

Chapter 6

Rationalization of Foreign Direct Investment Policy Structures in the South African Government

6.1 Introduction

Extending the discussion of the previous chapter (Supra. chapter 5) where it was shown that South Africa has no unit (department, directorate, sub-directorate or advisory council) of government that is exclusively responsible for overseeing and/or administering policy on the foreign direct investment of multinational enterprises, the current chapter seeks to further explore the extent to which foreign direct investment policy in the South African government may be rendered ineffective given the highly fragmented and decentralized nature of these policy dynamics. To this end, and against the backdrop that the central objective of this study is to test the hypothesis – *Ho = There is a necessity to formalize a government administrative structure for policy setting and implementation of Multinational enterprise (MNE) regulation in South Africa*; if the null hypothesis is not disproved this chapter aims to partially resolve this hypothesis by assessing the prospects offered for remedial relief by the analytical paradigms of organization theory with specific reference there under, to rationalization or alternatively structural re-organization.

6.2 Defining rationalization, organization and organization theory

6.2.1 Defining rationalization

Although the term rationalization is used with great frequency in the public administration discipline, ironically, it is also a term that has received little attention within the discipline in terms of being formally defined. As a starting point for reconciling the way in which the term rationalization is to be used in this thesis, reference is made to the definition offered by Banki (1981). Banki (1981) very generally defines rationalization in the management context as “...referring to the principles, methods and processes which are aimed at and utilized in achieving, maintaining or increasing overall organizational or system efficiency.” Thus, from Banki’s (1981) definition any management processes or activities that are designed to increase overall organizational efficiency can be considered to be part and parcel of the process of rationalization. This definition of rationalization is in-effectively broad and thusly does not make allowance for a pragmatic application of the term.

Alternatively, Parsons (1995:15-6) discusses rationality, and thus by default rationalization, under the auspices of policy-making stating that “...to have a policy is to have rational reasons or arguments which contain both a claim to an understanding of a problem and a solution.” The implication being that to rationalize is to develop and implement problem-solving policies that are based on an assured understanding of both the problem at hand as well as its solutions. Parsons (1995) further states that “...As Max Weber showed, the growth of industrial civilization brought about a search for more rational forms of organization for the state, commerce and industry.” Parsons (1995) definitions of rationality and rationalization are far less general than those of Banki (1981).

Yet, while Parsons (1995) is theoretically complete in his definitions, these definitions are not practically definitive in relating the types of problems and solutions to be dealt with, nor the types of organizational restructuring implied thereof. Roux et al. (1997:39) indirectly address these definitional shortcomings by relating the term rationalization to the reduction in the number of South African public executive institutions from the mid 1970s onwards that was based on reducing redundancy through extensive analyses of the functions of all of the various public executive institutions.

In order to give greater clarity of meaning to the context in which the term rationalization is used in this text, it can be noted that although the terms rationalization and re-organization are often used interchangeably in the literature, there are slight nuances that can be asserted between the terms. In this regard, the term rationalization is generally used to refer to streamlining by eliminating redundant activities through the compartmentalization and departmentalization of related work activities (Roux et al. 1997:39-40; Cf. Bellone 1980:10-12), while re-organization, on the other hand, is used to refer to the reconfiguration of existing institutional structures (e.g. structural changes to the organization's organogram) with the aim of seeking greater efficiency and effectiveness in the carrying out of work related activities (Hogwood and Peters 1983:69-70; Cf. Chandler and Plano 1982:147-8; Cf. Gortner et al. 1987:chapter 4). Based mainly on the lack of specificity in differentiating these two terms in the literature and in an attempt to take as broad and holistic an approach as possible, for the purposes set forth in the problem statement, hypothesis and objectives of this dissertation, the two terms shall herewith be used interchangeably. Thus, rationalization is taken here to refer not only to reductionism in government, but also refers to re-configurations of organizational structures.

6.2.2 Defining organization and organization theory

Although the literature suggests that there is no authoritative definition of the term *organization*, this same prose simultaneously stresses that it is imperative that a general understanding of the term be posited prior to discussion of the broader concept of *organization theory* (Meyer 1985: 58; Cf. Roux et al. 1997:7-8). Generally and very vaguely, the term organization is applicable to every aspect of human interaction wherein a large and/or complex task is tackled by a group of persons working in concert rather than by a single individual working alone (Meyer 1985:58; Cf. Farazmand ed. 1994:55). Defining organization in this way, it can be ascertained that organization is by no means a modern concept. Even the most ancient and primitive of men were able to organize themselves for the betterment of their collective social groupings (Roux et al. 1997:3-4).

Organization theory, in contrast, seeks to explain the formation, functioning and termination of organizations. In its most elemental interpretation, and focusing on its functional and operational implications, organization theory can be thought of as that branch of the social sciences that is fundamentally concerned with the efficient performance of the organization in as far as performance is dependent upon the internal and external structural relationships of the organization. Thus organization theory focuses internally mostly on the hierarchical relations within the organization, and externally on the influence that the environment external to the organization may exert on the organization (Meyer 1985:43-6; Cf. Roux et al 1997:8).

Organization and/or organization theory can further be understood within the contextual frameworks of both public policy making and public administration. In respect of the former, the public policy cycle can be described as the stages

through which any public policy must progress in order to become operational and organizing is a key component in this progression. In general, the policy cycle would normally include the following stages (Hogwood and Peters 1983:8):

- (a) Agenda-setting – in which problems existing in the society are perceived as requiring some actions by government to correct them, and those problems are moved on to some sort of official agenda for resolution;
- (b) Policy formulation – in which the policy instruments which will be used to attempt to alleviate the difficulties perceived in the environment are designed;
- (c) Legitimation – in which the policy instruments are accorded the authority of the state, through some form of official action. This action may be legislative, regulatory, or popular, for example, initiatives or referenda;
- (d) Organization – in which some organizational structures are developed to administer the policy. This may, of course, simply involve assigning the policy to an existing organization rather than creating an entirely new structure;
- (e) Implementation – in which the administrative structures attempt to make the policy work in practice;
- (f) Evaluation – in which the outputs and consequences of the outputs are analyzed and assessed according to some criteria; and
- (g) Termination – various procedures have been developed to make organizations and other policymaking bodies consider termination of organizations and functions more often than they might otherwise.

In the policy making cycle, therefore, it can be argued that the best made policies will not be implemented properly where the suitability of the organization structure has not been examined. The importance of organization in the policy

making process thus relates to the manner in which it provides the appropriate mechanisms through which efficient service delivery can take place.

From a public administration perspective, organization can also be defined as one of the key generic administrative functions of public managers (Roux et al. 1997:8-11). These generic functions can be summarized as follows:

- policy making;
- organizing;
- financing;
- personnel;
- determination of work procedures; and
- control

Although organizing is claimed by both the political science (public policy making) and public administration fields of study as belonging to their particular genus, the mechanisms of the process of organizing remain the same regardless of the paradigm that claims ownership of it. Somewhat over-simplistically, under either paradigmatic discourse, organizing roughly entails the arrangement of work activities and the development of the hierarchical structures within which this work is to take place. Thus once policies are put in place in the policy making process or plans are finalized and readied for implementation in the public administration field, the next step is to ensure that the most optimal organizational structure for carrying out those policies and plans are in place (or developed).

One of the most comprehensive and eclectic definitions of organization is that proposed by Meyer (1985). Meyer (1985:57-60) contends that almost every definition of organization contains some or all of the following five elements (to a

greater or lesser degree) – identity, purpose, structure, boundaries, and interchange with environments. More specifically, identity is associated with the name given to an organization. The name of an organization helps to differentiate it from all other organizations as well as providing information (among other) about the organizations mission, goals, output and ownership. As the second defining element of organization, purpose is what makes formal organizations differ from informal organizations. Purpose being here defined as - reasonably well defined tasks and the attendant accountability for carrying out those tasks. Structure, the third defining element of organization, is present in most formal organizations and is the element that makes it possible to break complex tasks into smaller and more manageable ones through such mechanisms as specialization and delegation. Boundaries is yet a fourth defining characteristic of organization, as it is important for defining the organization's internal and external environments in terms of certifying who may or may not constitute the organization's membership. Boundaries are far more clearly defined for formal organizations than for informal groupings of people. Lastly, the organization's interchange with the environment refers to the process by which inputs are acquired from the environment and outputs flow from the organization to the environment. While the organization's existence depends on the cyclical flow of this interchange with the environment, the same is not necessarily true of informal group structures.

In the sub-sections that follow, the overarching attempt is focused on gaining a meaningful understanding of contemporary organizations with particular attention being paid to seeking direction on identifying the fundamental issues associated with efficiently and effectively establishing new organizational units or alternatively re-structuring existing organizational units to accommodate new policy initiatives. This mostly academic exercise begins with an exposition of the

evolvment of classical and neo-classical organization theory to it's current contemporary state and ends with an exploratory comparison of contemporary divergent thinking on organizations. To this we now turn.

6.3 Evolvment of organization theory

Mapping out the development of organization theory chronologically, three distinct yet partially overlapping schools of thought can be identified – these are the classical, neo-classical and contemporary organizational perspectives (Roux et al. 1997:chapter 2; Cf. Farazmand 1994:chapter 1; Cf. Kramer 1981:chapter 4). Each of these is discussed in turn hereunder.

6.3.1. Classical organization theory

Common usage of the term bureaucracy has over the years become synonymous with the term organization generally, and more specifically it describes a distinct type of public organization. That is, bureaucracy is commonly understood to refer to public organizations in which power resides in the hands of public officials rather than with politicians or citizens and voters (Kramer 1981:83; Cf. Weiss and Barton ed. 1980:7). Furthermore, bureaucracies are also commonly associated with organizations plagued by inflexible rules of operation (Weiss and Barton ed. 1980:7). One of the earliest recordings of the usage of the term bureaucracy dates back to 1745 and is attributed to Vincent de Gournay, a French Physicist and philosopher (Kramer 1981:83). Since then the term has been further popularized in the eighteenth and nineteenth centuries and especially so in the early 20th century in the works of Max Weber. The contemporaries of Weber during this time were Frederick W. Taylor, Luther Gulick, and Henri Fayol. In fact, the publications of these four

notable contributors to the discipline of formal organization studies are normally classified together under the heading of classical organization theory (Farazmand 1994:8-11; Cf. Roux et al. 1997:19-24). Roux et al. (1997:19) make a further useful division of the school of classical organization theory into three relatively distinct strains – i.e., the bureaucratic approach of Max Weber, the scientific management approach of Frederick Taylor and the administrative theories of Henri Fayol. Following along the lines of the analysis of classical organization theory made by Roux et al. (1997), the discussion that follows reviews the bureaucratic approach, the scientific management approach and the general administrative approach in turn.

6.3.1 (a) The bureaucratic approach

In addition to Taylor, Gulick and Fayol, Karl Marx may also be considered as a fifth notable contributor to classical organization theory by way of his propagation of political, sociological and economic ideas that served as important antecedents of the classical organization genre. Although the writings of Karl Marx (1818-1883) cover a broad spectrum of academic disciplines, his contributions to and influence in the area of organization studies relate to his analysis of systems of government and how they may or may not empower or support the relationship between labor and capital. Thus, for example, Marx proposed that capitalist societies tend to subordinate the interests of labor to those of capital (those who own and control the means of production). In this regard, some of the areas covered in his works include scholarship on such themes as hierarchy, power and authority, autonomy and freedom, and contradictions and crises, all of which in turn relate directly to issues of efficient and effective organization (Farazmand 1994:5-7).

Amongst the classical organization theorists, Max Weber was arguably the most influenced by the work of Karl Marx (Farazmand 1994:9; Cf. Kramer 1981:83-5). In line with Marx's thinking, Weber was also fundamentally concerned with "...*the relationships between power – the ability to make people do what they do not ordinarily do – and authority – legitimate power*"(Kramer 1981:83). Additionally, Weber strongly believed that bureaucracy was the most efficient form of organization. In fact he defined an 'ideal type' bureaucracy which possesses the following characteristics (Roux et al. 1997:23; Cf. Farazmand 1994:9):

1. A well planned hierarchy with clearly defined areas of authority and responsibility;
2. A clear division of work to make specialization of functions possible;
3. A system of rules and regulations depicting the rights and responsibilities of the holders of positions, as well as a system of well-prepared procedures pertaining to the way in which the work and functions have to be performed;
4. A system of strict and systematic discipline and control within which the workers have to operate;
5. Merit based recruitment and promotion; and
6. Maintenance of files and records for future administrative action

As with most other proponents of classical organization theory, Weber believed that a highly structured and tightly controlled organization was the only type of organization that could operate efficiently. His 'ideal type' organization was prescriptive rather than descriptive and as such was intended to serve as a rational model to which organizations (public, private or other) were to aspire. Although Weber's ideal type model has been heavily criticized in recent times, it

is still a model that is widely prescribed to in today's modern organizations (Farazmand 1981:9).

Weber's model has been criticized for, amongst other, taking the organization's external environment as a given by assuming that greater internal efficiency is to be accomplished through focusing exclusively on internal organization or re-organization (Farazmand 1981:8-9; Cf. Roux et al. 1997:24-5). Critics also argue that Weber's ideal type bureaucracy pays little attention to how organizational efficiency can be enhanced through the acknowledgement and attempted satisfaction of human needs and aspirations. Further, it is also argued that Weber's approach leads to the build up of inflexible working arrangements by promoting red tape and delays in decision making (Farazmand 1981:9; Cf. Kramer 1981:87-8).

6.3.1 (b) Scientific management

As a point of departure along the organization theory line of reasoning, Frederick Taylor, Henry Gantt, Frank and Lillian Gilbreth, among others made up what came to be popularly known as the scientific management school. The central thesis underpinning this school of thought was the application of 'the scientific method' to the management process in general and to organizational dynamics in particular. Taylor's work was directed towards low skilled workers/laborers who occupied the bottom ranks of the organizational hierarchy. As a former engineer, Taylor proposed that similar to the design concepts incorporated in the production of factory machinery and equipment, human beings could also be made to be more productive through motion studies. It was thought, by the proponents of this school, that there was 'one best way' of doing any job. By establishing and training workers in this 'one best way', workers would

experience no wasted motion and effort, leading to greater productivity. Workers were also to be paid by the job rather than per hour as a further incentive towards greater output and productivity.

In terms of organizational dynamics, scientific management theorists believed that tight control and close supervision of workers was necessary to ensure that workers carried out their tasks according to strictly and scientifically established procedures. This mode of control was to be provided through a top-down authoritarian management approach that was mechanistic rather than organic, in which decision making was centralized rather than de-centralized, with narrow spans of control, inflexible chains of command and where work was departmentalized according to functional specialization (Kramer 1981:88).

The academic criticisms leveled against scientific management echo a similar resonance to that contained in the criticisms made against Max Weber's ideal bureaucracy. That is, the failure to recognize the effects of environmental and human relation forces on organizational efficiency made these models incomplete, unrealistic and unworkable. Despite these criticisms, the theory and practice of scientific management has also been credited with a number of significant contributions to modern living such as, for an example, the arrangement and standardization of typewriter keys to facilitate high-speed and efficient typing (Kramer 1981:89). Scientific management is also credited for being the conceptual foundation upon which more modern theories of organization are built (Roux et. al 1997:25).

6.3.1 (c) General Management Theory/Administrative Theories

As indicated above, classical organization theory was not confined to scientific management alone, but instead contained within it a second major stream of reasoning and theory that came to be known as the general management school of thought. Among the most prominent proponents of general management theory are Henri Fayol, James Mooney, Alan Reilly, Luther Gulick and Lyndall Urwick. Whilst scientific management focused attention on improving the work output of blue collar workers at the bottom of the organizational hierarchy, general management theorists focused on the supervisory and management levels of the hierarchy paying particular attention to what managers had to do or know in order to improve the organization's performance. In addition to framing elements of management – i.e. planning, organizing, supervision, coordination and control, Fayol also proposed fourteen principles of management which are (Roux et. al 1997:21):

- distribution of work;
- authority and responsibility;
- discipline;
- the subordination of individual interests to the general interest of the institution;
- reasonable remuneration of personnel;
- centralization of authority;
- scalar hierarchical authority;
- orderly hierarchical structure;
- equality in treatment of personnel;
- stable and guaranteed terms of service of personnel;
- emphasis on individual initiative; and

- maintaining the *esprit de corps*.

As can be seen from the above, the general management approach closely mirrors that of scientific management especially with respect to the stern belief in centralization and control, whilst however, general management was aimed at reforming management rather than blue collar workers/laborers. The work of Gulick and Urwick is also placed within the academic scope of general management theory. Gulick and Urwick's principle contribution to the field is in their taxonomic proposal of organizing principles that suggests that institutions should be structured according to four basic criteria, namely (Roux et. al 1997:22; Cf. Kramer 1981:90-3):

- according to objectives which need to be reached;
- according to process or function to be performed;
- according to the needs of the client to be served; and
- according to the geographical area where the service is required.

Gulick and Urwick recommended that the above four issues be evaluated and compared to determine the most effective way in which a particular organization should be structured. Thus, for example, an organizational unit can choose to be organized and divided into sub-units located in and serving several geographical areas where the resources and capacity exists to duplicate facilities and services to these several different areas, and where doing so would result in better service to clients; the same organizational unit may rather choose to operate from one central location in which defined objectives, functions, and types of clients are serviced through appropriately defined and structured sub-units if the benefits of doing so outweigh the costs. Although much of the work of Gulick and Urwick is representative of an outdated mechanistic way of thinking, the above four

principles have not been subjected to much criticism, perhaps owing to their timeless utility.

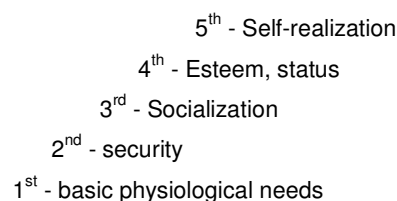
6.3.2 Neo-classical organization theory

The neo-classical school of organization theory developed out of a perceived need to address the shortcomings gleaned in the scientific management approach of the classical school of organization. Originating largely out of the pioneering work of Elton Mayo and Fritz Roethlisberger during the 1920s and 1930s, the neo-classical school particularly sought to draw the human factor into organizational analysis, design and management (Roux et. al 1997:25-7; Cf. Kramer 1981:97-8). Mayo and Roethlisberger of the Harvard Business School designed and conducted experiments aimed at determining whether efficiency in work tasks and productivity could be increased through improved work conditions. Although their experiments initially focused on the relationship between factory lighting and productivity, they did not manage to establish any such relationship. Instead, they came to the conclusion that where productivity increased it was not because of work conditions but rather because of the attention paid to and the importance given to employees needs. More specifically, and rather ironically, the intermediate findings of the Hawthorne experiments were that productivity increased whether factory lighting was increased, decreased or kept the same. Further experimentation led Mayo and Roethlisberger to conclude that productivity was primarily affected by the awareness of experimental subjects to the fact that they were being observed. This scientifically derived conundrum came to be popularly known as the Hawthorne effect.

In summary, the neo-classical school accepted the general propositions of scientific management and administrative management, but only on condition that they include the recognition of the human element in their analysis (Kramer 1981:101-3). Mayo and Roethlisberger were supported in their neo-classicalist reflections by amongst others, Abraham Maslow and Douglas McGregor.

As with other scholars labeled as organizational humanists, Abraham Maslow approached issues of organization from the perspective of human psychological and physiological needs. Maslow believed that organizational performance was ultimately dependent upon the satisfaction of the needs of the employees of the organization. These basic human needs applied universally to all employees and were arranged hierarchically as in figure 6.1 below. Higher order needs could only be satisfied if the needs below them had also been met, and every person aspired to reach the highest order need identified, i.e. - 'self-actualization'. By allowing employees to strive to attain their own personal needs and goals within the organizational context, the organization would in fact be unleashing the positive and often hidden potential of its employees towards the furtherance of organizational performance (Kramer 1981:101-3; Cf. Golembiewski and Eddy eds. 1978:210-211).

Figure 6.1: Maslow's Hierarchy of Needs



Adapted from Kramer 1981:102

Douglas McGregor, a second important exponent of neo-classical theory, superimposed and analyzed Maslow's hierarchy of needs against Taylor's 'efficient organization' and Weber's 'ideal bureaucracy'. More specifically, McGregor hypothesized that 'classical' organizational structures were not conducive to the promotion of the needs of individuals in the organization. In making his case, McGregor identified two diametrically opposed organizational types or structures – namely 'Theory X' and 'Theory Y' organizations.

Theory X organizations are characterized as being structured according to classical organization principles and were defined as having the following general properties (Kramer 1981:103):

1. Management is responsible for organizing the elements of productive enterprise – money, materials, equipment, people – in the interest of economic ends;
2. With respect to people, this is a process of directing their efforts, motivating them, controlling their actions, modifying their behavior to fit the needs of the organization; and
3. Without this active intervention by management, people would be passive – even resistant – to organizational needs. They must therefore be persuaded, rewarded, punished, controlled – their activities must be directed. This is management's task – in managing subordinate managers or workers.

Further, the underlying assumptions upon which Theory X-type organizations were created include the following (Kramer 1981:104):

1. The average man is by nature indolent – he works as little as possible;
2. He lacks ambition, dislikes responsibility, prefers to be led;
3. He is inherently self-centered, indifferent to organizational needs;
4. He is by nature, resistant to change; and
5. He is gullible, not very bright, the ready dupe of the charlatan and the demagogue.

McGregor and other organizational humanists rejected this view of human nature and human behavior, attributing the Theory X mindset to classical organization theorists. Instead, McGregor subscribed to what he termed Theory Y thinking which he defined as harvesting directly opposing views to Theory X. Under Theory Y, employees are not considered lazy, but if they are found to be so, it is the organizational structure that is to be blamed rather than the employees themselves. That is, Theory X-type organizations create barriers for employees to advance up Maslow's hierarchy of needs. The lack of personal fulfillment experienced by employees would then lead to the dysfunctional behaviors indicated above. Thus, under Theory Y (Kramer 1981:105):

1. Management is responsible for organizing the elements of productive enterprise – money, materials, equipment, people – in the interest of economic ends;
2. People are not by nature passive or resistant to organizational needs. They have become so as a result of experience in organizations;
3. The motivation, the potential for development, the capacity for assuming responsibility, the readiness to direct behavior toward organizational goals

- are all present in people. Management does not put them there. It is a responsibility of management to make it possible for people to recognize and develop these human characteristics for themselves; and
4. The essential task of management is to arrange organizational conditions and methods of operation so that people can achieve their own goals best by directing their own efforts toward organizational objectives.

McGregor's Theory X- Theory Y formulation is heavily biased towards Theory Y-type organizations. McGregor, therefore, was one dimensional and unrealistic in his thinking on organizations, as no one system or model can work in every given situation. More specifically, neo-classical organization theory is as incomplete in its rationalizations as its predecessor (classical organization theory) in that it favors one set of guiding principles over any other without taking account of any possible contribution(s) to be made by opposing views. Further research indicates that the Theory X paradigm is most effective in situations where the organization is faced with a stable external environment and has a task environment that is relatively routine, and the Theory Y-type paradigm is better suited to highly unstable and unpredictable external environments in which organizational survival depends on navigation through a highly innovative task environment (Kramer 1981:105-6). The openness to the possible contributions of a number of alternative organization theories is representative of the most recent thinking on organizations and is normally referred to as contemporary organization theory the discussion of which follows forthwith.

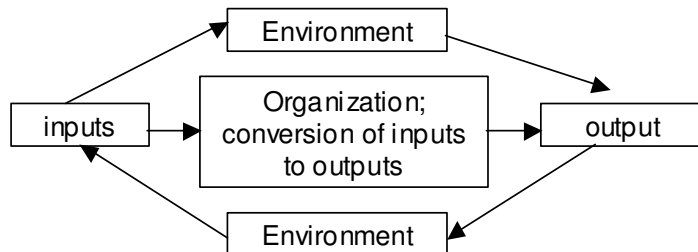
6.3.3 Contemporary Organization Theory

The more current theories of organization, contemporary organization theories, are based upon contingency and systems approaches. Contemporary writers do

not discard, at least in whole, the foundational elements of the classical and neo-classical schools of thought. Instead, contemporary models incorporate these elements and build upon them by taking account of the organization's external environment. To this end, contemporary organization theory rests on three key tenets that relate specifically to the environment, namely (Roux et. al 1997:28-33; see also figure 6.2 Infra.):

1. Taking account of the environment within which the organization operates, and thusly assuming that the organization is an open system that is affected by external forces;
2. Acknowledging that as an open system, the organization perpetuates it's survival by taking inputs from the external environment, processing these inputs internally, and producing an output that flows back out to the external environment; and
3. Acknowledgement of the fact that differing external environmental conditions will require contingent approaches with regards to organization theory, planning, and action.

Figure 6.2: A simple open system



Adapted from Roux et al. (1997:30)

At least one strong criticism can be made against contemporary theory. That being the lack of distinction made between public and private sector organizations. Public and private sector organizations have greatly divergent objective and task sets and face very different environmental forces. As a result, there is considerable room for the development of a sector specific approach to contemporary systems analysis and organizational structural design.

6.3.4 Optimum hierarchical structure recommended

From the foregoing discussions on the several and chronologically arranged theoretical bases of organization theory, it may correctly be discerned that in today's fast paced, competitive and dynamic environment, the most appropriate organizational theoretical analysis should follow along the lines of contemporary organization theory as it is the only paradigm to date in which environmental forces are taken account of. By the same token, however, classical and neo-

classical theories are not to be discounted as their principles are foundational to those of contemporary theory and may actually work out to be more efficient for organizations that face relatively stable and predictable external environments (Meyer 1985:49-51; Cf. Roux et. al 1997:32-3).

The structural design options available for organizing include, among others, the traditional forms of line; line and staff; functional and committee structures (Hodgson 1969:34-40). Large and modern organizations, such as those tasked with carrying out public policy in the public domain, incorporate elements of all four of these traditional forms in what is commonly referred to as a pyramidal structure (Hodgson 1969:40-60). The shape that a pyramidal structure tends to conform to is a function of, among other, the number of levels of authority; span of control specified for each authoritative position; and the degree to which decision making has been decentralized (Hodgson 1969:40-60; Cf. Roux et al. 1997:73-84).

In organizing, it may also be necessary to expand the focus of the organizing effort beyond the confines of the pyramidal structure defined. In other words, it is necessary to specify whether departmentalization will take place within the pyramid, or whether it must take place geographically (Hodgson 1969:40-60; Cf. Gortner et al. 1987:107-110). Where the geographical spread of clients is broad – creation, separation and distinction is required between a central office and those of geographically spread branch (regional, local etc.) offices vis-à-vis their differing objectives and responsibilities.

It is here recommended that for the case under study, the appropriate organizational structure within which foreign direct investment policies should be maintained should generally aim to be more mechanistic than organic as there

needs to be a comfortable level of stability in the policies to which investors, foreign and domestic, will be subjected. Also, departmentalization based on specialization is required given the degree of complexity and diversity of the domestic industrial sectors within which investment takes place. Specialization of departments is further supported by the fact that the proposed organization needs to have a broad scope of knowledge and expertise in such diverse fields as sustainable development, competition policy, and technology transfer. Additionally, geographical departmentalization may also be required if regulatory monitoring and control of investment strategies and activities is determined to be a high priority activity of the proposed organization. In terms of determining specific functions to be departmentalized geographically, the benefits of some functions such as registration and filing must be weighed against the costs involved in duplicating such functions across the country, especially in light of the fact that it should be relatively feasible for potential investors to correspond with a single centralized office.

Simultaneously, sensitivity to environmental forces may demand a more contemporary approach to various other organizational dynamics. For instance, the installation of performance management systems throughout the public sector requires a management by objectives approach to goal setting and performance monitoring thereby requiring lower levels of formalization and control. International environmental forces may also impose pressures on the proposed institution's regulatory framework thusly requiring the organization to be more flexible and organic in scanning the environment through its research functions and in the policy-making domain. Although it is envisioned that the institution is expected to play a largely regulatory role, sector and industry specific policy can also be expected to be generated from proposals to the legislature coming from the proposed organization. It is further recommended

that the establishment of the proposed organization be in the form of an independent institution that is part of government but separate from all other governmental departments. This is to ensure a more effective coordination role as well as to ensure that the institution can act without pressures of fear, favor and undue influence.

The commonality shared by all of the above theoretical approaches to structuring organizations is the attempt to provide answers as to how organizational performance can be assured and/or improved. In fact, it is commonly argued by organization theorists that “...*the choice of a particular form of organizational change should clearly turn on some estimate of its probable costs and benefits*” (Szanton 1981:10). To this end, organization theories are supported by other epistemological efforts that seek to quantify and measure the performance of public organizations. Thus, discussion of the measurement of the performance of public organizations and the implications this may have for organization structure follows.

6.4 Measurement of Organizational Performance and Structure

One approach to assessing the performance of public organizations is through the analysis of the programs and projects that these organizations may undertake as part of their functional responsibilities. Thus, given that organizations and their sub-structures come into existence to meet specified goals they must therefore be continually evaluated to measure their effectiveness in meeting these goals. The outcome of such evaluation may result in either a change in the goals required of the organization, change in the organization's procedures and methods, or change in the organization by way of growth, reorganization, or reduction. Thus, the importance of evaluation relates to its

implications for structural and required change in organization. The processes for conducting such evaluations in the public sector are addressed hereunder. The discussion begins with a brief review of some of the major complexities involved in public sector performance evaluation. This is followed by a discussion of the actual methods of evaluation for public projects and programs [Internal rate of return (IRR), Net present value (NPV) and cost-benefit analysis (CBA)] and the implications these may have for how organizations ought to be structured. The approach to evaluation taken in the South African public sector is also examined.

6.4.1 Public versus private sector program and project evaluation

Worldwide, there exists a strong current of opinion that private business operates more efficiently than public organizations as can be deduced from the culmination of the overwhelmingly international trend towards privatization. This public mind-set can be traced back to the earliest branching off within the field of accounting to form government accounting/public accounting (Meyer and Webster 1985:26-28).

In the United States (circa early 1950s), for example, not only was there a drive within management circles in government to emulate operating practices employed in the private sector, but additionally the accounting practices of private industry were seen as an important tool for improved performance via the evaluation feedback loop. That is, public accounting moved beyond complete dependence on control through budgeting to adopt from private accounting such key changes in principles as the change from cash basis to accrual basis accounting for operational and reporting purposes (Meyer 1985:26- 28).

Unfortunately, this view of improving performance and efficiency in the public sector overlooked the fact that any activity, be it private or public has effects beyond those intended. As an imperative, these external effects must be taken account of if the objective is to make evaluation as complete, accurate, meaningful and useful as possible. Thus, when formulating an opinion on the performance of an organization (public or private) precaution must be taken such that one's view should not be limited to quantitative considerations of revenues and expenditures whilst overlooking the objectives of the organization and the outcomes of the organizations activities both quantitative and qualitative. As will become apparent from the discussion that follows, this is especially critical for public sector organizations.

6.4.2 Complexities of public sector evaluation

Szanton (1981:18) makes the point that “...*the truth that structural reorganization is painful, costly, and uncertain in outcome argues that it should not be undertaken until the evidence is clear that current structures are inadequate and that the changes proposed will actually improve matters*”. The clarity of this point is underscored by the complexity of the task(s) involved in assessing administrative outputs and arriving at optimal solutions for actual or perceived inadequacies.

Three distinguishable and complicating features of evaluation of government programs can be identified. First, is the problem of determining the appropriate variables to use to represent such performance measures as benefits and costs (or gains and losses). The benefits to consumers of the construction of a road may include, for example, savings in the form of reduced costs for transported goods; reduced travel costs due to savings in petrol consumption; and time

saved as a result of reduced traffic. Determining and arraying these variables can prove to be a time consuming and difficult task.

Incompatible with the Pareto standard of efficiency (the Pareto efficiency standard defines as efficient that program or project that makes at least one person better off whilst at the same time making no other person worse off), most government programs affect several groups of stakeholders at once, producing gains for some and losses for others. Thus, given that governments are responsible to all of its citizens for their welfare and wellbeing, evaluation of government programs should include the benefits and costs accruing to all these citizens. For example, a government program may provide benefits to consumers through lower costs for services, while causing losses for both alternative suppliers of the service and taxpayers who finance the program. The gains and losses for all three stakeholders must be included in assessing the success of the program (Fisher 1988:26-7; Cf. Gramlich 1981:44).

Second, another complicating factor is that many of the variables considered as gains and losses are not easily quantifiable and thus measurable. In line with a government's obligations and commitments to its citizens, program benefits and costs must be evaluated beyond profit maximization results and take account of non-monetary variables such as pollution, health and safety, or even wastes of people's time. Changes in any of these accounts should be included in the calculation (Gramlich 1981:4-5).

Third, the pricing of resources or benefits is more complicated for public than for private enterprises. Whereas private business evaluates benefits and costs using market prices alone, governments may have to adjust market prices to reflect social costs or benefits that are not captured in these prices (Gramlich

1981:4). The prices that are adjusted to take account of such externalities are known as shadow prices (Mishan 1976: chapters 13 and 14).

6.4.3 Methods of evaluation

The methods of evaluating the performance of government programs and projects have long been a subject that has challenged researchers in the social sciences. The approach taken by scholars of management and administration tend to focus on the internal encumbrances to effective performance, such as communication, compensation and motivation. Examples of theories and methods from this field include the goals approach, competing values approach and participant satisfaction surveys (Rainey 1991:208-218).

In contrast, the standard method employed by economists (and consequently the focal point of this section of the paper) in evaluating public and private programs and projects is the cost-benefit analysis (CBA) method, the central criterion of which is simply that the benefits of a program must outweigh its costs. Compared to the general approach of management and administration scientists, the economists' analysis has focused much more on the environment external to the organization, taking as the key determinant of public performance the concept of consumer surplus. Consumer surplus is basically a representation of the degree to which program clients/consumers value program goods and services and can be defined as the excess of the amount a consumer is willing to pay for a given good or service over the amount actually paid (Mishan 1976:25) Graphically, consumer surplus is an area under the demand curve that is specified by (or a function of) the demand curve, price, quantity demanded, and marginal and average costs (Mishan 1976:17-54)(Infra. Figure 6.3).

Figure 6.3: consumer surplus

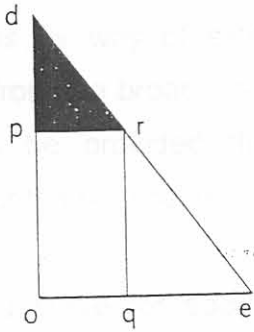
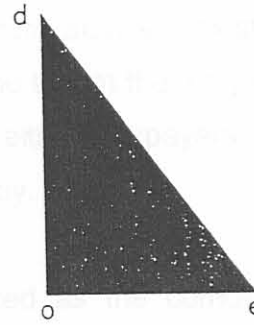


Figure 6.4: demand curve and consumer surplus



Both figures adapted from Mishan 1976:27

The demand curve for consumer goods and services is a function of sundry variables and includes income distribution, consumer tastes, and the prices of substitute and complementary goods. When graphed, the demand curve shows the maximum amount consumers are willing to pay for the good or service in question. Therefore, it can be seen that any point above (to the right of) the demand curve would represent a loss to consumers, and any point below (to the left of) the demand curve represents a price that is below what the consumer is willing to pay at that given quantity and is thus a gain to consumers. In the limiting case of a free public service to consumers, the entire area under the demand curve (the shaded area of figure 6/4) is equal to or less than the maximum amount consumers are willing to pay for the service, and thus the entire shaded area represents consumers surplus (Mishan 1976:27).

However, in valuing a government service, it is necessary to shift the focus of the analysis from that of the consumer surplus of program clients/beneficiaries to

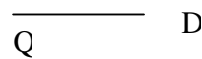
measuring the consumer surplus of society as a whole. Indeed, it is important to know how well the intended beneficiaries of a program are being served, but since many of the costs for providing these services are borne by taxpayers (and other citizens by way of external effects), the cost-benefit analysis must be considered from the broader societal perspective. Thus the truism that no public service can be provided “free” i.e. without cost to either taxpayers, the consumers of the service, or society at large comes into play.

The demand curve for society then, can be represented as the cumulative demand of all of society for that specific government program as determined by the median-voter (the median vote is that choice that lies in the middle of all available choices such that half the choices are below and half the choices are above the outcome of the vote; see also Fisher 1988:53). With this demand curve specified, figure 6.3 shows that at a given quantity (q) of service desired by society, the price (p) is the price level at which government will provide the service. Total expenditure of society is simply price times quantity which is graphically equivalent to the vector op times the vector oq , and thus also equivalent geometrically to the area $oprq$. The area $qodr$ represents total gain to consumers at quantity (q). Subtracting program expenditure $oprq$ from total gain to consumers $qodr$ leaves the area pdr which is defined as consumer surplus (Mishan 1976:27; Cf. Gramlich 1981: 29). Consumer surplus, once determined, must be included as a benefit in the cost-benefit analysis (Mishan 1976:27).

Prato (1998:127-8, 266-7) extends the considerations of cost-benefit analysis to include the concept of Net Social Benefit (NSB)(Infra. Figure 6.5). As opposed to the cost-benefit evaluations that take *consumer* surplus to be the most pertinent (and in some cases the only) measure of social benefit, NSB includes the benefits and costs of both *producers* and *consumers*. Given that NSB is the

amount by which benefits exceed cost, Prato demonstrates that the entire area under the demand curve up to point (q) comprises consumer and producer benefit, and the entire area up to the same equilibrium point (q) under the supply curve represents consumer and producer cost. Thus, subtracting the area under the supply curve from the area under the demand curve specifies the area considered NSB which is therefore equal to consumer surplus plus producer surplus.

Figure 6.5: Net social benefit of consumers and producers



The diagram consists of two horizontal lines. The upper line is labeled 'D' at its right end, representing a demand curve. The lower line is labeled 'Q' at its left end, representing a supply curve. The two lines are parallel and horizontal, indicating a constant price and quantity scenario.

(Adapted from Prato 1998:127, 269)

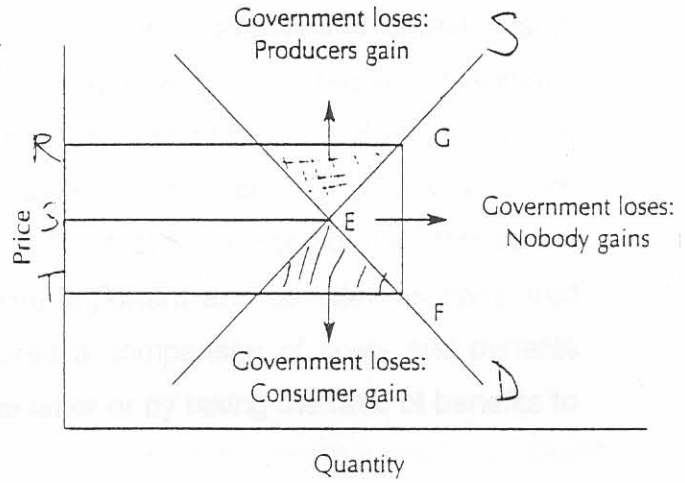
With respect to public sector evaluation, whether or not one chooses to think of total social surplus to include producer surplus, depends on the evaluator's perception or treatment of the institution of government. For those who argue that government constitutes the collective will of society and that costs incurred by government are in actuality costs to taxpayers and citizens; to equate government costs of providing public services with producer costs, would amount to double-counting that which has already been estimated as consumer costs. This conclusion is implied in Prato's analysis as he limits his discussion to producers and consumers only. This rationale would lead to the conclusion that cost-benefit calculations should be limited to considering the gains and losses of two sets of stake-holders only - either private producers and private consumers

in the private sector, or government (as producer) and private consumers, or government (as producer) and private producers (as the consumer).

A more complete and perhaps more legitimate cost-benefit comparison for public sector evaluation would be to consider separately the gains and losses of consumers, producers, and government as done by Harberger (cited in Haveman & Margolis 1983:Chapter 5) in contrasting the evaluation methods of cost-benefit analysis with the basic-needs approach. In Harberger's analysis a government subsidy simultaneously causes a loss for government and gains for both producers and consumers, or a loss for government and neither producers nor consumers gain.

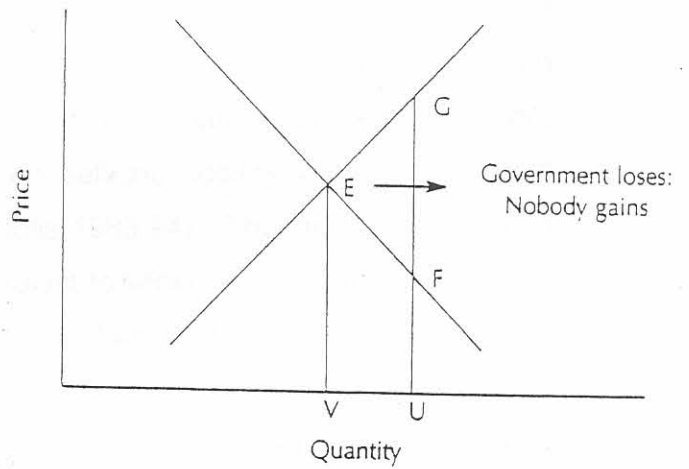
From figure 6.6 (Infra.) below it can be seen that the interests of each of these three stakeholders can be considered together graphically. This graphical presentation works well to elucidate cost-benefit results of changes along the price axis. The total cost to government of the subsidy is given by the area TRGF and the proportion of this subsidy that is a benefit to producers is given by the area SRGE, while the benefit to consumers is depicted by SEFT. Alternatively, the basic-needs approach considers the same problem but from the vantage point of the quantity axis as shown in figure 6.7. Both approaches lead to the same result in this simplified example.

Figure 6.6: Cost-benefit analysis to include government



Adapted from Haveman & Magolis 1983:115

Figure 6.7: Basic-needs approach to include government



Adapted from Haveman & Magolis 1983:115

The advantage of the preceding graphical presentation of cost-benefit analysis is that it simplifies and clarifies the concept of consumer surplus and its relationship to its determining factors. However, the graphical analysis requires pragmatic application. This would entail a three stage process of first identifying and listing all benefits and costs, second, converting them to their present values, and third to compare these by ratio or net benefit. The first two stages of the process will be addressed here as they are the more important and complex as compared with the final stage which simply requires a comparison of costs and benefits either by subtracting the former from the latter or by taking the ratio of benefits to costs.

6.4.4 Benefits and costs to include in cost-benefit analysis

Answering the question as to which costs and benefits must be included in cost-benefit analysis requires a consideration of society's gains and losses in general as well as requiring a definition of the relevant *primary* stakeholders to include in the cost-benefit analysis analysis. Society may be defined differently for each program under study based on how wide-ranging the effects of the program are estimated to be (for further discussion on defining society in the cost-benefit analysis context see Haveman and Margolis 1983:94). This being noted, it can be considered, for example, whether a project to widen a road can be evaluated in the same way as a program that provides welfare benefits to the elderly.

Government agencies, the programs they oversee and the services they provide can best be understood and evaluated in terms of the following three basic functions of government – allocative, distributive, and regulatory (Gramlich 1981: 35). The benefits and costs to be considered in each of these categories of government activities are discussed in brief hereunder.

6.4.4 (a) Allocative expenditure programs

Allocative expenditure programs are those that simply allocate funds for the provision of public services at the national and sub-national level such as national defence, police services and fire protection. This category also includes physical investment programs – which are those programs whose services involve the provision of some capital construction such as infrastructure (roads, bridges, and dams)(Fisher 1988; Cf. Gramlich1981). By their very nature physical investment projects will undoubtedly effect change upon the environment and may thus require a unique set of evaluation tools (within the cost-benefit model) manifestly different from those required of other types of programs. An excellent example of this is the environmental impact assessment required of most physical investment projects. As in most developed and developing/emerging market economies, the *Constitution of the Republic of South Africa, Act 108 of 1996* (in the Bill of Rights) supports and promotes legislation that ensures the prevention of pollution, promotion of conservation, and the assurance that economic and social development will not contravene ecological sustainability. Further, a significant yet recent piece of South Africa's legislation in this regard is the *National Environmental Management Act, 1998* (Act 107 of 1998) that as its basis requires an Environmental Implementation and Management Plan of every national department whose activities may impact on the physical environment.

Comparatively, evaluation of other *allocative* program categories such as those listed above (police, fire and national defence) may require instead the inclusion of such quantitative measures or statistics as number of reported cases and their direction of growth or change (Cf. Fisher 1988:304).

6.4.4 (b) Distributive expenditure programs

Distributive expenditure programs refer to programs that attempt to change the income distribution in society. These programs are usually carried out through government's taxing function, welfare programs and human investment programs.

A progressive tax system that imposes a proportionately greater tax burden on the richer members of society than on the poor can be thought of as being a distributive program as it attempts to provide for a more equitable distribution of society's wealth. Welfare and Human investment programs also have as their goal the redistribution of society's wealth, but through different means.

Welfare and human investment programs can be considered more similar to each other than they are different. Perhaps the most significant difference between the two is that the expected outcomes of welfare programs are less well defined than those for human investment programs. Thus, welfare programs generally have as their objective the provision of basic needs to those members of society who are unable to 'adequately' sustain themselves. A common approach to evaluating the efficiency of welfare programs uses the measure defined as the welfare ratio – which is a family's total realized income (including welfare benefits received) relative to its level of need (based on family size, age and location) (Haveman & Margolis 1983:Chapter 9; Cf. Gramlich 1981:Chapter 7). When this ratio is found to be less than one, the family is determined to be in poverty for that year. When the ratio is between 1.0 and 1.25, the family is considered near poverty, and when the ratio is above 1.25, the family is considered non-poor. Simply stated, the object of this approach is to balance redistributive gains to program recipients against losses incurred by program

contributors. The question to be answered is – “by how much does society gain in transferring income from contributing to recipient families?”(Gramlich & Wolkoff cited in Haveman & Margolis 1983:187).

6.4.4 (c) Human investment programs

Human investment programs, in comparison, also provide benefits directly to citizens and include programs for the provision of public education, health, and job training. What differentiates these programs from welfare programs is that their outcome is expected to benefit society (in the long-run) to a greater extent than welfare programs. Thus educational attainment and job skills can be defined as the appropriate benefits of such programs whilst costs would include the costs to society of financing the programs (Gramlich 1981:160; Cf. Fisher 1988:305).

6.4.4 (d) Regulatory programs

For the objectives and hypothesis defined for the current study, the appropriate classification for the discussion of foreign direct investment policies would fall under regulatory type programs. Regulatory activities of government can be simply thought of as government mandates placed on private sector enterprises concerning what to do and what not to do (Gramlich 1981: 201). From a cost-benefit framework of analysis these types of programs can be judged by weighting the costs - compliance costs of private producers, and usually also costs to consumers by way of higher costs and prices for the regulated goods - with the benefits accruing to society at large of improved products (safer products) or processes (ex. - cleaner environment).

6.4.5 Time value considerations in cost-benefit analysis

Generally, program and project cash flows that are one year or less in duration can be estimated using current prices. However, for cash flows of longer duration, the time value of money becomes a significant consideration given the realities of inflation and interest rates. The value of a dollar received tomorrow is worth less than a dollar received today and therefore (future) cash amounts must enter into the analysis at their present values in order to facilitate meaningful comparisons.

The standard way in which anticipated future cash amounts can be assigned a current value is by use of an interest factor or discount rate that compensates the investor for amongst other things time, inflation and risk. This discount rate, once determined, is a cardinal concept and a key factor in performing a competent benefit-cost analysis. The decision to accept or reject a project or the decision to select the optimal project amongst two or more alternative projects is especially sensitive with respect to the evaluation method applied and the magnitude of the discount rate used.

The internal rate of return (IRR) and net present value (NPV) criteria are the two most widely accepted approaches to using discounted cash flows in benefit-cost evaluations. IRR and NPV are calculated using the following formulas:

$$(1) \quad NPV = \sum_{t=0}^T \frac{B_t - C_t}{(1 + r)^t} \qquad (2) \quad IRR: 0 = \sum_{t=0}^T \frac{B_t - C_t}{(1 + i)^t}$$

where: t = each individual year of the project

T = number of years the project lasts

B_t = total benefits in year t (or each year)

C_t = total cost in year t

r = discount rate in NPV formula

i = discount rate in IRR formula

As can be seen, these methods use essentially the same formula and differ only with respect to how that formula is used.

The net present value approach [eq. (1)] requires estimates for benefits, costs, and the discount rate. If the discount rate used results in a positive net benefit (i.e. the present value of all benefits is greater than the present value of all costs), the project can be considered an acceptable option. In contrast, using the internal rate of return method requires estimating benefits and costs only, and the discount rate is solved for (with equation 2) rather than estimated. The principle here is to compute that rate of discount (known as the internal rate of return - or i in equation 2.) that would at minimum equate the present value of all benefits to all costs. This is done by setting $PV = 0$ and solving for i . By this criterion the project has positive net benefits and should be accepted if $i > r$, where the estimated r can be thought of as the opportunity cost of capital. Alternatively, when faced with two or more projects and scarce resources, projects can be arrayed according to the value of i where the optimal decision is to select the project(s) with the highest i value(s).

It is generally accepted and can easily be shown that the net present value method is the more consistent of the two investment decision criteria. While both methods need to be used cautiously and with particular attention being paid to potential pitfalls, the internal rate of return method has been shown to be ineffective as a decision tool for a number of reasons including:

1. The solution of the internal rate of return formula can result in two or more discount rates. This mathematical contradiction is evident when costs occur at more than one point during the life of the investment. This is because solving for the unknown in the internal rate of return formulation is equivalent to solving for the root or roots of a polynomial equation (Chaing 1984:17-53; Cf. Mishan 1976:183-95). The following example given by Mishan (1976:187-8) illustrates this anomaly:

An investment stream of - 100, 420, - 400 has two different rates of return, 46% and 174%, that solve the internal rate of return equation.

2. For investment projects whose benefits and costs expire within the period of one year, the net present value method is acceptable because for investments of this duration, the net present value of benefits over costs is equal to the undiscounted net benefits. However, i in the internal rate of return formula cannot be computed to give a meaningful measure (Gramlich 1981:93).

It is therefore advisable to use the net present value method for all cost-benefit discounting calculations and decisions.

6.4.6 Appropriate discount rate

For public sector investments, before the translation of monetary benefits and costs into equivalent and comparable present value figures, the issue of the appropriate discount rate to be used – the unknown in the net present value (NPV) formula – must be resolved. As yet, in the academic discourse on this matter, there exists no firm consensus amongst the more prominent scholars. Some even reversing or modifying their positions as the subject continues to be

studied and debated (Gramlich 1981:96). Essentially, the three competing perspectives on determining the discount rate for public investments are the gross before-tax rate of interest on private investment, the weighted average of the gross before-tax rate of interest on private investment, and the after-tax rate of return on private savings, and the social optimum rate of discount (Gramlich 1981:95). A brief discussion of each of these follows.

6.4.6 (a) Gross before-tax rate of interest on private investment

The rationale for using the gross before-tax rate of interest on private investment as the discount rate for public investments assumes an equivalence between the two types of investments (public and private) before taxes such that investing in one is an opportunity cost for not investing in the other. The underlying assumption is that because many governments exempt a substantial proportion of their bond and security issues from taxes, a rational comparison of returns for public and private investment can only be made on a pre-tax basis. However, this construction overlooks the fact that private and public investments can never be commensurate, as their corresponding discount rates must not just account for tax differences but must also be adjusted to account for risk. As a result of government regulation, investments above a particular level of risk are unavailable for public investment thus resulting in a lower required rate of return and discount rate for public investments (Prato 1998:266; Cf. Bradford cited in Haveman & Margolis 1983: 130).

6.4.6 (b) Weighted average rate of return

This approach to determining the discount rate to be used for valuing public investments is based on the premise that funds available for public investment can be estimated as the opportunity cost of funds that would otherwise have been used for private investment and/or private consumption. The opportunity cost of the former is estimated as the before-tax return on private investment and the opportunity cost of the latter is estimated as the after-tax return on consumer saving. The rationale here is that the weighted average of these two opportunity costs is the best estimate for the public investment discount rate.

Gramlich's (1981) argument against the use of this weighted average method is based primarily on the inclusion of the after-tax return on consumer saving. When calculated using 'real' data, this rate quite often turns out to be negative after adjusting for inflation and government regulation that puts a ceiling on the amount of interest payable to consumers through bank savings accounts.

This after-tax rate cannot therefore be taken as the rate investors require to invest their savings in public projects, but rather this rate reflects the constraints imposed by government on consumer savings.

6.4.6 (c) Social discount rate

It has been shown and it is generally accepted that the required rate of return on government investments (i.e. the economy's risk-free rate of return on investment) is closely approximated by the long-run real growth rate of the economy (Reilly 1985:10-19; Cf. Gramlich 1981:101-7).

This derivation of the appropriate discount rate for evaluating public investments is based on the premise that this is the optimal rate of discount that maximizes return (or equivalently output) where this maximum return occurs at the highest point on the production function. Gramlich (1981) shows that the slope of the tangent to the production function at this point is equal to the slope of the capital requirements curve which is in turn equal to the growth rate of the economy.

6.4.7 Cost-benefit adjustments

For government projects it is usually not possible to compare all benefits to all costs as the cost-benefit method requires. In those cases where the benefits of a project are not easily quantifiable, two alternatives to the cost-benefit analysis are cost effectiveness evaluations and monetarizing costs and benefits.

6.4.7 (a) Cost effectiveness

The cost effectiveness approach rests on the premise that where benefits are not easily quantified it is feasible to compare alternative programs with the same objectives based on costs alone. This method indirectly maximizes net benefit by directly minimizing costs. "Benefit-cost analysis is really a framework for organizing thoughts, for listing pros and cons, and for placing a value on each consideration. In many situations there will be some considerations that cannot easily be enumerated or valued and where the benefit-cost analysis becomes somewhat more conjectural. Yet the sensible way to deal with such omitted considerations is not to abandon all efforts to measure all benefits and costs, but rather to [modify the cost-benefit analysis to accommodate varying circumstances] ... *viewed in this light, even if benefit-cost analysis alone does*

not make any decisions, it can serve a valuable purpose in focusing decisions on the critical elements" (Gramlich 1981:5).

6.4.7 (b) Monetizing costs and benefits

It is obviously not possible to assign a monetary value to each variable considered relevant to a cost-benefit calculation. Rather than attempting to convert all direct and indirect benefits and costs into monetary terms, Prato (1998:ch.12) suggests the utilization of multiple criterion decision analysis (Cf. Gramlich 1981:5). In short, this analytical approach accommodates the combining of monetary and non-monetary cost-benefit assessments into a single study by simply quantifying that which is quantifiable and listing and ranking those variables that are non-quantifiable in monetary terms. This should result in more accurate and meaningful impact measures than would be obtained by assigning arbitrary and subjective monetary values to such factors as aesthetics. Further, the temptation to exclude from the analysis one or more factors because they cannot be monetarized, would lead to underestimation of costs or overestimation of benefits.

6.4.8 Efficiency considerations in cost-benefit analysis

The decision by government to take on a project or to provide a service, is motivated by efficiency concerns. That is, if inefficiency (in terms of price and/or quantity) exists in the private market for the delivery of needed services to the public, government is obliged to intervene in that market by providing the service or product in question more affordably and efficiently than is currently the case.

6.4.8 (a) Pareto efficiency principle

Among the efficiency concepts that may be used in parallelism with a cost-benefit analysis are the Pareto efficiency standard and the Kaldor-Hicks criterion (Gramlich 1981:42). The Pareto standard defines efficiency as a state of affairs in which it is not possible to make at least one person better off without making someone else worse off (Fisher 1988:27; Cf. Gramlich 1981:42). The practicality of this concept is questionable as it is rare to encounter a government program that meets this standard (Gramlich 1981:42). Rather the usefulness of this theorem lies not in its stated requirement for bringing about or determining efficiency, but in its implicit recognition of possible externalities of programs that must be accounted for.

6.4.8(b) Kaldor-Hicks efficiency principle

The Kaldor-Hicks principle basically extends the rationale of Pareto efficiency by defining as efficient government programs in which the gainers could compensate the losers and still be better off. Stokey and Zeckhauser re-phrase this principle in more pragmatic terms: "In any choice situation, select the (policy) alternative that produces the greatest net benefit." (cited in Gramlich 1981:43). Here the combined financial gains and losses of all stakeholders are summed together to derive the net benefit. This total is then compared to the total cost of the program or project. The option with the highest *benefit-to-cost ratio* or *net benefit differential* is to be selected (Gramlich 1981: 117).

Government programs that are concerned with distributive equity normally adjust the Kaldor-Hicks cost-benefit measures by using a simple weighted average technique that assigns greater consideration or weight to gains and losses of

low-income or disadvantaged groups. Gramlich correctly cautions however, that “... *the distributional weighting of gains and losses is typically one of the most speculative aspects of any evaluation*” (Gramlich 1981:120).

6.4.9 Evaluation methods in the South African public service

Section 196 of Act 108 of 1996 assigns to the Public Service Commission (PSC) the task of '*promoting effective and efficient public administration and a high standard of professional ethics in the public service*'. This is to be accomplished through the evaluation and oversight functions of the Public Service Commission as specified under sub-sections (4)(b) and (4)(c) which are:

- (b) to investigate, monitor and evaluate the organization and administration, and the personnel practices, of the public service; and
- (c) to propose measures to ensure effective and efficient performance within the public sector.

Although the Public Service Commission is essentially the government's policy-making body in the areas of public performance management, implementation of these performance management mandates is carried out by the Department of Public Service and Administration. A key initiative currently being carried out by the Department is the implementation of Performance Agreements. Heavy consultation (between managers and subordinates) is involved in effecting these agreements and there exists a fair amount of flexibility in defining performance measures. The scope of the agreements, however, is heavily weighted toward internally focused measures.

In addition to the mandate required of the Public Service Commission, the responsibility for performance evaluation in the South African public service is shared with the office of the Auditor General (AG). The Auditor General's office fulfills its constitutional mandate to evaluate public sector performance through its accounting and management auditing activities. The work of the Auditor General is therefore fundamentally centered in the discipline of public accounting and is focused on the efficient, competent and honest use of public funds (Annual Report of the Auditor General: 1997-8).

The observation is made here that the quantitative approach of the Auditor General's office needs to be increasingly tempered with qualitative performance appraisal that is also externally focused. To this end, the Department of Education has positioned itself as a conspicuous example of the shifting importance being given to externally focused program evaluation in the S.A. Public Sector. Specifically, the review committee that studied the efficiency and effectiveness of "Curriculum 2005" effectively balanced the 1997 Auditor General's audit of their department with qualitative assessments of the social objectives and outcomes of one of the department's most significant programs.

6.4.10 Summary – Measurement of performance and structure

The private sector enterprise is normally concerned primarily with maximizing profits, however, in this era of social consciousness and corporate responsibility, private enterprises are increasingly being forced to consider the externalities of conducting business. Conventionally, at least up until very recently, private business compared or decided upon investments using capital budgeting techniques which applied essentially the same benefit-cost analysis used in evaluating public programs and projects. However, private sector cost-benefit

analysis had been focused almost exclusively on monetary gains and losses and excluded externalities in the calculation. In recent decades, this focus of analysis has experienced a slow but steady paradigm shift brought on in many respects by the constraints put upon private businesses by the legal environment in which they operate and in which they are held responsible and accountable for their actions. Further, private corporations are increasingly adopting the philosophy of corporate responsibility not just for the sake of benevolence or legal sanction, but good business practice and economic survival dictate these largely public considerations.

It is increasingly clear that the evaluation considerations for both private and public investment are converging. However, regardless of the degree of conformity between these two types of evaluation, arguably there must always be a higher moral standard placed on public enterprise investments as the private enterprise will always possess an opportunistic self-interest epitomized in the profit motive whereas the public sector will always be responsible - almost paternalistically - for citizen welfare. Consequently, the scope of inclusion of benefits, costs and externalities will always be broader for public investments than for private enterprise investments.

An important caveat is that there can be no precise determination of net benefit for public programs and projects. Rather, it is only possible to arrive at conclusions or decisions based on rough estimation and subjective determinations given the nature of the problem of limiting the variables to be included in the analysis (for example - plant life and endangered species) and measuring them. However, despite the imprecise and subjective nature of cost-benefit analysis it still remains a worthwhile effort as it at some level substantiates the external implications of government activities when one

considers the connectivity of relationships that exist in society in general as well as between society's members and the physical environment.

6.5 Regulation and Structure

In defining a social problem, Hoogerwerf (in Wittrock and Baehr (eds.) 1981) states that "...a [social] problem exists if there is a discrepancy between a goal or some criterion and the perception of an existing or expected situation." In the case of the regulation of multinational enterprises therefore, in defining the problem, or assessing, or justifying a policy (or set of policies) it is necessary to start with a clear indication of the goals or expected benefits, if any, that the government intends to derive from its relationship with multinational enterprises. In turn, this can only take place in an organized manner wherein organizational systems and structures are in place to oversee the administration of the thusly concluded set of policies.

In order to give effect to, monitor and review policies decided upon, such policies must be housed in the appropriate institution(s) of government. It is not enough for government to espouse a general approach to foreign direct investment; it is necessary to articulate the government's policy formally and clearly within a clearly defined administrative framework. This point is strongly emphasized by Dunning (1993:566), for example, who states that "...the success of government policy towards ... inward direct investment depends upon the effectiveness of the administrative machinery set up to implement and monitor the policies decided upon." Mhlanga (2003) is also of the opinion that social policies are sure to fail where such policies are hurriedly set up and promulgated in countries that fail to also establish the necessary institutional mechanisms to continuously monitor and review said policies. It can further be argued by extrapolation, that countries

that have neglected to centralize their foreign direct investment policy structures may have experienced inefficiency in coordinating the various tasks, responsibilities and objectives of the several ministries involved in some manner in the administration of this type of investment. As an example, there may emerge conflicting regulations coming simultaneously from a Ministry of Labor and a Ministry of Science and Technology. This may occur where the former Ministry is primarily concerned with attracting labor-intensive job creating multinational enterprise investment, while at the same time the priorities of the latter Ministry involve upgrading domestic technological and innovatory capacity, an objective which may tend to reduce labor-intensive employment (Dunning 1993:566).

6.5.1 Developing a regulatory framework for the regulation of multinational enterprises

Academic inquiry and literature, of the 1950s and 1960s, aimed at investigating the intrinsic nature and proliferation of multinational enterprises led to policy assessment that in large part suggested tighter regulation of this type of business enterprise. This shift of policy orientation was in large measure based upon research findings that confirmed the ability of multinational enterprises to transcend national regulatory boundaries, as well as confirming the potential for monopoly control of markets by multinational enterprises. The multinational enterprise was thus seen to be a unique form of business enterprise that required a specialized regulatory framework to control against its possible abuses of host states (Muchlinski 1995:7). Since the 1960s, however, there have been several additional major ideological influences on the regulation of multinational enterprises. These ideological strands are the 'neo-classical market analysis' of the multinational enterprise, the 'orthodox post-war economic' perspective, the

'Marxist' perspective and the 'nationalist' perspective, and more recently the 'environmental' perspective and 'global consumerism' (Muchlinski 1995:90-101). In order to present a balanced approach to understanding regulatory motivations and current approaches to host state regulation of multinational enterprises, these major ideological influences that have been shown to affect the extent and nature of multinational enterprise regulation will be discussed hereunder.

6.5.1 (a) Neo-classical market analysis

The underlying assumption of the neo-classical market perspective is based on the laissez faire principle that the market operates most efficiently when left to its own devices. Therefore, this view purports a minimalist approach to multinational enterprise regulation. The multinational enterprise is seen as a crucial conduit for the proper development and advancement of the international economy through its unique abilities to integrate and coordinate resource allocation globally. As such, multinational enterprises can only fulfill this role if they are uninhibited in the establishment and operation of affiliates wherever and whenever needed. The major criticism leveled against the neo-classical perspective is that it fails to recognize that countries differ fundamentally and as a result an 'open door' approach to multinational enterprise regulation will not always result in an equal international spread of the benefits to be derived from the foreign direct investment of multinational enterprises (Muchlinski 1995:93). This concern is partly addressed in the 'orthodox economic' perspective on multinational enterprise regulation which is discussed forthwith.

6.5.1 (b) The orthodox post-war economic perspective

Whereas the neo-classical perspective saw free and unregulated markets as the path to global economic efficiency, the orthodox post-war approach argued that without some amount of intervention markets can and do become imperfect allocators of resources. Large corporations (both domestic and foreign multinational enterprises) were seen to have the ability to dominate and monopolize markets thereby causing markets to function inefficiently. Orthodox exponents suggested that such market failures could only be controlled for by the use of selective public sector interventions. The Orthodox approach does, however, recognize the potential gains that may accrue to nation states from the foreign direct investment activities of multinational enterprises and as such, this approach sees over-restrictive controls as self defeating. In the final analysis, the orthodox school takes a middle of the road approach tailored to specific circumstances of nation states and multinational enterprises. Examples of diversity of regulations that fall under this perspective are the low intervention approach of existing and draft voluntary international codes of conduct concerning multinational enterprises and European Community proposals for greater disclosure and accountability, and the high intervention approach exemplified by national laws requiring indigenous involvement in the ownership and control of local subsidiaries of foreign corporations (Muchlinski 1995:93-5).

6.5.1 (c) The Marxist perspective

Based on the views and arguments of Karl Marx on the exploitation of labor by capital, the Marxist perspective sees multinational enterprises as agents of capital exporting countries that have the power to control both the flow of raw materials and finished products in and out of less developed countries (LDCs) as

a result of the multinational enterprises monopolistic control of the market(s) concerned. According to this perspective, this exploitative relationship justified excessive regulatory measures such as nationalization and expropriation (Muchlinski 1995:95-7).

6.5.1 (d) The Nationalist perspective

The ideological basis of the nationalist perspective on multinational enterprise regulation takes expression, among other, in the pro-nationalist sentiments of 'dependency theory' especially with respect to prioritizing national independence, self-determination and cultural autonomy in relations with multinational enterprises. In this regard, for example, large foreign firms are seen to be a threat to the way of life of the people in the host country by way of displacing cultural identity and adapting local consumer tastes to those of foreign origins mainly by investing heavily in advertising. There is also a fear of interference in the political sphere of the host country by multinational enterprises as had been demonstrated in Chile and elsewhere (Supra. Sect. 4.2.2).

The more overzealous nationalistic approaches have been criticized for being self-defeating as they may actually tend towards a greater degree of dependency than that which they seek to avoid through nationalization and expropriation. This is because they give preferentiality to the replacement of foreign management corps and techniques with less efficient local substitutes (Muchlinski 1995:97-9).

6.5.1 (e) The Environmental perspective

Environmental concerns are among the more contemporary issues that have entered the debate on multinational enterprise regulation. According to the environmental perspective two important areas that need to be taken account of in developing a regulatory framework for multinational enterprises are firstly, environmental health and safety, and secondly, incidence of exploitation of countries that are regarded as environmental pollution havens. With respect to the former, environmentalists call for provision to be made for the development of an international legal regulatory body on group liability for damage caused by environmental hazards under the control of multinational enterprises, more certain rules on the provision of compensation in the case of accidents, and improved disclosure on health and safety issues. With regards to the latter, the environmental approach calls for regional or preferably international coordination and consensus on pollution standards (Muchlinski 1995:99-100).

6.5.1 (f) Global consumerism

Although theorists of global consumerism accept that there are going to be social and cultural changes brought on by the presence and activities of multinational enterprises in host countries, they do not necessarily accept that these changes should be considered in a negative light. Instead, they welcome the creation of a new global culture and lifestyle perpetuated in large measure by transnational media and advertising firms that aim to develop consumer tastes for the products sold by multinational enterprises. The drive to satisfy these new consumer demands is expected to contribute to development as job creation and increasingly higher standards of living will be have to be the economic and social policies prioritized by host country governments (Muchlinski 1995:100-101).

6.5.2 Normative jurisdictional levels of regulation

Against the backdrop of the varying beliefs about the extent to which multinational enterprises should be regulated, each individual nation-state needs to determine its own particular regulatory framework based on its predominating political and ideological orientation towards the foreign direct investment activity of multinational enterprises. To this end, optimization of a regulatory framework for multinational enterprises requires going through a two-stage analytical process that consists of firstly analyzing the substantive content of any regulatory agenda that is currently in place, and secondly, evaluating these against the normative jurisdictional levels and methods of regulation, as have commonly been applied globally, so as to identify effective policy options that may be available to policy makers (Muchlinski 1995:90). The first stage of this process, i.e. analyzing substantive policy content, was covered in the previous chapter (Supra, chapter 5) of this dissertation. With regard to the normative jurisdictional levels and methods of regulation, host states can exercise regulation over multinational enterprises through either the national, regional or international levels. Each of these will be discussed in turn, hereunder.

6.5.2 (a) National level of regulation

The national level of regulation can be subdivided into unilateral and bilateral regulatory frameworks. The unilateral branch of the national level of regulation is indicative of cases in which a host country acts alone in determining what regulations will apply to multinational enterprises and foreign direct investment with little or no concern for how these policies may affect the multinational enterprise in question, the home county of the multinational enterprise in question or any other incidental stakeholders. In contrast, the bilateral approach

to regulation at the national level involves agreements between host and home countries of multinational enterprises on issues of regulatory control. Here the interests of the multinational enterprise, host country and home country are given due consideration and compromise is reached between them in determining the most appropriate regulatory policies (Dunning 1993:574-8; Cf. Muchlinski 1995:107-111).

Although the national level of regulation is the most common approach to regulating multinational enterprises, it has been criticized for failing to provide consistency in how multinational enterprises are to be regulated domestically as well as in the international arena. That is, as the main aim of host government regulation of multinational enterprises at the national level is to negotiate and secure the greatest economic and social gains from the foreign direct investment activities of multinational enterprises, this level of regulation may in principle and theory lead to as many different regulatory regimes as there are countries in the world. The problem that this circumstance creates for individual countries as well as for the global economy at large is that multinational enterprises will be in advantaged position to play one country against the other as countries compete to attract foreign direct investment. Such competition would prove to be an inefficient use of resources such as investment incentives. In terms of consistency on the domestic front, too many regulatory agendas may develop as these may evolve from bi-lateral (as opposed to regional or international) negotiations and agreements between a particular host state and a number of home states representing the interests of their multinational enterprises in the host country. It can thus be concluded that bilateral treaties are limited in their ability to provide the appropriate and efficient solution to regulatory problems since they represent specific regimes applicable only to the signatory states of those specific treaties.

A further significant criticism of the national level approach is that it does not take account of the mismatch that exists between the territorial and jurisdictional limits of the laws of the regulating host state, and the global spread of the economic interests and activities of multinational enterprises operating from within the host state's borders (Muchlinski 1995:107-111). As has been documented in *Lubbe v. Cape Plc* and other cases (Supra. Sect. 4.3.2), this mismatch has tended to lead to international legal complications for which most individual host governments lack the legal capacity to resolve.

6.5.2 (b) Regional level of regulation

The regional level of multinational enterprise regulation refers specifically to the establishment of supranational regulatory policies as well as supranational regulatory bodies to administer those policies. The coverage of that regulation being greater than that of the bi-lateral form yet lesser than that of the international form. In other words the geographic coverage of the regional level of regulation is limited to groups of countries that share a distinct (and normally contiguous) geographic area and who would benefit from the establishment of a common market, currency and/or political system.

Regional regulation of multinational enterprises serves to address some of the shortcomings identified in the national (unilateral and bilateral) approach. As such, regional regulation has the potential to reduce the mismatch between the territorial and jurisdictional reach of host states and the geographical scope of multinational enterprise operations. However, this is the case only for firms operating exclusively within the territorial region of the participating states. With respect to firms operating both within and outside the common region, the problem of jurisdictional limitation may re-emerge whereby host governments

that belong to the region may encounter difficulties applying their laws and regulations to multinational enterprises whose operations extend outside of the region (Muchlinski 1995:111-12). One notable shortcoming of the regional approach, however, is that it may tend to divide the world up into regional blocs of countries that compete with each other for the foreign direct investment of multinational enterprises (Muchlinski 1995:111-12; Cf. Dunning 1993:574-8).

6.5.2 (c) International level of regulation

Host state regulation of multinational enterprises at the international level involves an international collaborative effort by the majority of the world's states. Although this level of regulation would appear to be the most efficient in terms of rectifying the mismatch between jurisdictional control of host states and the geographical scope of multinational enterprise operations, it may also prove to be the most difficult to accomplish. This is because firstly, international regulation can only take place where national jurisdiction is curtailed, and secondly, given the great amount of diversity that exists in national ideologies, it would be difficult to reach an international consensus on how the international regulatory framework should be constituted (Muchlinski 1995:112-14; Cf. Dunning 1993:574-8; Cf. Modelski ed. 1979:274-5).

6.6 Conclusion

Although all stages within the policy cycle are crucial, in the current context the most important decisions have to be taken as to the organizational structure within which multinational enterprise policy will take place. Once multinational enterprise policies have been studied and formulated, either a new organizational unit can be developed for the administration of this policy, or an existing

administrative unit can add multinational enterprise regulation to their functional responsibilities. A third option would be to leave the current system intact.

Focusing on the first two options for organizing, the key issues here relate to which option is most efficient in terms of administrative effectiveness and also which option is most efficient in terms of administrative cost. Resolving these issues requires a cost-benefit focus of analysis. In this regard, either option will require additional costs, so before choosing one as the optimal situation, a cost/benefit assessment has to be made to determine whether the added benefits of the proposed organizational change(s) justifies the implementing costs (thus, also addressing the third option of leaving the system intact). Considering this question first, requires us to specify an objective measure for the costs to be compared as well as a basis for comparison. Thus, since there is no current administrative directorate or unit for foreign direct investment and multinational enterprise policy, comparison has to be made on the basis of the costs of implementing and maintaining a new system versus the economic and social costs and benefits related to the current system (i.e. the opportunity costs of not having a regulatory unit). As has been indicated in this chapter, although cost benefit analysis cannot provide absolute answers or precise measures, it's still remains a worthwhile exercise as it goes a long way towards providing objective bases for comparison for determining the optimality of organizations and their structures in terms of their performance.

From the discussion posed in section 6.5 of the dissertation, it can be deduced that the scope for rationalization of foreign direct investment policy structures in the South African context can also be partially resolved by firstly taking account of the Governments ideological stance on regulation, and secondly by making a determination as to the most effective levels of policy making, implementation

and mediation of such regulation. Additionally, account must also be taken of a number of other potentially deterministic factors discussed elsewhere in this dissertation such as a benefit-cost analysis of a proposed rationalization, applied organization theory and the economic and social effects that regulated as well as un-regulated foreign direct investment may entail. These are but a few of the deterministic factors that have been explored thus far in the dissertation and the concluding chapter (Infra. chapter 7) attempts to draw to a central divergent point, each of these considerations in order to recommend the most optimal basis for the aforementioned rationalization.