STRUCTURAL ADJUSTMENT AND PRIVATE INVESTMENT IN AFRICA

By

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A Thesis
Submitted to the Faculty of Graduate Studies
in Partial Fulfilment of the Requirements
for the Degree of

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ABSTRACT

This study examines the effect of structural adjustment programmes on private investment in Sub-Saharan Africa. The impact of the three main components of structural adjustment--macroeconomic adjustment, sectoral reforms, and institutional adjustment-- on factors that affect private investment, and hence on private investment is delineated theoretically and investigated empirically. The study deals with the effect of restrictive fiscal and monetary policies, and devaluation on investment, the relationship between public and private investment, the importance of credit availability for capital formation, the effect of external debt on investment decisions, and the impact of privatization and deregulation on private investment.

The econometric investigation specifies an investment model that takes into account the structural characteristics of developing countries. Data on four African countries--Kenya, Malawi, Mauritius, and Zimbabwe-- for the period of 1970-92 is used for the econometric analysis. The equations are estimated by the method of ordinary least square for the four countries separately, as well as using pooled cross-section time series approach. A dummy variable is used to take into account the

structural break that may have occurred due to the debt crisis and structural adjustment programmes after 1982.

The results show that structural adjustment has failed to revive private investment in Africa. The results on the relationship between many of the economic variables included in the study and private investment tend to be weak. The discussion on the institutional adjustment and its impact on private investment shows that the reforms do not seem to have succeeded in encouraging African entrepreneurship or attracting foreign direct investment.

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Chapter 1

INTRODUCTION

1.1 General Overview

Since the early 1980s a majority of the countries of Sub-Saharan African (SSA) have adopted structural adjustment programmes (SAPs) under the auspices of the International Monetary Fund (IMF) and the World Bank. The objective of SAPs is to raise the productive capacity of the economy through macroeconomic, sectoral, and institutional interventions. It is hoped that these reforms would create an environment in which private investment flourishes. The main purpose of this study is to enquire whether the objective of increasing private investment has been achieved. This will be done in the context of selected SSA countries.

SAPs consist of three categories: macroeconomic adjustment, supply side sectoral reforms, and institutional adjustment. The first involves restrictive fiscal and monetary policies, and devaluation. Supply side restructuring calls for liberal price and trade policies, and financial liberalization. Institutional adjustment includes privatization, deregulation, and the introduction of liberal investment codes. The changes

in the policy environment, and the institutional setting are meant to revitalize the domestic economies, increase exports, and allow the private sector to grow and succeed where the public enterprises failed. It is suggested that private investment will revive within five years of the implementation of adjustment (Solimano, 1992).

The programmes, however, do not seem to have succeeded in increasing private investment. The response of private investment to adjustment in Sub-Saharan Africa has been wanting. The immediate reasons for this may be sought in the side effects of SAPs on some of the determinants of investment. Consider some of the components of SAPs: restrictive fiscal and monetary policies, devaluation, and liberal trade policies. Each of them may impact negatively upon private investment. Restrictive fiscal policy may decrease the investment enhancing component of public expenditure, notably infrastructure investment; restrictive monetary policy limits credit availability for investors and raises interest rates. Devaluation may reduce investment in the nontradable sector. Trade liberalization may decrease domestic economic activities by weakening the import competing sector without strengthening the export sector. The implied decrease in output would further reduce investment via the accelerator principle.

Furthermore, since SAPs have their origin in the debt crisis, the question of private investment must be considered in the context of debt management. Debt service demands would reduce investment if the business class expects high future taxes on its earnings. In addition, institutional changes create a state of flux and uncertainty. If people have doubts about the appropriateness as well as sustainability of externally imposed economic arrangements, then at least in the short run investment may not rise.

Still the relationship between these variables and investment is not unambiguous. For instance public expenditure may involve a crowding out effect such that restrictive fiscal policy may favour private investment where interest rate matters. Devaluation may increase exports and GDP growth, and thus stimulate private investment. Favourable changes in the institutional setting may activate domestic entrepreneurs and attract foreign investment. One way of shedding light on some of these ambiguous relationships is via empirical investigation.

1.2 Research Issues

From a theoretical point of view what determines investment remains very much an open question. A number of theories have been advanced to explain investment behaviour. They include:

the simple accelerator principle, the neoclassical model, Tobin's Q, and the irreversibility approach. These theories have been modeled and applied in several industrialized countries, but less so in developing economies because of the peculiar institutional setting of less developed countries (LDCs) and data constraints. It is common in the economic literature of developing countries to employ investment models that reflect LDCs' economic structures, and that are manageable under the conditions of data constraint (Tun Wai and Wong, 1982; Blejer and Khan 1984). I will follow a similar approach, in the context of SAPs.

Adjustment affects investment through its impact on the variables that determine private investment. Stabilization and sectoral reform programs affect key economic variables such as GDP growth, public expenditure, credit conditions, inflation, and real exchange rates- variables that are likely to have impacts on private capital formation. The study seeks to answer a number of questions with regard to these relationships. They include:

* What has been the impact of the cuts in public investment on private investment? Has the decline in public investment affected private investment negatively as postulated by the hypothesis of complementarity between private and public investment? Or has private investment benefited from a reduced

public expenditure as suggested by the crowding out hypothesis?

* What is the effect of changing credit conditions on private investment? Does financial liberalization stimulate private investment in SSA countries?

* What is the impact of devaluation on private capital formation? Through which channels are the rate and composition of private investment affected?

* What is the impact of the external debt and the reduction in external financing on private investment? What are the transmission mechanisms and order of magnitude of the impact of external debt on private investment in Africa?

One of the main features of SAPs that distinguish them from pre-debt crisis policies of the IMF and the World Bank toward LDCs is their emphasis on institutional adjustment. Privatization and deregulation have recast the structure of incentives and the rules of the game in the adjusting countries. The theoretical justification for these policies may be found in the works of new institutional economists, notably that of Douglass North (1990). Do these institutional reforms and the concomitant changes in the structure of incentives and the rules of the game stimulate private capital

formation? Or would they create a wait-and-see attitude among private investors? Do the types of businesses that follow on the heel of institutional reforms bring about capital formation that propels economic development? The study will attempt to address these questions.

1.3 Format of the Study

The organization of the study is as follows. Chapter two surveys the theoretical literature on the behaviour of private investment. The survey looks at mainstream investment models as well as models that have been employed in developing economies. Chapter three explores the implications of SAPs for private investment. The likely consequences of each of the components of the adjustment package- macroeconomic, microeconomic and institutional- will be investigated. The chapter also addresses the issues of entrepreneurship and foreign direct investment in the context of structural adjustment. Chapter four uses the available data to discuss financing of investment in Africa, and the macroeconomic performance and trends in private investment in the four Sub-Saharan African countries of this study- Kenya, Malawi, Mauritius and Zimbabwe. In chapter five a formal model of investment is presented to systematically and empirically investigate the effect of SAPs on private investment in the four countries. Chapter six looks at two components of SAPs

that are not included in the empirical analysis of the previous chapters. It explores the issues of privatization and deregulation and their impact on private investment using North's theory of institutions. The final chapter ties together the various threads and discusses policy options.

Chapter 2

THEORIES OF INVESTMENT : SELECTIVE REVIEW OF THE LITERATURE

This chapter reviews theories of investment behaviour. The chapter has three sections. The first section is a selective survey of standard theories of investment. The literature on the theoretical explanation of what determines investment is quite rich and diverse. This section discusses four main theories: the simple accelerator, the flexible accelerator, the neoclassical model, and Tobin's Q theory. It also briefly discusses some recent theories of investment behaviour, i.e., the financial explanation, the irreversibility approach, and the coordination failure hypothesis[1]. The second section examines some of the economic factors that are particularly important in the context of developing economies, but usually not included in the mainstream models of investment. The third section deals with models that have been used in the study of the behaviour of investment in developing countries. This will provide the background for the type of model of investment that will be employed in chapter 5 to investigate the effect of structural adjustment programmes (SAPs) on private

[1] For a more detailed review of the theoretical literature on investment, see Meyer and Kuh 1957; Jorgenson 1971; Junakar 1972, Helliwell 1976; Clark 1979; and Precious 1987.

investment in the Sub-Saharan African context.

Standard Theories of Investment Behaviour

2.1 *The Simple Accelerator Model*[2] : The accelerator theory of investment highlights the fact that capital accumulation depends on the state of the economy. In its simplest form the theory is based on the notion that a particular amount of capital stock is needed to produce a given output. In other words , the theory assumes a constant capital output ratio. Formally,

$$K_t = \upsilon Y_t \qquad (1)$$

and

$$K_{t-1} = \upsilon Y_{t-1} \qquad (1a)$$

where K is the economy's capital stock, Y is output, υ is a constant denoting capital output ratio, and the time subscript t denotes the period.

As output expands and contracts, firms will invest and disinvest in order to keep the capital stock proportional to

[2]The original formulation of the accelerator concept is due to J. M. Clark, "Business Acceleration and the Law of Demand: A Technical Factor in Economic Cycles" The Journal of Political Economy, Vol. XXV, No. 3 (March 1917)

output. Thus the accelerator theory of investment posits that the level of investment depends on the change in output. Since net investment is the change in capital stock, the simple accelerator may be represented as

$$I_t = K_t - K_{t-1} = \upsilon(Y_t - Y_{t-1}) \qquad (2)$$

or

$$I_t = \Delta K_t = \upsilon \Delta Y_t \qquad (2a)$$

where I is net investment and Δ denotes change between two periods.

This formulation is based on a number of key assumptions. These include, first the constancy of υ, which follows from the assumption that firms employ capital and labour in fixed proportions irrespective of factor prices. In other words, firms face production functions with fixed coefficients, i.e., right angled isoquants.[3] Second, it is assumed that firms do not face a shortage of funds for the purpose of expanding their capital equipment. Third, firms attain optimum capital stock in each time period, such that firms are always in equilibrium. This implies the absence of excess capacity. It also indicates that the supply of capital goods is infinitely elastic, i.e., adjustment takes place without lags. These are stringent and unrealistic assumptions. A more reasonable and

[3]The constancy of υ may also obtain with normal isoquants if the production function exhibits constant return to scale *and* relative input prices is constant.

modified version of the accelerator theory is the flexible accelerator.

2.2 *The Flexible Accelerator.* The flexible accelerator overcomes the major shortcoming of the simple accelerator, namely the assumption that capital stock is always optimally adjusted. Although both theories assume some optimal relationship between capital stock and output, the flexible accelerator assumes lags in the adjustment process. In other words, the discrepancy between the desired and actual capital stock is eliminated over a number of periods rather than in a single period of the simple accelerator.

The gradual adjustment of the flexible accelerator may be represented by a function of the distributed lag of output changes, in which the importance of any given change in output upon investment declines through time.

$$I_t = K_t - K_{t-1} = \upsilon\lambda\Delta Y_t + \upsilon\lambda(1-\lambda)\Delta Y_{t-1} + \upsilon\lambda(1-\lambda)^2\Delta Y_{t-2} + \ldots \qquad (3)$$

or

$$\Delta K_t = \upsilon\lambda\sum(1-\lambda)^i\Delta Y_{t-i} \qquad (3a)$$

where $0<\lambda<1$, indicating that ΔK is only a fraction of the desired investment. If λ is equal to one then (3) reduces to the simple accelerator equation.

The reason for the gradual adjustment of investment is lags in 'decision making' and 'delivery'. The former refers to time taken by firms to ensure that an increase in demand for products is permanent before they decide to acquire additional capital goods. The latter refers to the lag between the ordering of capital goods and its delivery. That is the supply time needed by the capital goods industry. Furthermore, in a world of imperfect capital markets, firms may need time to raise sufficient finance to purchase capital goods. The flexible accelerator offers an improvement over the simple accelerator. From the neoclassical perspective, however, both versions of the accelerator lack theoretical underpinnings. In particular the accelerator models do not involve the usual assumption of maximization of profits, nor they take into account the substitutability of labour and capital inputs, and the effect of interest rates on the demand for capital.

2.3 The Neoclassical Model. The neoclassical investment model (Jorgenson 1963) focuses on the determination of optimal capital stock. The model is based on several neoclassical assumptions. These include: profit maximising firms operating in a world of frictionless, certain and competitive conditions; exogenously given input and output prices; complete and well-functioning financial markets in which firms can borrow and lend at a constant rate of interest, and perfect markets for second hand capital goods.

Furthermore, there are no costs of adjustment so that firms alter their capital stock rapidly. Finally it is assumed that firms maximize the present value of expected revenues less expenditure on labour and capital subject to a production function and an accumulation identity.

Formally,

$$\text{Max } PV = \sum 1/(1+r)^t \, [P_t Y_t - W_t N_t - PK_t GI_t] \qquad (4)$$

subject to the production function

$$Y = f(N,K) \qquad (5)$$

and the accumulation identity

$$GI = K_{t+1} - K_t + \delta K_t \qquad (6)$$

where (omitting the time subscript)

r = interest rate

P = output price

PY = value of sales

WN = wage bill

PKGI = expenditure on investment goods

PK = price of capital goods

GI = gross investment

δ = depreciation rate

Application of the method of the Lagrange multipliers affords the marginal product of labour $Y_N = W/P$; and the marginal product of capital

$$Y_k = [\delta PK_t + rPK_{t-1} - (PK_t - PK_{t-1})]/P_t = C_t/P_t \qquad (7)$$

The numerator in (7), denoted also as C_t, is the user cost of capital or the rental price of capital. It consists of three components. The first item is the depreciation cost, the second item is the opportunity cost of investing money in capital goods, and the last item shows the rate of appreciation of the price of capital goods, i.e, capital gains.

If we assume a Cobb Douglas production function of the form $Y=L^{\theta}K^{1-\theta}$, where θ is a positive fraction, the marginal product of capital will be given by

$$Y_k = \theta Y/K \qquad (8)$$

From equations (7) and (8) we can obtain equilibrium K^{*}, which is expressed as a function of output, the user cost, and the price of output.

$$K^* = K(Y, C, P) = \theta P_t Y_t/C_t \qquad (9)$$

where the partial derivatives have the following signs

$$K_y > 0 \cdot K_p > 0, \quad K_c > 0$$

The net investment function can be derived from changes in K^*

$$I_t = \Delta K_t^* = \theta\Delta(PY/C)_t \tag{10}$$

The foundations of Jorgenson's investment model have been criticized on a number of grounds. The model ignores the effects of uncertainty and risk and its valuation by the market. Many assumptions of the model are problematic. The assumptions of perfect markets, instantaneous and costless adjustment of capital are unrealistic. The assumption of perfect market for second hand capital goods is unattainable. Furthermore, the assumptions of static expectation about future prices, output and interest rates contradicts the dynamic and forward-looking nature of investment.

2.4 Q Theory of Investment. The Q theory of investment (Tobin 1969) links the real and financial sectors of the aggregate economy. While the theory does not directly tackle the questions of adjustment costs, expectations, and risk , it nevertheless does so indirectly by employing stock market prices in the determination of the investment decision.

There are two versions of the Q. The marginal Q is defined as the ratio of the change in the value of the firm as a result of acquiring an additional unit of capital to its

replacement cost.

Formally,

$$\text{marginal } Q = 1/1+r \; [P_t Y_k + PK_t(1-\delta)] \; / \; PK_{t-1} \qquad (11)^4$$

where Y_k is the marginal product of capital, $P_t Y_k$ is the increase in sales, and $PK_t(1-\delta)$ is the increase in the value of the capital in period t. Thus the numerator is the increment to the value of the firm from the acquisition of an extra unit of capital discounted back to period t-1. The denominator is the cost of acquiring that additional capital in period t-1.

In equilibrium marginal Q equals unity. In other words the firm has undertaken all projects that add more value relative to their cost. If Q>1 investing in additional capital more than pays for the costs of acquiring and installing the capital good. If Q<1 the firm will reduce the capital stock through disinvestment or depreciation.

Because of the difficulty of measuring marginal Q, a second version of the concept, average Q, which is directly measurable, is often used. Average Q is defined as the ratio of the value of the entire existing capital stock of the firm

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[4]This can be derived form the first order condition for capital from the maximization problem of the neoclassical model discussed in the previous section.

as evaluated by the financial markets to the replacement cost of the firm's existing capital. Formally,

$$\text{average } Q = V_t / PK_t K_t \qquad (12)$$

where V is the value of the firm (including equities, bonds, and net short-term liabilities)as evaluated on financial markets.

Q models have been a popular form of investment models. The appeal arises because the observable value of the firm contains the market expectations about future returns and risk adjustments. The researcher does not have to make specific assumptions about expectations formations. The market value of the firm would also reflect the problems of lag and adjustment costs of investment. Thus Q theory avoids the criticisms of the neoclassical theory by acknowledging the dynamics arising from expectations.

The theory is also intuitively appealing. This intuition was first expressed by Keynes:

> Daily revaluations of the Stock Exchange, though they are made to facilitate transfers of old investments between one individual and another, inevitably exert a decisive influence on the rate of current investment. For there is no sense in building up a new enterprise at a cost greater than that at which a similar existing enterprise can be purchased; whilst there is an inducement to spend on a new project what may seem an extravagant sum, if it can be floated off on the Stock Exchange at an immediate profit (Keynes 1936:151)

However, there are problems with the Q theory. First, the two measures of Q, the marginal and the average, are equal only under the specific circumstance of constant returns to scale. When firms enjoy economies of scale or market power, or if the economy experiences a supply shock marginal and average Q will systematically diverge. Second, Q theory has demonstrated generally disappointing empirical performances. This may be due to the erratic nature of the stock prices. The theory may explain events *ex post*, but does a poor job of predicting the level of investment. Finally, in countries where financial markets are weak the explanatory power of the theory is difficult to test.

2.5 Recent Theories of Investment. In this section a brief discussion of three recent theories of investment will be presented. These theories focus on the effects of the financial constraint, on irreversibility, and on coordination failures.

2.5.1 Financial Constraint. The literature on financial constraints on investment in developed economies (Stiglitz and Weiss 1981), focuses on the effect of asymmetric information on the role of the interest rate as a market clearing device. It is argued that banks have imperfect information about borrowers. Thus the banks are apprehensive

that a rate determined by the free play of demand and supply would lead to adverse selection (attract risky borrowers) or induce investors to undertake highly risky projects . To avoid these problems the banks will resort to credit rationing and quantitative restraint. (Note that credit rationing due to asymmetric information as discussed here is different from credit rationing due to administrative control prevalent in developing countries to be discussed in section 2 below). The equilibrium interest rate in such a market, i.e., in which the assumptions of perfect and costless information do not hold , is characterised by excess demand for funds. The banks will be more interested in protecting themselves against risky investors than in increasing the interest rate and clearing the market. Consequently some worthy investors (projects) are denied access to the credit market even if they are willing to pay a higher interest rate.

Furthermore, asymmetric information may create a discrepancy between the cost of financing internally (retained earnings) and financing externally (debt and equity). This is so because lenders may tend to undervalue the quality of investment projects in order to compensate for their lack of perfect information. Thus they raise the cost of debt and equity above the opportunity cost of retained earnings. Again, this is a clear departure from a world of perfect capital markets, in which internal finance and

external finance are substitutes (Fazzari et al 1988a, 1988b; Mayer 1989; Hubbard 1990).

2.5.2 Irreversibility. A number of recent papers (Bernanke 1983, McDonald and Siegel 1986, Bertland and Caballero 1990, Pindyck 1991) have emphasized the implications of irreversibility for investment decisions. Pindyck (1991) focuses on the irreversibility of investment under conditions of uncertainty. He points out two characteristics of investment expenditures: sunk costs and the option firms have to delay investment. Sunk costs are expenditures that once made cannot be recovered. They are irreversible for a number of reasons. First capital may be firm or industry specific, such that it cannot be used by different firms or industries. Second, costs may be partly irreversible because of the 'lemons' problem, i.e., very low resale value of purchased capital. Third, government regulations and institutional arrangements may make it impossible for firms to move their assets for reallocation. In the presence of sunk costs, firms may forego the freedom to enter an industry because the irreversible costs have become barriers to exit.

The problem of irreversibility is compounded by the uncertainty
over the future value of projects and other relevant variables. Several factors cause uncertainty. They include

macroeconomic instability, in particular, volatility of output, inflation, interest rates , and exchange rates. In the context of developing countries uncertainty may be heightened by political instability; doubts about the speed, suitability, and sustainability of adjustment programs; and large external transfers due to debt overhang.

Under these conditions firms may exercise their option to delay investment and wait for new market conditions to prevail. Where sunk costs are present, therefore, the usual present value rule of investing in a project when the present value of its expected cash flows is at least as large as its cost is no more optimal. The rule does not take into account the value of keeping the investment option alive. To be sure, the option of delaying investment projects does involve its own costs - the risk of entry by competing firms - but the assumption is that in most cases the benefit of waiting is greater than the cost of delaying.

2.5.3 Coordination Failure. The last theory of investment behaviour we consider here is the coordination failures hypothesis. This theory, which is part of the new Keynesian economics (Cooper and John 1988, Bryant 1983, Shleifer 1986, Woodford 1991), centres on the argument that, in the absence of the fictional Walrasian auctioneer, a many-person economy fails to coordinate and realize profitable economic

opportunities. The explanation of this argument involves concepts that are usually held by opposing schools : 'animal spirit', rational expectations, and monopolistic competition.

Coordination failure occurs despite the fact that increased economic activities by the private sector will lead to a better resource allocation, and notwithstanding that such activities are preferred by the firms in the economy. The reason for the improvement not to obtain is that, each firm expects the aggregate economic activity to be low, and considers its own contribution to production negligible and thus unprofitable in the absence of similar strategies by other firms. Accordingly, in the absence of a mechanism to coordinate the decision of the firms, the economy may remain at an equilibrium with a low level of investment. In other words, the macro level of economic activity may determine investment decisions at the micro level.

2.6 Pertinent Economic Factors in Developing Countries

According to Jorgenson the number of explanations and determinants of investment are limited only by the imagination of the researcher. Hence, in empirical study most theories and determinants of investment behaviour must be overlooked (1967, p. 130). In his survey of econometric studies of investment

behaviour Jorgenson (1971) ranks the neoclassical flexible accelerator model above other models of investment. Economists concerned with developing economies, however, find the neoclassical model inappropriate because they regard its assumptions of perfect capital markets and minimal government role in the economy untenable. Furthermore they point out the paucity or inadequacy of data for certain variables as an additional reason for not relying upon the neoclassical model.

For these reasons, some seem to have abandoned the neoclassical model (McKinnon 1973, Shaw 1973), while others have attempted to use an eclectic version of the model (Tung Wai and Wong 1982, Blejer and Khan 1984, Greene and Villanueva 1990). These latter studies proceed by identifying a number of economic variables that are crucial in determining private investment in developing countries, and attempt an adaptation of the neoclassical model to the structure of developing economies. Below we will discuss the theoretical implications of three main institutional features of developing economies for private investment behaviour. These are the relatively large role of the government in capital formation, 'financial repression' , and the debt overhang.

2.6.1 *Public Investment* : government expenditure in the form of public enterprises and infrastructural investment could have a crowding out effect or a crowding in effect. In

other words, public investment may substitute, or become complementary to, private investment. The total effect of public investment on the economy depends on the relative strength of the two effects.

The crowding out effect reasoning is as follows. In the fixed price IS/LM model fiscal expansion leads to a higher aggregate demand and output. The increased income shifts the demand for money function to the right in the money market and raises the interest rate. Given a high interest elasticity of investment, private investment declines. If we assume full employment a rise in government expenditure may cause an offsetting fall in private investment.

In the context of developing countries the crowding out effect obtains mainly, not through the interest rate mechanism, but because of the restriction on the availability of credit (to be discussed in the next section). If banks are obliged to give priority to the needs of the government, financial crowding out obtains. In particular, if the government expenditure, financed in this manner, is on consumption the negative effect on private investment would be magnified (Sundrajan and Thakur 1980, T Wai and Wong 1982, Matin and Wasow 1992).

The crowding in argument stresses the role of

infrastructural investment in enhancing overall economic activity. Infrastructure is an umbrella term for many activities known as social overhead capital. The World Bank (1994, p. 2) lists three categories of infrastructure. These are: 1) Public utilities - power, telecommunications, piped water supply, sanitation and sewerage, solid waste collection and disposal, and piped gas. 2) Public works - roads and major dam and canal works for irrigation and drainage. 3) Other transport sectors - urban and interurban railways, urban transport, port and waterways, and airports. Education (investment in human capital) may be included in this category. These types of investment enhance and complement the production and distribution of private goods and services. This is so because such public investment tends to reduce costs and raise the productivity of private capital; creates linkages by disseminating information, integrating markets and increasing the demand for inputs and auxiliary services; and augments resource availability by expanding national income and hence savings. The outcome is an attractive environment for private investment.

The case for public investment could easily be supported by historical evidence from developed countries as well as from new industrialized countries. In developed nations state intervention played a key role during the mercantalist era in opening their economies to commerce, in cultivating the

conditions for industrialization, which eventually propelled them toward laissez-faire type capitalism. The Great Depression of the 1930s ushered in the Keynesian Revolution which became instrumental in the revival of the capitalist system. Government infrastructural investment continues to play a critical role in the economies of advanced countries (Aschaur 1989a, 1989b). Countries at lower levels of industrialization may even require larger, growth-inducing, public investment in order to facilitate the development of a vibrant private sector (Gerschenkron 1962).

2.6.2 Availability of Credit : a number of economists have rallied around the idea that financial development is an integral part of overall economic development (McKinnon 1973, Shaw 1973, Fry 1988). They maintain that the financial structure of a country plays a crucial role in mobilizing resources in the form of savings towards investment. This view contrasts with the Kaleckian argument that investment is not subject to financial limits, that the direction of causation is from the real economy to financial development, such that finance adjusts to real changes (FitzGerald 1980).

According to McKinnon and Shaw the financial constraint that investors face in developing nations is more that of the quantity (availability) of credit than the cost of credit. This problem is associated with the state control of the

financial sector. The administrative control includes the setting of ceilings on interest rates and the imposition of high reserve requirements on the commercial banks. The results have been credit rationing , the selection of projects on criteria other than best economic returns, and disequilibrium interest rates below the rates of inflation - a phenomenon known as 'financial repression'. Furthermore, assuming a positive interest elasticity of private savings, 'financial repression' causes shortages of savings, and thus limits the availability of financial resources for investment.

The implied solution is to remove the ceiling on the interest rate , and let it be determined by the market. A rise in the real interest rate would increase savings, relax the liquidity constraint on private investors and accelerate capital formation. The result is unconventional because a higher interest rate does not lead to a fall in investment via the user cost of capital as the neoclassical model predicts. On the contrary, a high (positive) real rate of interest increases investment. However, this may be explained by the interaction between the formal and the informal (curb) credit markets. A policy change that raises the interest rate in the former may decrease it in latter, resulting in a decline of the average rate of the two markets.

2.6.3 External Debt Burden : developing countries today are

characterized by their enormous external debt. For many of them this external indebtedness is large relative to the size of their economies. The debt burden affects private investment through a number of channels. First, the burden of debt-service payments reduces the resources that are available for domestic productive ventures (Ajayi, 1991). Second, the debt overhang adversely affects the incentive to invest. The debt overhang refers to a situation where the foreign debt obligations cannot be met with existing resources, and the actual payments are tied to the economic performance of the debtor nation. Under this type of payments arrangement the debtor country's benefits from good economic performance are reduced by the amount that is hived off for debt servicing. Consequently, the debt payments act as a tax on domestic economic activities , and create a disincentive to invest (Krugman 1988). Third, countries that have difficulties in meeting their debt-service obligations may face unfavourable standing in the international capital markets. This creates a liquidity constraint, and makes it more costly to finance private investment. Borenstein (1990) refers to this effect as 'credit rationing', because the difficulties the debtor nation faces in the international market may lead to a high domestic interest rate relative to the international rate. Furthermore, the liquidity constraint may accentuate the decrease in investment given the reliance of many investment projects in developing countries on imported capital goods (Mirakhor and

Monteil, 1987). Finally, large external debt creates uncertainty in the macroeconomic environment. The size of the external transfer a debtor country makes depends on factors such as the international interest rate , the terms of trade, and the possibilities for rescheduling the debt. The uncertainty about these factors feeds into the macroeconomic policies that are required to meet the external transfer obligations (Serven and Solimano 1991)

Greene and Villanueva (1990), and Oshikoya (1992) discuss additional factors that influence private investment in developing economies. These and other factors that may have come into play because of SAPs, will be examined in chapter 5.

2.7 Developing Economy Models.

The theories we looked at in the first section have been formulated with developed economies in mind. They do not reflect the experiences, institutional features, and structural peculiarities of less developed countries (LDCs). A few studies have been aimed at investigating investment behaviour in LDCs. Most of these studies are of the empirical type. They usually employ the flexible accelerator and neoclassical models to consider the implications of the specific circumstances of developing economies. The earliest

attempt at adopting the neoclassical model to investigate investment behaviour in developing economies is Sundararajan and Thakur (1980). Their model examines the relationship between public and private investment in India and Korea. They argue that the assumptions of the neoclassical theory such as the existence of perfect markets for goods including secondhand market for capital, and well developed financial markets, are not important to the propositions of the theory. Their model involves wages, interest rates and estimations of capital stock.

A study by Tun Wai and Wong (1982) of the determinants of private investment in five developing economies employs a modified version of the flexible accelerator model. They argue that in developing economies the lack of data on capital stock, the difficulty of establishing empirically a production function from which desired capital stock could be derived, and undeveloped capital markets whose observable interest rates do not reflect the scarcity of capital, render the adoption of the neoclassical model unrealistic. They formulate a model in which private investment in developing countries is tested against government investment, the change in bank credit to the private sector, and the inflow of foreign capital to the private sector. However, the reduced form equation they use for regression involves a capital stock variable for which data is not available, and they resort to

estimation methods to obtain this variable.

The preceding two studies represent the starting point for the paper by Blejer and Khan (1984), which warrants discussion in some detail. Blejer and Khan note the analytical and pragmatic difficulties in adopting the neoclassical model. They refer to the relatively larger role of the government in capital formation, to distortions created by foreign exchange constraints, and to the absence of data on the stock of capital, labour force, wages, interest rate and user cost of capital for most of the twenty four developing countries they investigate. The model they formulate has two distinctive features. First, it allows the assessment of the effects of stabilization policy by deriving an explicit relationship between policy instruments such as variations in bank credit and in government expenditures and private investment. Second, it postulates that the effect of government expenditure on private investment depends on the type of expenditure. To examine this it attempts to distinguish between infrastructural investment and other types of government investment.

The theoretical specification and mathematical derivation of the Blejer and Khan model is as follows. In the long-run steady state the desired capital stock of the private sector is assumed to be proportional to expected output:

$$KP^* = \alpha Y^e \qquad (13)$$

where KP^* is the desired private capital stock, and Y^e is the corresponding level of expected output, and α is a constant. Equation (13) may be presented as[5]

$$KP^* = \alpha Y_{t-1} \qquad (13a)$$

Lags in the adjustment of actual investment are introduced through a partial adjustment mechanism for the capital stock.

$$\Delta KP_t = \beta (KP^* - KP_{t-1}) \qquad (14)$$

which may be rewritten as

$$KP_t = \beta KP^* + (1-\beta) KP_{t-1} \qquad (14a)$$

$$0 \leq \beta \leq 1$$

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[5] Equations 13 and 13a are derived assuming that private output is proportional to total output. 13a is obtained using a simplified version of the adaptive expectations model developed by Cagan (1956). Expected output is assumed to respond to the difference between actual output and the output that was expected in the previous period. This is given by:

$$\Delta Y^e_t = \eta [Y_{t-1} - (1-g) Y^e_{t-1}]$$

where η is the coefficient of expectations, $o<\eta<1$, and g is the growth rate of output. Using the lag operation notation, this equation can be written as

$$Y^e_t = \eta Y_{t-1} / [1-(1-\eta)(1+g)L]$$

Blejer and Khan show that in the specifications that follow from their model the log-likelihood function η is maximised when $\eta=1$, such that the above equation can be written as $Y^e_t = Y_{t-1}$.

and where ΔKP is net private investment, KP is the actual private capital stock, and β is the coefficient of adjustment. In order to get around the problem of data constraints associated with net private investment and private capital stock, equation (14) is transformed into gross investment terms. This would allow us to eventually eliminate the capital stock term from the specification.

Gross private investment is given as:

$$IP_t = \Delta KP_t + \delta KP_{t-1} \qquad (15)$$

where δ is the rate of depreciation. Introducing the lag-operator notation, L, (15) becomes

$$IP_t = [1-(1-\delta)L]\,KP_t \qquad (16)$$

A simple inversion of (16) is

$$KP_t = IP_t \,/\, [1-(1-\delta)L] \qquad (17)$$

From (14a) and (17) we obtain

$$IP_t \,/\, [1-(1-\delta)L] = \beta KP^* + (1-\beta)\ IP_t \,/ [1-(1-\delta)L] \qquad (18)$$

which yields

$$IP_t = [1-(1-\delta)L]\beta KP^* + (1-\beta)IP_{t-1} \quad (19)$$

substituting equations (13) or (13a) into equation (19) obtains the basic dynamic accelerator model :

$$IP_t = \beta\alpha[1-(1-\delta)L]Y^e + (1-\beta)IP_{t-1} \quad (20)$$

or

$$IP_t = \beta\alpha[1-(1-\delta)L]Y_{t-1} + (1-\beta)IP_{t-1} \quad (20a)$$

An appealing feature of (20) or (20a) is that they can be readily applied to available gross investment data in developing countries, while being consistent with the original capital stock model we started with in (13) and (14).

We can also obtain equation (20) by starting with a specification of a partial adjustment function for gross investment:

$$\Delta IP_t = \beta(IP^* - IP_{t-1}) \quad (21)$$

where IP^* is the desired level of investment in the steady state, which is given by

$$IP^* = [1-(1-\delta)L]KP^* \quad (22)$$

Equation (20) can be derived from (21) and (22) because $KP^*=KP_{t-1}$.

The economic factors that influence the ability of private

investors to achieve the desired level of investment are captured by the coefficient β , which is the measure of the response of private investment to the gap between desired and actual investment. Two important economic factors that influence private investment in the Blejer and Khan model are availability of credits and the level of public investment[6]. (As discussed in the previous section, one of the principal constraints on private investment in LDCs is the quantity of credit rather than its cost. An increase in the flow of credit to the private sector will encourage private investment. With regard to government expenditure the focus is on public investment. Public investment may lead to crowding out if it employs the physical and financial resources that would otherwise go to the private sector. On the other hand public investment in public goods and infrastructure may crowd in private investment.) The coefficient of adjustment β in (21) may be expressed as a function of these monetary and fiscal policy variables. A linear representation of this relationship is

$$\beta_t = b_1 + \frac{1}{(IP^* - IP_{t-1})} \left[b_2 \Delta CR_t + b_3 GI_t \right] \qquad (23)$$

where ΔCR is the change in real bank credit to the private

[6] In the original formulation Blejer and Khan (1984) make β depend also on the stage of business cycle; and the change in real bank credit to the private sector includes real net private capital flows.

sector, and GI is real public sector investment. Equation (23) states that the response of private investment to the discrepancy between desired and actual investment depends on the magnitude of these two factors. The signs of the parameters in this equation are expected to be :

$b_2 > 0$; and $b_3 <$ or > 0

The sign on b_3 is ambiguous because it depends on whether the public expenditure is of infrastrucural type or not.

Substituting (23) into (21) affords

$$\Delta IP_t = b_1(IP^* - IP_{t-1}) + b_2 \Delta CR_t + b_3 GI_t \qquad (24)$$

From equations (22) and (13a) we have

$$IP^* = \alpha[Y_{t-1} - (1-\delta)Y_{t-2}]$$

We can now obtain a dynamic reduced-form equation for gross private investment that includes factors that influence private investment:

$$IP_t = b_1\alpha [Y_{t-1} - (1-\delta)Y_{t-2}] + b_2\Delta CR_t + b_3 GI_t + (1-b_1) IP_{t-1} \qquad (25)$$

Equation (25) can be easily extended to include other relevant factors that affect private investment behaviour, by making the coefficient of adjustment , β, depend on the chosen

factors. Blejer and Khan extended their model by including the change in public sector investment (ΔGI), the trend level of real public investment (TGI), and expected or anticipated public investment (EGI). The last two are proxies for the infrastructural component of public investment. (Noninfrastructural investment is given by deviations form trend public investment (GI-TGI), and by the unexpected component of public investment (GI-EGI). (The method of calculating these will be discussed in chapter five)). Using these concepts they specify three more reduced-form equations for gross private investment. These are :

$$IP_t = b_1\alpha[Y_{t-1} - (1-\delta)Y_{t-2}] + b_2\Delta CR_t + b_3 GI_t + b_4\Delta GI_t + (1-b_1)IP_{t-1} \quad (26)$$

where the sign of b_4 is considered to be ambiguous.
And incorporating TGI,

$$IP = b_1\alpha[Y_{t-1}-(1-\delta)Y_{t-2}] + b_2\Delta CR_t + b_3 TGI_t + b_4(GI_t-TGI_t) + (1-b_1)IP_{t-1} \quad (27)$$

where $b_3>0$, and the sign of b_4 would be positive for crowding-in and negative for crowding-out. And finally,

$$IP_t= b_1\alpha[Y_{t-1}-(1-\delta)Y_{t-2}] + b_2\Delta CR_t + b_3 EGI_t + b_4(GI_t-EGI_t) + (1-b_1)IP_{t-1} \quad (28)$$

where the expected signs for the parameters are:

$b_1\alpha > 0$; $b_2 > 0$; $b_3 > 0$, and the sign of b_4 is ambiguous.

Summary of the variables of the Blejer and Khan Model

KP = capital stock of the private sector

Y = output

IP = gross private investment

CR = credit availability to the private sector

GI = public sector investment

TGI = trend level of public investment, proxy for infrastructural investment

DVGI = deviation from trend public investment, GI-TGI, proxy for noninfrastructural public investment

EGI = anticipated public investment, proxy for infrastructural investment

RGI = unexpected or surprise part of public investment, GI-EGI, proxy for noninfrastructural public investment

δ = rate of depreciation

β = coefficient of adjustment

L = lag operator

In the Blejer and Khan model therefore, private investment is a function of growth rate of output, availability of credit

to the private sector, infrastructural and noninfrastructural public investment.

As mentioned previously the model by Blejer and Khan (1984) has a number of desirable features. The model is theoretically consistent and simultaneously incorporates factors pertinent in developing economies. Since this model does not require data on capital stock, wages, and user cost of capital, it is particularly suited for developing economies in which severe data constraints exist. Furthermore, because their model is developed with stabilization programs in mind, it easily takes into account the effects of government policy instruments on private investment. Although the authors do not seem to have entertained the type of comprehensive changes implied by structural adjustment programmes (SAPs), their model can tackle many of the economic variables that have been altered by SAPs, and which in turn may affect private investment. We shall turn now to review the relationship between structural adjustment programmes and the behaviour of private investment.

Chapter 3

THE ADVENT OF STRUCTURAL ADJUSTMENT AND IMPLICATIONS FOR PRIVATE INVESTMENT

This chapter seeks to delineate the relationship between the components of structural adjustment and private investment. Most of the literature in this area focuses on the effects of macroeconomic adjustment on economic growth in general. Although investment is usually one of the variables included in the studies, it is total investment rather than private investment that is frequently referred to. Nevertheless, it is possible to gauge the implications of SAPs for private investment from these studies. Moreover, some of the literature on SAPs is concerned specifically with private investment.

The chapter is organized into six sections. The first section defines structural adjustment and elaborates on its different components. The second section deals with the effects of macroeconomic adjustment policies on private investment. The third section examines the effects of the supply side reforms on private investment. The fourth section discusses the issue of entrepreneurship in the context of structural adjustment programmes (SAPs). The fifth section is

on structural adjustment and foreign direct investment. The last section contains the concluding remarks.

3.1 The Meaning of Structural Adjustment

Structural adjustment is a comprehensive concept. As such various definitions exist. One of the broadest definitions is given by Streeten (1987), who states that "the essence of development is structural adjustment." Here the concept is cast as 'a problem of transition'.

A less broad definition views structural adjustment as "a process of deliberately adjusting the structure of an economy to counter adverse shocks or to take advantage of new opportunities arising from internal or external economic shifts." The emphasis here is on the response of a country to new economic conditions (Balassa 1982, and Glover 1991).

Writing in the early 1980s, Loxley (1986) maintains that the term structural adjustment is the term 'stabilization' recast. This recasting has been affected through: far-reaching changes in the trade regime of developing countries, substantial shifts in the structure of investment and production, and significant alteration in the mix of state control and market incentives. "Thus the term 'structural adjustment' simply makes more explicit the fact that

contemporary stabilization programs frequently imply substantial changes in the direction of the economy, in its sectoral priorities and in its institutional make up" (Loxley 1986, p. 26).

For the purpose of this study, structural adjustment refers to the specific economic policies that the International Monetary Fund (IMF) and the World Bank require developing countries to follow in order to access the financial facilities of the two international financial institutions for balance of payments support.

Until the late seventies the activities of the two organizations were quite distinct. The IMF was concerned with short run disequilibria in the balance of payments of its member countries. It lent funds to nations experiencing severe external adjustment problems, and advised on stabilization policies. These were typically restricted to the macroeconomic areas of monetary, fiscal, and exchange rate policies. The World Bank's involvement in developing countries had more of a microeconomic character, and was mainly exercised through the Bank's investment in sectoral projects.

By the late seventies and early eighties the two organizations moved into areas which hitherto they had avoided. The IMF started advising developing countries on

supply side questions, and the Bank became unsatisfied with its narrow focus on sectoral projects. In 1979 the Bank launched its Structural Adjustment Loans (SALs) program and began to look beyond sectoral projects to the whole economy. As a rule the SALs have been extended to countries that have negotiated IMF conditionality. The policy link between the two organizations is reflected in the Bank's definition of structural adjustment: "Reforms of policies and institutions - microeconomic (such as taxes), macroeconomic (such as fiscal imbalance), and institutional (public sector inefficiencies)." (World Bank 1988, p.11).

The closer cooperation between the two organizations and the blurring of old-fashioned stabilization and development projects with fundamental economic policy changes is a conjunctural phenomenon, abetted by a number of political and economic events of the last fifteen years. Three of these seem prominent. The first is the Thatcher-Reagan conservative political offensive which succeeded in disseminating the ideology of the free market. The second is the debt crisis which was a consequence of, but also became a threat to, the power of internationally mobile capital. The IMF and the World Bank played a crucial role in averting the collapse of the international financial system. The third event is the collapse of the Soviet Union and Eastern European 'existing socialism' and their capitulation to the idea of the market.

This shifted the world political economy by eliminating the major existing alternative to the market.

The underlying assumption of SAPs is that the economic malaise of LDCs has domestic sources. Consequently adjustment means reforming the domestic economic environment. The theoretical and ideological underpinnings of the required reforms -- Fund/Bank conditionality -- are those of vigorous monetarism and free market economics. Specifically, orthodox stabilization and adjustment programs involve the following policy components.

1. Macroeconomic Policies : restrictive fiscal and monetary policies, and devaluation

2. Microeconomic Policies : trade, price, and financial liberalization

3. Institutional Reforms : privatization, improving the business climate and legal arrangements

The first of these is mainly included in IMF conditionality; the second and the third are part of the Bank's structural adjustment initiative. In the light of the program of liberal capitalism the Fund and Bank packages are complimentary.

Restrictive fiscal policy aims to reduce government budget deficits by cutting recurrent government spending, ending subsidization, and decreasing public investment. The restrictive monetary prescription is based on the argument that easy money in developing countries has often led to high inflation rates, balance of payments problems, and low levels of savings. Devaluation seeks to encourage exports and discourage imports. These macroeconomic instruments are expected to reinforce each other in adjusting the external disequilibrium.

The objective of microeconomic liberalization policies is to allow the free play of relative prices to allocate resources efficiently. For instance it is believed that supply elasticities of agricultural products are high, such that market prices would induce farmers to increase production. Trade liberalization involves elimination of quantitative restrictions and the reduction of tariffs, to allow specialization according to comparative advantage. Financial liberalization seeks to remove interest rate ceilings and barriers to entry faced by financial intermediaries to generate savings and release resources for private investment.

Privatization is a component of public enterprise reform in adjustment programs. The other component involves restructuring public enterprises without changes in ownership.

The reform of the parastatals is done through performance contracts that seek to set clear objectives, grant sufficient autonomy, improve management, impose better accountability, tighten staff supervision, and restructure personnel. Because the ideological emphasis is on minimal state participation in the economy, however, privatization is the preferred option of the international lending institutions. A large scale privatization program in which state-owned assets are sold to private economic agents, coupled with government devotion to its traditional obligations of law-making, enforcing law and order, and ensuring an efficient judicial system is believed to reduce uncertainty, and furnish the right institutional setting for economic recovery and growth.

What are the effects of the components of SAPs on private investment? Obviously, the objective is to create conditions conducive to the acceleration of capital formation and economic growth. These conditions include a stable macroeconomic environment, adequate access to credit and to imported inputs by the private sector, and attractive institutional arrangements for the use and protection of private property.

In the following sections we will examine whether or not these objectives have been met. In particular, we will assess the relationship between each individual component of SAPs and

private investment.

3.2 Macroeconomic Adjustment and Private Investment

The macroeconomic adjustment component of SAPs aims to correct unsustainable internal and external imbalances, as well as high or erratic inflation. The sources of these problems are perceived to be high fiscal deficits, easy monetary policy, and overvalued domestic currency. Accordingly, macroeconomic adjustment involves restrictive demand policies and devaluation. In this section we review the literature on the effects of macroeconomic policies on private investment. Most of the literature in this area takes into account the institutional characteristics of developing countries, in particular, the financial structure and the role of public investment in the economy. Thus questions relating to transmission mechanisms and crowding-out / crowding-in effects are the most salient aspects of the discourse.

3.2.1 Fiscal Policy: Restrictive fiscal policy aims to reduce high fiscal deficits which tend to crowd out private investment by increasing the interest rates and/or reducing the availability of credits. Accordingly fiscal adjustment should allow private investment to expand. Van Wijnbergen (1982) confirms this result for Korea, and Martin and Wasow (1992) report similar outcome for Kenya. Nevertheless, the mix

of tax increases and expenditure decreases matter. Restrictive fiscal policy is usually pursued by cutting government expenditure. A reduction in the fiscal deficit attained by the trimming of capital expenditure may decrease private investment, i.e., lowering complementary public investment reduces private investment (Blejer and Khan 1984, Greene and Villanueva 1991). Contractionary fiscal policy also involves decreases in aggregate demand and output. The change in output may further decrease private investment via the accelerator principle.

Faini et al (1989) present a statistical evaluation of the macroeconomic performance of countries under the Fund/Bank programs. They use the control-group approach, which is based on the idea of comparing countries facing the same external factors and initial conditions, but differing in terms of whether they are under the Fund/Bank conditionality programs. They employ the investment-to-GDP ratio as one of nine indicators of growth. They found that this ratio declined as a result of decreasing investment in countries that are under adjustment programs. However, since they do not distinguish between private and public investment, it is not clear what the effect of the adjustment on private investment has been.

Elbadawi (1992) investigates the performance of Sub-Saharan African (SSA) economies under the Bank's adjustment lending

program. He applies a statistical method - a modified control group approach - to evaluate the effectiveness of the adjustment program. He maintains that this modified version of the control group approach allows a more satisfactory evaluation of the effectiveness of the adjustment programs, because it addresses the "need to estimate the marginal contribution of the program for given initial conditions, exogenous [external] shocks, and the counterfactual policy stance that would have prevailed in the absence of the program." (p. 44-45). His empirical analysis produces a statistically significant decline in total investment. He suggests that the decline in total investment is due to the cut in public investment and the less than proportionate rise in private investment. The failure of private investment to increase sufficiently is attributed to the complementarity of public and private investment, and the possibility that private investors took 'a wait and see' attitude to ensure themselves of the credibility and sustainability of the reforms.

Matin and Wasow (1992), Oshikawa (1992), and Cardoso (1993) put a particular focus on the effect of macroeconomic adjustment on private investment. Matin and Wasow estimate a dynamic reduced-form equation of private investment for Kenya. Using OLS and 2SLS methods they find that reduced infrastructural investment due to adjustment programs has a

negative impact on private investment. Oshikawa estimates a simple private investment equation for selected African countries. He regresses private investment against a number of macroeconomic variables which includes the ratio of public investment to GDP. His results confirm the complementarity between public investment and private investment. He explains that adjustment in many African countries took the form of cuts in infrastructural investment because the governments were reluctant to reduce expenditure on consumption for fear of political instability. Cardoso's empirical examination of private investment in Latin America for the period 1970-85 corroborates the complementarity hypothesis.

A closely related issue is the relative productivity, and thus importance, of public investment and private investment in the development process. Khan and Reinhart (1990) use a simple growth model to estimate the relative importance of private and public investment. Their objective is to examine if market based adjustment policies which advocate the enhancement of private economic activities are effective as judged by empirical evidence from developing countries. They estimate the coefficients of private investment and public investment with respect to growth for twenty four Latin American and Asian countries. Their results indicate that the marginal productivities of private and public investment are

not equal. In particular, the marginal productivity of private investment is positive , while the marginal productivity of public investment is found to be negative though not at a statistically significant level. They, therefore, conclude that the key role assigned to private investment and the market system in the development process by the IMF and the Bank has an empirical justification. However, they qualify their conclusion by pointing out that the model has ignored the indirect effect of public investment on economic growth. In particular, public investment that is related to the development of infrastructure, and the provision of public goods such as education could enhance the productivity of private investment and indirectly contribute to growth.

The effect of restrictive fiscal policy on private investment is ambiguous. The studies we reviewed here emphasize the complementarity between private and public investment. This complementarity, however, does not rule out the possibility of the crowding out of private investment by high public deficits. In particular, government spending that is financed by borrowing from the domestic credit market may displace private investment by raising the interest rate and/or by limiting credit availability for the private sector. The studies also show that the short-run response of private investment to an attractive fiscal environment may not be significant.

3.2.2 Monetary Policy: Price stability and low inflation are among the key objectives of the adjustment programs. The policy prescriptions to attain these aims are based on the ideas of monetarism. According to this school of thought inflation is always a monetary phenomenon. Furthermore, given a fixed exchange rate regime, excessive money supply creates a balance of payments disequilibrium by making imports attractive and exports expensive (Crockett 1980). Under conditions of 'financial repression' the problem of the balance of payments would be exacerbated because of capital flight. Hence, restrictive monetary policy and a constant and low rate of money supply growth would reduce inflation, alleviate the balance of payments problem, and allow for the price stability necessary for efficient resource allocation.

The tight control on money supply and credit creation adversely affects private investment through various channels. Tight money raises the user cost of capital by raising the interest rate, and thus reduces the desired stock of capital and the optimal rate of investment. The importance of this indirect effect has been confirmed by de Melo and Tybout (1986), and Greene and Villanueva (1991).

Other studies emphasize the direct effect of tight credit policies on the stock of available credit to the private sector due to financial repression. Firms that are affected so

would usually resort to retained earnings to finance their investments. However, tight money may reduce profit flows and thus weaken the ability to self-finance. This leaves firms with the option of seeking finance in the informal curb market, or abandoning some investment projects (van Wijnbergen 1982, Blejer and Khan 1984, Lim 1987, Dailami 1990, and Cardoso 1993). Consequently, the two transmission mechanisms may simultaneously occur. For instance, the migration of some firms from the formal credit market to the informal curb market would increase the demand for the curb credit, raise the interest rate and thus cancel some viable business projects (Van Wijnbergen 1983).

A positive effect on private investment from restrictive monetary and credit policies could be expected if inflation is reduced and price stability is attained. In other words, a macroeconomic environment in which the uncertainties associated with high and erratic inflation are reduced may attract private investors. However, this can only be a medium or a long-run phenomenon. In the short-run the policies of monetarism tend to reduce private investment.

3.2.3 Exchange Rate Adjustment : the IMF advises changes in the exchange rate in cases of fundamental disequilibrium - a concept used but not defined in the articles of agreement of the IMF. The general idea is that a fundamental diseqilibrium

exists when an international payments imbalance cannot be corrected without increasing trade restrictions or imposing unduly restrictive aggregate demand policies. Devaluation is a key component of the macroeconomic adjustment program for countries running out of reserves and experiencing balance of payments deficits. It is expected to increase the value of exports and decrease the value of imports. The Marshal-Lerner condition is sufficient for devaluation to succeed in improving the balance of payments on the current account. Assuming elastic supply for both exports and imports, the Marshall-Lerner condition states that devaluation will restore the external balance if the sum of elasticities of domestic demand for imports plus foreign demand for exports exceeds unity. This condition is usually met in developing countries where the manufacturing sector is highly developed. In low income primary exporting countries with small open economies the requirement is even less demanding. The Marshall-Lerner condition for these countries simply requires the sum of elasticities of domestic demand for imports and domestic supply of exports to exceed zero, since both foreign demand and foreign supply are assumed to be perfectly elastic (Williamson 1983, Loxley 1986).

According to the mainstream view the main effects of devaluation on macroeconomic variables are increased aggregate demand and output if the economy is at less than full

employment, and higher domestic prices if there are no unemployed resources (Johnson 1976). The expansion in output is expected from the expenditure-switching effect of devaluation, i.e., the increase in the domestic prices of tradables makes exports profitable and encourages firms to shift their production to the export sector. However, in primary exporting countries the elasticity of supply of exports may not be large enough to meet the second version of the Marshall-Lerner condition, at least, not without a considerable time lag. Primary export products are unlikely to be consumed domestically so that little expenditure switching takes place (Crockett 1981). Moreover, it generally takes several years before investment in the production of primary products such as the mineral industry translate into increased output.

Devaluation may even involve contractionary effect on output at least in the short-run (Krugman and Taylor 1978, Van Wijbergen 1986, Solimano 1986, Edwards 1987, and Lizondo and Montiel 1989). This view is based on the expenditure-reducing effect of devaluation. The main reason for decreased demand is the negative effect of devaluation on consumption as real income is redistributed from wages to profits and rent. In the absence of money wage increases, the inflationary tendencies of devaluation causes real wages to decrease. If the assumption that the marginal propensity to save out of

wages is less than the marginal propensity to save out of profits, the change in income shares will reduce aggregate demand. This is referred to as the 'income effect' of devaluation (Krugman and Taylor 1978).

The impact of devaluation on private investment may be looked at from both the demand and supply sides of the economy. On the demand side the effects of devaluation mainly follow from its tendency to raise prices. As mentioned above the income effect of devaluation reduces aggregate real consumption. Also the increase in prices decreases real wealth and thus reduces domestic absorption (Khan and Knight 1985). The decrease in aggregate demand will act as a sales constraint on economic activities and may reduce private investment via the accelerator principle. The contractionary effect of devaluation and the implied reduction in investment, however, may be a short-run phenomenon. In the long-run, output and investment may expand as the substitution effect comes into play and the volume of exports picks up in response to devaluation.

On the supply side, devaluation may influence private investment through its effect on the relative prices of tradables and nontradables, the price of imported capital and intermediary goods, and the financial position of firms with foreign debt. Because devaluation increases the price of

tradable goods, measured in domestic currency, relative to nontradable goods, it may alter the relative composition of private investment in the two sectors. Assuming high substitutability of traded for nontraded goods, devaluation increases private investment in the tradable sector, and decreases it in the non-tradable sector. The net effect on investment is ambiguous. Econometric studies on the impact of devaluation on output and investment reflect this uncertainty (Musalem 1989, Solimano 1989, Chhiber and Shafik 1990).

In many developing economies imported capital and intermediary goods constitute a large component of investment goods. Devaluation raises the cost of the imported component of new capital goods. This reduces investment especially in the nontradable sector where output prices tend to decline relative to the tradable sector (Branson 1986, Buffie 1986).

Devaluation may make the financial market less hospitable to private investment. Firms with foreign debt would face an increased burden of debt and a reduction in their net worth because of devaluation. Banks and financial intermediaries may react by restricting credits or raising interest rates to compensate for the increased risk of default and to reduce exposure. This reaction by lenders may also adversely affect firms that have no foreign currency liabilities. As financing becomes scarce, private investment would decline (Serven and

Solimano 1992).

To summarize, the effect of devaluation on private investment is rather complex. On the demand side, devaluation may have a contractionary or an expansionary effect depending on the time horizon chosen. On the supply side, devaluation stimulates investment in the tradable sector and depresses it in the non-tradable goods sector. The magnitude of the two conflicting tendencies may depend on the relative size of the tradable and non-tradable sectors. The higher the size of the tradable goods sector relative to the non-tradable sector, the greater the prospect that on balance investment will increase. Therefore, countries with a large export sector may benefit from devaluation. However, if these economies are highly dependent on imported capital goods and intermediate materials investment may decline. The inflationary outcome of devaluation and the financial difficulties it creates for indebted firms could have a depressing effect on private investment.

3.3 Supply Side Liberalization and Institutional Adjustment

Most of the supply side reforms are promoted by the Bank under its SALs and "sectoral adjustment loans" (SECALs) programs. The reforms are mainly directed towards eliminating inefficiencies due to price distortions, and are expected to

improve resource allocation. They are probably the key policy instruments in the drive of many developing countries to conform their economies to the principles of free enterprise capitalism. This section discusses four market oriented liberalization policies -- trade liberalization, financial reform, privatization, and institutional and legal changes -- and their effect on private investment.

3.3.1 Trade Liberalization : Devaluation and trade liberalization are the two parts of the Fund/Bank trade policy reform program. The former aims at correcting the balance of payments problems, while the latter seeks to relax/dismantle restrictive trade regimes. A country in balance of payments deficit may tend to impose import restrictions to reduce the deficit. The Bank, which promotes trade liberalization, emphasizes the indirect negative impact of import controls on the incentive to export. It argues for the elimination of quotas and the reduction of tariffs.

The leniency towards tariffs and the strictness towards quotas follows from the argument of mainstream economic theory that if the state must intervene in the economy, this can be done more efficiently by harnessing the market mechanism itself. In the case of trade, tariffs are preferred to quotas because the resulting revenue from tariffs goes to the government rather than to foreign and domestic producers; and

more importantly, unlike quotas, tariffs provide less protection to inefficient firms. The ultimate objective, however, is to eliminate all restrictions on trade. The Bank's emphasis on freer trade is reflected in the fact that four fifths of its adjustment lending involves trade policy programs (World Bank 1988, p. 34).

A liberal trade regime would equalize prices across nations, such that prices signal the true opportunity costs of goods and services. The expected result is efficient resource allocation as each country produces according to its comparative advantage. Thus private investment would tend to increase in areas in which the country has comparative advantage, while in other areas investment would decrease.

For most developing economies this may mean a decrease in economic activities in capital-intensive industries, and an increase of business in the labour-intensive sectors. The loss in investment in the capital-intensive sectors may be compensated by the flow of capital to the now more productive sector in which the countries have comparative advantage (Solimano 1992). In the context of the unequal development of capitalism this entails the specialization of many developing countries in traditional crops and commodities. SAPs do not seem to have sympathy for engineering comparative advantage through strategic trade policy (Krugman 1986), as this

involves selective government subsidies. Adjusting countries may have to abandon the possibility of using policies of direct intervention designed to create dynamic comparative advantage that may have been instrumental in the industrialization of Japan and some South-East Asian countries.

3.3.2 Financial Liberalization: The rationale for financial reform is the relationship between financial and economic development. According to the dominant view, the financial system mediates between savings and investment. It is this bridge that has not been properly built in developing countries. The main obstacle is 'financial repression', discussed in section three above. Financial liberalization seeks to create conditions conducive to the development of financial structure by removing the distortions in the credit market due to government intervention. The reform program centres on financial market deregulation, which includes the removal of interest rate ceilings, relaxing entry restrictions on financial intermediaries, and reducing required reserves of banks. These reforms are expected to improve economic performance at both the micro and macro levels. At the micro level, resource misallocation associated with administrative credit rationing comes to an end, as access to credit is now determined by the expected returns of proposed projects. In other words, investment becomes more efficient. At the macro

level, positive interest rates due to financial liberalization will increase private savings and relax the credit constraint on private investment.

The interest sensitivity of savings is an unsettled issue (Giovannini 1983). Keynesians underscore the role of income and habit in the determination of savings. Structuralists stress the distribution of income, the state of the government's recurrent budget, and the reinvestment of profits. These factors are considered relatively insensitive to interest rates. This may even be more true in poor countries. Dornbusch and Reynoso (1989), find that the interest elasticity of domestic savings in developing countries is particularly low. Furthermore, while financial liberalization may lead to increased financial savings, this may not necessarily translate into real savings, capital formation and improved economic performance.

The evidence on the effects of financial liberalization is mixed. In their study of Uruguay, De Melo and Tybout (1986) conclude that financial liberalization resulted in the outcomes predicted by the financial repression theorists. They qualify their conclusion, however by citing that, for the period of their study, GDP growth rates were above historical trend due to exogenous events, which may have accelerated investment. Another country which succeeded in increasing

rates of savings, investment and growth by adopting financial liberalization is South Korea. Nevertheless, the success of Korea is also attributed to its modest financial deregulation (Solimano 1992), which means mild financial repression. Moreover, the experience of the Korean financial sector may have been due to the transfer of financial savings from the informal sector to the formal sector.

Excessive financial liberalization may result in an overexpansion of financial intermediaries, increased volume of trade in financial assets rather than long-term capital formation. Morisset (1993) develops a model in which he tests the response of private investment to financial liberalization in Argentina. He shows that the positive effect of a rise in domestic credit due to financial liberalization is offset by a portfolio shift from capital goods to monetary assets. Furthermore, he argues that this shift in the portfolio of private agents may come about through a higher demand for bank deposits and a lower demand for government bonds. This will force the public sector to increase its demand for bank credits to finance a given budget deficit. The result is a crowding out effect without a change in the government's behaviour.

Diaz-Alejandro (1985) maintains that financial deregulation may lead to financial crashes. The reason is that high real

interest rates lead to speculative activities and not to increased capital formation. The speculative financial trade may lead to industrial enterprise failures. Furthermore, credit rationing due to administrative controls may be replaced by credit rationing due to asymmetric information, and limiting the role of the interest rate as a market clearing device. In both cases- the possibility of financial crisis and credit rationing- some form of government intervention may be required. In other words, while financial repression needs to be tackled, one must also avoid financial and economic crisis due to excessive financial liberalization. Thus the case is made for some state regulation of the financial market.

McKinnon himself, one of the leading and early proponents of financial liberalization, has recognized the dangers of premature financial liberalization. He argues (1991) that financial liberalization must come in the latter periods of adjustment programs. In particular, financial deregulation and trade liberalization must be preceded by fiscal adjustment and control of inflation. This is more than recognizing of the links between the microeconomic and macroeconomic adjustment programs. It points to the importance of phasing in adjustment programmes.

3.3.3 Privatization: In addition to macroeconomic and

microeconomic policy reforms structural adjustment involves the creation or the enhancement of a social arrangement conducive to a liberal market economy. A well-defined and enforced private property rights regime is believed to provide such an environment. Privatization, the process of transferring publicly owned enterprises into private ownership, is primarily intended for this purpose. It shifts the mix of private and public ownership structure of an economy in favour of the former.

There are two main reasons for privatization: providing funds to reduce the budget deficit, and improving economic efficiency. The fiscal impact of privatization is expected to move the economy towards a budgetary balance (Bienen and Waterbury 1989). Sales proceeds from privatization and savings from subsidization of parastatals could be used to write down government debt. However, the amount of funds that can be provided in this way may not be large.[7] The second reason, economic efficiency, seems to be the main argument for privatization.

The efficiency reason has three overlapping arguments, all dealing with the relative efficiencies and inefficiencies of

[7]If net government debt were being properly measured it would include the asset values of government enterprises. By selling the asset, net government debt could remain unchanged, unless some how the assets are worth more in private than public hands.

private and public enterprises. First, it is argued that public enterprises are technically and allocatively inefficient relative to private enterprises. This is so because of the level of employment, wage structure, and the incidents of corruption and mismanagement associated with public enterprises (Hemming and Mansoor 1988). The second argument emphasizes the distortion in resource allocation due to the policy of taxes, subsidies and tariffs required to support public enterprises. An example would be the creation of public enterprises in order to establish a national presence in an industry in which the country has no comparative advantage (Lal 1983). The third argument deals with the question of incentives. It is maintained that a well defined property rights regime creates incentives to perform efficiently. In a liberal capitalist system it is the owners of private property who reap the benefits and bear the costs of their decisions. This reward/penalty mechanism disciplines private firms and forces them to improve efficiency. Public enterprises tend to be sheltered from this test of market competition (Hank 1987, Commander 1988).

(The inefficiency of public enterprises as a rational for the policy of privatization overlooks the economic reasons for public enterprises. From welfare economics perspective public enterprises may counter the imperfections of the market economy. Instances of these include indivisibilities in

production and economies of scale, public good externalities, and linkage effects. In these cases the arguments for privatization are weak.)

There seems to be no direct effect of privatization on private investment. Selling the existing assets of publicly owned corporations to private shareholders does not create a new productive capacity. Nevertheless, there may be indirect effects. Privatization can induce the introduction of new technologies and management techniques into the production process (Solimano 1992).

A different type of impact of the privatization program on private investment could be psychological. Privatization is a strong signal to the capitalist class that the economy is moving towards a free enterprise system. In conjunction with deregulation, and other institutional and legal changes , privatization may reduce uncertainty and create a friendly environment for private capital accumulation. This effect is of a long term nature; which could be one of the reasons why there is so very little empirical evidence on the relationship between privatization and private investment in developing economies.

3.3.4 *Regulatory and Legal Changes:* The reform programs recommended by the Bretton Woods sisters seek to make

economies conform more to the requirements of a free enterprise system. Monetarist macroeconomic policies and liberalization of relative prices go a long way towards this goal. However, the opportunities for specialization and trade signalled by freely moving prices may not be acted upon unless the institutional and legal environment allows the desired responses. In other words, firms must be able to move resources from sector to sector without legal obstacles. To this end the Fund/Bank adjustment programs imply institutional and legal reforms which include defining suitable property rights structure, deregulation, and the removal of administrative restrictions on entry and exit. For obvious reasons the literature on these issues focuses on Eastern European countries. However, many developing countries have embarked on regulatory reforms to create a legal framework favourable to private economic activities.

Privatization (discussed in the previous sub-section) signals the shift from the nationalization policies of the sixties and seventies towards a property rights structure based on a more secure private property rights regime. The lifting of legal barriers to entry, and the easing of licensing requirements is expected to bring in the entry of private investors to areas previously restricted to them, and also increase the number of firms in all areas of the economy. Furthermore, these regulatory changes may encourage businesses

in the informal sector of the economy to make the transition to the formal sector and play a greater role in the economic recovery.

According to Marsden and Belot (1987) many African countries can make greater use of the potential benefits of private entrepreneurship by creating a liberal regulatory environment. In particular they argue that removal of barriers to entry would enhance private participation in the agricultural trade and urban transport. They also emphasize the importance of liberalizing investment codes to attract both indigenous and foreign firms to the mining, manufacturing and public utilities sectors.

In many developing countries the informal sector accounts for a significant share of the economy's output (UNIDO 1979). The informal sector may be identified by the following features: ease of entry, reliance on indigenous resources, family ownership, small scale operation, labour intensive, traditional technology, skills acquired outside the formal school system (Bromly 1978). Probably the most important characteristics are their being small in size and their use of traditional technology.

Informal firms can make an even greater contribution to the economy and aggregate investment if they employ intermediate

or modern technology and expand their operations to attain some economies of scale. However, this transition from the informal sector to the formal sector, or the graduation from small to medium size is impeded by a number of factors. Oyejide (1992) discusses three institutional and regulatory hindrances to such a transition in the African context: financial restrictions, minimum wage legislation, and licensing and registration formalities.

Under the conditions of financial repression and credit rationing due to administrative controls, access to credit is usually reserved for the large-sized firms. The informal small firms must become formal before they become eligible for consideration. The transition to the formal sector however, may require a high set-up cost which the informal firms may not be able or willing to incur. The implied solution is to develop financial programs aimed at supplying credit to smaller firms. Minimum wage legislation hinders the graduation of informal firms to the formal sector by increasing the cost of production. If minimum wage legislation applies only to medium and large size firms, smaller informal firms may choose to remain small to avoid the high average cost of formal sector labour. Similarly, licensing fees increase the unit costs of production and act as a barrier to entry. Registration formalities may breed excessive legalism and bureaucratic corruption that would discourage the

transition of smaller firms to the formal sector.

While such liberalization may allow local entrepreneurs to flourish, it is not clear whether the countries which have embarked on these institutional and regulatory reforms have succeeded in their objectives. For instance, we do not know if such reforms have increased the graduation of the informal firms into the formal sector, and if such a transition is indeed accompanied by an increase in private investment. Furthermore, liberalization may encourage more small, informal enterprises, or the proliferation of newly registered firms that do not exist as productive units.[8] In general, there seems to be a lacuna in the literature on the effect of institutional reforms on private investment.

3.4 Structural Adjustment and Entrepreneurship

Entrepreneurship is a pragmatic concept. It involves spontaneous and evolutionary phenomena. These features of entrepreneurship do not allow it to be predicted within the static neoclassical model. There are many definitions of the entrepreneur. The most widely used definition is that of Schumpeter (1934), who emphasizes the role of the entrepreneur as an innovator and agent of change. Schumpeter distinguishes five types of innovation: the introduction of a new product or

[8] *The Economist*, March 11-17, 1995, p.54.

qualitative improvement of an existing product, the introduction of new methods of production, the opening of new - in particular export - markets, the conquest of new sources of supply of inputs, and the creation of new types of industrial organization. While the innovator may at the same time be an inventor and risk-bearer, inventing and risk-bearing are not the characteristics of the Schumpeterian entrepreneur. An inventor is a scientist or an engineer, a risk-bearer is a capitalist who lends funds to the entrepreneur. Thus a private investor need not be an entrepreneur. The Schumpeterian definition of the entrepreneur excludes not only the financial risk takers but also business administrators and imitators of innovation. It is perhaps difficult to find many Schumpetarian entrepreneurs in less developed countries, so a different and looser definition of the entrepreneur may be required in that context.

According to Broehl (1983) the adoption of an idea from the developed world to the specific constraints and opportunities of LDCs is a special form of innovation. Kirzner (1973) stresses the role of the entrepreneur in acquiring, harnessing and using information. Leibenstein (1957, 1968) denotes the entrepreneur as someone who succeeds by avoiding the inefficiencies that other firms are prone to. He lists several functions that entrepreneurs of LDCs may perform. These are: search and discover new economic information; translate the

new information into new markets, techniques, and goods; seek and discover economic opportunity; evaluate economic opportunities; marshal the financial resource necessary for the enterprise; make time-binding arrangements; take ultimate responsibility for management; provide the motivational system within the firm; provide leadership for the work group; and be the ultimate risk-bearer. Kilby (1971) extends the role of entrepreneurs into rather day to day managerial activities. In particular, where the business is small and the subordinates are incompetent, the entrepreneurs' duty includes: purchasing inputs; marketing of the product; dealing with the public bureaucracy; management of worker, customer, and supplier relations; financial management; production management; and assembly of factories.

However defined, the entrepreneur requires certain general conditions to accomplish his/her roles. This may include the political, cultural, economic and technological milieu. The focus here is on the economic environment. Martin (1982) points out that in a laissez faire capitalist system entrepreneurs expect to have the freedom to put their ideas into practice, enjoy the consequences of their activities, and be free from undue interference in their enterprises. Schumpeter (1934) believed that the capitalist system has an inherent tendency towards bureaucratization and socialism, such that the entrepreneur is eventually stifled. However, the technological progress and the revival of the market ideology

in the last decades of the twentieth century in virtually all countries do not seem to support Schumpeter's prediction. The acceptance and application of market oriented economic policies in LDCs may lead to the emergence of local entrepreneurs.

One of the objectives of SAPs is to create an 'enabling policy and institutional environment' in which entrepreneurship flourishes, i.e., the entrepreneur loosely defined to include innovators as well as undertakers of small or big projects (World Bank 1991). The change in the policy mix of state and market in favour of the latter, the alteration of property rights regimes, coupled with macroeconomic, microeconomic, and regulatory reforms are expected to unleash Third World entrepreneurs into the economic arena. By and large the entrepreneurs are expected to rely on their own resources. However, multilateral organizations have programmes to encourage indigenous firms in LDCs. For instance, the International Finance Corporation (IFC), an arm of the World Bank dedicated to encouraging private enterprises, launched an initiative in 1986 designed to extend technical, managerial, and financial assistance to African entrepreneurs. The programme known as the African Project Development Facility has been jointly sponsored by the United Nations Development Programme and the African Development Bank. The European Economic Community has separate

but similar programmes to assist Third World small and medium sized firms. These international organizations have the faith that developing economy entrepreneurs are up to the challenge. Indeed, according to one director of IFC, African businesses should be capable of competing on the global level.[9]

The impact of the policy components of SAPs on entrepreneurs is not all that clear. While some of the reform policies tend to encourage enterprise, the effects of the other policies are complex. We may catagorize the components of SAPs into those that primarily change the domestic conditions that entrepreneurs face, and those that alter the external conditions. The former include privatization, deregulation, fiscal and monetary policies, and financial liberalization. For reasons discussed in the previous sections, privatization programmes and regulatory reforms are perhaps the most important components of SAPs with regard to encouragement of entrepreneurship. The number of licensed and registered firms has increased dramatically in adjusting countries. Indeed, Dawson (1993) for Ghana and Bagachwa (1993) for Tanzania note that the influx of new enterprises could be so high as to create a harmful effect by causing intense competition among small enterprises. As a result, the rate of disappearance of new firms is also high. Furthermore some of the newly registered firms may not be engaged in productive

[9] *African Business*, July/August 1994, p. 34.

activities. In other words, the composition of the new enterprises is perhaps more important than their aggregate appearance rates for economic progress and we have no systematic information on this.

Macroeconomic adjustment - restrictive fiscal and monetary policies - has contractionary effects in the short to medium term. Also devaluation may reinforce this tendency toward the decrease of output and the increase in unemployment. The decrease in aggregate demand decreases economic opportunities and thus may create a difficult condition for private enterprises. On the other hand, public sector retrenchment may become the source of supply of new entrepreneurs (Kessous and Lessard 1993). In Ghana 15 percent of small business enterprises surveyed are established by former civil servants (Osei *et al.* 1993). The entry of former civil servants into the private sector may have an additional positive aspect because of their education and skill levels.

Access to credit is a major determinant of the entrepreneur's ability to translate ideas into action. A responsive financial system would facilitate the expansion of entrepreneurial activities. In general, new and small enterprises are less likely to obtain credit from formal financial institutions because these enterprises have a high risk of failure. Many LDC governments have attempted to tackle

the problem of financing by establishing special credit institutions (referred to as development finance institutions or simply development banks in the literature), and by requiring commercial banks to participate in special programmes to support local enterprises. The application of this policy involved subsidized credit, sectoral credit minimums for indigenous small and medium sized firms, and differentiated sectoral credit ceilings that limited loan increases to non-priority sectors. The strategy has not succeeded in increasing credit availability to entrepreneurs (Aryeetey 1993; Oyejide 1993). On the one hand the development banks have been unable to mobilize sufficient resources to channel to local enterprises. On the other hand, the commercial banks turned down most requests for credit by insisting on collateral to reduce exposure under the conditions of financial repression. Furthermore, governments have not been able to monitor and enforce the policy of favourable lending to small and medium size enterprises. The weakness of this strategy has been a contributing factor to the search by authorities for an alternative financial policy regime.

A successful financial liberalization may increase credit availability to entrepreneurs. In some countries, such as Nigeria and Kenya, the entry of new banks into the financial market and market determined interest rates, has increased

loans to small and medium sized firms beyond what had been achieved under state directed sectoral targeting (Aryeetey 1993; Mwarnia 1993). However, the Kenyan experience was short lived because the collapse of the new financial institutions forced the government to resort to re-regulation. We may state that while financial liberalization may increase the supply of funds to the private sector of the economy, a sustainable flow of funds depends on the ability of the new financial institutions to survive the uncertainties of the market.

Devaluation, trade liberalization, and openness to foreign investment alter the external conditions entrepreneurs face. For entrepreneurs aiming at export markets devaluation may be a boon. If these firms rely however, on imported capital or raw material the advantages of devaluation will not be as attractive. Furthermore, in a liberalized trade regime they must contend with competing foreign products. In particular, late starters of the capitalist game may be at a disadvantage on the global stage. Established indigenous firms which have benefited from import substitution policies of the past may become more efficient as a result of international competition, or may become extinct in the process, and lead to the deindustrialization of the losing countries. Alternatively, success in attracting foreign direct investment may assist in the industrialization of LDCs, and also significantly alter the ownership structure of these

countries. This may restrict local entrepreneurs to the nontradable service sector and petty production.

The overall effect of SAPs on entrepreneurship is by no mean clear. On the one hand SAPs may foster the growth of indigenous capitalist class. Given the thrust of SAPs toward a deeper integration of the world economy, the success of local entrepreneurs depends on their ability to penetrate foreign markets and/or on holding onto their own domestic markets. On the other hand, SAPs may merely lead to the proliferation of petty entrepreneurs incapable of generating significant capital accumulation. While the unleashing of petty entrepreneurs may allow for a better income distribution by reducing local monopoly powers and rent-seeking activities, it may not lead to the expansion of the domestic economic pie available for division.

3.5 Structural Adjustment and Direct Foreign Investment

The economic reforms of SAPs have come at a time when 'globalization' has become the buzz word of the world business class. Dobson (1992) defines globalization as "the increasing integration of economies through trade and investment flows, and the creation of production in numerous countries through foreign direct investment in order to be internationally competitive" (p.105). The 1980's brought to light the

simultaneous phenomena of the increasing power of economic organizations (specially multinational enterprises) and the decreasing power of the nation-states (Stopford and Strange 1991). This may well mark a turning point in the hitherto rather stable balance between the 'political realm and the economic realm' of the Western industrialized world (Heilbroner 1993). International institutions abet this transformation. The Bretton Woods institutions have in effect become the facilitators of world capitalist accumulation, and in the process may have transformed themselves into 'embryonic surrogates for a world government' (Loxley 1986).

One of the expected outcomes of SAPs is the creation of a world-wide favourable condition for capital mobility. Developing countries are expected to benefit from foreign direct investment (FDI). Foreign investors are keenly interested in the consistency, predictability and history of a country's economic policies. The state of relationships with the IMF and the Bank has become the litmus test of confidence. For instance, in 1987 the American firm H. Heinz decided not to invest in Zambia because of that country's difficult relation with the IMF and the Bank at that particular time (Cockcroft and Riddell 1991). Considering the role of the IFC in encouraging and supporting private foreign investment, good relations with the Bretton Woods sisters becomes even more important.

According to the United Nations (1992) data there has been a consistent increase of FDI flow to South and South-East Asian countries during the 1980s, while no surge in FDI has materialized in other developing countries. Africa and Latin America experienced zigzags between modest increases and decreases of FDI flow during the same period. Among developing regions Africa is the weakest performer with regard to attracting FDI. The share of Africa of FDI flow to all developing regions was 11.1 percent for the 1980-85 period, declining to 9.9 percent in the 1986-90 period. According to Cockcroft and Riddell (1991), Africa accounted for 14 percent of the total developing regions stock of FDI in 1985, falling from 27 percent in 1975. It appears that FDI in Africa plays a comparatively small role in overall investment as well as in the share of total external resource flows. It is also concentrated in just a handful of countries.

In contrast the decline in FDI that Latin America has experienced during the 1980s may be coming to an end. Of particular interest is the development of a new pattern of trade and investment between Latin America, on one side, and Japan and the newly industrializing countries (NICs)of Asia, on the other (Won Chol 1993). Japan and the NICs have become important sources of FDI in the 1990s. Latin America has become an attractive destination for Asian FDI because it offers inexpensive labour, geographic proximity to the United

States market, ready local supply of raw materials, access to the region's internal market potential, and greater receptiveness to the manufacturing technologies of the NICs. In addition, the region's advanced drive toward political and economic liberalization seems to have assisted in attracting FDI.

In general though, the components of SAPs have contradictory effects on FDI. Among the policy components that adversely affect foreign investment are: trade liberalization which may reduce the FDI that seeks to produce behind protective tariffs; price liberalization which increases the cost of agricultural and energy inputs; devaluation which may discourage foreign investment in industries where imported inputs are important; and positive and increased interest rates which reduce the access of foreign investors to favourable and easy credit.

On the other hand, parts of the adjustment program may attract foreign investment; in particular, institutional and legal changes that are tailored towards attracting foreign investors. Competition among nations for the investment of multinational firms by creating favourable regulatory regimes has become the norm. Eastern European and many developing countries have introduced new investment codes and regulations or revised existing ones (UN 1992). These new or revised

liberal rules involve the removal of restrictions on foreign ownership, simplification of approval procedures, freer transfer of profits and repatriation of capital. Additional measures to attract foreign investors include provision of incentives in the form of tax exemptions, tax holidays, custom exemptions, and the participation of developing nations in international investor insurance schemes by becoming signatories of the Overseas Private Investment Corporation. Furthermore, privatization and debt-equity swap programs are expected to steer the flow of FDI to developing countries.

Another important adjustment policy area is the spread of flexible labour practices. Explicit deregulation that ends formal labour regulations and implicit deregulation, whereby remaining regulations are systematically bypassed, create the type of flexible labour market that capital relishes. According to Standing (1989) this has led to the 'feminization' of labour, i.e., the rise in young female labour force participation, coupled with the spread of the types of work, labour relations, income, and insecurity associated with "women's work". The 'feminization' of labour in LDCs is a boon for FDI, because women, for social reasons, tend to have low "aspiration wages" and low "efficiency wages"; and also because women, unlike men, are not expected to respond to lower sub-family wage rates by reducing their "effort bargain" (Standing 1989).

The number of countries involved in these pro-foreign-capital institutional and regulatory changes, and the extent to which they go in order to conform to international rules on investment is astounding. This is a total reversal of the policies of the sixties and the seventies. Then the ruling elite of the developing countries were mainly interested in creating a national bourgeois class and/or state capitalism behind regulatory walls. Since the 1980s however, the ruling classes of developing countries seem to have been convinced, or cajoled into accepting, that their interests lie in joining a globally integrated liberal capitalist order, and hence the competitive drive toward deregulation.

While the regulatory reforms may have been instrumental in increasing FDI flows to some LDCs, they may have also created a 'wait and see' attitude among foreign investors. This is partly because the adjustment programs have been endorsed world wide, and have created an unprecedented state of flux in the international economy. The continued competition among countries in terms of their investment codes and the possibilities for further devaluation and liberalization have increased the state of uncertainty and increased the value of waiting.

More important, however, is the possibility that the components of SAPs may not contain policies which directly

affect the key determinants of FDI. In particular, liberal regulatory policies such as favourable investment codes, tax incentives, and low wage regimes are neither sufficient nor even, at times, necessary conditions for the attraction of foreign investment. According to Root and Ahmed (1978) and Lutkehorst (1988) the flow of foreign investment depends on more fundamental and concrete factors. Root and Ahmed (1978) empirically investigate the relative importance of forty-four socio-economic variables that may influence foreign investment. They conclude that the decisive factors in the attraction of foreign investment are: infrastructure, per capita income, extent of urbanization, and political stability. Lutkenhorst pushes the argument further , and maintains that modern international enterprises are no more satisfied with mere traditional physical infrastructure. They seek locations with highly developed human and technological infrastructure. He highlights the importance of skilled labour, market size, the existence of industrial support networks, telecommunications and information processing facilities.

In short, the combination of large market size, advanced technological infrastructure, and good international relations and reputation may overshadow the importance of all other variables and policy reforms.

In this context, the countries of South East Asia, and Latin America may fare better than African economies, regardless of the liberality of the regulatory regimes. Furthermore, given the sweeping march of Eastern European countries towards a free enterprise system, and the rise of regional economic blocks, the competition for the necessarily limited international capital may forestall any improvement in the flow of foreign investment African countries can attract.

3.6 Concluding Remarks

The principal question this study addresses is the effect of SAPs on private investment. To answer this question we have to examine the process by which changes in the policy environment affect private investment. In other words we need to investigate the effect of SAPs on the variables that influence private investment.

The main macroeconomic variables in this regard are: GDP, government expenditure, availability of credit, inflation, and the exchange rate. The literature reviewed indicates that private investment has a positive relationship to GDP and availability of credit; a negative relationship to inflation; and an uncertain relation with regard to government expenditure and the exchange rate.

The main institutional factors that influence private investment are the regulatory environment and the structure of property rights. Both deregulation and privatization are expected to have a positive impact on private investment. Since SAPs have been undertaken in the context of the debt crisis- a crisis which is not yet resolved for the debtor nations- we will examine the effect of the debt on private investment. High debt burdens and debt service commitments are expected to have adverse effects on capital accumulation.

The effect of SAPs on these determinants of private investment is complex. Although SAPs aim to increase GDP and stabilize prices, the short run effect could be contractionary and inflationary. While privatization and deregulation may encourage private investment, their effect tends to be of long run duration. Thus the question of time horizon need to be taken into consideration.

Solimano (1992) finds a certain regularity in the cycle of private investment in countries that have implemented SAPs. This cycle has three phases. In first phase of an adjustment programme private investment declines. In the second phase of adjustment private investment reaches a plateau. In the third phase private investment begins a sustained recovery. Based on data for a few developing countries, he suggests five years as

the minimum time needed for private investment to start a sustained recovery.

However, the experience of many countries may diverge from this stylized cycle of private investment. The characteristics of some economies may not allow a sustained recovery of private investment in five or more years. In these countries alternative policies to standard SAPs may have to be sought.

We may conjecture that in low income countries, such as most of the Sub-Saharan Africa, where the national capitalist class is not mature, and where public investment can play a major role, a positive response of private investment to SAPs may require a very long time and high social cost. Consequently, SAPs and their implied laissez-faire policy may not be appropriate in these countries. Furthermore, even in middle income countries where the business class is relatively large, the interdependent nature of business decisions under the condition of the state of flux created by SAPs, may trap the economy in a low investment equilibrium. The implications of the coordination failures theory is that the government could take initiatives that would encourage private investors to exploit the opportunities afforded by the economic reforms.

In other words, too much emphasis on the benefits of the

market and the failure of the state may be counter productive. In this regard we will raise and address the following questions. What are the effects of SAPs on the level and composition of public expenditure? What is the relationship between government expenditure and private investment in African economies, and hence what is the effect of SAPs on private capital accumulation? It may be the case that for many developing countries the challenge is to formulate 'market-compatible' policies and not the uncritical acceptance of laissez-faire policies (Wing Thye Woo 1990). The Bank may be leaning towards such a view. For instance, *The World Development Report 1991* refers to the need to strike a balance between the state and the market. It eschews extreme 'market-freindly' approach and lauds the results that could be attained when markets and governments work in harness, and calls for reduced but effective intervention (p. 2). While the effectiveness of government intervention needs to be improved upon, some countries may not need to reduce the size of their governments and may, rather, require alternative policy regimes to standard SAPs.

Whether such alternatives will be developed under the tutelage of the IMF and the World Bank or generated by sovereign polities would partly depend on the degree of integration of countries involved in the world economy, and the conformity of their policies to the requirements of a

liberal capitalist order. A detailed discussion of these alternatives will be presented in the final chapter.

Chapter 4

INVESTMENT TRENDS IN AFRICA

This chapter will comment on trends in investment in Africa and on how investment has been financed. It will also look at the macroeconomic and investment performance of the four Sub-Saharan African countries which will be modeled in the next chapter.

4.1 Investment, Savings and Financing

Table 4.1 shows gross domestic investment and gross domestic savings as a percentage of GDP for Sub-Saharan African countries for the years 1972-1992, with similar data for South Asia for comparison. It is clear from the table (second column) that African investment ratios were in the low and mid twenties in the 1970s and decreased to high and mid teens in the 1980s. The average investment ratio for the years 1972-1982 is 23.6, while the average for the years 1983-1992 is 17.4. That is a significant decline. The debt crisis of the 1980s and the structural adjustment reforms that were introduced on the heel of the crisis may have played a role in the decline of investment ratios in Sub-Saharan African countries. By comparison the trend in South Asia is rather the

reverse of the African trend. In the seventies investment ratios were in the teens, but moved steadily into the twenties in the 1980s. The debt crisis and adjustment do not seem to have adversely affected the South Asian economies. In the case of East Asian countries such as Thailand and Malaysia (data not shown here) the investment ratios soar into the 30s and even 40 percentage points.[10]

The third column of table 1 shows the savings ratios for Africa. For ten of the twenty one years of the data Africa was able to cover its investment needs with local savings. For the remaining eleven years Africa relied on foreign savings to finance its investment. The years that most required foreign financing are 1975-1978 and 1981-83. By contrast South Asia always relied on foreign savings, i.e., there are no years in which domestic savings covered all of its investment needs. However, the variability among African countries is great partly because the African data involves forty three countries whereas the South Asia data is for six countries only. In other words aggregate figures mask important differences between countries. African countries such as Ethiopia, Ghana, Mali, Senegal, Sudan and Tanzania tend to have much lower domestic saving ratios relative to their investment ratios and rely heavily on foreign savings to finance their investment finance; whereas countries such as Cameroon, Congo, and Gabon

[10] World Bank (1994), World Tables, pp. 14-15.

tend to generate sufficient domestic savings to finance their investments.

Table 4.1

Gross Domestic Investment and Savings: Percentage of GDP

	Sub-Saharan Africa		South Asia	
	I	S	I	S
1972	21.4	20.7	15.8	14.4
1973	21.8	22.1	17.0	15.9
1974	22.7	24.2	17.9	15.7
1975	25.8	20.6	18.3	16.1
1976	26.7	22.5	19.6	18.2
1977	25.4	25.1	19.0	18.1
1978	23.6	21.4	20.9	18.2
1979	22.1	24.0	21.4	17.5
1980	23.9	26.8	20.5	15.1
1981	25.2	20.0	23.7	18.7
1982	21.3	16.3	22.1	17.3
1983	19.0	16.9	20.3	16.2
1984	16.4	16.7	20.3	16.3
1985	14.7	16.9	22.6	17.8
1986	17.4	17.4	23.1	18.9
1987	18.4	18.9	22.6	19.0
1988	19.1	18.2	23.9	19.7
1989	18.5	18.6	24.4	20.7
1990	17.9	19.6	24.7	20.9
1991	16.8	16.5	22.3	20.8
1992	16.1	14.7	22.0	19.1

Source: World Tables, World Bank (1994)

S = saving/GDP; I = investment/GDP

Foreign financing comes in two forms: official foreign saving, both bilateral and multilateral disbursements, and private foreign saving which includes direct investment, international commercial lending, and grants by non-governmental organizations. Table 4.2 shows the net resource flows to Sub-Saharan Africa (SSA) for the period 1982-89. The concept of net resource flows represents foreign savings that are used to finance goods and services for development after making payments of interest and dividends on earlier flows of foreign capital.

Between 1982 and 1989 total net resource flows increased by over 25 percent. The bulk of this increase came in the form of official development finance, which increased by close to eighty percent during the period , and accounted for 59.1, 77.3, and 79.7 percent of the total flows for the years 1982, 1985 and 1989 respectively. In general, private flows were very variable but showed a dramatic decline, accounting for 28, 11, and 4.1 percent of the total flow for the same three years. Direct investment accounted for 12.6,
-1.4, and 5 percent of the total flows for the three years; and international bank lending showed similar declines. The only private flow that increased during these years was grants by non-government organizations.

Table 4.2

Net Resource Flows to Sub-Saharan Africa, 1982-90

Billion U.S. Dollars

	1982	1983	1984	1985	1986	1987	1988	1989
Official Development Finance (bilateral, multilateral)	10.7	10.5	11.8	11.9	15.1	17.9	18.9	19.2
Export Credits	1.9	0.3	0.2	1.1	-	0.4	-0.5	2.0
Private Flows	4.9	2.0	-0.6	1.6	4.2	4.1	3.9	0.9
Direct Investment	2.2	0.3	-0.3	-0.2	0.6	1.2	1.0	1.1
Int'l bank lending	2.0	1.1	-1.0	0.8	2.5	1.8	1.8	-1.6
Bond lending	-	-	-	-	-	-	-0.1	-0.1
Other private	0.1	-	-	0.1	0.1	0.1	0.1	0.5
NOGs	0.6	0.6	0.7	0.9	1.0	1.0	1.1	1.0
Total Net Resource Flows	17.5	12.8	11.4	14.6	19.3	22.4	22.3	22.1

Source: OECD, 1990.

There is a paucity of data with regard to the composition of domestic savings. Nevertheless, the available data, table 4.3, may allow some commentary on the relative importance of government savings and private domestic savings in the second half of the eighties and the early nineties. It is clear from the table that government savings have been mostly negative during 1986-93, and tend to follow a downward trend. By contrast private savings are well above ten percent and follow a rather upward trend. The private sector more than covers its investment expenditure and consistently has a positive net financial balance. Overall, the improvement in private savings during the period offsets the decline in government savings. Clearly, in the second half of the eighties and early nineties domestically generated private savings has been the most important source of investment finance. The negative net financial balance of the public sector is financed by foreign savings and private domestic savings.

Table 4.3

Savings, Investment, and Net Financial Balances: Public and Private (Sub-Saharan Africa)

in percent of GDP

	1986	1987	1988	1989	1990	1991	1992	1993
Government								
Savings (excl. grants)	1.1	-0.2	-0.7	0.7	0.1	-0.4	-3.4	-2.6
Gross investment	7.2	7.0	6.6	6.1	5.9	6.3	5.9	5.5
Net Financial balance	-6.1	-7.2	-7.3	-5.4	-5.8	-6.7	-9.3	-8.1
Private Sector								
Savings	12.9	15.8	15.7	14.9	16.4	15.5	16.9	16.1
Gross investment	10.3	11.5	13.0	12.7	12.7	11.5	11.0	12.0
Net Financial Balance	2.6	4.3	2.7	2.2	3.7	4.0	5.9	4.1

Source: Hadjimichael, Ghura, Muhleisen, Nord, and Ucer, 1995

4.2 Macroeconomic Performance in Selected African Countries

In this section we will briefly discuss the adjustment policies and macroeconomic performance in four Sub-Saharan African countries. The countries are Kenya, Malawi, Zimbabwe and Mauritius. While the main reason for choosing these four countries for this study is data availability, they can also be considered representative of groups of African countries and, more generally relevant. According to World Bank (1994) classification of analytical groups for SSA countries Kenya and Malawi are low income countries, where as Mauritius and Zimbabwe are middle income countries. Kenya and Malawi are among the African countries that did not attempt the 'socialist road' of development in the 1960s and 1970s and are representative of countries that emphasized the free enterprise system. In particular, at times Kenya was seen as a success story of SSA. Mauritius has perhaps become the most successful SSA country in terms of putting its economy on a sustainable path. Zimbabwe is governed by a party that has a socialist orientation. Nevertheless it has a relatively open economy, and has maintained its links with the capitalist world and international financial institutions.

Table 4.4 presents the adjustment programmes these countries undertook under the direction of the IMF and the World Bank in the 1980s and early 1990s; and table 4.5 presents data on key macroeconomic performance indicators for

the years 1970-92 for the four countries. The data shows some variation in the adjustment programmes and macroeconomic performance of these countries.

Kenya is among the eleven SSA countries which in the 1980s undertook ten or more stabilization and structural adjustment programmes. The country entered the 1980s with many favourable economic features relative to other African countries. Kenya enjoyed high economic growth and dynamism during the first two decades of its independence. The average real GDP growth for the 1970s was a remarkable 7.3 percent. A liberal attitude toward foreign investment and government involvement in the promotion of industry, and the conversion of land from extensive use to small holder cultivation created a favourable policy environment for growth.

Table 4.4

Stabilization and structural Adjustment programmes in Sub-saharan Africa, 1980-92

	IMF Facilities					World Bank Loans				year of first programme in '80s
	SBA	SAF	ESAF	EFF	EA	SAL	ER	SECAL	Total	
Kenya	6	1	1			2		3	10	1980
Malawi	3		3	1		3		2	13	1980
Mauritius	5					8		1	14	1980
Zimbabwe	2		1	2	1		1		7	1981

Legend: SBA = Stand-By Arrangement; SAF = Structural Adjustment Facility; ESAF = Enhanced Structural Adjustment Facility; EFF = Extended Fund Facility; EA = Extended Arrangement; SAL = Structural Adjustment Loans; ER = Economic Recovery/Rehabilitation; and SECAL = Sectoral Adjustment Loans.

Source : Cornia et al (1992), and *IMF Survey* various issues.

In the 1980s the momentum of the Kenyan economy slowed down. During the 1980-83 period GDP growth was down to 3.2 per cent. This was attributed to economic mismanagement in the late 1970s, and the deterioration of the terms of trade. Stabilization and adjustment programmes were adopted in three phases, 1980, 1982, and 1987. The focus of the programmes were exchange rate flexibility, devaluation, stabilization measures, trade reforms, and liberalization of the agricultural and financial sectors.

Table 4.5

Macroeconomic indicators for selected african countries: 1970-92[a]

Country	Real GDP Growth Rate	Per Capita GNP in US dollars	Inflation Rate	Gross Domestic Savings/ GDP	Current account Balance/ GDP	Government Deficit/ GDP	Foreign Debt-GDP Ratio
MAURITIUS							
1970-79	6.5	1118	11.0	20.2	-3.1	-8.97	17.4
1980-83	1.1	1145	18.4	14.5	-8.6	-11.33	48.6
1984-88	7.9	1456	5.1	24.4	-4.3	-1.97	47.1
1989-92	5.6	2367	9.4	23.8	-3.0	-0.93	37.3
MALAWI							
1970-79	6.3	183	6.3	14.5	-14.5	-7.4	51.8
1980-83	0.4	167	13.5	13.2	-16.9	-10.43	69.9
1984-88	2.8	160	16.5	11.9	-9.2	-7.25	95.9
1989-92	2.1	150	14.9	5.9	-13.2	-8.14	85.2

Table 4.5 (continued)

Macroeconomic indicators for selected african countries: 1970-92[a]

Country	Real GDP Growth Rate	Per Capita GNP in US dollars	Inflation Rate	Gross Domestic Savings/ GDP	Current account Balance/ GDP	Government Deficit/ GDP	Foreign Debt-GDP Ratio
KENYA							
1970-79	7.3	227	10.9	20.2	-7.7	-5.05	39.3
1980-83	3.3	395	14.4	19.1	-8.0	-6.37	51.5
1984-88	5.2	334	8.2	21.1	-5.3	-5.49	65.5
1989-92	2.7	342	19.45	17.9	-7.0	-3.57	79.0
ZIMBABWE							
1970-79	4.1	472	7.3	19.5	-2.7	-5.18	8.4
1980-83	6.8	830	13.1	14.9	-9.0	-8.39	24.6
1984-88	0.8	614	12.6	22.7	-1.6	-9.35	48.4
1989-92	0.9	607	23.9	17.4	-2.4	-8.62	53.4

SOURCE: 1) IMF, Yearbook of International Financial Statistics 1995: (Washington, D.C., International Monetary Fund, 1995).
2) World Bank, World Table 1994, (Washington, D.C., World Bank 1994).

a Data for external debt to GDP ratio starts in 1972, the 1992 data for this variable is based on estimates. Data on government deficit to GDP ratio starts in 1974 for all the countries except for Zimbabwe which starts in 1976. Also the following values are missing for this variable: 1991/92 for Malawi and Zimbabwe, and 1991 value for Maruitius.

The impact of the programmes was mixed. Real GDP growth increased to 5.2 percent for the 1984-88 period, but declined to 2.7 percent in the 1989-92 period which was less than the rate of population growth of 3.3 percent for the same period. The inflation rate fell from more than 20 percent in 1982 to 13 percent in 1985. By 1987 it was down to 3.9, but the average for 1989-91 period was 19.5 percent , reaching just under 30 percent in 1992, i.e., ten points more than what it was in early eighties. In 1984 the fiscal deficit was reduced to 4.5 percent of GDP from 10 percent in 1981. This was achieved mainly through cuts in capital expenditure. For the 1989-92 period the fiscal deficit was down to 3.5 percent of GDP. The current account deficit declined from 14 percent of GDP in 1980 to 3.7 in 1985, but increased to 8 percent in 1987 due to sharp drops in coffee and tea prices. For the period 1989-92 the current account deficit was reduced slightly to 7 per cent of GDP. Thus while the external and internal balances have tended to improve, the decline in the growth of real GDP and the inflationary problem show the continued malaise of the Kenyan economy.

Malawi enjoyed a strong economic growth of 6.3 per cent per annum in the 1970s. This came to an end in the early 1980s due to drought and declines in the terms of trade. The average GDP growth for the period 1980-83 was merely 0.4 per cent. Malawi adopted a total of thirteen IMF/Bank programmes in the 1980s,

with the standard objectives of encouraging exports, reductions in internal and external deficits, and improving the economic environment for the private sector. Growth in real GDP over the 1984-88 period was 2.8 per cent, and for the 1989-92 period 2.1 per cent. While the average population growth rates for these periods were 3.4 and 3.3 per cent respectively, so that income per head declined. Inflation was 6.3 in 1970 and more than doubled to 13.5 in the mid eighties, and it was over 16 per cent in the late eighties and early nineties.

Malawi tended to have the largest current account deficit of the four countries we are considering, the lowest current account deficit for the country being 9.2 per cent during the 1984-88 period. The fiscal deficit was 10.4 per cent of GDP in the early eighties and declined to 7.2 per cent of GDP over the 1984-88 period, and further fell to 2.1 per cent in the 1989-92 period. Thus the main policy objective that was met was the reduction in the budget deficit. The other macroeconomic indicators either remained rather unchanged or worsened.

Zimbabwe became independent in 1980 and is among those countries that adopted fewer than the average of seven Fund/Bank adjustment programmes in the 1980s. As shown in Table 5 it has had a total of only seven programmes, three of

which were taken in 1992. Its economic policies therefore, have been relatively independent of the rigours of an externally imposed structural adjustment.

The country experienced a short lived economic boom in the first two years of independence. Real GDP growth averaged 4.1 per cent in the 1970s, and increased to over 10 per cent in the early independent years of the eighties, but plummeted to 0.8 and 0.9 per cent over the 1984-88 and 1989-92 periods respectively. Meanwhile, in those latter periods, population growth rate averaged 3.4 per cent per annum, such that per capita income continued to decline. Zimbabwe turned to the IMF in 1982 to correct its external balance which increased sharply from 2.5 per cent of GDP in 1979 to 11.5 per cent in 1981. The conditionalities included a ceiling on domestic credit expansion and a reduction of subsidies. The programme was however suspended in 1984 due to a higher than prescribed budget deficit, which increased from 6 per cent of GDP in 1983 to 10 per cent in 1984.

Nevertheless, despite the suspension of the IMF programme the government, on its own initiative, made use of orthodox stabilization instruments and structural reforms throughout the eighties. The policy reforms however do not seem to have brought improvements in the functioning of the economy. In the period 1989-92 growth rates remained very low, per capita

income fell, and the budget deficit as a percentage of GDP rose from 5 per cent in the 1980-83 period to 8.6 per cent. Inflation rose from 13.1 per cent in the early 1980s to 23.9 for the 1989-92 period. The current account deficit did, however, decrease to 7.4 per cent of GDP in 1989-92 from 9 per cent over the 1980-83 period. Thus, since the eighties, only the current account has shown some improvement.

Mauritius implemented a stabilization programme relatively early, in 1979. In the 1980s it undertook 14 Fund/Bank programmes which was the second highest number of programmes among the SSA countries. The programmes involved orthodox policy packages of devaluation, liberalization of trade, restrictive domestic credit, and measures to improve resource allocation.

In the initial years of adjustment (1980-83) real GDP growth declined sharply to 1.1 per cent from an average of 6.5 per cent in the seventies. The economy rebounded in the mid eighties and grew by 7.9 per cent over the period of 1984-88, and by a still repectable 5.6 per cent in the 1989-92 period. At the same time population growth rate tended to show a declining trend, averaging 1.3 per cent for the whole period, so that per capita income increased significantly. The budget deficit made a steady and remarkable improvement declining from 11.33 per cent in 1980-83 to 0.93 over the 1989-92

period. The current account deficit showed a similar downward trend declining from 8.6 per cent in 1980-83 to 3 per cent in 1989-92 periods. Inflation declined from 18.4 per cent in 1980-83 to 5.1 per cent in 1984-88, before it increased to 9.4 per cent over the 1989-92 period. In appears that in Mauritius the effect of adjustment was to worsen the macro indicators in the initial years of the eighties, but to considerably improve them in the mid eighties and early nineties.

4.3 Trends in Private and Public Investment in Africa

In this section we will discuss briefly the preliminary evidence on private and public investment in the four SSA countries. Table 3.6 shows the data on these variables for the period 1970-1991. A common pattern among these countries is that private investment as
a percentage of GDP was lower in the eighties than it was in the
seventies. In Kenya there was a weak but steadily declining trend of the rate of private investment throughout the period under consideration, starting from a relatively high base. In the other three countries the percentage of private investment rebounded significantly in the late eighties and early nineties, but did not reach the rate of the seventies except in Mauritius which surpassed it. Mauritius has enjoyed a higher rate of private investment than the others even in the

early 1980s when it experienced its lowest rate. Meanwhile Zimbabwe and Malawi also had their lowest rates in the mid eighties. This may have been the result of the timing of adjustment programmes, given the supposed tendency for adjustment programmes to dampen investment during the initial years before a rebound occurs. However, the trend in Kenya does not fit this stylized fact.

Table 4.6

Private and Public Investment as a Percentage of GDP for Selected African Countries, 1970-1991

	Kenya		Malawi	
	private	public	private	public
1970	13.7	6.0	7.5	12.7
1971	14.0	8.7	7.5	10.4
1972	13.6	8.5	9.6	12.7
1973	11.4	9.4	7.8	12.6
1974	10.5	8.7	7.3	11.6
1975	11.7	8.5	7.8	17.1
1976	11.6	8.4	8.5	13.6
1977	12.1	8.9	9.4	12.8
1978	15.6	9.5	12.3	18.6
1979	12.8	10.9	7.5	19.3
1980	12.9	10.7	4.7	17.5
1981	13.4	10.7	4.9	10.2
1982	10.6	8.7	6.1	8.4
1983	11.6	7.2	5.4	8.3
1984	10.7	7.7	3.3	9.8
1985	10.9	7.0	5.0	8.3
1986	11.6	8.1	2.0	10.0
1987	12.5	7.1	5.0	7.8
1988	11.8	8.3	6.8	7.8
1989	11.1	8.0	8.6	7.3
1990	10.8	9.6	7.9	8.3
1991	10.4	8.4	8.5	8.3
1970-79	12.7	8.7	8.5	14.1
1980-83	12.1	9.3	5.3	11.1
1984-88	11.5	7.6	4.4	8.7
1989-92	10.8	8.7	8.3	8.0

Table 4.6 (continued)

Private and Public Investment as a percentage of GDP for Selected African Countries, 1970-1991

	Zimbabwe		Mauritius	
	private	public	private	public
1970	9.6	6.5	8.9	4.9
1971	11.2	6.6	11.4	4.5
1972	11.4	6.7	11.4	4.6
1973	13.4	7.9	20.4	5.5
1974	14.2	8.4	17.4	5.9
1975	13.7	9.7	24.9	8.4
1976	11.2	8.6	20.3	8.1
1977	10.1	7.1	18.9	8.8
1978	8.4	6.1	18.3	10.0
1979	9.2	4.8	17.7	8.0
1980	10.6	4.7	14.9	8.4
1981	13.4	5.4	13.5	8.5
1982	10.1	10.0	11.5	6.4
1983	8.4	11.6	11.6	6.4
1984	8.7	9.8	12.3	5.7
1985	6.4	9.2	12.6	6.0
1986	8.5	7.2	12.8	7.0
1987	9.9	8.2	14.3	7.3
1988	7.0	11.5	16.6	12.2
1989	9.3	8.9	19.5	7.1
1990	10.7	10.3	20.0	11.6
1991	12.0	10.0	19.4	9.7
1970-79	11.2	7.2	17.0	6.9
1980-83	10.6	7.9	12.9	7.4
1984-88	8.1	9.2	13.7	7.6
1989-91	10.7	9.7	19.6	9.5

Source: Pfeffermann and Madrassy 1992; and Oshikoya 1992.

The ratio of public investment to GDP shows an increasing trend in Mauritius and Zimbabwe, but a declining trend in Malawi. This may reflect the fact that the latter had a high ratio in the seventies to start with while the former had a low ratio in the seventies. The pattern in Kenya is less clear and more variable than the other countries.

The other pattern that may be gleaned from the data is that, except for Malawi, in the sample countries the share of private investment in GDP tends to be greater than that of public investment. This may reflect the differences among these countries in real income per capita. Mauritius, with the highest income per capita, has had a consistently high rates of private investment, while Malawi with, the lowest per capita income, has tended to have high rates of public investment.

In the next chapter we will systematically examine the relationship between private and public investment, and the relationship between private investment and other macroeconomic variables in the context of stabilization and structural adjustment.

Chapter 5

A MODEL OF PRIVATE INVESTMENT FOR ADJUSTING AFRICAN ECONOMIES

In this chapter we will describe and empirically test an investment model that attempts to reflect the conditions of adjusting African countries. Our discussion will draw on the theoretical literature review of chapter 1 and the discussion of the implications of structural adjustment programmes (SAPs) for private investment of chapter 2. The framework we propose to use is an eclectic version of the flexible accelerator model and an adaptation of Blejer and Khan (1984). The chapter departs from Blejer and Khan in two ways. Firstly, we employ the model to account for the variables that have been altered by SAPs and are also likely to affect private investment. Secondly, we apply the model to African countries for which relevant data is available. The chapter has two main sections. The first section is a presentation of the formal model, and the second section uses the model to empirically investigate the effects of SAPs on private investment in Africa.

5.1 The Model

In the long-run formulation of the accelerator model, the

private sector's desired capital stock can be assumed to be proportional to expected total output at any time, t,

$$KP_t^* = \alpha(Y_t^e) \qquad (1)$$

where KP^* is the desired capital stock of the private sector, Y^e is the corresponding expected level of total output[11], and $\alpha>0$ and constant. This formulation assumes that the underlying production function has fixed proportions among factor inputs, such that factor prices do not enter into the model. As discussed in chapter 1, data problems preclude the use of sophisticated production function models for African economies. Thus we work with a restrictive model that does not admit factor substitution.

To obtain a model for private investment, we start by specifying a partial adjustment function for private gross investment as follows:

$$\Delta IP_t = \beta(IP_t^* - IP_{t-1}) \qquad (2)$$

where β is the coefficient of adjustment, $0<\beta<1$; and IP^* is the desired level of gross private investment in the steady state. IP^* is related to the desired stock of private capital

[11] Strictly speaking the output variable should be the expected private sector output (Tun Wai and Wong, 1982). However, for simplicity we assume that private sector output is proportional to total output and use total output throughout.

as follows:

$$IP_t^* = KP_t^* - KP_{t-1} + \delta KP_{t-1}$$

or as $$IP_t^* = [1-(1-\delta)L]KP_t^* \quad (3)$$

where δ is the rate of depreciation, and L is the lag operator, $LKP_t = KP_{t-1}$.

In order to allow private investment to vary with underlying economic conditions, and thus make the model consistent with the flexible accelerator framework, we will assume that the response of private investment to the gap between desired and actual investment, as measured by the coefficient β, varies systematically with economic factors that influence the ability of private investors to achieve the desired level of investment (Coen, 1971). Our aim is to address the question as to what factors influence the response of private investment to that gap.

As the focus of this study is on the impact SAPs on private investment, we wish to consider factors that have been brought into focus by the economic conditions created by SAPs, and which would affect the coefficient of adjustment β. Our main hypothesis is that the response of private investment depends on the following seven factors. These are the availability of credit (CR), government investment (GI), the real exchange

rate (RER), macroeconomic stability, given by inflation (INF), the availability of foreign exchange (IMY), the debt burden (DBT), and institutional changes involving privatization and deregulation (Z). Note that the crowding out effect is captured through its effect on the speed of adjustment rather than through directly changing the desired level of private investment.[12]

In chapter 2, we discussed at length the determinants of private investment from a theoretical point of view; and in chapter 3, we investigated the implications of the variables that have been altered by SAPs for private investment. On the basis of those discussions we postulate a number of hypotheses with regard to private investment and the seven variables listed above. We focus on the variables that are related to macroeconomic adjustment.

In developing countries bank credit is more important than retained earnings and equity as a source of investment financing. Through credit/monetary policy, the government can affect the speed and ability of private investors to respond to achieve their desired levels of investment. We hypothesize that changes in the volume of bank credit would have a direct impact on private investment (Fry, 1980).

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[12]The latter method yields an estimation equation similar to the equation obtained by the method followed here. See footnote 14.

The impact of government investment on private investment is ambiguous. Public investment can crowd private investment in or out, depending on whether it involves projects complementary to or substitutive for private investment. The overall effect of government investment on private investment depends on the relative size of these various effects (Tun Wai and Wong, 1982; Blejer and Khan 1984; Serven and Solimano 1992).

Devaluation is another key component of macroeconomic adjustment. The level of real exchange rate affects private investment through various channels which operate in opposite directions. It affects private investment negatively through the cost of imports of capital goods and positively through its impact on exports. Therefore, it plays an ambiguous role and its overall effect on private investment depends on the relative strength of these contradictory effects (Khan and Knight 1985, Buffie 1986, and Serven and Solimano 1992).

Macroeconomic instability can be expected to adversely affect private investment. One of the indicators of this instability is high and unpredictable inflation rates. Inflation may distort the information content of market signals and increase the uncertainty associated with investment. Also inflation increases the riskiness of longer-

term investment projects. We expect a higher inflation rate to have a negative effect on private investment (Greene and Villanueva 1991).

One of the factors that may constrain private investment is the limited availability of foreign exchange which is necessary to procure capital goods and intermediate imports. Restrictive import rationing would constrain the supply of such funds for investment (Hemphill 1980, Moran 1989, Matin and Wasow 1992). Liberalization of trade and less restrictive import licensing, as prescribed in adjustment programmes, may facilitate access to foreign exchange and enhance capital goods imports. We postulate that increased availability of foreign exchange would have a positive impact on private investment.

A high foreign debt to GDP ratio constitutes a measure of anticipated taxation, external liquidity problems, and the macroeconomic uncertainty associated with servicing the external debt. In addition, in a debt crisis situation markets discount the value of existing claims, leading to the discounting of the value of new creditor claims and thus restraining profitable investment projects. Consequently, it is hypothesized that the presence of a large external debt burden would discourage private investment (Borensztein 1989; Doodley 1989; Mirakhor and Montiel 1987).

In chapter 3 we discussed briefly the effects of institutional changes on private investment. It was suggested that privatization and deregulation would create a conducive environment for private economic activities. However, because of paucity of data, institutional changes do not lend themselves easily to econometric tests. Furthermore, these institutional reforms imply fundamental structural changes in the political economy of adjusting countries. For these reasons we will devote a separate chapter[13] to investigating the implications of privatization and deregulation for adjusting African economies.

On the basis of the above propositions, we express β, the coefficient of adjustment as a function of these factors. Using equation (2) a linear representation of this relationship would be

$$\beta_t = b_0 + \frac{1}{(IP_t^* - IP_{t-1})}(b_1\Delta CR_t + b_2GI_t + b_3RER_t + b_4INF_t + b_5IMY_t + b_6DBT_t + b_7Z) \quad (4)$$

Equation (4) indicates that the response of private investment to the size of the discrepancy between desired and actual investment depends on the magnitude of these seven

[13] Chapter 6, "Douglass North's Theory of Institutions: Applications to Institutional Adjustment in Africa."

factors. The signs of the parameters are expected to be:

$$b_1>0,\ b_2 \gtrless 0,\ b_3 \gtrless 0,\ b_4<0,\ b_5>0,\ b_6<0,\ b_7>0$$

Substituting equation (4) into equation (2) yields

$$\Delta IP_t = b_0(IP_t^*-IP_{t-1}) + b_1\Delta CR_t + b_2GI_t + b_3RER_t + b_4INF_t + b_5IMY_t + b_6DBT_t + b_7Z \quad (5)$$

From equation (3) and (1) we have

$$IP_t^* = [1-(1-\delta)L]KP_t^* = [1-(1-\delta)L]\alpha Y_t^e \quad (6)$$

We can now obtain a dynamic reduced-form equation for gross private investment that involves the adjustment programme instruments as the explanatory variables.

$$IP_t = b_0\alpha[1-(1-\delta)L]Y_t^e + b_1\Delta CR_t + b_2GI_t + b_3RER_t + b_4INF_t + b_5IMY_t + b_6DBT_t + b_7Z + (1-b_0)IP_{t-1} \quad (7)^{14}$$

---

[14] Capturing crowding out through the variability of β is one way of arriving at the expression given by equation (7). Another method is to specify desired private investment as a function of expected output, change in credit, government investment, and the other independent variables, as follows:

$$IP_t^* = \alpha[1-(1-\delta)L]Y_t^e + h_1\Delta CR_t + h_2GI_t + h_3RER_t + h_4INF_t + h_5IMY_t + h_6DBT_t + h_7Z$$

Substituting this equation into equation (2) and solving for IP_t, yields

5.2 Empirical Analysis

This section uses various specifications of equation (7) to empirically investigate the extent to which the factors that affect private investment explain the observed performance of private investment in the selected SSA countries, and examines the extent to which this performance can be explained by the external environment and the economic policies these countries adopted since the advent of structural adjustment in the early 1980s. The general form of the equation to be estimated is as follows,

$$IP = f[GY, LGI, \Delta CR, RER, INF, IMY, LDSR, LDOH, IP_{t-1}]$$

where

IP = ratio of private investment to GDP

GY = growth rate of real GDP

LGI = the lagged ratio of public investment to GDP

ΔCR = change in credit to the private sector

INF = percentage change in consumer price index

RER = index of real exchange rate

DSR = the lagged ratio of external debt service payments

$$IP_t = \beta\alpha[1-(1-\delta)L]Y_t^e + \beta h_1 \Delta CR_t + \beta h_2 GI_t + \beta h_3 RER_t + \beta h_4 INF_t + \beta h_5 IMY_t + \beta h_6 DBT_t + \beta h_7 Z + (1-\beta) IP_{t-1}$$

which is a reduced form equation similar to equation (7). See Blejer and Khan (1984), pp. 389-390.

to exports of goods and services

LDOH = the ratio of external debt to GDP (debt overhang)

IMY = the level of merchandise and service imports as a ratio of GDP, a proxy for availability of foreign exchange

The discussions in the preceding section and in chapters 1 and 2 suggest the following postulate. Growth rate of output, the availability of credit to the private sector, and the availability of foreign exchange would have a positive effect on private investment, while inflation, debt service ratio, and the debt burden would have a negative effect on private investment. The effects of public investment and the real exchange rate are, on an 'a priori' basis, ambiguous.

However, recall that it was argued in the previous chapters that infrastructural public investment has a crowding in effect. Due to lack of data on the components of public investment, proxies are used for infrastructural investment and noninfrastructural investment. Following Blejer and Khan (1984) the proxy for long term infrastructural investment may be calculated in two ways. The first approach is to distinguish between types of public investment on the basis of whether the investment is expected or not. Expected public investment is generated by the following first-order autoregressive process

$$EGI = \rho_0 + \rho_1 GI_{t-1}$$

where ρ_0 and ρ_1 are autoregressive parameters estimated for each country. The fitted values (EGI) proxy the long-term component of public investment or infrastructural investment that would have a crowding in effect, and the residuals (RGI) proxy noninfrastructural investment. However, in a rational expectations framework, if there is a high degree of substitutability , the effect of expected public investment on private investment could be negative. Thus an alternative approach to representing infrastructural investment will be tried.

The alternative approach seeks to represent infrastructural investment by the trend of public investment, while deviations of public investment from the trend are considered noninfrastructural investment. The trend of public investment is calculated as

$$TGI = GI_o e^{gt}$$

where GI_o is the initial value of public sector investment, g is the average growth rate of GI, and t is a linear time trend. The deviation from trend is calculated as DVGI = GI-TGI . In order to take into account the structural break that

has taken place in the early eighties, separate TGI values were calculated for two periods, i.e., for the period 1970-1982 and for the period 1982-1991 for each of the four countries in this study. Thus the regression analysis uses three different representations of pubic investment, i.e., GI, EGI and RGI, and TGI and DVGI. These are used in three separate equations.

Following Edwards (1991, pp. 89-100) the real exchange rate index is calculated as, RER=(E x WPI)/CPI , where E is the nominal exchange rate with respect to the U.S. dollar, WPI is the wholesale price index of the U.S., and CPI is the African country's domestic consumer price index.

The equations are estimated by the method of ordinary least square (OLS) for each of the four countries separately, as well as using pooled cross-section time series approach which would increase the degrees of freedom[15]. The use of pooled time-series and cross country data raises some econometric issues. These include country heterogeneity, and if the time period considered for each country is long enough the issue of serial correlation needs to be considered. In addition, when many explanatory variables are used in a multiple regression framework, the issue of multicollinearity must be addressed.

[15]F-statistics calculations indicate that the data may be pooled.

Collinearity will be addressed in this study by considering the correlation between two variables. A large correlation coefficient between two variables indicates that they both contain the same information and they are not included together in the same regression equation. This has been the case with the debt service ratio and debt as a percentage of GDP. The issue of heterogeneity will be addressed by including country specific dummy variables in the pooled procedure, which will account for a different intercept for each country.

To test whether autocorrelation is present in the error terms the Durbin-Watson test is usually conducted. When applied to the equations of this study the tests show that there is no statistically significant evidence of autocorrelation. However, there are two problems with this conclusion. First, the Durbin Watson test is meant for time series data thus making its application to pooled data inappropriate. Second, in models where a lagged dependent variable appears as an independent variable the Durbin Watson *d* statistic is at best suggestive. The appropriate test statistic is Durbin *h*. This test statistic was conducted for the single country equations. However, Durbin *h* was not applicable because N[var(v)], where N is sample size and var(v) is the variance of the estimated coefficient PI_{t-1} exceeded unity, there by raising the problem of a square root of a negative number for which there is no solution.

Moreover, this test is meant for large samples and its application in small samples, such as the single country regressions of this study, may not be justified. One way of addressing the problem of lagged dependent variable is to employ autocorrelation models. This was attempted for the single country regressions. However, the equations were not executed due to matrix conversion problems or the Durbin h was not calculated for similar reasons mentioned earlier.

As a last resort, equations were run without using the lagged dependent variable. The object was to ascertain whether or not serial correlation was a problem with the balance of the variables. In none of the twelve equations for the individual countries was serial correlation present. Thus, we proceed with the OLS even though the possibilities of serial correlation are not firmly rejected.

The estimation of a macroeconomic reduced form equation such as the one in this study presents the problem that some of the explanatory variables may be endogenous. For instance, variables like GDP are simultaneously determined with investment. Researchers tend to use the two stage least square approach or instrumental variables to correct for simultaneity bias. In this study the problem of simultaneous determination of private investment and other variables is addressed by replacing the contemporaneous values of each of the

potentially endogenous explanatory variables with their own lagged values.

To avoid spurious correlation, the investment rate is used, i.e., share of investments in GDP instead of investment levels. (The division of most of the variables by GDP may raises the concern of multicollinearity. This was checked by looking at the correlation coefficients of the variables and no severe multicollinearity was detected.) Finally, a dummy variable will be introduced into the regression equations that takes a value of one after 1982 to capture a possible shift in the equation as a result of the changes in external financing and the introduction of adjustment programmes after the debt crisis.

The four African countries in the sample are Kenya, Malawi, Mauritius, and Zimbabwe. The annual data used covers the period 1970-1991; hence the sample consists of 88 observations. The choice of countries and time period is dictated by the availability of data for private investment and other key variables. The main sources of data are the following: (1) Data on private investment rates and public investment rates are obtained from G. Pfeffermann and A. Madrassy, "Trends in Private Investment in Developing Countries" IFC Discussion Paper, No. 16 (World Bank, Washington D.C., 1992); and T. Oshikoya, "Macroeconomic

Adjustment, Uncertainty and Domestic Private Investment in Selected African Countries" African Development Bank, Research Paper, No. 16 (African Development Bank, Abidjan, 1992). (2) Data on debt service and debt to GDP ratios are from World Bank, *World Tables* (Washington, D.C., 1994). (3) Data on real GDP growth rates, Inflation, credit to the private sector, nominal exchange rate, consumer price index, whole sale price index, and value of imports are form International Monetary Fund, *International Financial Statistics* (Washington, D.C.: IMF, 1994).

5.3 Estimation Results

The reported results below are based on three linear specifications with some lagged variables and using different proxies for infrastructural investment[16]. The first equation is specified with lagged public investment, in the second equation infrastructural and noninfrastructural public investment are proxied by EGI and RGI, and in the third equation the two components of public investment are proxied by TGI and DVGI. Furthermore, the equations are estimated for

[16] Various forms of the equation - linear, lagged, and logarithmic specifications - were tried. The linear form with some lagged variables is reported here because there are no theoretical reasons to prefer the logarithmic specifications.

three different subsets of the four countries. Table 5.1 reports the results of estimations based on a pooled data of all four countries, table 5.2 is based on estimations of pooled data for Mauritius and Zimbabwe which are considered middle income countries, table 5.3 reports a similar estimation for Kenya and Malawi which are low income countries. Tables 5.4 through table 5.7 present results of individual country regressions for the four nations.

While the results of the estimation based on a pooled data for all four countries and the pooled regression for the middle income countries tend to support the hypotheses postulated in this study, the pooled estimates for the low income countries and the individual country regressions are less supportive. Also the coefficients of the all- country pooled regressions tend to be more statistically significant than those for the other regressions.

The report in Table 5.1 confirms the claim that GDP growth rate have a positive impact on private investment, but the statistic is not significant at the conventional levels. For the middle income countries, table 5.2, the coefficient of the lagged value of GDP growth rate (LGY) is significantly different from zero at the 5% level in each of the three regressions. The regression on the low income countries, table

5.3, shows negative coefficients for LGY though they are not statistically significant. The individual country regressions also show mixed results in terms of the effect of LGY on private investment. The regressions for Zimbabwe, table 5.5, and Kenya, table 5.6, have the expected positive coefficients. The former is significant at the 5% level, while the latter is statistically insignificant. The regressions on Mauritius and Malawi have negative coefficients, but both are insignificant at the conventional levels.

The impact of lagged aggregate public investment (LGI) on private investment displays similar mixed results. In the all-country regression the coefficient on LGI is negative and significant at the 10 per cent level. This may lend support to the crowding out argument. However, the results of the separate pooled and individual country regressions do not concur with the results of table 5.1. While the estimate for the middle income countries show a positive but insignificant impact of LGI on private investment, the estimate for low income countries exhibits a negative but insignificant relationship between the two variables. The individual country estimates show similar patterns, with regressions on Zimbabwe and Mauritius producing positive but insignificant estimates, while the individual regressions on Kenya and Malawi produce negative but insignificant coefficients.

The estimates for equation (2), where the distinction is made between the expected (EGI) and unexpected (RGI) components of public investment to proxy infrastructural and noninfrastructural public investment, tend to have unexpected signs on EGI. But the results depend on the countries that are included in the regression equation. In the all-country regression the coefficient of EGI is negative and significant at the 5% level. The sign on EGI for the middle income countries (table 5.2) is positive, while that for the low income countries (table 5.3) is negative, but in both cases the t-ratios indicate insignificant statistics. In the individual country regressions the coefficients of EGI are negative for all the countries except for Mauritius, but in all cases the estimates are not significantly different from zero. The negative signs on infrastructural investment are unexpected. However, as noted earlier, people's beliefs about whether a public investment is a complement or a substitute may affect their responses. These expectations may depend on the existing rate of public investment. In countries where the ratio of public investment to total investment is high, investors may think of any additional public investment as a substitute. Among the four countries in this study Kenya and Malawi tend to have a high ratio of public investment (see table 4.6 of the previous chapter). Furthermore the two countries are among the African countries with the highest number of public enterprises (see table 6.1 of the following

chapter). By contrast Mauritius, the only country for which the coefficient on EGI is positive, has the lowest ratio of public investment. The effect of the unexpected or surprise component of public investment (RGI) on private investment is assumed to be uncertain, and the results in the tables show this ambiguity.

In equation (3) infrastructural investment is proxied by the trend value of public investment (TGI). The coefficient on TGI is positive in six of the seven tables, but none of the t-ratios of these estimates are significantly different from zero. Furthermore, the coefficient on TGI in the pooled regression for the four countries is negative and significant at the 10% level. Thus the crowding in effect of infrastructural investment is not supported by the empirical evidence.

With regard to the effect of credit availability on private investment we can observe that the change in bank credit to the private sector, ΔCR , has a positive effect in all three regression equations of the seven tables, except in the case of Mauritius which shows a negative effect. However, the estimated coefficients are statistically insignificant, except in the case of all-country pooled regression which shows a significant coefficient at the 10% level.

The empirical evidence on the effect of inflation rates on private investment in the pooled regressions is negative as postulated, but the coefficients are statistically insignificant. In the individual country regressions the coefficient on inflation is positive and insignificant for Zimbabwe and Mauritius, and negative and insignificant for Malawi and Kenya.

The coefficient of the real exchange rate is negative and insignificant in all the reported regressions, except in the third equation of the all-country pooled regression where it is negative and significant at the 10% level. The negative sign on this variable may indicate that in the countries of this study the negative impact of devaluation on private investment through its adverse effect on the cost of imported capital may have outweighed the positive impact of devaluation via its impact on exports.

The effect of foreign exchange availability on private investment is proxied by the value of imports of goods and services as a percentage of GDP and a positive sign is expected. Again the results differ across countries. While the pooled regressions for all-country and middle income countries have positive coefficients, the regression on low income countries shows a negative sign. The individual country coefficients are positive for Zimbabwe and Kenya, and negative

for Mauritius and Malawi. In all cases the statistic is insignificant.

The effect of foreign debt on private investment could be captured by the coefficient on debt to GDP ratio or debt to export ratio. Both were tried, and the tables report the results of using the lagged value of the latter (LDSR). In all the cases except for Zimbabwe the coefficient on LDSR is negative as expected. However the results are not significantly different from zero except in the case of Mauritius where the coefficient is significant at the 10% level.

Finally the coefficient on the dummy variable that was introduced to take into account the possible shifts in the regression equations after 1982 as a result of the introduction of structural adjustment policies shows a negative sign. This coefficient is significant at the 10% level in all the cases, and hence may be considered the strongest result of the empirical investigation. It indicates that for the period under consideration, structural adjustment has *not* succeeded in its objective of increasing private investment and instead may have adversely affected private investment in the four countries of this study.

5.4 Conclusion

This chapter investigated econometrically the determinants of private investment in selected African countries in the context of SAPs. Overall, the specifications presented here have low to somewhat high explanatory powers. In the pooled regressions the analysis accounted for up to 80 per cent of the observed variations in the ratio of private investment to GDP as measured by R^2. In the single country regressions it accounted for about 30 to 60 per cent of the variations.

In general, the empirical results lend a weak support to most of the hypotheses we started with. In some cases the results indicate unexpected signs. Still, the regression coefficients with regard to growth rate of GDP, infrastructure public investment as proxied by TGI, credit availability to the private sector, inflation, and foreign debt burden tend to have the expected signs, notwithstanding that these coefficients are usually statistically insignificant at the conventional levels. Note though that several of the t-ratios are significant at the 20% level. The sign on infrastructural public investment as represented by EGI is not as expected. The sign on IMY, a proxy for foreign exchange availability, varies across the reported tables and no conclusive tendency could be discerned. As for real exchange rate the study shows that it has a negative impact on private investment. Finally

the dummy variable that was introduced to take into account the structural break due to adjustment programmes consistently indicates that SAPs may have adversely affected private investment.

Given the fragile to moderate statistical results, these findings should be considered suggestive, rather than as strong evidence for rejecting or accepting the various hypotheses discussed in this study. We must also note that the study is limited because it uses aggregate data, covers limited countries, focuses on macroeconomic variables and leaves out a number of sectoral and institutional reforms. Perhaps the weakness of the statistical results may have been due to the structural and institutional characteristics of Sub-Saharan African economies. Furthermore, institutional adjustment, which is a typical element of SAPs, may have created a heightened state of flux in the basic building blocks of the economy such that the other components of SAPs became relatively ineffectual. In short, the findings are reflective of the poor relationship between policy reforms and the revival of investment, suggesting that explanations for this dilemma might lie elsewhere. In the next chapter we will discuss the relationship between adjustment in the institutional realm and private investment using Douglass North's theory of institutions.

Table 5.1 Estimation Results, Pooled - All four countries
(Dependent variable: private investment/GDP ratio)

Variable	Equation (1)	(2)	(3)
LGY	0.077 (1.47)	0.087 (1.64)	0.099 (1.94)
LGI	-0.210 (-1.95)	---	---
EGI	---	-0.355 (-2.16)	---
RGI	---	-0.138 (-0.94)	---
TGI	---	---	-0.268 (-1.98)
DVGI	---	---	-0.125 (-0.64)
ΔCR	0.0004 (1.64)	0.0005 (1.69)	0.0005 (1.75)
INF	-0.016 (-0.47)	-0.025 (-0.70)	-0.029 (-0.82)
RER	-0.482 (-1.53)	-0.509 (-1.59)	-0.593 (-1.82)
IMY	0.056 (1.25)	0.071 (1.48)	0.066 (1.38)
LDSR	-0.007 (-1.13)	-0.006 (-1.06)	-0.006 (-1.07)
LPI	0.488 (4.82)	0.507 (4.80)	0.498 (4.53)
DM	-1.445 (-1.80)	-1.560 (-1.96)	-1.612 (-1.96)
R^2 adjusted	0.8005	0.8005	0.7980
SEE	1.9105	1.9104	1.9221

(t-statistic appear in brackets)

Table 5.2 Estimation Results, Pooled - Mauritius and Zimbabwe
(Dependent variable: private investment/GDP ratio)

Variable	Equation (1)	(2)	(3)
LGY	0.162 (2.42)	0.162 (2.39)	0.161 (2.41)
LGI	0.005 (0.02)	----	----
EGI	----	0.081 (0.20)	----
RGI	----	0.097 (0.40)	----
TGI	----	----	0.023 (0.04)
DVGI	----	----	0.119 (0.43)
ΔCR	0.001 (0.98)	0.001 (0.96)	0.001 (0.93)
INF	-0.003 (-0.05)	-0.002 (-0.04)	-0.002 (-0.04)
RER	-0.899 (-1.56)	-0.859 (-1.45)	-0.913 (-1.33)
IMY	0.083 (0.96)	0.080 (0.91)	0.085 (0.92)
LDSR	-0.025 (-1.22)	-0.025 (-1.21)	-0.024 (-1.18)
LPI	0.304 (2.08)	0.272 (1.69)	0.275 (1.67)
DM	-2.816 (-1.72)	-2.926 (-1.74)	-2.8401 (-1.61)
R^2 adjusted	0.7841	0.7781	0.7783
SEE	1.9876	2.0149	2.0141

(t-statistics appear in brackets)

Table 5.3 Estimation Results, Pooled - Kenya and Malawi
(Dependent variable: private investment/GDP ratio)

Variable	Equation (1)	(2)	(3)
LGY	-0.040 (-0.41)	-0.039 (-0.39)	-0.014 (-0.14)
LGI	-0.115 (-0.74)	----	----
EGI	---	-0.146 (-0.51)	-----
RGI	---	0.018 (0.08)	----
TGI	---	---	0.174 (0.75)
DVGI	---	---	-0.235 (-0.96)
ΔCR	0.0003 (1.29)	0.0003 (1.26)	0.0002 (-0.97)
INF	-0.065 (-1.20)	-0.066 (-1.16)	-0.092 (-1.67)
RER	-0.005 (-0.90)	-0.005 (-0.82)	-0.012 (-1.86)
IMY	-0.023 (-0.27)	-0.030 (-0.32)	-0.029 (-0.31)
LDSR	-0.003 (-0.52)	-0.003 (-0.47)	-0.004 (-0.54)
LPI	0.377 (1.75)	0.36 (1.61)	0.312 (1.44)
DM	-2.050 (-1.69)	-2.051 (-1.60)	-2.051 (-1.66)
R^2 adjusted	0.7644	0.7564	0.7730
SEE	1.5390	1.5648	1.5105

(t-statistics appear in brackets)

Table 5.4 Estimation Results for Mauritius
(Dependent variable: private investment/GDP ratio)

Variable	Equation (1)	(2)	(3)
CONSTANT	34.560	38.881	30.342
LGY	-0.016 (-0.09)	-0.012 (-0.06)	-0.034 (-0.19)
LGI	0.11 (0.28)	---	---
EGI	---	0.742 (0.60)	---
RGI	---	0.338 (0.59)	---
TGI	---	---	1.328 (0.63)
DVGI	---	---	0.189 (0.63)
ΔCR	-0.002 (-0.59)	-0.002 (-0.50)	-0.004 (-0.73)
INF	0.088 (0.78)	0.121 (0.94)	0.108 (0.89)
RER	-0.26 (-0.93)	-0.289 (-0.99)	-0.226 (-0.77)
IMY	-0.160 (-0.48)	-0.133 (-0.33)	-0.077 (-0.21)
LDSR	-0.182 (-1.75)	-0.199 (-1.80)	-0.209 (-1.82)
LPI	-0.106 (-0.28)	-0.193 (-0.46)	-0.154 (-0.41)
DM	2.407 (0.48)	3.160 (0.59)	5.864 (0.74)
R^2 adjusted	0.5474	0.5188	0.5229
SEE	2.6282	2.6997	2.6882

Table 5.5 Estimation Results for Zimbabwe
(Dependent variable: private investment/GDP ratio)

Variable	Equation (1)	(2)	(3)
CONSTANT	3.194	2.719	-16.249
LGY	0.175 (2.98)	0.179 (2.91)	0.136 (2.22)
LGI	0.005 (0.09)	----	----
EGI	----	-0.107 (-0.27)	----
RGI	----	-0.225 (-0.46)	----
TGI	----	----	2.766 (1.39)
DVGI	----	----	-0.222 (-0.62)
ΔCR	0.002 (1.05)	0.002 (1.06)	0.0001 (0.57)
INF	0.029 (0.42)	0.029 (0.40)	0.079 (1.10)
RER	0.003 (0.3168)	0.004 (0.35)	0.002 (0.21)
IMY	0.039 (0.36)	0.013 (0.99)	0.15 (1.05)
LDSR	0.022 (1.06)	0.024 (1.11)	0.014 (0.69)
LPI	0.377 (1.38)	0.524 (1.23)	0.014 (1.17)
DM	-4.209 (-1.81)	-3.617 (-1.33)	-15.61 (-1.89)
R^2 adjusted	0.6610	0.6350	0.6985
SEE	1.2583	1.3057	1.1867

Table 5.6 Estimation Results for Kenya
(Dependent variable: private investment/GDP ratio)

Variable	Equation (1)	(2)	(3)
CONSTANT	16.17	17.59	15.81
LGY	0.042 (0.27)	0.040 (0.25)	0.076 (0.44)
LGI	-0.154 (-0.47)	---	---
EGI	---	-0.337 (-0.41)	---
RGI	---	-0.025 (-0.05)	---
TGI	---	---	0.009 (0.014)
DVGI	---	---	-0.109 (-0.19)
ΔCR	0.001 (0.45)	0.001 (0.43)	0.001 (0.46)
INF	-0.096 (-0.94)	-0.096 (-0.90)	-0.113 (-1.11)
RER	-0.136 (-2.04)	-0.137 (-1.88)	-0.111 (-0.89)
IMY	0.076 (0.58)	0.078 (0.55)	0.051 (0.35)
LDSR	-0.198 (-1.65)	-0.019 (-1.53)	-0.018 (-1.36)
LPI	0.239 (0.64)	0.252 (0.52)	0.143 (0.31)
DM	-1.967 (-0.99)	-2.018 (-0.87)	-1.847 (-0.70)
R^2 adjusted	0.339	0.274	0.263
SEE	1.091	1.144	1.153

Table 5.7 Estimation Results for Malawi
(Dependent variable: private investment/GDP ratio)

Variable	Equation (1)	(2)	(3)
CONSTANT	15.06	16.08	16.13
LGY	-0.065 (-0.43)	-0.066 (-0.42)	-0.039 (-0.23)
LGI	-0.171 (-0.79)	---	---
EGI	---	-0.167 (-0.36)	---
RGI	---	0.068 (0.19)	---
TGI	---	----	0.047 (0.07)
DVGI	---	---	0.67 (0.15)
ΔCR	0.027 (1.56)	0.027 (1.50)	0.026 (1.38)
INF	-0.057 (-0.65)	-0.051 (-0.52)	-0.057 (-0.55)
RER	-0.001 (-0.12)	-0.001 (0.08)	-0.004 (-0.34)
IMY	-0.039 (-0.25)	-0.067 (-0.30)	-0.114 (-0.51)
LDSR	-0.002 (-0.15)	-0.002 (-0.19)	-0.003 (-0.25)
LPI	-0.159 (-0.33)	-0.172 (-0.34)	-0.143 (-0.274)
DM	-4.814 (-1.91)	-4.592 (-1.59)	-4.471 (-1.08)
R^2 adjusted	0.364	0.303	0.263
SEE	1.871	1.959	2.014

Chapter 6

DOUGLASS NORTH'S THEORY OF INSTITUTIONS: APPLICATION TO INSTITUTIONAL ADJUSTMENT IN AFRICA

In this chapter we will investigate the relationship between private sector investment and institutional adjustment, viz, privatization and deregulation. While the macroeconomic adjustment and the microeconomic liberalization components of structural adjustment are routinely discussed within the neoclassical paradigm, the theoretical support for institutional reforms tends to be tentative. Often the need for such reforms is stated as a truism or as a political argument for weakening state power. Occasionally though the Bank has made references to Douglass North's work on economic history and institutions (World Bank 1987, 1991). In this chapter we will first employ North's theory of institutions to incorporate institutional questions into the neoclassical framework. Then we will explore the validity of the hypothesis that privatization and deregulation would lead to increased economic activity within the African context. The chapter has four sections. The first section is a brief outline of North's theory of institutions. The second section describes the process and scope of institutional adjustment in Sub-Saharan Africa. The third section uses the available evidence to evaluate the effect of privatization and deregulation on

private investment in the region. The last section involves the concluding remarks.

6.1 A Brief Outline of North's Theory of Institutions

In mainstream economics we usually describe the economy in terms of three building blocks: endowments, technology, and preferences. These pillars of the economy are assumed to be given (constant). The focus of the analysis is to find the equilibrium values of the endogenous variables (prices and quantities), examine the characteristics of the equilibrium, and do comparative static analysis. The building blocks are not subject to analysis within the neoclassical model. It is acknowledged that the model is not meant to explain the determination of these fundamentals of the economy (Clower, Graves, and Sexton, 1988, pp. 450-453)

Douglass North adds institutions as the fourth building block. Furthermore, he endeavours to integrate technology and institutional analysis into economic theory. He is not the first to have attempted such a project. Karl Marx, Thorestein Veblen, and Harrold Innis have avoided the focus on the quantity/price determination, and made some of the four building blocks the object of their analysis. Veblen and Innis did not have much enthusiasm for models and systems. Marx and North rely on model building.

For both North (1990) and Marx, economic development is explained by the interaction of technology and institutions. The similarity seems to end here. Marx uses the categories of class, class struggle, state, and revolutions in his analysis. For North the choices of individuals, and firms, under the conditions of scarcity and competition are important. In other words, North gives his theory of institutions micro foundations. Furthermore, he emphasizes the role of incremental changes, and maintains that revolutions are not as discontinuous as they seem to be. In the Marxian model the dynamics between forces of production (technology) and relations of production (institutions, property rights) move societies from lower stages to higher stages of development. The movement leads to a utopian society.

North, however, guarantees no happy ending. His favourite example is the different development paths that were taken by Britain and Spain from the seventeenth century onwards. He observes that the political changes in the seventeenth century England resulted in the limitation of the king's fiscal power. This change in polity created a secure property rights, facilitated the formation of capital markets , and launched the industrialization of England. In Spain, by contrast, the unlimited fiscal power of the monarch inhibited capital accumulation and development.

North defines institutions as the rules of the game. They "are the humanly devised constraints that shape human interaction" (1990, p. 3). They form the incentive structure of society. Institutions are classified into formal and informal institutions. Formal constraints include: constitutions, statute, common law, property rights, by-laws, and contracts. These are enforced externally-- by the state. Informal constraints are socially sanctioned norms of behaviour. They are internally (self) enforced rules of conduct. They include: routines, taboos, customs, tradition, conventions, and religion. The two types of institutions are complementary.

Why do people invent institutions? We design institutions to reduce uncertainties that permeate human interaction. The uncertainties are due to the complexity of the problems to be solved , incomplete information, and limited human capability to process information. To simplify decision making, to know what to do and what not to do, we devise rules. Institutions are, therefore, generated in response to the problem of processing complex information and uncertainty. We may, then, assert that uncertainty and institutions point toward the origin of predictable human behaviour (Heiner 1993).

If institutions are rules of the game, organizations are the players. Organizations (political parties, firms, schools,

clubs..)

have objectives to attain. They maximize their objectives in the context of the institutional framework. There is a two way relationship between institutions and organizations. Certain types of institutions generate corresponding types of organizations. Organizations not only reflect the institutions that gave birth to them, but attempt to alter existing rules in order to maximize their objectives. The interaction between the two shapes the development of the economy.

How do we relate institutions to economic analysis? The connection between economic theory and institutions is made primarily because of the existence of transactions costs or simply put the cost of doing business. The neoclassical competitive equilibrium assumes zero transaction costs. When it is costly to transact, efficiency is unattainable. This point was first made by Coase in an indirect fashion (1960).[17]

What is the nature of transaction costs? The two main components of transaction costs are measurement and enforcement costs. North states that

[17] The Coase theorem states that if property rights are assigned clearly, self-seeking individuals will arrive at an efficient economic arrangement. Coase made this result dependent on the absence of transaction costs.

> The costliness of information is the key to the costs of transacting, which consists of the costs of measuring the valuable attributes of what is being exchanged and the costs of protecting rights and policing and enforcing agreements (1990, p. 27).

In other words the parties to a contract have to find each other, and exchange information about the assets to be traded. The assets must be described, inspected, and measured. Title transfer may involve drawing up contracts, keeping of records and consultation with lawyers. In cases were the contracts fail to be self-enforcing, compliance needs third party intervention, i.e.,
legal action and the arm of the state. The existence of measurement and enforcement problems in almost all types of exchange makes transaction costs ubiquitous. According to an empirical study by Wallis and North (1986) the size of transactions costs that go through the market in the U.S. economy accounted for 45% of the national income.[18]

Production costs consist of both transaction and transformation costs. Institutions affect transactions costs. (Technology determines transformation costs). Therefore, a

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[18]The concept of transactions costs has broad applications in other areas of economics: for instance, in Monetary Theory in regard to the choice of the medium of exchange (Neihan 1969, Benton and Smith 1976), and in Industrial Organization in regard to the existence and boundaries of firms (Coase 1937, Williamson 1975). North applies it to the areas of Economic History and Economic Development.

counry's economic growth depends not only on the technology it employs but also on the institutions it has in place. Institutions affect economic development because they determine transaction costs. As mentioned earlier transaction costs appear wherever exchange opportunities exist, and thus the question is one of degree and level. Prohibitively high transaction costs mean low volume of transactions, exchanges or economic activity. Hence, an economy performs better when its institutions reduce transaction costs. In any given economy, however, the institutional matrix is a mixed bag of institutions that promote productivity and those that inhibit efficiency. Thus it is only on balance that we compare the efficiency of a country's institutions through time or cross-sectionally.

By efficient institutions North means: a condition where the existing set of constraints generate productive opportunities, a climate that creates the right incentives and appropriate economic organizations, and induces economic growth. Efficient institutions enable the parties in exchange to capture more of the gains from trade (1990, p.93). Perhaps these ideas can be captured by the concept of production possibilities frontier. Assume an increase in resources or technological progress or an opening of a foreign market. Opportunities for economic growth obtain and the frontier moves outwards. Institutional theory argues that the extent of

the outward movement depends on the institutional arrangement. The frontier of a country with institutions that reduce transaction costs will move further outward than the frontier of a country whose institutions inhibit economic agents from exploiting the new opportunities.

From the perspective of institutional theory the most important economic rule (institution) is property rights. North defines property rights as "the rights individuals appropriate over their own labour and the goods and services they possess" (1990, p.33). The institutional framework determines the extent of this appropriation. In other words property rights are relations among people. This definition of property rights is consistent with Roman law, common law and Marx's writings.

A development-compatible institutional framework requires a well-specified property rights structure which from the neoclassical and new institutional economic perspectives, means private property rights regime. An efficient property rights structure is usually defined by the features of universality, exclusivity, transferability, and enforceability. Universality indicates that resources are privately owned and that all entitlements are completely specified; exclusivity implies that all benefits and costs that follow from owning and using resources accrue only to the

owner; transferability denotes the voluntary exchange of property rights from one owner to another; and lastly enforceability insures the property against seizure or encroachment by others.

North maintains that Third World countries are characterized by inefficient institutional infrastructure: inefficient property rights regimes and a productivity-inhibiting legal and regulatory environment. The result is high costs of transacting, lower volumes of exchange, and poor economic performance. The focus of development economics and growth theory, as applied to LDCs, on technology and capital accumulation is misleading because the effect of these factors on growth is not independent of the institutional setting.

The emergence and sustenance of technological innovation and diffusion and capital accumulation require secure private property rights. Insecure property rights lead to the use of technologies that employ little fixed capital and a short term focus. This explains why private firms tend to be small in developing economies, and why large firms are the domain of public enterprises.

The regulatory environment limits the volume of productive economic activity. Inability to get spare parts, input controls, waiting to get telephones installed, production

interruptions, long queues and waiting time to get permits (licences) are all manifestations of inefficient institutional arrangements. Furthermore, these type of institutions generate perverse incentives such as rent-seeking, bribes and cronyism. Perhaps all these observations are not new. What is novel is the use of the concept of transactions costs to model the effects of institutions on economic performance. North postulates that secure property rights increase economic activity because they reduce transaction costs.

The policy implications of North's theory of institutions are clear. Devising secure private property rights and a regulatory regime that are conducive to private economic activities is a necessary step towards economic growth. Structural adjustment programmes, in particular the components involving privatization and legal reforms, are policy prescriptions that fit North's theory of institutions as applied to capital accumulation and economic development.

North would likely advise developing countries to press on with the present trend of stabilization, liberalization, privatization and deregulation. Following the export oriented growth path, countries may find areas in which they have comparative advantage. Sufficient waiting may bring in FDI flows, and result in a deeper incorporation of developing countries into the world capitalist system. The IMF, the Bank,

and other international organizations would play an important role in keeping the adjusting countries on track, encourage them toward international integration and thus lock in the institutional reforms that are being taken. As North puts it " International specialization and division of labour requires institutions and organizations to safeguard property rights across international boundaries so that capital markets as well as other kinds of exchange can take place with credible commitments on the part of the players" (1990, p.121).

According to North, it is the polity that determines the property rights structure (1990, p.48). But why would the polity in Africa agree to adjustment policies that would decrease the power of the state via privatization, deregulation, and liberalization? Willoughby (1993) suggests a new institutionalist theory of imperialism. Using the concepts of leading new institutionalists (Buchanan and Tulloch 1965, Olson 1971, North 1981, Williamson 1981), he maintains that government and economic elites of the periphery may have come to the conclusion "that the benefits of joining a common legal tradition outweigh the differential benefits they might obtain by discriminating against foreign (and domestic) capitalist agents...that it is more rational to dismantle statist interference and share the surplus generated by relatively unrestricted capitalist enterprise" (p.66).

6.2 The Process of Institutional Adjustment

In this section we will look at the practice of institutional adjustment as operationalized via privatization and deregulation. Privatisation is a component of public enterprise reform in adjustment programmes. The other component involves restructuring public enterprises without changes in ownership. The reforming of the parastatals is done through performance contracts that seek to set clear objectives, grant sufficient autonomy, improve management, impose better accountability, tighten staff supervision, and restructure personnel. Privatization is, however the preferred option of the international lending institutions.

Privatization could be defined as the transfer or sale of state-owned enterprises, or shares in them, from the public to the private sector. This narrower definition may be accompanied by softer objectives: reduction of fiscal deficits and improving the efficiency of the enterprises. Kornai (1990) uses a broader definition which considers privatization as the development of the private sector. This is a definition that the International Finance Corporation (IFC) would accept. The IFC is the arm of the World Bank, formed in 1956, responsible for lending to, and investing in, private sector companies in developing countries. It plays a supporting role in the privatization process by advising

governments and firms on privatization transactions. It also invests in newly privatized firms.

According to one of the directors of the IFC, Phillipe Lietard, the problem of public enterprises is one of ownership and not of better accountability.[19] Privatization is viewed as a means of broadening market economies by enticing private investment. It is also believed that privatization will lead to the development of capital markets by becoming the source of shares, securities, and debt-equity swaps. Lietard assumes that African firms are capable of adapting and taking risks in the global competitive market. Similar sentiments may be found in Steel (1993) who associates the apparent lack of indigenous entrepreneurs in Africa more "with policy environments that reward rent-seeking and discourage private investment than with an absence of the requisite talents".

The data on the process and magnitude of privatization, and regulatory reforms in Sub-Saharan Africa is incomplete. The available data, however, could be used to make a preliminary observation. In 1994 the World Bank published a report on adjustment in Sub-Saharan Africa. The report reviews adjustment reforms and their relation to economic performance in twenty nine African countries. The Bank also published a companion report involving case studies of seven countries.

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[19] See *African Business*, July/August 1994, pp. 34-35).

According to these reports, African governments took a number of preliminary steps to initiate the privatization process. These included the establishment of an inventory of public enterprises or shareholdings, and the classification of the enterprises into strategic and non-strategic. The strategic parastatals included utilities, telecommunication , and heavy industry. The non-strategic firms were subdivided into commercially viable and nonviable. The viable are privatized and the nonviable are liquidated.

Since 1986 the trend toward increasing public enterprises has been reversed, and hundreds of firms have been privatised. The twenty nine adjusting countries of the Bank's report have privatized or liquidated 550 public enterprises. These are about 20% of parastatals in these countries. The distribution in privatization among the adjusting countries is not even. The percentage of privatization ranges between zero and sixty, (see
table 5.1). The leading privatizers are Benin, Ghana, Guinea, Mozambique, Nigeria, and Senegal. The proportion of privatized firms will continue to increase because many of the parastatals slated for privatization have not yet been sold. For instance, Nigeria put 145 firms for sale, and only less than half of these have gone into private hands.

Table 6.1

Divestitures of Public Enterprises, 1986-92

Firms divested in %	*Number of parastatals before divestiture*			
	0-50	*51-100*	*101-200*	*over 200*
0-10	Gambia Mauritania Rwanda Siera Leone Zimbabwe	Burkina Faso Conga Uganda Zambia	Cameroon Cote d'Ivoire Malawi	Kenya Tanzania
11-25	Chad	Burundi Central African Republic	Madagascar	Ghana Mozambique
26-40	Niger		Guinea Nigeria	
41-60	Guinea Bissau	Benin Mali Senegal Togo		

Soure: World Bank, Adjustment in Africa : Reforms, Results, and the Road Ahead, (Washington D.C., World Bank, 1994).

Privatization signals the shift from the nationalization policies of the sixties and seventies, toward a more secure private property rights regime. The legal and institutional environment needs to reflect the existing property rights structure. Consequently, privatization programs are accompanied by regulatory reforms. These reforms seem to be even more explicit about their objectives than privatization. They aim to increase the number of private domestic firms as well as attract foreign direct investment.

While regulatory reforms, in the form of new or revised investment codes, are meant for all firms, they also have been tailored toward the different demands of domestic and foreign firms. One of the main institutional obstacles to domestic firms is barriers to entry. These may take the form of legal restrictions, state monopoly, or frustrating licensing requirements and registration formalities. All African counties have embarked upon liberalizing their investment codes. For instance, the revised investment code of Senegal includes such provisions as : streamlining of the administrative procedure for investment approval by the creation of a one-stop window, simplification of formalities for setting up enterprises, faster investment evaluation, and the automatic approval of private investment if the bureaucracy does not act within thirty days (World Bank 1994b, p. 324).

According to institutional theory, these regulatory reforms should decrease the cost of doing business (transaction costs), encourage entrepreneurial activities, and increase private investment. Furthermore the reforms may persuade businesses in the informal sector of the economy to make the transition to the formal sector. One of the features of firms in the informal sector is the use of traditional technology. If their graduation to the formal sector is supported by easier access to credit, they may employ intermediate or modern technology, and hence enhance capital accumulation.

A large part of the regulatory reforms is tailored toward attracting foreign investors. Intense competition among nations for the investment of multinational firms by creating a favourable business climate has become the norm. The new or revised investment codes include: the removal of restriction on foreign ownership and sectoral restriction, a freer transfer of profits and the repatriation of capital, the provision of incentives in the form of tax exemptions and tax holidays (UN 1992). Furthermore, developing countries emphasize their sincerity by participating in international investor insurance schemes and becoming signatories of the Overseas Private Investment Corporation.

6.3 The Effects of Institutional Adjustment on Private Investment: A Preliminary Appraisal

Given the paucity of data our appraisal of the effects of privatization and regulatory reforms on private investment can only be of preliminary nature. We must note at the outset that privatization has no immediate effect on investment, i.e., the selling of existing assets of parastatals to private shareholders does not create new productive capacity. The issue is whether the climate that is brought about by privatization (a more secure property rights regime) has increased private economic activity and improved economic performance. According to the World Bank (1994a), privatization in Africa has had little effect on growth and efficiency. The reasons cited include: limited privatization, continued government involvement in partly privatized firms, large severance benefits to dismissed workers, tax benefit favours to the new owners, speculative purchases, ill-considered transactions due to pressure on governments to privatize, cronyism and corruption.

While the evidence on investment during the adjustment period in Africa is mixed, the trend shows a decline in investment. The median gross domestic investment as a percentage of GDP for the twenty nine countries of the Bank's report declined from 17.2 for the 1981-86 period to 16.3 for the 1987-91 period. Table 5.2 shows that both private

investment and public investment as a percentage of GDP have not recovered to their early eighties shares. While the share of private investment as a proportion of total investment has tended to increase, it has not increased enough to balance the decrease in public investment.

Table 6.2

Average Investment Shares for Sub Saharan Africa

	Total % of GDP	Private % of GDP	Public % of GDP	Private % of Total I	Public % of Total I
1981	26.0	8.6	13.5	33.1	66.9
1982	20.5	9.0	11.9	43.9	56.1
1983	18.9	7.5	9.9	39.8	60.2
1984	18.1	5.7	10.6	31.6	68.4
1985	14.8	5.4	8.0	36.6	63.4
1986	14.6	5.2	8.2	35.8	64.2
1987	14.9	6.3	8.3	42.6	57.4
1988	16.1	6.4	8.6	39.8	60.2
1989	15.5	6.9	8.4	44.9	55.1
1990	16.2	8.1	8.7	50.1	49.9
1991	17.2	8.4	8.6	49.1	50.9

Source: G. Pfefferman and A. Madarassy, "Trends in Private Investment in Developing Countries ", IFC Discussion Paper No. 16 (Washington D.C. , The World Bank, 1993).

Note: The trends in averages should be read with caution because data for some of the countries for some of the years are not available.

As stated earlier privatization usually entails deregulation. Regulatory reforms, however, have their own purposes, such as the encouragement of local entrepreneurs and the attraction of foreign direct investment (FDI). One way of accounting for the increase in local enterprises is to look at the number of newly registered firms, but the mere increase in the number of registered firms does not mean an increase in investment. As the experience in Eastern Europe shows, the number of private enterprises may proliferate for reasons that are not productive. Indeed the diminution of state power in Eastern European countries has led to the proliferation of informal money making activities many of which are criminal. In Hungary (where North has served as an adviser), there are one million registered firms for a population of ten million. Many of these 'enterprises' are set up for the objective of tax evasion.[20]

With regard to FDI, Sub-Saharan Africa experienced little private capital inflow despite the incentives offered by new investment legislation. For instance, non-oil exporting African countries received on average less than $0.5 billion per year during the adjustment period. This is about the amount of FDI that flowed to Papua New Guinnea alone. Africa is increasingly being marginalized (UN, 1992, p.29). Liberal

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[20] *The Economist,* March 11-17, 1995 p.54.

regulatory policies such as favourable investment codes, tax incentives, and low wage regimes are neither sufficient nor even, at times, necessary conditions for the attraction of foreign investment. Transnational corporations tend to invest in countries with high growth rates and large domestic markets (World Bank 1991, p.8).

Table 6.3 shows the flows of FDI to developing economies by regions for the 1980's. On average all the regions have experienced a higher FDI inflow in the second part of the eighties than in the first part of that decade. The regions that account for the bulk of the increase in the flow are East, South, and South East Asia, followed by Latin America and the Caribbean. Africa and Western Asia lag far behind the other two regions. By 1990 the FDI flow to East, South and South-East Asia has tripled its value of the mid-eighties, while that of Africa was less than double for the same time interval. Furthermore, the figure for the whole of Africa shows a sharp decline in 1990, while the non-oil exporting African countries have also experienced greater variablity in their FDI inflows. In terms of percentages Africa's share of FDI to developing countries declined from an average of 11.2% for the 1980-85 period to 6.95 in 1990. It seems that the regions with large markets and better infrastructure attract the lion's share of FDI.

Table 6.3

Foreign Direct Investment Inward Flows, Developing Regions, 1980-90

(Millions of Dollars)

Host region	1980-85 Annu. Ave.	1986	1987	1988	1989	1990
All Developing Regions	**12 634**	**14 184**	**25 021**	**29 718**	**29 756**	**31 776**
Africa	**1 411**	**1 728**	**2 186**	**2 325**	**4 446**	**2 196**
OEC	1 044	1 541	1 664	1 894	3 670	1 633
Other	367	188	522	431	776	563
Latin America and the Caribbean	**6 035**	**5 353**	**10 826**	**11 443**	**8 363**	**10 055**
OEC	1 674	1 650	3 413	2 816	3 455	3 319
Other	4 361	3 749	7 412	8 627	4 908	6 736
Western Asia	**379**	**283**	**255**	**690**	**447**	**1 004**
OEC	221	133	154	476	298	797
Other	158	150	102	214	149	207
East, South & South-East Asia	**4 644**	**6 728**	**11 636**	**15 017**	**16 218**	**18 328**
OEC	1 284	741	808	1 296	2 350	3 865
Other	3 360	5 987	10 828	13 724	13 868	14 463

OEC = Oil-Exporting Countries

Source: United Nations, World Investment Report, (New York, United Nations 1992).

The *World Investment Report 1992* from which this data is drawn also shows that in second half of the 1980s developed countries increased their share of FDI flow, while the proportion going to LDCs decreased. Between 1980-85 the share of the South of total FDI flow averaged about 29%, declining to 17% in 1990, notwithstanding increases in absolute value. Africa's share of the total FDI fell from 3% to a mere 0.7% over the same period. The report notes that most of the FDI circulated between Europe, North America, and Japan because transnational corporations followed the strategy of favouring the locational advantage of developed countries. In other words the institutional adjustment that has been undertaken in Africa, may not have been noticed by the multinationals.

6.4 Concluding Remarks

While we may need to estimate the partial regression coefficient of institutional adjustment in the context of other policy variables to determine its relation to private investment, the preliminary evidence indicates that neither domestic private investment nor FDI have responded appreciably to privatization and deregulation in Africa. Policy makers at

the Bank and IFC tend to
argue that what is needed is more privatization and deregulation. Although North is unlikely to oppose such a prescription, he would at the same time stress that "privatization is not a panacea for solving poor economic performance" (North, 1994, p.366).

North's theory of institutions makes formal and informal rules complementary. Imposing formal rules of a successful economy on another country may not produce the intended results. The reason is that informal institutions have the tenacity to persist long after formal rules have changed. Indeed North would argue that radical revolutions such as that of 1917 in Russia are not as discontinuous as they appear to be. Ultimately the informal institutions of Russia may have contributed to the demise of the Soviet Union (North 1990, p.37, and 1994, p.366). This argument is similar to the claim that from a strictly Marxian perspective of historical materialism Russia, a country dominated numerically and culturally by the peasantry, was not ready for socialist transformation.

Certain informal institutions embody traditions and norms that induce productivity. However these rules cannot be imposed by decree as can be done with privatization and deregulation. A number of social scientists have underscored

the scarcity of African entrepreneurs (Lancaster 1988), and the effect of the cultural milieu of African societies on African capitalism (Kennedy 1988). Caution may be needed however, in dubbing African institutions inefficient. Institutions are rules and habits that have evolved over many centuries in response to specific geographic constraints, historical events, and external pressures. Mere comparison with developed countries may lead us to distorted diagnosis and inappropriate prescription.

Structural adjustment programmes emphasize the need to specify formal property rights and protecting contract rights in order to unleash African entrepreneurship. We must however, weigh the importance of property rights relative to other constraints. For instance, does the polity in Africa feel threatened by the emergence of a vigourous national capitalist class such that it favours foreign capital against which local capital could not compete? While some African entrepreneurs may be able to respond by forming partnership with foreign capital, many may choose to remain compradors, and perhaps the majority confine themselves to the informal economy. Also other factors such as the harsh environment of Africa, the continued marginalization of Africa in the world capitalist system, low urbanization, and low per capita income have all militated against the emergence of a strong national capitalist class. It is not clear whether the absence of

entrenched private property rights played the decisive role in weakening the emergence of African capitalism. In fact the success of China's township and village enterprises which are neither state nor privately owned shows that capital accumulation can flourish in a different property rights regime than that envisaged by new institutional economics.

We may also ask whether the objective of African governments in embracing structural adjustment is the establishment of a liberal capitalist order that the Fund and the Bank aim at. Writing from a different perspective, Bayart(1992) offers a *longue duree*[21] view of African history. He argues that, for centuries, Africans have been subordinate players in relation to the developed world. But they have been players nonetheless, who have sought to draw on resources from the external world in order to further their internal competitive position for wealth and power. Therefore the acceptance of adjustment lending by African governments is not ideological, but driven by internal political competition (1992, p.225-6). A similar view is expressed by Eboe Hutchful(1990, p.17) who argues that the adjustment program "has not produced a perceptible shift of power away from the state", but created "domination by a new dirigiste "adjustment cadre" rather than capital and market."

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[21]On the nature and meaning of the *longue duree* see Fernand Bruadel, *On History*, trans. Sarah Mathews (Chicago, 1980), pp. 27-34.

Hence we seem to have come back to the role of the polity in economic development. The appropriate question is perhaps: what is the right mix of state and market in Africa in the era of globalization and reduced foreign aid? No precise answer can be attempted. However the present circumstances of history suggest a number of alternative routes that may be taken by the polity in Africa. These options will be discussed in the concluding chapter.

Chapter 7

CONCLUSION AND POLICY DISCUSSION

7.1 An Overview of Findings

The findings of this study suggest that structural adjustment has not succeeded in increasing private investment in Africa over the period under consideration. In fact, as the sign on the dummy variable for the structural shift after 1982 shows SAPs may have led to decreases in the rate of private investment in Sub-Saharan African countries. Unlike other studies such as that of Solimano (1992) which suggested sustained recoveries within five years in adjusting countries, this study shows that ten year of adjustment has not yet brought about a revival of private investment in the case of African economies. This is especially true for three of the four countries we looked at, viz Kenya, Malawi and Zimbabwe.

With regard to the specific hypotheses, the empirical evidence examined in chapter five supports some of them, fails to support others, and gives partial support to the rest. On the basis of these findings, it appears that GDP growth rate and availability of credit to the private sector have a

positive impact on private investment, while inflation and foreign debt burden have a negative impact on private investment. These findings are in agreement with other studies that have looked into this topic area for different regions and periods (Blejer and Khan 1984, Green and Villanueva 1990, Oshikoya 1992).

The hypothesis that is contradicted by the finding of this study is the claim that infrastructural investment would affect private investment positively. In particular the sign on infrastructural public investment as proxied by expected value of public investment is negative. This finding clashes with the finding of Blejer and Khan (1984). We must note however that the study by Blejer and Khan was conducted for mostly Latin American and Caribbean countries, for the period before the advent of SAPs, and they included only a limited number of explanatory variables in their investigation. Also note that the sign on the other proxy for infrastructure investment, the trend value of public investment, in our study has tended to be positive. Thus while we did not find a clear support for crowding in, neither is there support for the crowding out argument.

The study noted that SAPs introduced a fundamental shift in the structure of adjusting economies. The key mechanism of this shift is institutional adjustment. Chapter five discussed

the effect of privatization and deregulation using the framework of North's theory of institutions. The preliminary evidence presented in that chapter does not support the claim that privatization and deregulation would unleash African entrepreneurship and increase private investment. This is an area in which research is in its infancy and strong conclusions are better avoided. Nevertheless, the available evidence appears to call policy practitioners to be cautious about copying institutions such as well-specified private property rights from developed countries.

7.2 Policy Options

The failure of SAPs to generate the expected amount of capital accumulation in Africa, raises question as to the desirability of pressing on with the present Fund/Bank alternative of stabilization, liberalization, privatization, deregulation, and international integration drive. It appears that SAPs have created a heightened state of flux and dislocation without putting the adjusting African economies on a growth path. Willoughby (1994) maintains that in order for the new liberal capitalist economic order to win and sustain itself on the global level it must create sufficient surplus to ameliorate the dislocation it creates. While the bilateral and multilateral financial flows into Africa would ease the struggle of African economies, the magnitude of the net flow

may not be sufficient to translate into the fulfilment of SAPs objectives.

The World Bank explains the failure of SAPs to generate the promised private investment in terms of poor governance. The Bank defines governance as "the manner in which power is exercised in the management of a country's economic and social resources for development" (World Bank 1992, p. 1).[22] In other words the Bank has introduced political conditionality in its relation with adjusting countries. This seems to require from LDCs governments not just tip-toeing the foreign policy of the West, but also aligning their domestic policies to the demands of the West, and dealing with the forces that oppose SAPs and integration. But 'poor governance' is not a sufficient explanation for the failure of SAPs. The weaknesses of the adjustment programme itself may have contributed to the malaise of African economies. Consequently, adjusting countries may need to consider other models of development.

Below we will briefly discuss two options other than SAPs that African countries may consider. We will also touch upon an alternative institutional reform.

Alternative A: The Fund/Bank policy advisers have tended to

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[22]For more on governance see C. Lancaster (1993), P. Landell-Mills and I. Seragedin (1991), and I. Shihata (1991).

interpret the success of Japan and the newly industrialized countries (NICs) of East Asian as a demonstration of what markets and semi-SAPs strategy can accomplish. An alternative interpretation is to read the phenomenon of the NICs as a story of a successful government intervention rather than the superiority of laissez-faire (Bienefeld 1988, Alam 1989). According to this view, developing countries should choose economic objectives and industrial policy and pursue them by a combination of policies that may include: selective import substitution, subsidized credit, foreign exchange rationing, large public sectors, technological import screening, regulation of enterprises such as plant size requirements, domestic content regulations, domestic sale restrictions, export targets, including complementary social and labour policies. This route does not seek to challenge the world capitalist order. Rather it tries to thrive within that order by following certain mercantalist-like policies. There is no guarantee however, that such policies would succeed. Some of the advantages that the four tigers have possessed such as the favourable attitude of Western countries toward them during the Cold War, and their proximity to the second strongest world economy (Japan) may not be replicated elsewhere.

Alternative B: Adopt delinking as suggested by Amin (1985). The concept of delinking is not synonymous with autarky. It is rather defined as an unwillingness on the part of Third World

countries to subject their national development strategies to the requirements of imperialism; a refusal to accept the adjustment of the national programmes to the constraints imposed by the capitalist metropolis. Amin counters the neoclassical belief that 'interdependence governs every thing' with the idea of 'one planet, several systems, in the hope of a polycentric world'. Consequently delinking seeks a political economy space for developing nations. It rejects incorporation and postulates cooperation at an arms length. Although plausible, the viability of such an option is questionable. Imperialism punishes those who refuse integration. The ostracism that countries such as Cuba are facing suggests that any alternative that markedly diverges from the objectives of international capital will be an extremely difficult route to choose and sustain. Still, such an alternative cannot be dismissed.

If a large number of Third World countries choose such a road, and if people in the West support such strategy for environmental and employment reasons this option may become a reality[23].

Alternative Institutional Adjustment: The discussion in chapter six was based on North's theory of institutions, which

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[23]For a criticism of the neoclssical unrestricted international integration stance, and alternative perspectives from the North which come close to 'delinking' see Herman Daly (1994), and the references cited there.

is part of the new institutional economics (NIE). While North and NIE address the weakness of neoclassical economics- the banning of institutions from its framework- they do not transcend the neoclassical paradigm because they make market determined prices and quantities central to their theory of institutions.

An alternative institutional approach is that of Veblen and the associated school, which may be referred to as the radical or old institutional economics (OIE)[24]. This school of thought considers prices as just an aspect of markets. Markets are social institutions which organize legitimate contractual agreements. For instance, a well-defined private property rights regime in the sense of NIE does not necessarily lead to more exchange unless such a regime is perceived as legitimate by society. This is so because property rights are more than legally recognized entities; it expresses a mode of thinking that is historically specific. The importance of historical specificity and experiences may be illustrated with the following two examples: land tenure systems and financial markets.

A successful movement from one type of land tenure system to another requires society's acceptance of that change as

[24]See Veblen (1919) and Hodgson (1988). For a critique of NIE from OIE perspective see Dugger (1990) and Hodgson (1992).

legitimate. An example of this pertains to events of the last few decades in Ethiopia. In 1975 the government of Ethiopia declared all farm land public property. The decision ended the feudal type relation that was especially prevalent in the southern part of the country. The change was greeted with overwhelming support because the previous system was established through conquest and thus was illegitimate in the eyes of the peasants as well as the population at large. In 1991 the pro-Soviet regime that was responsible for the change in the land tenure system was overthrown by political groups that embraced the policy of free market and enterprise. However, the majority of the political groups resisted converting the existing public ownership of land into private property. This resistance may reflect the population's preference for customary law of usufruct, as well as fear that privatization of land may revert the country back to the feudal system and/or generate landless peasants, swelling the already high unemployment ranks of the urban areas. In short society perceived privatization of land as illegitimate.

Another sector of the economy that may illuminate the issue is the financial market. In chapter two we discussed that SAPs emphasizes the problem of financial repression and advocates deregulation of the financial markets. Also, we noted in chapter five that NIE associates the development of financial markets with private property rights. The experience of

African countries such as Kenya and Nigeria that have deregulated the financial market has not been encouraging for the financial liberalization school. A recent report shows that since 1988 twenty African countries experienced systematic banking crises, and five of these were forced to spend ten per cent of their GDP to correct the damage.[25] The banking crises and problems in adjusting African countries, and the failure of financial liberalization to increase private investment in these countries may indicate a mismatch between modern financial intermediation imported from the developed world and Africa societies. Modern financial institutions do not emanate from the concrete conditions of African societies, such that they may not easily mesh with the style of African entrepreneurs.

In some African countries the population have developed indigenous financial institutions known as rotating savings associations. This associations are used for both consumption and investment purposes. Their wide spread use indicates their legitimacy and potential for growth. The design of financial policy in Africa should take into account the potential of these indigenous credit institutions and assist them to play an increasing role in the financial system. A recent successful institutional innovation in the financial market of

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[25]The Economist, "Banking in Emerging Markets." April 12th, 1997, p. 5.

Third World countries is the Grameen Bank. One of the reasons for its success is its adaptabilty to the conditions of the people, and its "grassroots development" approach.[26] To borrow an expression from the field of education, a successful development of the financial sector or for that matter any institutional innovation can be approached as, a programme and 'a pedagogy which must be forged *with* not *for*, the peoples.'[27]

7.3 Scope for Improvement and Future Research

This work may be improved in many ways. One way of improving the study is to include more Sub-Saharan African countries in the regression analysis. Given the diversity of African countries increasing the numbers could be more representative and thus allow us to make generalizations that are more valid. This could be done in the future as more data becomes available.

Another area of exploration is the relationship between different types of investment such as investment in human capital and investment in physical capital in the context of structural adjustment. This may be tied in with the effect of

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[26]For more on the Grameen Bank see Abu Wahid, ed. (1993).

[27]Paulo Freire, Pedagogy of the Oppressed, trans. Mira Ramos (New York: Herder and Herder, 1970), p. 33.

SAPs on income distribution and its consequences for private investment.

Finally, the area of institutional adjustment and institutional theory appears to promise a fruitful research direction. A thorough comparison of existing institutional theories and a study of the institutions of Africa is needed. This may help us tackle the questions of institutional change and stability in the context of Africa. Because the central role played by the polity in the institutional realm, and the multifaceted aspects of institutions, this research area requires a political economy and interdisciplinary approach.

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