# **Accounting Information Systems in Developing Countries**

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#### **Abstract**

The aim of this paper is to identify what role accounting information systems (AIS) play in developing countries at present. This paper continues this argument by reviewing studies of accounting systems in developing countries, with an emphasis on the importance of accounting education and the accounting profession. The paper begins by defining the term "developing countries", exploring their characteristics and relating them to accounting development. This is accomplished first by describing environmental factors such as economic, legal and political factors. It then focuses on the adoption of accounting systems from developed countries, highlighting the difficulties encountered in this process. A discussion of the role of accounting systems in meeting the needs of developing countries follows, with a synthesis of studies on the role of accounting systems, and the patterns and regulation of accounting systems.

**Keywords:** accounting information systems, developing countries.

#### 1. Introduction

Developing countries are those that became independent by the end of the 1950s (Wallace 1990). These developing countries have been defined as "third world countries", meaning they are less developed and do not include either the western world as their center (as U.S.) or the eastern world (as Russia). Developing countries are mostly found in Africa, Asia, Latin America, the Middle East, and Oceania (Perera 1989; Wallace 1990). Although developing countries have some common features they are not a homogeneous group. Each country is different in terms of gross national product (GNP), population, culture, degree of literacy, and the kind of economic and political system under which it operates (Perera 1989; Wallace 1990). Despite great differences in these factors, however, there are many characteristics that are quite similar (Perera 1989; Samuels 1990; Wallace 1990; Belkaoui 1994; Belkaoui 2000), including:

- The absence of exchange markets;
- low levels of living standards and productivity;
- high rates of population growth, dependency burden and levels of unemployment and underemployment;
- political mismanagement and an inefficient public sector; and
- An absence of the relevant education system in general and accounting education in particular.

Some of these characteristics that have influenced accounting systems in these countries will be discussed in the next section.

## Accounting and Environmental Factors

Accounting, being a social practice, is affected by environmental factors (Perera 1989, p. 141; Mueller, Gernon et al. 1997, p. 2), which differ from country to country as they do from time to time within the same country. Accounting does not work alone, but works in symbiosis with the surrounding environment. Each country has special environmental factors, internally and externally, which play a vital role in creating its accounting system (Cooke and Wallace 1990).

Wallace (1990) argued that the study of accounting systems for any country should include not only a study of its accounting techniques, but should include also a study of the practice and education of accounting in that country, within its environmental context. Many studies (Bait El-Mal, Smith et al. 1973; Kwabena 1982; Kilani 1988; Bait El-Mal 1990; Bait El-Mal 1990; Cooke and Wallace 1990; Kilani 1990; Jones and Sefiane 1992; Baydoun and Willett 1995; Bakar 1998; Bakar and Russell 2003) have shown that the study of environmental factors for any country should precede a study of its accounting systems. Since accounting systems are a product of the environment in which they are embedded, they need to be suitable to its environmental needs. Accounting researchers have identified:

- difficulties in determining the environmental factors affecting accounting systems in any country;
- the impossibility of generalisation of the affect of any independent factor, or a group of environmental factors, upon various accounting systems for different countries; and
- difficulties to determining the attraction between environmental factors in developing countries (Cooke and Wallace 1990).

Environmental factors affecting accounting systems are the broad national environment of the country, as well as the global environment. Nationally, they include economic, social, cultural, legal and political factors (Perera 1989; Radebaugh and Gray 2002). Accounting education and the accounting profession are also subject to these environmental factors, and have a profound effect upon the development of accounting systems.

#### Economic Factors

Economic factors have an important effect on accounting systems on the one hand, and on the other contextual factors. Among the economic factors that affect accounting systems are the nature of ownership, the nature of the economic system, economic development plans, users of the accounting systems and the stock market (Perera 1989; Samuels 1990; Wallace 1990; Belkaoui 1994; Belkaoui 2000).

The nature of the ownership of a business has an effect upon national accounting systems. Most governments in developing countries control and own the business field because of their role in the ownership of natural resources in such countries. This situation ensures that the governments in these countries have a vital role in economic activities for the purpose of achieving economic development and growth. Therefore, accounting systems have an important role for these governments in assisting them to achieve their goals. The role of the government in an economic system affects the feasibility of accounting systems as a result of government legislation. As a result of this control, many Acts have been issued to organise accounting systems in developing countries (El-Sharif 1981, p. 36). To achieve economic development in developing countries, governments should create development plans. These development plans require information and, of course, some part of this information is accounting information. This accounting information should satisfy key characteristics 1 to assist management to reach informed decisions about any issue.

The reflexive relationship between accounting and its environment has already been mentioned (Mueller, Gernon et al. 1997, p. 2). Because every country has a different history, values and political systems, they also have different patterns of accounting systems development (Belkaoui 1983; Cooke and Wallace 1990). For example, accounting in the U.S. is not like accounting in other countries. Indeed, diversity is what we see. This diversity is an outgrowth of the variety of business environments around the world and the fact that accounting is environmentally sensitive. The development of globalised accounting systems emanates from U.S. and Europe, impacting the culture and regulatory systems of developing countries. It is interesting to note, too, that when countries' business environments are similar their financial accounting systems also tend to be similar. Financial accounting information in many developed countries is directed towards the needs of investors and creditors, and decision usefulness is the overriding criterion for judging its quality. However, in developing countries, financial accounting has a different focus and performs other roles, such as to ensure that the proper amount of income tax is collected by the national government. Moreover, in many developing countries few enterprises have private shareholders. Investment decisions are often not made on financial grounds and the market for information is imperfect (Mueller, Gernon et al. 1997, p. 2), challenging the assumption of classic economic theory with its emphasis on equilibrium between supply and demand.

<sup>&</sup>lt;sup>1</sup> Understandability, relevance, consistency, comparability, reliability, and objectivity.

### Legal and Political Factors

Political and legal factors are among the most important environmental factors that affect the determination of accounting practices (Cooke and Wallace 1990; Radebaugh and Gray 2002). The degree of their importance depends upon the political freedom of a country (Belkaoui 1983), and there is a positive relationship between accounting roles and political freedom. Moreover, accounting systems that apply in any country are affected by government legislation, which has a defining effect on the organisation of the accounting profession. Legislation includes tax law, commercial law and companies Acts. Professional organizations in the U.S. such as the American Institute of Certified Public Accountants (AICPA) have a basic role in organizing the accounting profession with the Financial Accounting Standards Board (FASB), an independent body, issuing financial accounting standards. However, in developing countries such as Libya, the government has full responsibility for these issues.

### Adoption of Accounting Systems from Developed Countries

A number of studies have shown that the main reason for the differences in accounting systems between countries is the variety of their environmental factors (Mueller, Gernon et al. 1997, p. 2; Radebaugh and Gray 2002, p. 21). This is because the difference in environmental factors between countries is a guide to the difference in the objectives of decision-makers from one country to another (Mueller, Gernon et al. 1997, p. 2). As a result of this, every country should create its own accounting system that is relevant to its needs and consistent with its own environmental factors. The challenge with Globalisation is to adapt successfully accounting systems imported from the developed would.

Many studies (Mirghani 1979; El-Sharif 1981; Cooke and Wallace 1990; Kilani 1990; Baydoun and Willett 1995) have shown that the environmental factors differ between developing countries and developed countries, and occur at various levels within those countries. Since the industrial revolution many changes have occurred in the environment of western countries in general and in particular the U.S. and U.K. For example, the growth of the private sector has resulted in a growth in the need for capital. Moreover, there has been an increase in the number of investors, the extent of private ownership and the separation of management from ownership. There has also been an increase in the effectiveness of the stock market and a high need for professional accounting services. However, this has diminished the role of governments in economic activities in these countries. As a result some development has occurred in accounting systems because of these changes.

On the other hand, the environment in developing countries continues as before, wherein the private sector is very small and less important than the public sector. Due to the role of the government in developing countries in decision-making, planning and control, especially in making development plans, this has led to many flexible changes in the environment in these countries. Even the main objectives of accounting systems in developing countries are to fulfil economic and social development as fast as possible, requiring all enterprises to contribute to the nation's advancement. However, developed countries have taken the opposite view (Kilani 1990). The objectives and needs for information in these countries are completely different because the main purpose of accounting in developed countries is to satisfy shareholders (i.e. the interests of the providers of capital), whereas in developing countries, with an insignificant number of shareholders, the main purpose of accounting is to satisfy government reporting requirements. In spite of these differences, accounting systems in developing countries are adopted from developed countries, sometimes without any modification to make them more suitable to the needs of the developing countries (Kilani 1988, P. 509; Mir and Rahaman 2005, p. 817). It is hardly surprising that the introduction of accounting systems from developed countries in general, and the U.S. and U.K. in particular, into developing countries, fails to satisfy the particular needs for information in developing countries (Wallace 1990). This information has the opposite effect on performance activities and economic development in developing countries because it focuses on short term results. Furthermore, the majority of developing countries do not understand the role of accounting systems at their stage of economic and social development (Mirghani 1982).

### Problems in the Development of Accounting Systems in Developing Countries

The previous discussion showed that accounting systems in most developing countries reflect the economic, political and social environment of those countries. Many studies (Mirghani 1979; El-Sharif 1981; Cooke and Wallace 1990; Kilani 1990; Baydoun and Willett 1995) have shown a variety of negative aspects of accounting systems in these countries, aspects which might be the main reason for the inefficiency of accounting information being derived. Some of these negatives aspects are discussed below.

It has been established that accounting systems have been adopted from developed countries without any attention being paid to environmental and local needs (Perera 1989), despite the irrelevance of such systems to these countries. While a great deal of attention has been directed to developing an accounting profession in developing countries, little serious attention has been given to a determination of the accounting objectives and development needs in such countries (Bakar and Russell 2003). Accounting education in developing countries is weak, with an adherence to the source of accounting influence, outdated regulations, and a lack of qualified instructors at professional institutions (Bakar and Russell 2003). Accounting systems that are applied in companies are irrelevant and uncommon (Wallace 1990). This is as a result of the absence of training in accounting and auditing fields. Accounting in developing countries has not been highly valued and the accounting information which is created by such accounting systems is of negligible use (Enthoven 1983; Bengharbia 1989). Consequently, most developing countries do not appreciate the role of accounting systems, nor their importance in each stage of their decision-making and national development plans (Mirghani 1982; Bengharbia 1989; Belkaoui 1994).

Corruption is another problem facing the development of accounting in developing countries. Corruption may be overbearing, administrative, syndicated, criminal or political, sometimes linked to government employees. However, this corruption is not exclusive to government (Belkaoui 1994), with organised crime, and elected officials being implicated. These negative aspects are the main reason for the problems of accounting in developing countries at the present time. As a result of these problems, information systems which provide reliable financial data are few in number and each time a production, pricing or investment decision is made without adequate knowledge of its consequences, the probability of misdirected effort, wasted recourses and economic loss is increased.

# The Role of Accounting Systems in Meeting Development Needs

There are similarities between the accounting systems of developing countries. The colonial legacy is clear and continues to influence accounting in such countries, despite the growth of other influences in more recent years. These newer influences do not reflect the legalistic part of the order of colonial relationships but they do echo the economic element. Despite change and evidence, in some countries, of a movement towards more locally relevant accounting systems, a major concern remains the suitability of accounting systems for local needs and, in particular, for those of development. This has long been a central issue in development accounting. More fundamental, however, is the notion that accounting systems matter for development. This is implicit in much of development accounting: accounting systems contribute to economic development and lack of developed accounting systems acts as a barrier to economic development in developing countries.

Seiler (1966, p. 652) stated that "the strength and extent of a nation's information system determines in large part the rate at which economic development will progress, and that accounting systems thus assume an important role in the development of emerging nations". Many authors have expressed similar views (Bait El-Mal, Smith et al. 1973; Enthoven 1973; Enthoven 1977; Enthoven 1980; Enthoven 1983; Belkaoui 1988; Kilani 1988; Bait El-Mal 1990; Kilani 1990; Enthoven and Sokolov 1993; Bakar 1998). However, the evidence, either from theoretical analysis or empirical research, to justify the claim that accounting systems matter for economic growth, is scattered and limited. Much work remains to be done on this subject.

Enthoven (1977) saw accounting as having a dual role to play in economic development. Accurate and informative accounting information created an environment of confidence in which flows of capital may be stimulated, implying the generation of saving and its effective use in investment. Accounting, thus, should help to attract capital. The second role for accounting, as stated by Enthoven (1977), was in assisting capital to grow through its effective utilization, once invested. This provided accounting with its organizational role in both private and public sectors. The capital market role of accounting thus introduced the link between financial development and economic development, since accounting cannot help stimulate savings or assist in their allocation in an institutional vacuum. Controversy has been intense over the relationship between financial development and economic development (Enthoven 1977). No one can deny that accounting systems have the potential to play a very important part in many of the debates on issues affecting economic development (Wallace 1990, p. 67). Consequently, the role of accounting systems in social and economic development has received some attention by accounting researchers since the 1960s (Perera 1989). Many studies (Enthoven 1980; Kwabena 1982; Mirghani 1982; Parry 1989; Perera 1989; Ezzamel and Bourn 1990; Kilani 1990; Wallace 1990; Jones and Sefiane 1992; Belkaoui 1994; Taufu'i 1996; Wallace 1999; Phadoongsitthi 2003) have shown that accounting has a vital role to play in all stages of economic and social development in developing countries.

This is because the only way for developing countries to improve their situation is to provide relevant information at the right time to decision makers. Successful developmental efforts are dependent, among other things, upon the availability of reliable economic information for supporting the multitude of decisions that comprise them. Accounting information, as a part of an overall information system, could have a significant positive impact on decisions involving planning and programming the economic development of developing countries. In the majority of developing countries, there is a lack of awareness of the potential significant role that accounting could play in the economic development process (Mirghani 1982).

## A Survey of Studies on the Role of Accounting in Developing Countries

The basic perspectives of financial statements as far as purpose is concerned, are the economic income and stewardship functions of management, according to critics like Gaffikin (1993, p. 11), Whittred and Zimmer (1992, p. 11). Following this notion, the major goal of financial statements has been to prepare reports for capital suppliers such as shareholders and creditors in order to make an evaluation of management's stewardship (Beaver 1981, p. 48; Whittred and Zimmer 1992, p. 12; Gaffikin 1993, p. 11). However, in the 1960s, when the information approach was introduced, a change was made from the stewardship function of financial statements to having a role in decision-making. This provided practical information to investors, creditors and the remainder of users to help them make their decisions (Beaver 1981, p. 22). Discussion in regard to a more emphatic stress on functional accounting systems centres emphasizes the various requirements of the users of such accounting information.

Several specific research studies have been undertaken on the required information and role of accounting in different developed countries. Several kinds of theoretical and empirical studies have broadened the matter of the role of accounting systems in developing countries. Table 1 summarises the objectives, findings, methodologies and research methods of these studies, most of which are empirical and functionalist2. A brief evaluation of these studies follows the table.

Table 1 Summary of Studies of the Role of Accounting in Developing Countries

<u>Author(s)</u>	Objectives and finding	Epistemology/	Research method	The role of accounting
		<u>methodology</u>		<u>(relevant issues)</u>
Enthoven	The aim of this study was to	Exploratory.	Theoretical, based on a	Accounting should
(1973)	explore the significance and role		socio-economic	become more involved
	of accounting in the process of		approach.	in all aspects of society,
	economic development, and how			the degree of
	it more effectively enhances			concentration to be
	economic growth and			dependent on the
	development.			urgency of the problems
				to be solved.
Briston	The study argued that the	Interpretive.	Theoretical based on	Each country should be
(1978)	development of economic facts		economic theory.	encouraged to create a
	was based on real world			system appropriate to its
	phenomena.			own needs.
Mirghani	This study aimed to explore the	Exploratory.	Descriptive, personal	AIS must be capable of
(1979)	role of accounting systems with		interviews, and	producing information
(dissertation)	specific reference to one		analytical.	outputs that satisfy the
	developing country, the Sudan.			information needs of the
				Sudan
Kwabena	The study examined the use or	Functionalist.	Empirical data from	The role of accounting is
(1982)	potential use of accounting in the		management of state run	minimal.
	management of state controlled		enterprises.	
	Ghanaian business enterprises in			
	comparison with private			
	corporations.			
Kilani (1988)	The main purposes of this study	Functionalist.	Empirical data from	Current accounting
(dissertation)	were to ascertain whether Libya's		Libyan organisations	systems in Libya do not

 $<sup>^2</sup>$  This refers to the application of methodologies used in the natural sciences to analyse the way organisational control systems work.

<u>Author(s)</u>	Objectives and finding	Epistemology/ methodology	Research method	The role of accounting (relevant issues)
	accounting systems provided the necessary information for its socio-economic development planning and to suggest means by which to improve accounting in the country.	memouolog <sub>j</sub>		provide information relevant to the Libyan environment.
Parry (1989)	It was taken as axiomatic that there is a relationship between accounting and development. A model of the nature of that relationship incorporating contingency theory was developed in this study, for the case of Bangladesh.	Functionalist.	Empirical data from Bangladesh using Contingency theory.	AIS in developing countries must meet the countries needs.
Perera (1989a)	This study focuses on accounting in developing countries as a case for localised uniformity.	Functionalist.	Theoretical based on historical development.	Anglo-American style of accounting practice did not match the conditions of developing countries such were countries unable to provide efficient information for the AIS.
Jaruga (1990)	The study offers a synthesis of accounting functions in Socialist Countries. Its aim is a better understanding of the systems of centrally-planned economies, the changing role of the plan, the market and the institution of governmental finance within their social, economic, and legal contexts.	Functionalist.	Theoretical, based on a socio-economic approach.	Accounting should be understood not only as a technical device, but as a social phenomenon in a democratic socialist society
Abdalaziz (1992) (dissertation)	The main objective of this study is to investigate some aspects of the information issue; specifically users of information concerning Libyan industrial companies are to be determined.	Exploratory.	Empirical data using questionnaires and interviews to collect data from industrial companies.	Both the quality and quantity of information which industrial companies give to users have many problems.
Jones and Sefiane (1992)	The study examined how short- run operating decisions are made in four enterprises in Algeria, all supervised by the Algerian Ministry of Light Industry.	Functionalist.	The multi case study focused on 4 public manufacturing companies in Algeria. A qualitative method was adopted in this study.	The inadequacy of internal accounting systems compromised economic development.
Dunbar (1993) (dissertation)	The study explored the role of accountants in the economic development of developing countries with specific reference to the Caribbean. Accounting systems as they apply to the financial structure of the countries were the focus of the thesis.	Functionalist.	Empirical data using questionnaires and interviews to collect data from Caribbean countries.	Accounting made no significant contribution to economic development in the Caribbean region.
Baydoun and Willett (1995)	The study explored the issue of the relevance of western accounting systems to developing countries.	Exploratory.	Theoretical based on cultural theory.	Western AIS were not relevant to developing countries.

<u>Author(s)</u>	Objectives and finding	Epistemology/ methodology	Research method	The role of accounting (relevant issues)
Taufu'i (1996) (dissertation)	The study investigated the role of accounting and accountants in the economic development process of Tonga.	Functionalist.	Empirical data using qualitative approaches was collected from Tongan organisations.	Accounting played a very important role in Tonga's economic development.
Bakar (1998) (dissertation)	The study examined the environmental characteristics within Libya in order to determine whether its accounting system seemed appropriate for its environment and its economic development.	Functionalist.	Experimental. The basic research tool deployed to compile the necessary data for this study was a questionnaire distributed to key personnel in Libya.	AIS was oriented toward the U.K. and U.S. private sectors, to Libya's detriment.
Bloom <i>et al</i> (1998)	The focus of this case was the accounting system currently prevailing in Armenia and the proposal of reforms necessary to enhance the usefulness of decision making to investors and creditors.	Functionalist.	Theoretical based on analysing the historical background of Armenia, and also the cultural aspects of accounting systems.	Accounting reports affected share prices in the developing economy of Armenia
Andrew (2002)	This paper illustrates the role of accounting systems in a developed country. It explains the development of the accounting profession and practices in the public sector in the U.K. over the past 100 years.	Functionalist.	Theoretical based on economic rationality.	Professional accountants in the public sector have a dominant role in influencing government policy.
Phadoong- sitthi (2003) (dissertation)	The study examined what features of traditional and contemporary management accounting facilitate economic decision making in emerging economies and how that occurs in Thailand.	Functionalist.	Empirical data.	There was a direct relationship between accounting activities leading to financial benefits and the firm's financial performance

#### Theoretical Studies

In regard to policy on accountancy and economic development, Enthoven (1973, p. 7) argued that it addressed the administration or control of all data needed for socioeconomic activities and conditions in the micro and macroeconomic sector of developing countries. It also covered the requirements of different groups, whether internally or externally. It may be classified in broad terms first as the development of economic facts based on real-world phenomena involving measurements and their further appraisal and supply in the form of costs and benefits to enable effective evaluations and decisions about activities and the allocation of resources. Moreover, the effects of accounting policy were communicated in order be used for current and future goals. This source of information provides a more focal point on micro and macro managerial decision making that deals with supervision, economic programming and preservation of material instead of micro-entity accountability or stewardship content.

Considering the type of national economy, Briston (1978) believed that every country has its own specific political, social, economic, and even cultural features and more probably the purposes and information requirements also vary. In a study by Jaruga (1990) it became clear that accounting functions differed significantly in Socialist Countries (SCs) from accounting functions in Industrial Market Economies (IMEs), although the differing points have been subject to change during the passage of time. It is worth mentioning that IMEs learned harmonization and governmental control of accounting practice over time. However, in the SCs there appeared to be highly strict, uniform accounting systems under the control of a management system manipulated by economic reconstructions and democratisation, specifically in Hungary and Poland.

Accordingly, the study of any accounting activity or functions should consider the growth of the socio-economic system, and more importantly, the focal programming role that is subject to change. State budgeting should also consider the market. Jaruga concluded that accounting is not only a technical tool but also a social event of a democratic socialist society and as Baydoun and Willett (1995) clarified, this is because of the different cultures of each country. Andrew (2002) concluded that the accounting professional body of the public sector has a very dominant role in making view points and producing compelling methods which the state adopts or adapts.

### **Empirical Studies**

In order to set a relationship between the results and presuppositions obtained from theoretical studies and the activities of firms, many empirical studies based on these roles and functions have been carried out. Mirghani (1982) reported that since accounting cannot happen in developing countries at the same range and level that can occur in developed countries, it cannot grow and improve in such countries. In order to make accounting grow, the process should be done based on the consideration of each country's specific environment. So far, there has not been any significant focus on the function of accounting systems in developing countries.

In Kwabena's (1982) study, it was stated that in Ghana there was very limited use of accounting information by project managers, due to the low awareness and regard for accounting principles in managing processes. Kwabena thus concluded that as a solution, managers should strengthen their awareness about information sources which meant including accounting in the process of their decision making. At the end of Kwabena's research he stated that accounting information is very rare in management of the enterprises in Ghana. In Libya, specifically, as Kilani (1988) claimed, there was no relationship between the development situation and the information in its accounting systems. He suggested that by offering uniformity, an accounting system could be developed. Parry's (1989) analysis matrix enabled certainty of predictions with one exception: the lack of employment of a knowledgeable accountant on the operation of accounting management, whether in the internal system or for external reporting.

Concerning the necessity of an inward looking method in developing countries, Perera (1989) gave two reasons. He believed that the Anglo-American style of accounting practice did not match the conditions of developing countries. Secondly, he believed there was an inability of these countries to provide efficient information for the accounting system. This is when, according to Abdalaziz (1992), information plays a crucial role in economic development. He added that both the quality and quantity of information which industrial companies give to users may have many problems. This is why Jones and Sefiane (1992, p. 71) believed that considering the control of activities in developing countries, accounting is passive. They added that due to the inadequacy of inward accounting systems, there was an opposite result in the economic situation of the developing countries. As a developing country, Algerian manufacturing firms were controlled in a supervising manner by the Ministry of Light Industry. Although, according to four project studies, they provided accounting reports, these were aimed towards the requirements of external companies and could not have any positive role in programming and controlling plans. This was despite all the annual reports and financial support of the companies. It is believed that such a discrepancy originates from the various goals of the organisation system of market economies. Similarly, Dunbar (1993) found evidence showing the accounting standards of the reports from the Caribbean region were problematic.

As a whole, there are different ideas about accounting by some critics. Taufu'i (1996) believed that although accounting seemed to play a very important role, it was not very important. As a weak point of Libyan accounting, Bakar (1998) suggested that the direction of the accounting process, unfortunately, was oriented toward, the U.K. and the U.S. private sectors. Bloom et al (1998) concluded that accounting reports affected share prices in the developing economy of Armenia and Phadoongsitthi (2003) reported that in Thailand, another developing country, there was a direct relationship between accounting activities leading to financial benefits and the firm's financial performance.

All but one of these studies focus on the extent to which AIS assists in the economic development of developing countries. In each of these cases, with the exception of Taufu'I (1996), accounting played an insignificant role in the development of the national economy. The article by Andrew (2002), in contrast, identifies the powerful role of accounting professionals in the United Kingdom, indicate a profound difference in the influence and effect of accounting.

The issues that becomes apparent from these readings highlight the failure of AIS to influence or mobilise government economic policy in developing countries, thus denying these countries accounting information that could lead to an improvement in their economic status. The challenges in adopting and adapting western AIS to the culture and regulation systems of developing countries have been identified.

## Accounting Development Patterns

Hendriksen and Van Breda (1992, p. 33) stated that accounting can be considered a dynamic practice that interacts with its environment in a reflexive way, ever since the development of double-entry bookkeeping by Pacioli in the 15th century. Hendriksen and Van Breda (1992, p. 33) also believed that Globalisation Theory covered all countries, specifically developed countries. They identified the shift of emphasis in the major accounting literature since the 1920s and 1930s as a change in the goal of giving information to management and creditors to presenting such information to investors, shareholders and the general public (Hendriksen 1982, p. 68). The change in the objective of financial statements has led to an emphasis on consistency, a shift of emphasis from the balance sheet to the income statement and the need for full, fair and adequate disclosure (Hendriksen 1982, p. 67). Mueller (1967) traced the history of the accounting profession and believed that the U.S. and U.K. in the nineteenth century helped in a very significant way the progression of the accounting profession. Their technical and conceptual methods and standards have been used in many developing countries. The international engagement to undertake this application has been very important in conveying accounting technology from developed countries to others. Other elements that helped the transference of accounting technology include colonisation, education, international aid organisations, and other global institutional organisations such as the World Bank and International Monetary Fund (IMF). Mueller (1967, p. 2) also identified four methods of viewing accounting development: the macroeconomic pattern, the microeconomic pattern, the independent discipline approach and the uniform accounting approach.

## The Macroeconomic Pattern

In a macroeconomic framework, accounting has grown as a link between national economic policies. The coordination between firm goals and national goals requires a degree of administrative direction from central governments. There is an interrelationship between national economic policies and business accounting according to this pattern. As far as specific actions are concerned, national economic goals are mentioned rarely. On the other hand, specific actions are stated in developed policy guidelines. It is important to recognise that firm goals are often more significant than specific actions. Firm goals influence macroeconomic development, whereas a firm's specific actions, made on the basis of those goals, influence the firm at a micro level. According to Choi and Mueller (1992, p. 44), firm goals followed national economic policies. Every enterprise can set and operate its purposes through a close relationship of its practices with the policies of the national economy. As Muller (1967) added, the focus in this system is on value-added statements, tax accounting and social responsibility. He declared that there was only a minor difference between tax accounting and financial accounting but there was bilateral validity between financial accounting and accounting rules (Mueller 1967, p. 27).

### The Microeconomic Pattern

The microeconomic approach of accounting development is evident when countries have private businesses as the base for their economic affairs (Mueller 1967, p. 34). In this way, firms are the core of business and accounting can be considered as a sub-category of business economics. In this method, accounting reflects the reality of the economy, for example, its measurements and values. Mueller (1967) continued to say that the major features of such systems were the progression and application of accounting approaches, like replacement cost. The approach of micro economics to accounting demands a totally separate tax system from financial accounting since the former has macro goals while the latter has micro goals (Mueller 1967, p. 50).

## Accounting as an Independent Discipline

Mueller(1967, p. 74) referred to accounting as an independent discipline like an independent development of governments or theories of economy. He stated that the argument for accounting as an independent discipline is based on the postulate that accounting can construct a meaningful framework derived from the business process it serves (Mueller 1967, p. 74). He added that accounting terms and approaches are accordingly improved based on current business operations.

### The Uniform Accounting Pattern

A uniform model of accounting development has improved as a by-product of research to give accounting a more scientific approach. It is believed by Mueller (1967, p. 89) that the more uniform accounting is, the more scientific it will be. This kind of accounting system came to be used as a vehicle for the management of businesses, with standardisation of accounting definitions, measurements and presentation. Mueller (1967, p. 92) argued that to have an influence on national programming, a uniform scheme of accounting is needed. These kinds of accounting development patterns indicate that for both macro and micro purposes we need accounting information whose ways of provision differ in a substantial way. Such differences in financial reporting systems and rules among countries cause complex problems for those who are providing, and using published financial reports.

# Regulations

Existing market pressure and the differing regulations of many countries have led to the need to obtain comparative accounting information from firms. Beaver (1981) believed that information about conditions in a firm will be, in general, under-provided without regulation, and that we cannot trust in the capital market taking immediate action wherever it is needed unless there is regulation. Those who are against regulation give an opposite argument. They believe that managers are motivated to present international information to differentiate them from other firms. It has been said that regulation is probably important in diminishing the lack of symmetry produced by noise, where noise is defined as the link between the information needs of users and decision usefulness.

According to Cooke and Wallace (1990), the effectiveness of financial disclosure regulation in a country is dependent on the regulatory requirements and mechanisms of enforcement. They add that discussion of accounting regulations is based on many presuppositions. First, market forces themselves are unable to ensure sufficient quantity and quality of financial information. Secondly, the assumption is that it is uncertain that financial statements can be reliable and comparable when various standards are applied. Thirdly, there is the limited ability of users to apply and interpret accounting information provided by different regulations. Moreover, as Cook and Wallace (1990) stated, regulations can help investors to allocate resources among companies more efficiently by reducing information asymmetry between information users and by reducing information costs to investors. They believed that we need regulations with an organising base rather than those occurring from the capital market's mechanisms since they have the potential to limit the numbers of developed investors from exploitation. Gibbins et al (1992, p. 31) claimed that market failure and public interest theories see the state as justified in interfering only when the normal market processes fail. In regard to regulatory capture theories they maintained that the state acts only in response to lobbying pressure as lobbyists extend their efforts where the benefits outweigh the costs. The major challenge for developing countries, therefore, is to develop regulatory systems compatible with globally recognised systems, and to be able adequately to enforce them.

### Conclusion

Perceptions of the role of accounting systems in the academic accounting literature are based mainly on economic theories originating in liberal market economies. The application of these theories to understanding the role of accounting system practices in other economic settings was questioned. Few empirical accounting role-related studies have been conducted in developing countries. The transfer of developed countries' accounting systems and practices to developing countries was shown to be problematic. The literature indicated that many developing countries used accounting systems and standards that originated and were developed in Western countries. Developing countries, however, had different needs from those of developed countries due to the influence of their own unique culture on the role and development of accounting. They therefore needed different information to achieve these needs. The problems of development of the accounting systems in developing countries include the public ownership of enterprises in many developing countries, and the difficulty of adapting developed countries' accounting systems. A number of studies have explored the international differences in accounting practices. Accounting's role in meeting development needs in developing countries has been severely limited due to political and economic constraints and a lack of understanding of the role accounting could play

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