practices. Finally, in Section 2.4 four contingency approaches described by AAA (1993) for investigating national diversity in accounting principles and practices are reviewed. The 'contextual contingency' approach described by AAA (1993) is identified to provide a theoretical framework in this study. This approach provides a framework for research into the association between national cultural values and differences in consolidation disclosure practices by corporations headquartered in ten countries of the Asian-Pacific region.

2.2 THE THEORETICAL BACKGROUND OF INTERNATIONAL COMPARATIVE FINANCIAL ACCOUNTING RESEARCH

In this Section the theoretical background of international comparative financial accounting research is traced. First, the scope of international comparative financial accounting research is considered. Second, the division of research approaches between deductive and inductive is outlined. Third, various studies that have examined the relationship between national environmental factors and accounting measurement and disclosure practices are reviewed. These studies are summarised in Table 2.1. This table comprises three columns. The first column lists the author and date of the study. The second column lists the methodology and focus of the study. The third column summarises the data sources and results of the study. Details concerning each of the nine studies cited in Table 2.1 are discussed below.

Table 2.1: Approaches to International Comparative Financial Accounting Research

Study	Methodology / Focus	Data Sources and Results
[1] Mueller (1967)	Deductive - Identification of business environments.	Author judgement - Four broad approaches to accounting identified.
[2] Mueller (1968)	Deductive - Identification of circumstances affecting accounting practices.	Author judgement - Twelve environmental circumstances identified.
[3] Previts (1975)	Deductive - Identification of environmental conditions associated with accounting diversity.	Author judgement - Thirteen environmental conditions identified.
[4] AAA (1977)	Deductive - Morphology for classifying accounting systems.	Analysis of parameters and states of nature.
[5] Nobes (1983)	Deductive - Classification of countries by accounting measurement practices.	Author judgement - Nine factors used for differentiation.
[6] AlNajjar (1986)	Deductive - Factors associated with standardisation of accounting practices for large commercial enterprises.	Author judgement - Five causal factors identified.
[7] DaCosta, Bourgeois and Lawson (1978)	Inductive - Identification of factors associated with diversity in accounting practice.	Price Waterhouse survey data - Seven factors identified.
[8] Frank (1979)	Inductive - Test classification of accounting systems with factors.	Price Waterhouse survey data - Five significant factors identified.
[9] Nair and Frank (1980)	Inductive - Distinguish factors associated with accounting measurement and disclosure practices.	Price Waterhouse survey data - Factors associated with measurement and disclosure practices differed.

The domain of international accounting research covers all aspects of accounting in an international setting and has been defined by Radebaugh and Gray (1993, p.9):

> The study of international accounting involves two major areas: descriptive / comparative accounting and the accounting dimensions of international transactions / multi-national enterprises.

In this study the focus is upon the association of national cultural values with national diversity in consolidation accounting disclosure practices. This study therefore would be classified within the first area of 'descriptive / comparative accounting'. When comparing national patterns of consolidation accounting disclosure practices with national cultural values the objective is to identify which national cultural values are associated with different disclosure practices. If associations of national cultural values are found with different patterns of accounting disclosure then it may be possible to predict what are the disclosure consequences of these national cultural values. National cultural values are one element of the environment which may influence accounting practice. The development of ideas concerning the association of national environmental factors with accounting practices is discussed below.

The study of national environmental factors associated with national diversity in accounting practices can be traced in the literature to the mid-1960s. Identification of environmental factors associated with accounting has its origin in attempts to classify national accounting systems. Two primary approaches towards identifying environmental factors have been used by accounting researchers. Radebaugh and Gray (1993, p.61) commented:

> First, there is the deductive approach whereby relevant environmental factors are identified and then, by linking these to national accounting practices, international groupings or development patterns are proposed. Second, there is the inductive approach whereby individual accounting practices are analysed and development patterns or groupings identified, with explanations proposed by reference to a variety of economic, social, political and cultural factors.

In this study environmental factors are identified and linked to national consolidation accounting disclosure practices by theory prior to empirical testing. This is consistent with the deductive approach. The background to these approaches is reviewed below.

The origins of the deductive approach have been associated with the work of Mueller (1967). In this study, Mueller identified several environmental factors which he argued were associated with four broad approaches to accounting: the macroeconomic pattern, the microeconomic pattern, the independent discipline approach, and the uniform accounting approach. In the following year Mueller (1968, pp.92-3) identified four elements for differentiation of business environments listed below:

1. Stages of economic development.
2. Stages of business complexity.
3. Shades of political persuasion.
4. Reliance on some particular system of law.

The argument linking these elements to accounting was based upon the proposition that accounting performs a service function and that it must be practically useful in a social context. Mueller (1968, p.95) argued accounting '...must respond to the ever-changing needs of society and must reflect the social, political, legal, and economic conditions within which it operates.' From this perspective it was further argued that different accounting principles would be required in different 'business environments' and that the circumstances of the 'business environment' would determine the choice of appropriate accounting principles in an international framework. The twelve circumstances identified by Mueller (1968, pp.98-100) were:

1. Relative stability of the currency of account.
2. Degree of legislative business interference.
3. Nature of business ownership.
4. Level of sophistication of business management.
5. Differences in the size and complexity of business firms.
6. Speed of business innovations.

7. Presence of specific accounting legislation.
8. Stage of economic development.
9. Type of economy involved.
10. Growing pattern of an economy.
11. Status of professional education and organisation.
12. General level of education and tool processes facilitating accounting.

There was no formal test of the relationship of the above environmental circumstances and associated accounting principles. However, Mueller (1968, p.102) did provide some general illustrations of the relationships. First, that more comprehensive financial disclosure was a consequence of 'widening' securities markets. Second, that the increase in the use of consolidated financial statements was attributed to the 'ever growing extent of inter-corporate investments and the steady growth of portfolio investments beyond the domicile countries of the respective investors.'

Despite the lack of empirical evidence provided by Mueller (1968) other authors also asserted that accounting was influenced by its environment. For example, Seidler (1969, pp.36-7) argued:

> Skills of a technical nature appear to cross international borders with relative ease. Such skills are generally free from cultural or political labels, and hence they avoid the type of barriers which more commonly affect disciplines with a social orientation. Accounting skills would appear, from a superficial examination, to have a similar nonpolitical, noncultural orientation, which would enable them also to pass from country to country free of nationalistic influences. Unfortunately, this is not the case.

The above claim was not empirically investigated by Seidler.

Previts (1975, p.4) repeated the approach outlined by Mueller (1968) when he identified the following thirteen environmental conditions which were argued to be associated with accounting diversity:

1. Stability of the currency.
2. Nature of business ownership.
3. Level of management sophistication.
4. Size and complexity of businesses.
5. Speed of technological and commercial innovation.
6. Presence of specific accounting legislation.
7. Type of economy and degree of market freedom.
8. Growth pattern of the economy.
9. Status of accounting education.
10. Status of the accounting profession.
11. General level of public education.
12. Extent of kindred financial knowledge which would require the existence of sophisticated financial reports to the community.
13. Legal and customary structures of business and finance.

These thirteen environmental conditions are similar to those listed by Mueller (1968) but include some additional distinctions and items. In particular Previts (1975) included reference to legal and customary structures of business as item thirteen. This extended list was used by Previts (1975) for descriptive analysis and was not subject to empirical investigation. The list however, was indicative of the increasing range of factors considered to influence accounting practices.

An extension of the above deductive approach which had involved the production of a one dimensional list of environmental factors was to arrange items in a two dimensional format, which was referred to by AAA (1977, p.99) as a morphology. The morphology developed in AAA (1977) had eight parameters and identified several states of nature associated with each parameter and is reported as Figure 2.1.

Figure 2.1: The AAA's morphology for comparative accounting systems.

Source: AAA (1977, p.99)

Parameters			*States of nature*		
	1	2	3	4	5
P1 Political system	Traditional oligarchy	Totalitarian oligarchy	Modernising oligarchy	Tutelary democracy	Political democracy
P2 Economic system	Traditional	Market	Planned market	Plan	
P3 Stages of economic development	Traditional society	Pre-take-off	Take-off	Drive to maturity	Mass consumption
		Micro		Macro	
P4 Objectives of financial reporting	Investment decisions	Management performance	Social measurement	Sector planning and control	National policy objective
P5 Sources of, or authority for standards	Executive decree	Legislative action	Government administrative unit	Public-private consortium	Private
		Public	Private		
P6 Education training and licensing	Informal	Formal	Informal	Formal	
P7 Enforcement of ethics and standards	Executive	Government administrative unit	Judicial	Private	
P8 Client	Government	Public	Enterprises		
			Public	Private	

The deductive approach using a morphology was subsequently employed by Nobes (1983) whose study involved setting out a hierarchical scheme for classifying developed western countries according to their financial reporting measurement practices. Nobes (1983, p.8) employed nine factors for differentiation of accounting systems:

1. Type of users of the published accounts of the listed companies.
2. Degree to which law or standards prescribe in detail and exclude judgement.
3. Importance of tax rules in measurement.
4. Conservatism / prudence (eg., valuation of buildings, stocks, debtors).
5. Strictness of application of historic cost (in the historic cost accounts).
6. Susceptibility to replacement cost adjustments in the main or supplementary accounts.
7. Consolidation practices.
8. Ability to be generous with provisions (as opposed to reserves) and to smooth income.
9. Uniformity between companies in application of rules.

The above factors were scored in a range from 0 to 3 for each country and the resulting totals were used to classify countries according to accounting measurement practices. Another researcher to employ this approach was AlNajjar (1986) whose study identified causal factors that were associated with standardisation of accounting for large commercial and industrial enterprises. Five causal factors were identified, these were arranged in a morphology on a five point scale and are listed below:

1. Nature of economic system / extent of national planning.
2. Provider of finance / user of accounting information.
3. Importance of tax and other rules in measurement.
4. Importance of accountancy profession.
5. Responsibility for setting and implementing standards.

The above studies using a deductive approach have identified numerous items that have been argued to be associated with diversity of accounting practices. In the studies by Nobes (1983) and AlNajjar (1986), judgemental empirical evidence was used to score countries on the factors used for differentiation. The research programs also distinguished between environmental factors and particular aspects of accounting such as measurement practices (Nobes) and standardisation (AlNajjar).

The inductive approach towards studying factors associated with accounting practices can be traced to the work of DaCosta, Bourgeois and Lawson [hereafter DBL] (1978). This study used data from a 1973 Price Waterhouse survey of accounting practices. DBL (1978, pp.77-8) found seven independent factors which explained 63 percent of the variance of the one hundred practices sampled in the study. These factors were:

1. A measure of financial disclosure.
2. Company law as an influence on accounting practices.
3. Stress of reporting practices on income measurement.
4. 'Conservatism' as a guiding principle.
5. Tax law as an influence on accounting practices.
6. Inflation as an environmental consideration.
7. Orientation of reported information towards capital market users.

This approach was followed by Frank (1979, pp.601-2) who introduced a test to see whether his classification of countries according to their accounting practices using Price Waterhouse survey data was matched with the following social and economic environmental factors:

1. The country's official language(s) (English, French, German, Italian, Portuguese, Spanish, or other) as a proxy for cultural ties between countries.

2. Economic structure variables: per capita income; private consumption; gross capital formation; balance of trade (exports minus imports); agricultural sector output as a fraction of gross domestic product; the average annual growth rate of real gross national product;

average annual change in the country's foreign exchange rate for US dollars; and, average annual change in consumer prices.

3. Variables reflecting the bilateral trade between the various pairs of countries: imports; exports; and total trade (imports plus exports) between each pair of countries expressed as a proportion of each countries total imports, exports or total trade.

The conclusion reached by Frank (1979, p.604) was:

> The hypothesis that the cultural and economic environment in a country influences its accounting principles and reporting practices is also supported by this study. A multiple discriminant analysis using as explanatory variables the use or non use of English and / or French as a national language, consumption as a percentage of the country's gross national product, the average change in the country's foreign exchange rate (relative to the US dollar), and foreign trade with the four country-groupings was able to place 83 percent of thirty-five countries for which data were available in the same group as they were assigned on the basis of their accounting practices. This close association provides indirect support for the practice of relying upon an analysis of environmental factors in developing a conceptual framework for accounting principles.

The above research provided empirical evidence that there was an association between a country's accounting practices and its national environment. Despite subsequent criticism of the methodology [for example Nobes (1992, pp.51-2)], Frank's work introduced culture as an environmental factor and this was found to have explanatory power. The dimension of culture was measured by use of a surrogate, the official language of the country. This conceptualisation of culture was simple by reference to current approaches to studying the relationship between national accounting practices and culture [see Chapter 3] but at its time the inclusion of the variable was pioneering.

The above approach to studying the relationship between accounting and its national environment was extended by Nair and Frank (1980). Their study distinguished for the first time in the international classification literature the concepts of measurement and disclosure. The authors relied on Price Waterhouse survey data and used judgement to group accounting practices into those concerned with measurement and those concerned with disclosure. Their argument for making this distinction was premised on the proposition that measurement practices should apply to most accounting entities irrespective of size or other considerations while disclosure practices should vary depending upon a number of factors. They put forward the following four reasons for this distinction [Nair and Frank (1980, pp.426-7)]:

1. In many countries there are different rule making bodies concerned with accounting measurement and disclosure practices. For example, in the United States the Securities and Exchange Commission (SEC) is primarily concerned with disclosure, while the Financial Accounting Standards Board (FASB) is primarily concerned with measurement practices.

2. Measurement practices usually apply to a broader range of accounting entities than do disclosure practices. For example, entities required to make segment and earnings per share disclosures are restricted.

3. Different elements in the conceptual framework are considered when choosing between measurement and disclosure practices. For example, selection of measurement practices is guided by reference to criteria such as relevance, reliability and objectivity whereas selection of disclosure practices are often driven by cost benefit and other management considerations.

4. From an efficient capital markets perspective disclosure practices concerned with format were argued to be less substantive than most measurement practices.

Nair and Frank (1980) also attempted to find whether different economic and cultural variables were associated with the use of measurement and disclosure practices as reported in the Price Waterhouse survey. Nair and Frank (1980, p.427) predicted '...one would expect disclosure practices to exhibit more diversity and yield more country groupings than measurement practices.' Accounting practices were classified using the test that if the application of a specific practice resulted in recording a different value in the accounts then it was regarded as a measurement practice. All other practices were treated as disclosure practices.

The social and economic factors used in the study were the same as those used by Frank (1979). However, Nair and Frank (1980, p.439) reported alternative measures of the trade variables were made but the differences resulting from the new measurement procedures were minor. The discriminant function used to distinguish countries according to measurement practices had the following fourteen variables and provided approximately 92 percent discriminatory power and was significant at the .001 level (pp.440-1):

1. Per capita income (PCINC).
2. Private sector consumption (PVTCOM).
3. Balance of trade (BOT).
4. Role of the agricultural sector (AGSEC).
5. The gross national product growth rate (GNPGR).
6. English language (ENGLISH).
7. French language (FRENCH).
8. German language (GERMAN).
9. Italian language (ITALIAN).
10. Import trading block of Argentina, Bolivia, Brazil, Chile, Mexico, Paraguay, and Uruguay (IMPORT2).
11. Import trading block of Denmark, Greece, Iran and Ireland (IMPORT5).
12. Total trading block of Brazil, Canada, Chile, Denmark, Colombia, Germany, Norway, and Switzerland (TOTTR2).
13. Total trading block of Argentina, Paraguay and Peru (TOTTR5).
14. Total trading block of Mexico, Panama and Trinidad and Tobago (TOTTR5).

The discriminant function used to distinguish countries according to disclosure practices had the following twelve variables and provided approximately 92 percent discriminatory power and was significant at the .02 level (or better) (p.442):

1. Per capita income (PCINC).
2. Private sector consumption (PCTCOM).
3. Balance of trade (BOT).
4. Role of the agricultural sector (AGSEC).
5. Export trading block of Belgium, France, Italy, Netherlands, Nigeria, Ireland, South Africa, Spain, United Kingdom, United States, Uruguay, and Zaire (EXPORT1).
6. Export trading block of Argentina, Brazil, Chile, Colombia, Denmark, Panama, Paraguay, Sweden, Trinidad, and Venezuela (EXPORT2).
7. Export trading block of Ethiopia, Japan, Mexico, Peru, and Philippines (EXPORT4).
8. Export trading block of India, Iran, Pakistan, Singapore, and Switzerland (EXPORT6).
9. Total trading block of Brazil, Canada, Chile, Denmark, Colombia, Germany, Norway, and Switzerland (TOTTR2).
10. Total trading block of Mexico, Panama, and Trinidad and Tobago (TOTTR6).
11. English language (ENGLISH).
12. German language (GERMAN).

The variables found to have the greatest association with measurement and disclosure practices were different. The single most important variable in each of the discriminant functions were (pp.441-2):

Measurement Practices:	Function 1:	FRENCH
	Function 2:	IMPORT2
	Function 3:	PCINC
	Function 4:	TOTTR5
Disclosure Practices:	Function 1:	ENGLISH
	Function 2:	AGSEC
	Function 3:	TOTTR6
	Function 4:	EXPORT6
	Function 5:	GERMAN
	Function 6:	TOTTR2

Nair and Frank (1980, pp.442-3) made the following comment in respect of the above variables that were found to have discriminatory power:

> This result would suggest that measurement and disclosure practices in countries may be determined by different underlying environmental variables. It is difficult, however, to distinguish between the two sets of environmental variables on any conceptual basis.

In their concluding comments Nair and Frank (1980, p.448) stated:

> The disclosure practices do not seem to conform to any such conceptual classification schemes. They present a different picture of greater diversity where the boundary lines between different groups become blurred and indistinct

An assessment of the contribution of Nair and Frank (1980) towards understanding the influence of cultural, economic and other environmental factors on national diversity in accounting practices, would regard the distinction they drew between measurement and disclosure practices as their prime contribution. This distinction has been accepted by most subsequent researchers [see for example Nobes (1992, pp.74-84)]. However, the criticisms of the use of Price Waterhouse data, by Nobes (1981), that it was not suitable for the purpose and contained misleading cases and errors needs to be considered. Also the lack of a theoretical basis for specifying the selection of environmental factors by Nair and Frank (1980) limits the generalisability of their results. Research directed towards developing a theoretical framework for the identification of environmental factors associated with accounting diversity is discussed in Section 2.3 below.

In all of the studies reviewed above only very general relationships between environmental factors and accounting practices have been established. It was not until the late 1980s that an alternative approach to investigating the relationship between accounting practices and national environmental factors was developed in the accounting literature. This approach relied upon investigating the association of national culture with national accounting practices using the theoretical model of culture developed by Hofstede (1980). In the above studies culture was not used as an environmental variable except for Frank (1979) and Nair and Frank (1980) where language was used as a surrogate for national culture. The theoretical framework outlining the relationship between accounting practices and national culture as defined by Hofstede (1980) was developed by Gray (1988) and Perera (1989). This framework is adopted in the present study to explore the relationship between national cultural values and consolidation disclosure practices. The reasons for adoption of this approach are discussed in Chapter 3.

The literature reviewed in this Section has provided a theoretical background for the current study. First, the current study is generally concerned with exploring the relationship between a national environmental characteristic (national cultural values) and accounting practices (consolidation accounting disclosures). The literature to date has been primarily descriptive and according to Radebaugh and Gray (1993, p.66) '...only very general relationships between environmental factors and accounting systems have been established.' Second, the studies cited above did not use Hofstede's concept of national cultural values as a variable in the framework to explore reasons for national differences in accounting practices. In only two studies was a concept of culture used and this was measured by a surrogate, the national language. This deficiency was observed by Gray (1988, p.4) where he stated:

> The significance of culture in the context of prior research is far from clear. It may be that cultural influences have been generally subsumed in the predominant concern with economic factors but this has not been made explicit. Accordingly, the influence of culture on accounting would seem to have been largely neglected in the development of ideas about international classification.

Three further issues arise from the analysis of the above studies which place the current study in context.

First, the distinction made by Nair and Frank (1980) that accounting measurement and disclosure practices each should be expected to respond to different environmental factors. This distinction was subsequently accepted. For example, Nobes (1983) focused on measurement practices. It is emphasised that the focus of Nobes (1983) can be contrasted with the current study which focuses upon disclosure practices.

Second, the recognition that the relationship between environmental factors and national accounting practices is complex and that a single list of factors may not provide sufficient explanatory power. The morphology approach pioneered by the AAA (1977) and subsequently used by Nobes (1983) and AlNajjar (1986) provides an alternative framework for understanding complex relationships. The current study employs multiple regression analysis to examine the relationship.

Third, the use of secondary data sources and researcher judgement to measure observations concerning accounting practices in the reviewed studies limited the results. For example, Price Waterhouse survey data was used by [DBL (1978), Frank (1979) and, Nair and Frank (1980)] and individual researcher judgement was used by [Mueller (1967) and (1968), Previts (1975), AAA (1977), Nobes (1983) and, AlNajjar (1986)]. This can be contrasted with the present study where data are sourced from corporate annual reports and is consistent with the claim of Tay and Parker (1990, p.85) that '...actual reporting practices may be assessed most accurately from annual accounts'.

2.3 METHODOLOGY IN INTERNATIONAL COMPARATIVE FINANCIAL ACCOUNTING RESEARCH

This Section reviews methodological issues associated with international comparative financial accounting research. The general framework for classifying approaches to studying international accounting problems proposed by Wallace and Gernon (1991) is reviewed. The current study is identified within this general framework as one where the 'nation is the unit of analysis' and a 'contingency theory' approach is adopted.

A critical methodological issue facing researchers in the international accounting area is the treatment of 'nations as subjects' [Wallace and Gernon (1991, p.210)]. It has been argued that the lack of a comparative framework by which similarities and differences of accounting practices among countries and explanatory variables identified and general associations developed has hampered the development of research in international accounting. Wallace and Gernon (1991, p.210) stated:

> It is this lack of framework and the absence of a critical review of the different types of methodology used in international comparative financial accounting research that have probably prevented the research on international accounting from paralleling the growth of empirical research in other areas of accounting.

The first research issue to consider is whether accounting is culture dependent or culture free. The literature reviewed in Section 2.2 above listed many environmental factors which were argued to be associated with the set of accounting practices adopted within a country. Within the culture dependent school of thought it is believed that accounting practices can be only interpreted in their context. The particular patterns of accounting practice observed in each nation therefore can be interpreted with reference to the general environmental (including cultural) characteristics of the nation.

An alternative school of thought is of those who have argued accounting is culture free [for example Aitken and Islam (1984)]. In this school of thought the focus is not on the context of accounting but on the dimensions of accounting that are similar across nations. Aitken and Islam (1984) argued the information needs of users of accounting information are constant across nations and that accounting characteristics are universally applicable because accounting measurement can be performed using a common set of measurement techniques. Other evidence considered to support the culture free hypothesis is the movement towards international harmonisation of financial reporting. The argument here is that this harmonisation movement is evidence of accounting measurement and disclosure practices being independent of their environmental context. Despite these claims there is overwhelming evidence that accounting practices have differed among nations and continue to do so. Surveys of accounting practices such as Fitzgerald, Stickler and Watts (1979), Gray, Campbell and Shaw (1984), United Nations Centre on Transnational Corporations (1985) and, the Organisation for Economic Co-operation and Development (1987) are representative of this evidence. In Section 4.4 of this study national differences in consolidation accounting disclosure practices are documented. Further, the association of national cultural values with national differences in consolidation accounting disclosure practices is investigated in this study. Therefore, the arguments of the 'culture free' school of accounting are not applied in the present study and a research methodology embracing cultural factors is developed.

The choice of methods for exploring the association between national culture and accounting practices depends upon whether the differences being examined relate to the actual practices or the contextual environment in which accounting is practiced. Wallace and Gernon (1991, p.221) distinguish between these as follows:

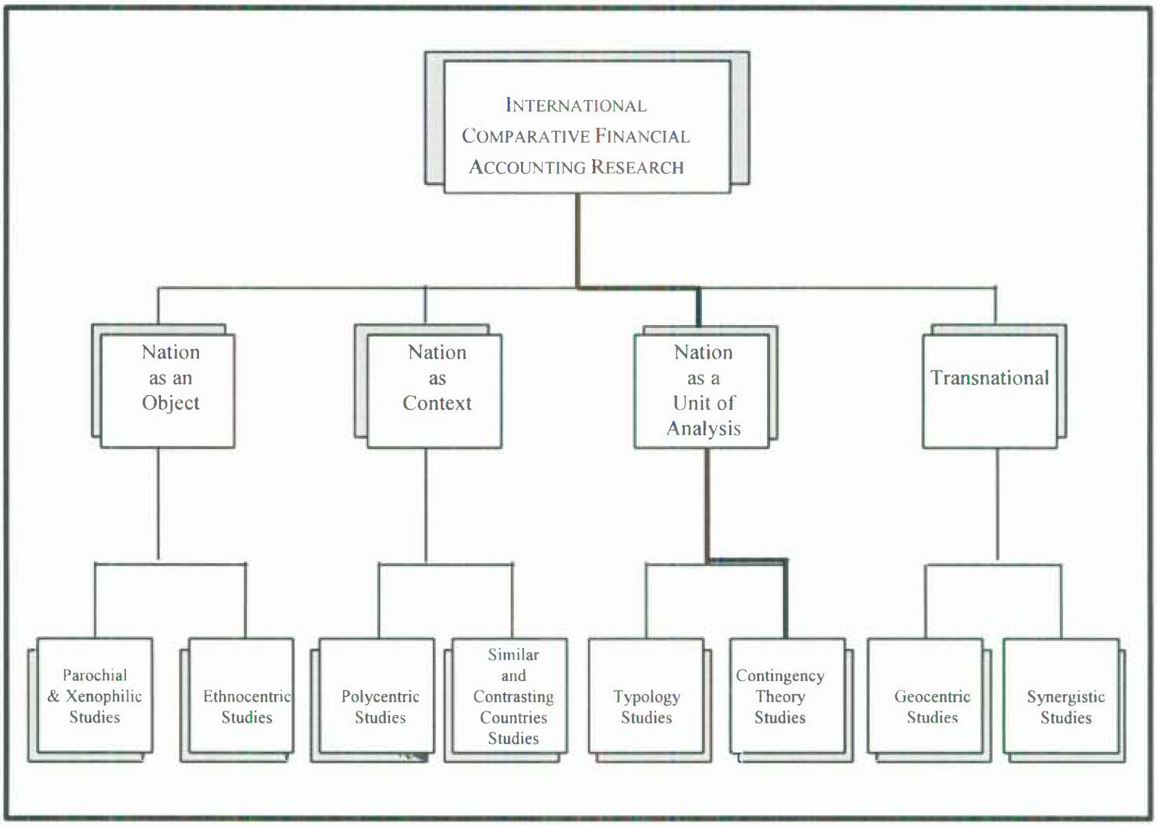
> To examine whether the environment (or culture as a part of it) has an effect on the accounting profile of countries, one needs to examine and compare both differences of degree and differences in relational or trait patterns. The comparison of differences of degree would enable one to assess whether accounting (or any part of it) differs from one country to another in terms of the extent to which various countries score higher or lower, on average, on particular contextual variables and dimensions of accounting. The next comparison would involve examining relational patterns between contextual variables and dimensions of accounting. The researcher can focus on both types of difference or on one type and not the other.

The framework outlined by Kohn (1989) for use in cross-cultural studies in sociology was adopted by Wallace and Gernon (1991, p.222) for use in classifying international comparative financial accounting research. This framework provides a means for locating the present study in the literature and is reproduced as Figure 2.2. Four types of research are identified:

1. The nation is the *object* of the research
2. The nation is the *context* of the research
3. The nation is the *unit of analysis* of the research
4. The nation is treated as a *component* of the international system

Figure 2.2 A Framework For Cross-National Accounting Research

Source: Wallace and Gernon (1991, p.224)



The present study is located within those previous studies classified where 'the nation is the *unit of analysis*' and is indicated by the bold lines. This is because the consolidation disclosure practices of corporations are grouped by country and tests of association are made with national cultural values. In this approach nations are classified according to various dimensions and accounting practices are investigated in relation to variations in national characteristics.

Two subgroups of these 'nation as the *unit of analysis*' studies are distinguished. First, are the typology studies where the object of the research is to classify nations into groups with similar accounting profiles. Some of these studies have been reviewed in the previous section [DBL (1978), Frank (1979), Nair and Frank (1980), Nobes (1983), and AlNajjar (1986)]. These studies are useful in the current research because of the national environmenta factors that were used in classification.

The second group of studies are referred to as 'contingency studies'. In this type of research Wallace and Gernon (1991, p.242) argued countries are used:

> ...to develop theories or to test hypotheses about the functioning of accounting across the world or about the association between accounting and its environment. A characteristic of the contingency type of studies is the conduct of cross-sectional examination of data on a sample of countries at a point in time...

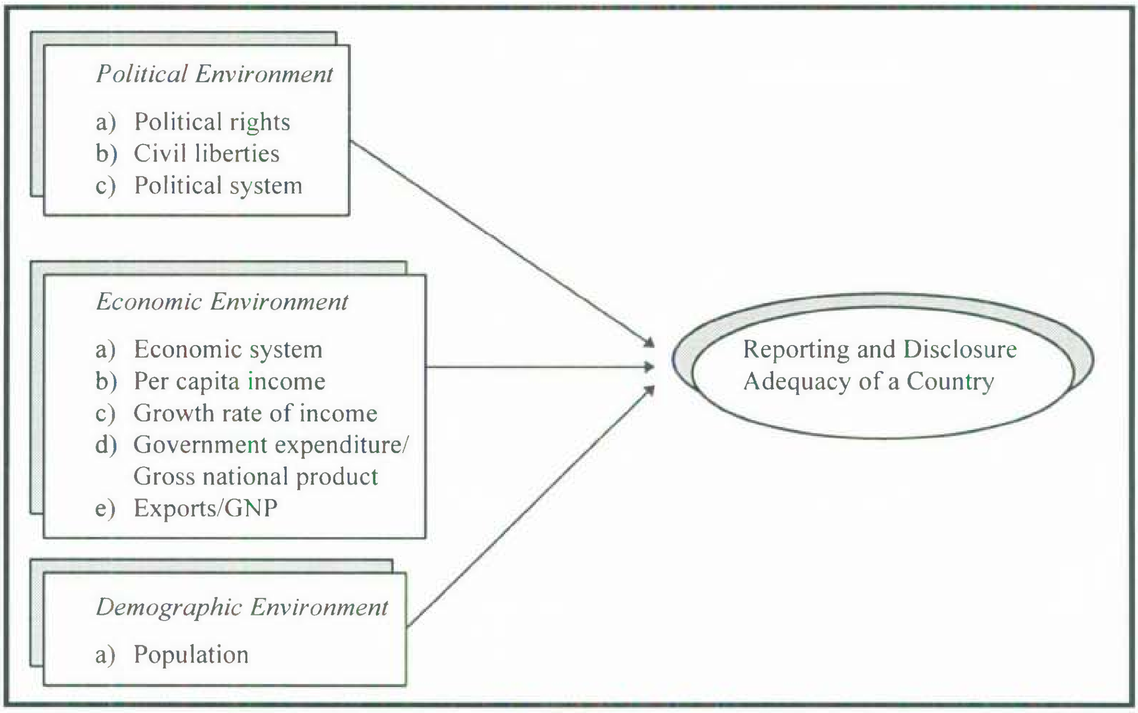
The current study can be grouped with these types of studies because it is concerned with investigating the 'association between accounting and its environment' (consolidation accounting disclosure practices and national cultural values). Also, the current study is conducting 'a cross-sectional examination of data on a sample of countries at a point in time' (consolidation accounting disclosures in corporate annual reports in ten Asian-Pacific countries for the 1992/3 financial years).

Three previous studies employing this approach were cited by Wallace and Gernon (1991) and each is now reviewed.

The first case of contingency theory approach was Belkaoui (1983) which examined whether national differences in 'reporting and disclosure adequacy' relate to differences in the political and economic environment. 'Reporting and disclosure adequacy' was defined as the extent to which financial statements covered events and transactions [Belkaoui (1983, p.212)]. The data used to test this proposition was drawn from a Price Waterhouse survey [Fitzgerald, Stickler and Watts (1979)]. It should be emphasised that the data in the Price Waterhouse survey does not report how corporations measure and disclose information but what would be measured and disclosed if a corporation observed all the rules and regulation concerning financial reporting of the nation. The 267 accounting principles and practices surveyed were scaled from 1 to 7 and summed to obtain the reporting and disclosure adequacy index for each country. The results of the general regression model developed were not significant (p.216). The illustrative model of elements influencing accounting development used by Belkaoui is reproduced below as Figure 2.3.

Figure 2.3 Model of Accounting Development

Source: Belkaoui (1983, p.209)

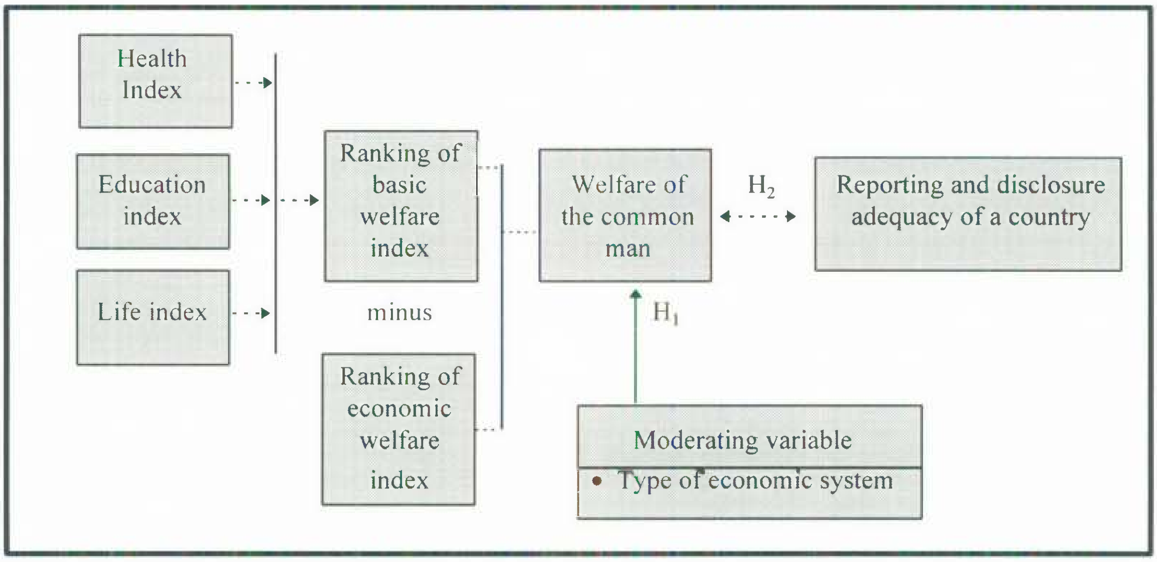


The second case of a contingency theory approach was Belkaoui and Maksy (1985) who developed a construct termed 'welfare of the common man', defined as the extent to which economic welfare is translated into achievement in social welfare, and was hypothesised to be related to financial reporting and disclosure adequacy of a country. This construct was measured as the difference between the ranking of the basic welfare index and the economic welfare index. The basic welfare index comprised three indices. First, a life index [life expectancy at birth, crude death rate per thousand of population, and child death rate aged (1-4)]. Second, a health index [population per physician, population per nursing person, daily per capita calorie supply as a percentage of requirement]. Third, an education index [number enrolled in primary school as a percentage of age group, number enrolled in secondary school as a percentage of age group, number enrolled in higher education as a percentage of population aged 20-24, adult literacy rate]. The index of reporting and disclosure adequacy was constructed from the data contained in Fitzgerald, Stickler and Watts (1979). The illustrative model developed by Belkaoui and Maksy (1985) is reproduced as Figure 2.4

The hypothesis tested was that countries with a high ranking for welfare of the common man would be more likely to establish an accounting profession and therefore be in a position to require greater levels of disclosure. The conclusion of the research was that there was no significant relationship between the index of the welfare of the common man and the index of reporting and disclosure adequacy. The approach used by Belkaoui and Maksy (1985) has been criticised by Cooke and Wallace (1990, p.86) for failing to adequately explain the causal link between the dependent and independent variables and also because the causal relationship is not reversible. For example, if the index of welfare rose this would be expected to be associated with an increase in the level of disclosure. However, if the index of welfare decreased this may have no impact on the level of disclosure operating within the nation.

Figure 2.4: Model of Accounting Reporting and Disclosure Adequacy

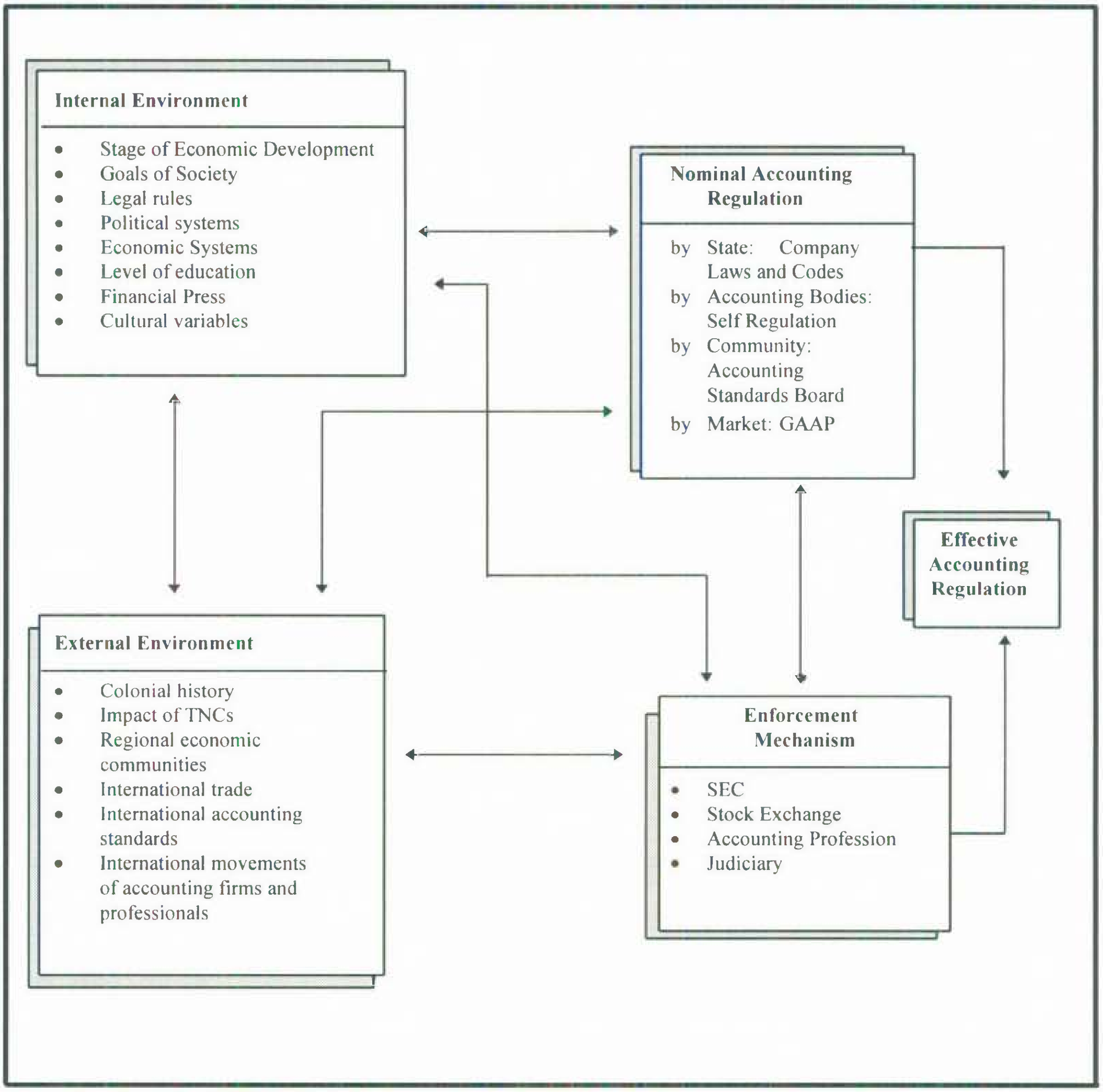
Source: Belkaoui and Maksy (1985, p.83)



The third case of a contingency theory approach was that of Cooke and Wallace (1990) who investigated the environmental attributes associated with the level of accounting regulation across nations. In developing their project they acknowledged that a primary task is the specification of 'conceptual' and 'operational' constructs for defining and measuring the relationship between aspects of accounting and its environment (p.81). Figure 2.5 below is the model of the relationship between environmental variables and accounting regulation proposed by Cooke and Wallace (1990).

Figure 2.5 Environmental Influences on Accounting Regulation

Source: Cooke and Wallace (1990, p.83)



The contribution of Cooke and Wallace (1990) was the distinction between internal and external factors that affect disclosure regulation. Also they investigated which of these was more influential in determining the level of comparative financial disclosure regulation in a nation. Two hypotheses were examined. First, developed countries are more likely to have highly regulated accounting than developing countries.

Second, countries with a favourable score on the business risk environmental index (high envindex scores) are more likely to have more items under corporate financial disclosure regulation than those with low envindex scores. [Envindex was the expression used by Cooke and Wallace (1990) to describe environmental index.] The results of the research in respect of each hypothesis were: The first hypothesis was rejected because it was concluded that developed countries did not significantly differ from developing countries in the intensity of their corporate financial disclosure regulation (p.97). In respect of the second hypothesis there were mixed results with evidence indicating a stronger relationship between internal environmental variables and corporate financial disclosure regulation for developed countries than for developing countries. The result provides support for hypothesis two for developed countries but not for developing countries (p.98). The data used to measure the corporate financial disclosure regulation in each nation was sourced from Fitzgerald, Stickler and Watts (1979) and Gray, Campbell and Shaw (1984). This reliance on survey data may be contrasted with the data used in the present study which is sourced from corporate annual reports.

The above discussion of the prior studies employing a contingency theory approach in the international accounting literature have all been from the environmental causal direction. That is, the studies have been directed towards finding national environmental variables associated with accounting disclosure practices and regulations. This is essentially a deterministic view of the relationship between accounting practices and its environment and may not capture the interactions that may exist. In the following Section the use of contingency approaches in comparative international financial accounting research is extended and the general application of this approach in the current study is outlined.

2.4 A CONTINGENCY APPROACH TO INTERNATIONAL COMPARATIVE FINANCIAL ACCOUNTING RESEARCH

In this Section various arguments for the adoption of a contingency approach in international accounting research are reviewed. Various alternative contingency approaches are considered and the adoption of a contingency approach in this study is outlined.

The use of a contingency approach for studying international diversity in accounting practices was supported by AAA (1993, p.9) which stated:

> Another special area of interest in international accounting research is the attempt to explain why one country behaves in a consistently different manner from another country. The attempt to find variables that would explain the variation among countries is the contingency approach. It is adapted from the contingency approach in organisational studies and is concerned with the association between accounting and its environment. Global contingency approaches are usually based on global cross-sectional primary or secondary data information. This is probably because cross-sectional designs can handle a great variation of phenomena and can provide a high degree of information. These studies are usually deterministic, unidirectional and implicitly assume that accounting is the dependent variable.

Few studies in the international accounting literature have used a contingency approach. Wallace and Gernon (1991, p.233) cited only three exemplars [Belkaoui (1983), Belkaoui and Maksy (1985) and , Cooke and Wallace (1990)]. Each of these was discussed in Section 2.3 above Despite this relative lack of prior use of the contingency approach in the international accounting literature the approach provides an effective means for addressing research questions. In the current study issues concerning the development of the contingency approach are reviewed, and then these are applied to the investigation of the association between national cultural values and consolidation accounting disclosure practices.

Contingency models have been used in a variety of settings in the accounting literature. The application of a contingency approach has been traditionally associated with management accounting research where variables internal and external to the entity have been investigated to determine their association with management accounting practices and managerial decision making. Emmanuel, Otley and Merchant (1990, pp.47-8) argued that organisational structures and activities, such as accounting, are influenced by the environment in which they operate and that contingency theory provided a useful means of studying this influence. Within this setting contingency theory can be used either normatively or positively. From a normative perspective the contingency approach suggests how an organisation should be structured and controlled [for example Cooper (1981, p.189)]. From a positive perspective contingency theory identifies variables '...in the organisation's environment that influence the organisation's structures and processes' [Legge (1978, p.97)].

Contingency theory however is not without its critics. The criticisms can be divided into two broad areas, conceptual and methodological. Conceptually, the contingency approach was faced with concerns stemming from its functionalist origins which were described by Wood (1979, p.338) as 'abstract and scholastic'. It was further argued that the contingency view of organisational and social change was essentially an exercise in finding the appropriate design and was therefore deterministic. Advocates of the contingency approach were not troubled by this criticism for they argued that an organisation's or society's propensity to change could be included as a contingent variable. Recent research employing a contingency approach has included managerial choice [Thomas (1986), Hofstede, Neuijen, Ohayv and Sanders (1990), and Forker (1992)]. The criticism that contingency theory is deterministic can be countered.

A second conceptual criticism of contingency theory is that the studies employing a contingency approach are time-specific [see for example Hopwood (1983, p.297)]. This criticism is acknowledged, as studies of contingent relationships have generally employed cross-sectional data and few have been longitudinal. However, the contingency approach does not preclude a longitudinal investigation and in order to examine more than simple causal or deterministic relationships, (such as consequences, recursive, and contextual relationships) a contingency approach can still be employed. Thus, this criticism of the contingency approach is acknowledged but not considered to discredit the approach.

A final conceptual criticism is that the contingency approach has failed to consider the capacity of organisations and particularly accounting systems to impact upon the environments in which they operate [for example Child (1975, p.27) and, Schoonhoven (1981, p.353)]. In response, advocates of contingency theory have developed consequences and recursive contingency models. An example of a consequences model is the study by Rayburn and Rayburn (1991). Proposed consequences, recursive and contextual contingency models in international accounting are discussed below.

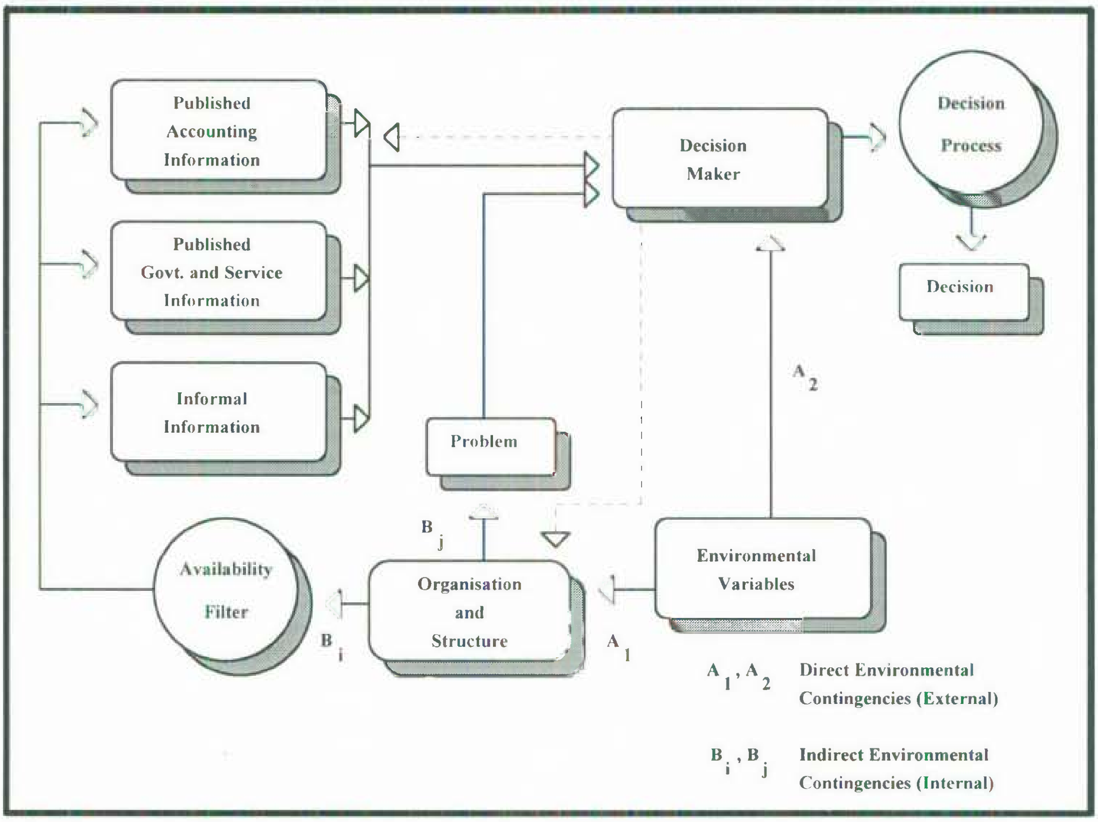
The second group of criticisms concerning contingency theory relate to methodology. These have primarily centred upon the identification, definition and measurement of the contingencies used in various models [for example Waterhouse and Tiessen (1978), Cooper (1981) and, Hopper and Powell (1985)]. Contingency models of a deterministic nature (cause-effect models) are criticised for their failure to accommodate a large number of contingent factors and therefore the results from contingency studies are considered to be not generalisable [for example Thompson (1967, p.157), Ginzberg (1980, p.370) and, Miller (1981, p.3)]. A second methodological criticism is that contingency theory studies have tended to rely upon general linear models and correlational procedures [Schoonhoven (1981)].

In response to these criticisms the advocates of contingency theory have argued that the call for the identification of unlimited contingent factors '...rings hollow since it is somewhat gratuitous and can never be completely addressed or circumvented' [Miller (1981, p.4)]. Further, the identification of contingent factors should be undertaken within a theoretical framework and the objective is to identify factors that are consistently significant predictors of relationships. The objective of the contingency approach is thus not to identify all factors, but to restrict a study to factors that have a strong theoretical basis for investigation. Gordon and Narayanan (1984) took the view that if clear relationships can be established using a contingency approach, then the relative importance of individual factors could be the subject of latter research. Thus, by employing established methodological techniques and a conceptual approach to the identification of contingent factors the criticisms of contingency theory can be minimised. The above criticisms of contingency theory are acknowledged, however it is considered that the contingency approach provides a useful theoretical framework for the current study.

Early advocates for the use of a contingency approach in international accounting research were Schweikart (1985) and Schweikart and Chandran (1988) because of the opportunities this approach offered for the establishment of a theory of international accounting by providing guidelines for designing effective research and a method for interpreting results. The financial accounting contingency model developed by Schweikart (1985) was descriptive and no attempt was made to test the model. Schweikart (1985) distinguished between direct and indirect environmental contingencies. Direct environmental contingencies were external to the decision maker. Indirect contingencies were internal to the organisation with which the decision maker was involved. The direct environmental contingencies were considered to have an impact on the indirect environmental contingencies although this relationship was not modelled to apply in reverse. Figure 2.6 is a reproduction of the financial accounting contingency theory model proposed by Schweikart (1985).

Figure 2.6: Contingency Theory - Financial Accounting Model

Source: Schweikart (1985, p.90)



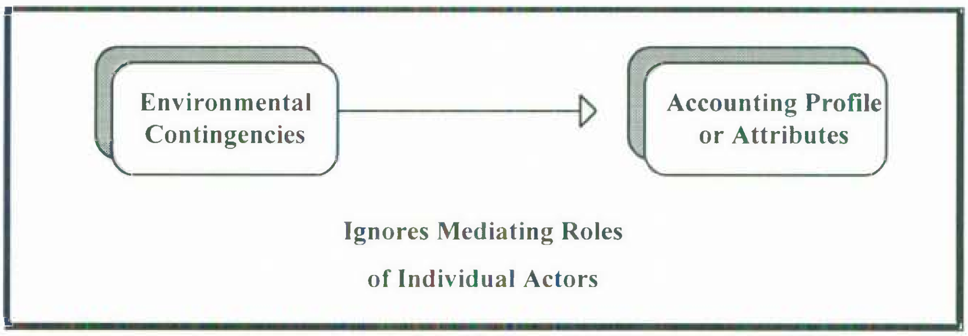
The above model locates environmental variables (contingencies) in the bottom right hand corner and indicates that they have an influence on both the organisation and structure, and also the decision makers. This model of the relationship is unidirectional. That is, no impact of the organisation or decision maker on the environmental variables is considered. This model can therefore be classified as an environmental causal model using the terminology of AAA (1993).

AAA (1993) argued for the use of the contingency theory approach in international comparative financial accounting research and distinguished four contingency approaches according to the level of interactions specified. Each of these approaches is reviewed below.

The first type of contingency approach was described as an environmental causal model. This is a unidirectional model in that variables in the environment are deemed to cause accounting practices to be adopted in a nation. Therefore, the key research issue is to identify the relevant environmental variables thereby enabling the specification of a unique set of accounting practices that would be associated with these variables. The model described by the AAA is bivariate and deterministic. This type of model is the one that was used by Belkaoui (1983), Belkaoui and Maksy (1985) and Cooke and Wallace (1990). Figure 2.7 reproduces this contingency model.

Figure 2.7: Environmental Causal Model

Source: AAA (1993, p.18)

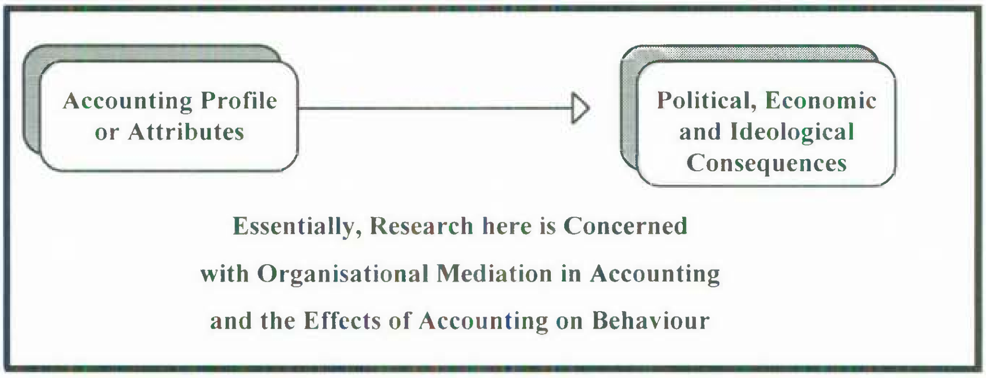


The second type of contingency approach was the environmental consequences model. In an international setting this model recognises that accounting attributes have an impact on the national environment. This model is also unidirectional. There is no study in the literature that has attempted to model the consequences of adopting accounting practices across a range of countries. An example of a study concerned with the impact of the introduction of accounting practices into a nation is McKinnon (1986) which considered the impact of the introduction of consolidation accounting practice on Japanese corporate reporting.

In order to isolate the environmental consequences of accounting practice on social change within a country all other intervening events would need to be identified. In addition such a study would require a longitudinal approach spanning several years. For the results to be generalised the same accounting practice would need to be introduced into several countries and the consequences observed. Therefore, the environmental consequences model despite being described as 'desirable' by AAA (1993, p.9) is not practically capable of implementation within the framework of the present study. Figure 2.8 reproduces the environmental consequences model.

Figure 2.8: Environmental Consequences Model

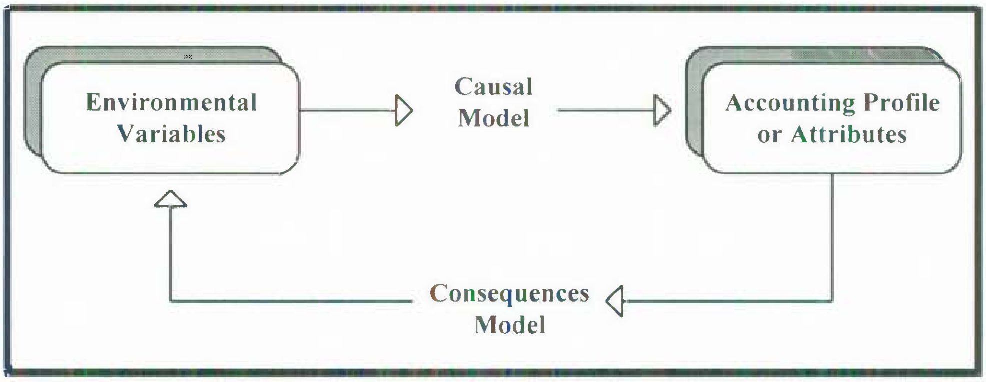
Source: AAA (1993, p.18)



The third type of contingency approach was referred to as a recursive contingency model. This model combines both the causal and consequences models discussed above. There is no example of a study employing a recursive approach in the literature. The development of such an approach would require time series data to measure the impact of environmental variables upon accounting attributes and then to measure the consequences of such accounting attributes upon the environmental variables. Such an approach would face all of the difficulties encountered by the consequences approach and in addition would involve measurement of the interaction effects of environmental variables and accounting attributes. These issues are beyond the scope of the present study. Figure 2.9 is a reproduction of the recursive contingency model.

Figure 2.9: Recursive Contingency Model

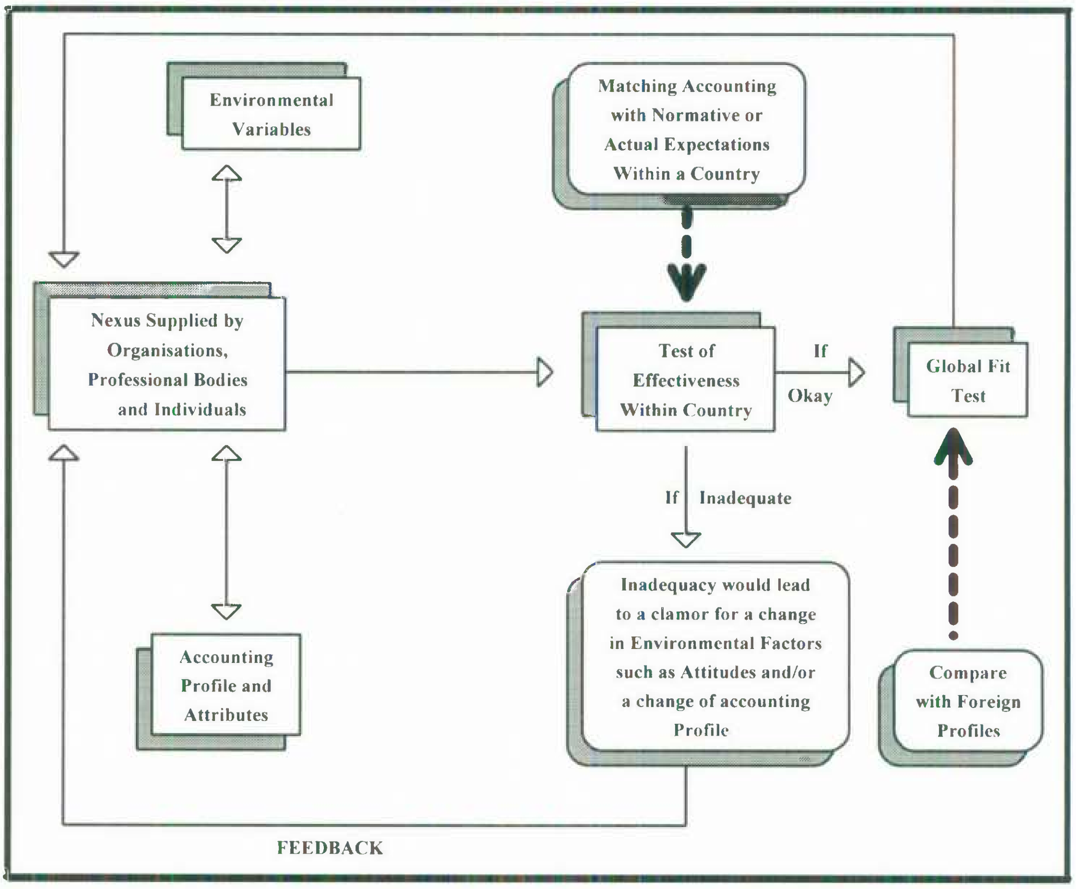
Source: AAA (1993, p.18)



The fourth type of contingency approach was classified as the contextual contingency model. AAA (1993, p.10) stated: 'This is the approach that brings to the fore concerns for cultural relativism and national character. Essentially, research in this mode is usually embedded in the context of individual countries; they are case studies.' The contextual model comprises the elements of the recursive model and considers them within the context provided by economic, political and professional organisations. This element is similar to the organisational context outlined in the contingency model proposed by Schweikart (1985). The next step in the contextual contingency model is to 'test for effectiveness within a country'. This test is dependent upon whether it meets actual or normative expectations within a country. If the test is inadequate, that is the accounting practices do not meet the standards expected within the country, then it would be expected that either environmental factors would change to accommodate the accounting practices or that the accounting practices would change. If the accounting practices are acceptable then they would need to pass a 'global fit' test involving comparison with foreign firms. The 'global fit' test provides feedback to the organisations, professional bodies and individuals concerned with accounting practices. The contextual contingency model is reproduced as Figure 2.10

Figure 2.10: Contextual Contingency Model

Source: AAA (1993, p.19)



The above review of the contingency models proposed by the AAA (1993) places the present study in context. The current study involves a partial test of the contextual model. That is, in the current study tests of the association between environmental variables (national cultural values) and accounting practices (consolidation disclosure practices in corporate annual reports) within country (extent of consolidation disclosure and degree of variation in the extent of consolidation disclosure) and global fit (degree of 'global fit' and degree of variation in the extent of 'global fit') are undertaken. These tests are described in Chapters 5 and 6 and the results are reported in Chapter 8.

The data set in the current study is cross-sectional, comprising annual reports from corporations headquartered in ten Asian-Pacific countries. Thus, this study does not undertake a longitudinal or time series study which would be required if the consequences or recursive contingency approaches were employed.

2.5 SUMMARY

This Chapter has provided an overview of the theoretical framework of which the present study is part. The literature review has highlighted important developments and contributions made by researchers into the study of the relationship between accounting and its national environment. These contributions are summarised below in the following categories: First, the approach towards identifying national environmental factors that have been hypothesised to be associated with diversity in accounting practices; second, the source of data used to measure accounting principles and practices; third, the focus of the research.

The approach towards studying the relationship between accounting practices and their national environments has evolved from the initial establishment of lists of environmental factors [Mueller (1967 and 1968), Previts (1975)], to those using a morphology of factors [AAA (1977), Nobes (1983), AlNajjar (1986)]. The approach to examining the relationship has also varied from the deductive [Mueller (1967) (1968), Previts (1975), AAA (1977), Nobes (1983), AlNajjar (1986)], to the inductive [DBL (1978), Frank (1979), Nair and Frank (1980)]. In addition, studies using a contingency approach have been developed [Belkaoui (1983), Belkaoui and Maksy (1985), Cooke and Wallace (1990)]. Only in the studies conducted by Frank (1979) and Nair and Frank (1980) was culture used as an environmental variable. None of the above cited studies used the conceptualisation of culture developed by Hofstede (1980).

The data used to evaluate accounting principles and practices in the above studies have varied from no testing [Mueller (1967 and 1968), Previts (1975), AAA (1977)], to reliance on various Price Waterhouse surveys [DBL (1978), Frank (1979), Nair and Frank (1980), Belkaoui (1983), Belkaoui and Maksy (1985), Cooke and Wallace (1990)]. In addition Cooke and Wallace (1990) used survey data from Gray, Campbell and Shaw (1984). Other researchers used individual judgement to assign scores for accounting practices [Nobes (1983), AlNajjar (1986)]. None of the above cited studies used data collected from corporate annual reports.

The focus of the research has varied among the studies and these may be summarised as follows: focus on accounting systems generally [Mueller (1967 and 1968), Previts (1975), AAA (1977)]; focus on similarities and differences in accounting principles and practices generally [DBL (1978), Frank (1979)]; focus on similarities in measurement and disclosure accounting practices [Nair and Frank (1980)]; focus on accounting measurement practices in developed western economies [Nobes (1983)]; focus on standardisation of accounting for large commercial organisations [AlNajjar (1986)]; focus on corporate reporting and disclosure adequacy [Belkaoui (1983), Belkaoui and Maksy (1985)]; focus on corporate financial disclosure regulation

[Cooke and Wallace (1990)]. None of the above studies focused upon disclosure practices in corporate annual reports.

The important points from the above analysis for the current study are:

1. The framework for the current study is 'nation as the *unit of analysis*' as was illustrated in Figure 2.2. A contingency theory approach is adopted and the study undertakes a partial test of the contextual contingency approach outlined in AAA (1993, p.19) and illustrated as Figure 2.10 This approach provides a conceptual framework for studying international accounting issues and the lack of such a framework has been criticised in some of the reviewed studies.

2. The research focuses upon the association of national culture, as an environmental variable, with accounting disclosure practices. Such a focus has not been found in other reviewed studies which have primarily concentrated on economic, social and political variables. The theory outlining the relationship between accounting practices and national culture as defined by Hofstede (1980) is outlined in Chapter 3 below. No studies have been published to date linking cultural factors to specific accounting disclosure practices.

3. The data source is items disclosed in corporate annual reports. This can be contrasted with all of the above studies where the data source was survey data [Fitzgerald, Stickler and Watts (1979) or, Gray, Campbell and Shaw (1984)], or generated by individual researcher judgement. The use of corporate annual reports as a data source in international accounting research is consistent with the calls for the use of this type of data by Tay and Parker (1990).