EFFECTIVE SAVINGS: AN ALTERNATE APPROACH TO DEVELOPMENT

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ABSTRACT

Economic development difficulties are often attributed by contemporary gap-models to inadequate capital formation and, in turn, to insufficient volumes of savings and/or inability to import a few critical capital goods. These models argue that since many LDCs lack the capacity to produce some of the strategic goods needed for development importation is the only recourse, and alternative which entails foreign exchange expenditure. However, increasing exports to earn more foreign exchange may be frustrated by adverse price and income elasticities for the primary produce of the LDCs as well as restrictive trade practices of the developed countries (DCs). Under these circumstances, foreign aid can play a vital and useful role in relieving the foreign exchange constraint on capital formation and hence development.

However, in linking export expansion difficulties to foreign elasticities and focussing primarily on the role of foreign aid in relieving bottlenecks the gap-analysis, perhaps inadvertently, had the unfortunate effect of suggesting that the problems of capital formation are generated mainly by "external" forces.

In constrast, the thesis emphasizes the role of foreign exchange in development to a greater degree than is the case in the gap-models. When investment is constrained by an inability to import essential capital goods, as is often the case, current savings out of disposable income are not "effective" for investment purposes. To be effective the savings have to be in the form of foreign exchange. To overcome some of these conceptual difficulties we introduce a concept of effective savings defined as abstaining from consuming foreign rather than domestic income,

i.e., the difference between an LDC's income from abroad and its consumption of foreign consumer goods. Such a definition of savings exclusively in terms of foreign exchange is more relevant for investment decisions and furthermore makes foreign exchange availability the integral part of the development process.

Second, the thesis applies the concept of effective savings to Ghana in a bid to demonstrate that Ghana's inability to earn foreign exchange or increase its effective savings is caused by "domestic" factors.

Specifically, soaring inflation caused by excess liquidity, which has been fed by persistent budget deficits, and defective economic policies have strangulated the export sector and therefore undermined Ghana's ability to earn foreign exchange. Furthermore, smuggling of export produce, corruption, embezzlement and diversion of foreign exchange into Swiss bank accounts by Heads of State and their Ministers have robbed Ghana of part of the little foreign exchange it has earned and which is needed urgently for capital formation.

On the curtailment of imported consumer goods to save or "free" foreign exchange for investment, here too bribery and corruption in the administration of import controls as well as elite pre-occupation with imported consumer goods as status symbols have severely hampered the achievement of this objective.

Even worse, the little foreign exchange that the country possessed was not invested judiciously. Much of this foreign exchange was misused and wasted on grandiose inefficient industries in an abiding faith to the "religion of development".

Thus, there are serious "domestic" obstacles to the generation of effective savings (or foreign exchange) for the capital formation process

in Ghana. To address these problems the thesis recommends:

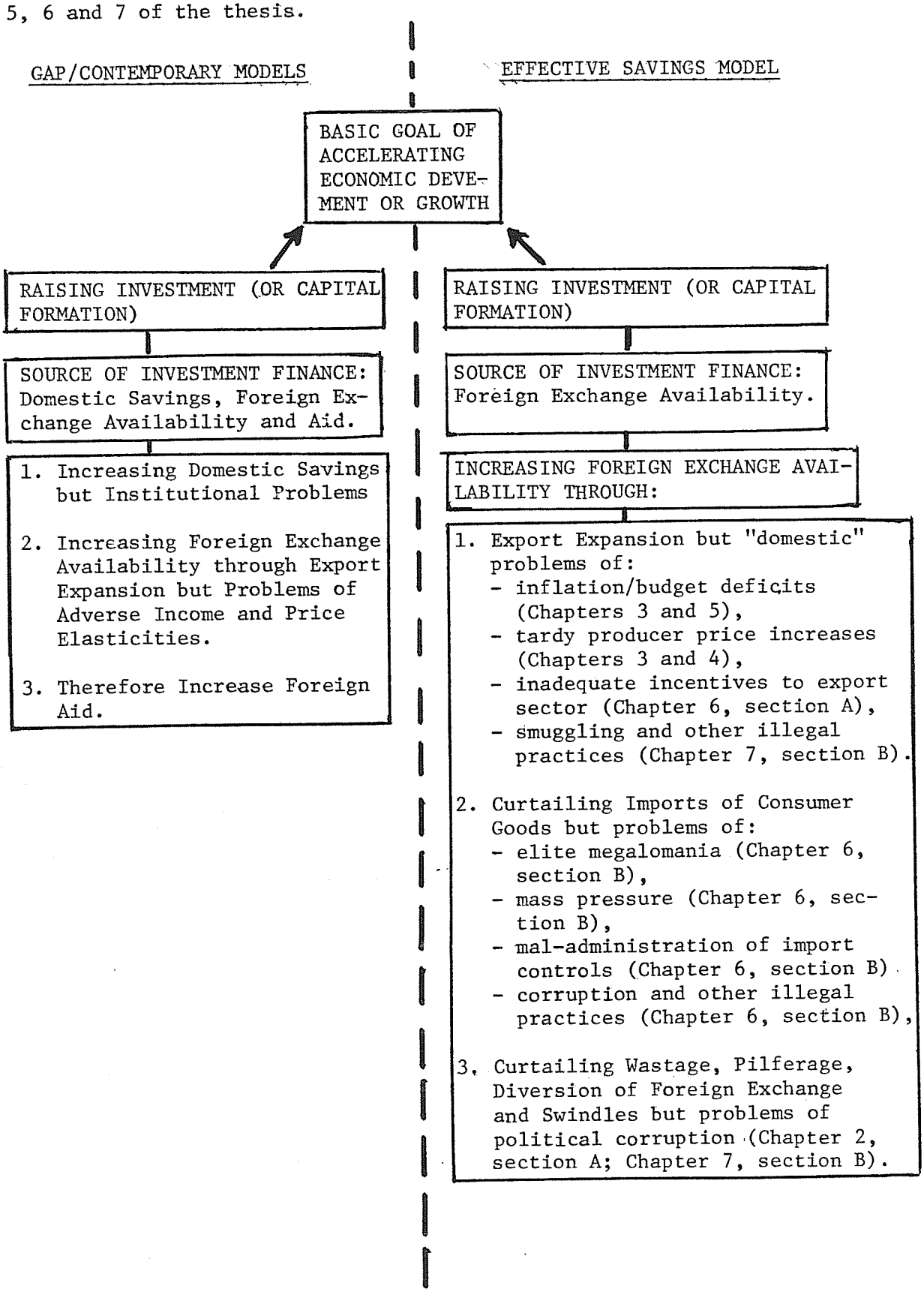
(1) Revitalizing the export sector through a system of adequate price incentives and sound economic policies, especially by raising the producer prices of export cash crops,

(2) Instituting an effective import-control program with a clearly defined set of objectives and free from political or personal influence, and

(3) Keeping in check bribery and corruption as well as such trade mal-practices as smuggling, under and over-invoicing of exports and imports.

FLOW CHART

The following flow chart may be useful in the reading of chapters 3, 4, 5, 6 and 7 of the thesis.



CHAPTER 1: INTRODUCTION

A. ACCELERATING DEVELOPMENT

1. Contemporary Approaches to Under-Development

The concern for under-development and the urgency of the need for accelerating development were championed by the United Nations. Declaring the sixties as "Development Decade", the UN proclaim development aid to be the collective duty of the rich nations. Assistance to the poor countries was seen as a matter of moral principle and international solidarity (Ohlin, 1966; p.14). The UN Charter referred to the determination of the members "to employ international machinery for the promotion of economic advancement of all peoples". Furthermore, at the UN Conference on Trade and Development in Geneva, the General Assembly resolutions of 1960 and 1964 urged upon the rich nations a contribution of 1% of their national income to development assistance.

The criterion for under-development was enshrined in the first chapter of the 1951 UN Report on "Measures for the Economic Development of Under-Developed Countries". Low real income per capita was adjudged as the main standard but following the insistence of some experts for an exact amount the figure $200 (US) was taken as the sacred line of demarcation in 1957. In 1972, this was raised to $600 (US).[1]

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[1] An unidentified Ghanaian Minister once remarked that the income per capita figure is conspiratorically set to keep the developing nations under-developed: "Each time we approach the figure they raise it. It is like taking on the task of Tantallus".

In the fifties, development economists were not satisfied with a concept of under-development that limited itself to stating an "objective" criterion without containing a clue to its explanation and elimination. The search for common characteristics of under-development was undertaken with the aim of finding clues to the causes of poverty. The obvious fact that the specification of common essential characteristics of a number of countries is influenced a priori by the choice of these countries was disregarded (Zeylstra, 1975; p.116).

Identifying the common characteristics and perhaps the "causes" of under-development involved a mental exercise of juxtapositioning a typical LDC against a DC and isolating aberrant economic and social features. The most elaborate list of such characteristics was provided by Leibenstein (1957). His summary of the findings of a number of empirical studies gave prominence to a variety of items such as the structure of employment, output, income and consumption, amount of capital per head, per capita income, fertility and mortality rates, literacy and yield per acre. To this list other authors appended other characteristics like disguised unemployment (Nurkse, 1953; Lewis, 1954; Viner, 1957)[2], fragmented capital markets and financial repression (McKinnon, 1973).

After the mid-fifties the pattern of thought about under-development lost its homogeneity. Uniqueness of each LDC, or diversity among the LDCs began to receive recognition and specification of common characteristics abandoned. Nevertheless, subsequent scholarly

[2] For criticisms and empirical refutations of the concept of disguised employment see Oshima (1958), Cumper (1963), Schultz (1964), Paglin (1965) and Wellisz (1968).

contributions, with a few notable exceptions, have generally "tended towards one of two poles - introspective generalizations and immanent empiricism - both of which fall short of scientific analysis" (Yotopoulos and Nugent, 1976; p.11).

Introspective generalization has been inspired by the evolution and growth of the DCs exclusively. With methodological precepts of neo-classical economics developed in the DCs, in the light of DC experience, introspection has led to spinning simple and abstract theories and applying them to all countries including the LDCs. In the process, a variety of development axioms emerged which Rimmer (1973) aptly described as symptoms of "macromancy".

Immanent empiricism, on the other hand, assigns an excessive weight to deviations from the "special case" of the DCs. Instead of looking for a theory the immanent empiricist looks at data hard and long enough until some "general principles" become clear, less by formal logic than by insight (Yotopoulos and Nugent, 1976; p.11).

According to Yotopoulos and Nugent (1976) introspective generalization and immanent empiricism have inspired four "fundamentalist dogmas"; sectoral, planning, import-substitution and capital fundamentalisms, not necessarily listed in order of importance.

"Sectoral Fundamentalism" reflects the tendency among development economists to equate development with industrialization with the result that industry has been emphasized to the detriment of agriculture. For example, Lewis (1954), Rostow (1960), McKinnon (1964), Ranis and Fei (1964) and Jorgenson (1967) betray such an inclination. Import-substitution "fundamentalism" arose out of the belief that industrialization could be initiated by producing those commodities which were previously imported

and for which a sufficient domestic demand existed (Prebisch, 1950; Hirschman, 1958; Chenery, 1960).

"Planning Fundamentalism" derived its impetus from both ideological and economic premises. Some development economists have become fascinated by the growth of the Soviet Union's and Cuban economies as well as the performance of some Western countries, notably France, during the war years. Other development economists were advocating extensive state planning and participation in the economy for a variety of economic reasons. One popular argument was that the price mechanism that exists in a rudimentary form in the LDCs is distorted and incapable of discharging forces strong enough to accomplish the changes needed for development. The market system therefore is ineffective, unreliable or irrelevant when prices do not reflect true opportunity costs to society. In Bator's (1958) terminology, there is market failure by signal, incentive and structure. Only by planning, it was argued, could the defects in the market system be circumvented.

Of the four "fundamentalist dogmas", perhaps that of capital attracted the most attention. Pre-occupation with capital was largely the result of direct international transferrence of approaches developed for the DCs, with minor modifications, to fit the "special case" of the LDCs (Yotopoulos and Nugent, 1976; p.12).

In the 1950s and the first quinquennium of the 1960s, it was thought that labor was abundant in the LDCs; Lewis's (1954) "Development with Unlimited Supplies of Labor" may be recalled. It was naturally assumed that the auxilliary factors were in inadequate supply. If these factors, principal among them was capital, could be augmented then poverty would be eradicated. The theoretical basis of "capital fundamentalism" was the Harrod-Domar model developed for the DCs. So important was capital that

Lewis (1954) contended that:

> "The central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5% of its national income or less, converts itself into an economy where voluntary saving is running at about 12 to 15% of national income or more. This is the central problem because the central fact of economic development is rapid capital accumulation" (p.353).

Capital as the prime determinant of development was implemented with a number of policies for increasing savings (Cairncross, 1955; Nurkse, 1953; UN: ECAFE, 1960). However, this emphasis on capital did not go un-criticised. Harbinson (1962), Schultz (1962), Myint (1964) and Musgrave (1966) argued that it would be senseless to increase material capital without ensuring that the capacity exists to utilize it effectively. Effective utilization, the argument went on, depends upon absorptive capacity, the existence of efficient technical, professional as well as administrative personnel. Meier (1976) was more explicit:

> "An improvement in the quality of the 'human factor' is as essential as investment in physical capital. An advance in knowledge and the diffusion of new ideas and objectives are necessary to remove economic backwardness and instill the human abilities and motivations that are more favorable to economic achievement. Although investment in material capital may indirectly achieve some lessening of economic backwardness of the human resources, the direct and more decisive means is through investment in human beings" (p.520).

Horvate (1958) put it even more strongly,

> "...the experience of planning seems to suggest that knowledge (and certainly not investment resources) is the most important scarce factor in the under-developed countries with otherwise favorable social climate" (p. 751).

Despite these misgivings, the primacy of capital was extended to other areas. It was reckoned that domestic capital formation need not be constrained by inadequate domestic savings. Such savings could be supplemented by foreign savings or assistance and an even larger role was envisioned for foreign aid. It may also be used to relieve other

bottlenecks like scarcities of foreign exchange and skills (McKinnon, 1964; Chenery and Strout, 1966; Vanek, 1967; Sengupta, 1968). In general, however, two distinctive roles were consistently assigned to foreign aid: to bridge either the saving-investment gap or the import-export gap.[3]

These "fundamentalist dogmas" have done a great deal of harm to development economics and to development in practice.[4] The proliferation of "dogmas" has served to distort, pervert issues and confuse causes with effects. On closer examination, many of these dogmas can be found to be based on inadequate or faulty premises. The practice of using the DCs as a standard of comparison to spin off simple and abstract theories, on the basis of which policy solutions modelled after DC experience were prescribed, is questionable on both philosophical and methodological grounds.

Philosophically, two value premises are implicit in the exercise: the notion that "under-development" itself, when compared with the state of development in the DCs, is inherently inferior and the premise that there

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[3]It was reckoned that by relieving shortages of critical resources foreign aid would make the requirements for co-ordinated changes in the economy less stringent and permit fuller utilization to be made of domestic resources (Chenery and McEwan, 1966; Chenery and Bruno, 1962). For reservations and criticisms of the aid-gap doctrine see Bruton (1969), Pincus (1970), Tinbergen (1970), Findlay (1971), and Lal (1972).

[4]The respectability of development economics as an analytical discipline is already impugned. Srinivasan (1972) for example quoted an unnamed but highly respected economic theorist as saying,

> "Those among economists who cannot make the grade as mathematical economists, statisticians, monetary or trade economists or economic historians usually end up either as labor economists or worse still as development economists" (3n).

is but one "preferred" road to progress and general welfare - that traversed by the DCs (Zeylstra, 1975; p.118-119).

The weaknesses of these premises are immediately apparent. First, the LDCs of today face an international economic environment that is very different from those faced by the DCs during their industrial revolutions. Kuznets (1960) was among the first to argue convincingly that in the history of the DCs no situation could be found corresponding with actual conditions in the LDCs. Second, the presumption that industrialization per se and high mass consumption or Western standard of living are the principal determinants of human welfare is objectionable.[5]

Third, using the rich countries as standard of comparison has created a peculiar and unfortunate state of mental outlook in the LDCs - "religion of development" (Uphoff and Ilchman, 1972). By this "religion" is meant the tendency, prevalent among the LDCs, to regard the characteristics of under-development as the causes of their poverty and therefore development to mean the eradication of these characteristics. The religion also manifests itself in blind imitation of the consumption habits of the DCs or their ways of life and an inclination to exalt anything foreign or imported as sanctified as well as a fanatical zeal to castigate local or traditional ways of life in the LDCs as "inferior". The unfortunate consequence has been the perversion of the notion of development to mean straight imitation of the DCs.

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[5]Pollution, acid rain and crime all affect human welfare. Zeylstra (1975) goes further:

> "The influence of racial prejudice disguised as humanitarian paternalism cannot be altogether be excluded. It is too much of a coincidence that the division between the developed countries and 'others' is so insistently supposed to run grosso mondo parallel with that between the 'white' and the 'colored' world" (p.122).

Methodologically, the adoption of an essentialist epistemology has also contributed to the perversion of the concept of development.[6] Development is generally viewed as a quantifiable and measurable production process whose rate of output can be manipulated by varying the amounts of capital inputs or new materials and all other non-quantifiable factors are dismissed as either irrelevant or un-important. It would be sacrilegious economically to assert that doubling the number of tractors in Ghana, for example, would result in a three-fold increase in agricultural output - a case of increasing returns of scale.

In the next section, we shall critically evaluate the role assigned to capital in contemporary development theory in the light of the questions raised above.

2. The Primacy of Capital: A Detailed Evaluation

There is no doubt that capital formation is an essential part of the economic growth process. But, emerging from a Harrod-Domar growth model developed for the DCs, many of the strictures about capital formation are often inapplicable to the LDCs. Specifically, the emphasis on increasing domestic savings and effective utilization through the expansion of absorptive capacity, technical, professional as well as administrative personnel seems misplaced. Central to the capital formation process in the LDCs is the availability of foreign exchange. Many of these countries lack the capacity to produce capital or investment goods and must consequently import them. A shortage of foreign exchange therefore acts as a brake on

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[6] An essentialist intellectual tradition indicates an inclination to abstract, generalize and seek "first causes" to account for outcomes in terms of the essence of things rather than their interaction. In contrast, an existential tradition is more oriented towards problems of choice, taking into account the goals and capabilities of persons as well as the uniqueness of situations in which persons find themselves (Uphoff and Ilchman, 1972; p.14).

capital formation. Had the capital treatise emphasized instead the translation of domestic savings into foreign exchange for example, many of its strictures would have been relevant to the LDCs.

This conceptual difference was clearly recognized by the gap-models which emphasized the availability of foreign exchange as the essential ingredient in the investment process in the LDCs. The gap doctrine went further to argue that when foreign exchange shortages (or bottlenecks) occur, LDCs may find it beyond their means to relieve these constraints because export expansion (to earn more foreign exchange) may be limited by adverse income and price elasticities as well as protectionist trade barriers erected by the DCs. Under these circumstances, the only recourse is to foreign assistance (Chenery and Strout, 1966).

In identifying foreign exchange availability as the critical determinant of capital formation as well as demonstrating the vital role foreign aid can play in this process, the gap-models did a great service to development economics. However, this service was attenuated by certain weaknesses in gap analysis. Firstly, the emphasis on the operation of adverse income and price elasticities on export expansion encouraged the LDCs to attribute problems of capital formation to external factors. Consequently, the equally probable alternative hypothesis that foreign exchange shortages and attendant capital formation problems can be created by domestic factors was hardly considered. The case of Ghana indeed suggests domestic causes of foreign exchange crises. Free-wheeling government expenditures financed by extensive borrowing from the banking system resulted in excess liquidity and demand. This demand was partly vented off on imports, exacerbating the exchange crisis and partly on domestically produced goods which were in inadequate supplies, thanks largely to inept

economic policies. The resultant inflation robbed export producers of real income and price incentives. Consequently, the export sector stagnated. Clearly, domestic factors can either precipitate export stagnation and foreign exchange crises (hence capital formation problems) or hamper an LDC's ability to recover from such crises.

Secondly, the epistemology adopted by the gap-models was essentialist. It betrayed an inclination to seek explanation in terms of quantifiable factors. That is, a given inflow of foreign aid would permit a determinate increase in the rate of growth. In many LDCs, development plans were hastily drawn up with over-ambitious targets. The amount of investment needed to achieve these targets were calculated and used as the basis to solicit foreign aid. Little did it dawn upon the planners that "other things" were missing from the equations - the "human factor" and a congenial socio-political and economic environment. For example, as aid from the Socialist countries, Ghana imported a multitude of tractors and other agricultural machinery in the early 1960s. To-day they litter the countryside, broken down for want of repairs. Clearly a mere physical increase in capital or aid, although necessary, is not a sufficient condition for the acceleration of capital formation.

Finally and most important of all in our view, besides the interactive and cumulative effects of the socio-political and economic environment, there are yet other aspects of this environment which have received very little attention in the capital formation literature. These are the so-called man-made obstacles to domestic capital formation. Among them are bribery, corruption, pilferage of foreign exchange by Heads of State and their Ministers as well as smuggling and other trade mal-practices such as over and under-invoicing of legal trade.

On corruption, the literature is growing but rather hesitantly. However, the contributions on this topic come principally from non-economists such as political scientists and sociologists. Among them are Andreski (1969), Heidenheimer (1970), LeVine (1975), Matthews (1966), Nye (1967), O'Connell (1967), Sharpston (1970), van Roy (1970) and Werlin (1972 and 1973).

In international trade literature, some attempt has been made to analyse the normative aspect of smuggling and quasi-smuggling phenomena (see Bhagwati, 1974, for example). In the development literature, Robinson (1971) is notable in recognising the problem and contending that,

> "The ruling elites use their governing authority to extract wealth from the productive classes and spent it on prestigious status symbols, luxurious living as an imitation of the standards of the richer metropolitan countries. Certainly the grand public buildings, airlines, Rolls Royces (Mercedes Benzes), political patronnage and corruption all present formidable obstacles to internal capital formation and productive investment" (p.43).

Many questions raise their heads. How precisely does the "corruption index" (Matthews, 1966;p.12) or the "mal-practice factor" affect capital formation. If this mal-practice factor has deleterious effects on capital formation why has contemporary development theory remained silent about the issue?

Perhaps the illegal nature of these mal-practices and severe problems in estimating their magnitude caused the intellectual reticence. Or perhaps Western writers were fearful of being accused of "discrimination" or shirking their responsibilities towards aiding the LDCs. Whatever the reasons, it seems to us that the time is ripe to take this "mal-practice factor" seriously in formal development analysis. Extensive evidence from Ghana suggests that that corruption factor has the potential of

posing a more serious threat to capital formation than economic factors. For example, between 1960-65 Ghana financed many of its investment projects by suppliers' credit. According to Grayson (1973), many of these contracts were riddled with graft and under the arrangement Ghana imported expensive but obsolete pieces of machinery for its capital formation drive. A study by Steel (1972) found that many of the state enterprises set up with suppliers' credit were "inefficient savers of foreign exchange". Furthermore, the Paterson, Simons & Ewart Cocoa Report for 1978 estimated that Ghana would lose 13 to 20% of the expected 1978 cocoa output of 308,000 tonnes to smugglers. Cocoa is Ghana's main export crop and foreign exchange earner, accounting for some 65% of exchange revenue. Even worse, the late Colonel Acheampong, ex-Head of State of Ghana, was reputed to have stashed away in Swiss and other foreign banks ₤45 million of Ghana's wealth (Ashanti Pioneer, August 4, 1978).

Clearly, at least in the case of Ghana, mal-practices have conspired to rob the country of the foreign exchange needed for capital formation or impede the country's ability to earn as well as save foreign exchange. Therefore, any meaningful discussion of the capital formation process in the LDCs must address itself to the "mal-practice factor" even though it may be difficult to estimate. For the recognition of this factor, a product of the interaction between socio-political and economic forces, is essential in understanding why many developing countries, especially Ghana, have failed to reach the take-off stage.

B. THE SCOPE AND AIM OF THESIS

The gap-models, despite their significant contribution to development literature, possessed some conceptual weaknesses. In identifying foreign exchange as the critical determinant of capital formation they assumed

its availability to be externally determined. Furthermore, the capital formation process was analysed outside of the socio-political environment in which it occurs and gap-analysis was noticeably reticent on the "mal-practice factor".

Although essential to development, external resources can make a significant contribution only if the domestic economic and socio-political situation is conducive to the utilization of foreign exchange. It is quite conceivable that domestic constraints may impair effective utilization as well as undermine an LDC's ability to generate the foreign exchange needed for capital formation.

The aim of this thesis therefore is to address some of the weaknesses in the gap-analysis by formulating a theory about capital formation in which domestic factors and their interaction play a primary role in a specific developing country, in this case Ghana. In this exercise, external determinants of foreign exchange availability, for example aid and terms of trade, have been assigned a subsidiary role.

The thesis begins with a search for an operational concept that is vital for capital formation and subject to control by domestic economic forces but at the same time also sensitive to the "mal-practice factor". This effort necessitates a re-examination of the contemporary concept of saving.

We argue that, since investment is invariably constrained by the inability to import certain capital goods an LDC cannot produce, the contemporary concept of saving is not particularly useful for the analysis of capital formation. To be effective such savings need to be in the form of foreign exchange, a point clearly recognised by the gap-models. However, the difference between our analysis and the gap-models resides in

our assertion that domestic forces greatly influence the conversion of savings into foreign exchange or its generation. Therefore, domestic economic policies, specifically incentives to export producers, can be seen as playing a crucial role in the capital formation process.

The generation of additional foreign exchange in itself is only a necessary but not sufficient condition for an accelerated capital formation. Socio-political preferences may predispose an LDC to waste much of its earned foreign exchange in conspicuous consumption on grand public buildings, state weddings, Mercedes Benzes and other obstructive "signs of modernism". In addition, part of the foreign exchange generated may be lost through embezzlement by the Head of State for example - the "malpractice factor".

Thus, it is not so much the amount of foreign exchange an LDC succeeds in earning but also how much it saves from conspicuous consumption and mal-practices. To give this idea an operational content we propose an alternate concept of saving - effective savings - defined as the difference between export earnings (foreign income) and imports of consumer goods. Clearly, effective savings represents the amount of foreign exchange that is "effectively" saved from wasteful consumption and vice for investment.

In the next chapter (2), we provide some background information on the political economy of Ghana. Naturally, this chapter is selective in its contents and includes only such topics as recent political history, certain features of the socio-political environment and relevant economic characteristics that either bear on the saving-investment process or facilitate the comprehension of subsequent chapters. Readers familiar with Ghana could safely skip this chapter.

In chapter 3, we construct a theory of capital formation using effective savings as the main building blocks. This chapter is a theoretical discussion of the impact of domestic forces on the generation of effective savings and hence on the capital formation process.

Chapter 4 examines the concept of effective savings in the light of Ghana's experience. The next three chapters delineate and discuss the domestic variables that have been important in influencing Ghana's ability to earn foreign exchange, i.e., the volume of effective savings. Specifically, in chapter 5 we examine the effects of monetary variables on effective savings. Chapter 6 examines the influence of economic policies of past Ghanaian governments (fiscal measures) on the generation of effective savings.

A comprehensive treatment of the interactive effects of the social and political environment and the "mal-practice factor" on the generation and use of effective savings is formidable for obvious reasons: the non-quantifiability of socio-political factors, illegal nature of mal-practices and difficulties in estimating their magnitude. Nevertheless, in chapter 7, we attempt to show how certain socio-economic and political factors such as corruption and smuggling impinge on Ghana's effective capacity to save. Although this chapter is not as rigorous as the others it lends a qualitative and illustrative dimension to the "mal-practice factor" in effective savings analysis.

The final chapter contains a summary, conclusions and policy recommendations.

CHAPTER 2: THE POLITICAL ECONOMY OF GHANA

This chapter discusses some of the political and economic features of Ghana that help to delineate the "environment" within which its development is taking place. Since there are many features of this environment which bear directly or indirectly on development it is necessary to be selective, discussing only those which are directly relevant to the concept of effective savings. Readers already familiar with Ghana may wish to proceed directly to chapter 3 without loss of continuity.

A. POLITICAL FEATURES

1. Ideology

On March 6, 1957, the Gold Coast gained its political independence from Britain and the name Ghana was adopted for the new state.[1] Dr. Kwame Nkrumah, leader of the Convention People's Party (CPP), became the first Ghanaian Prime Minister and later the President when the state was declared a republic in 1960.

Nkrumah declared socialism as his ideology and that his "Convention People's Party is the state and the state is the party.....The Party has always proclaimed socialism as the objective of our social, industrial and economic programmes. Socialism however will continue to remain a slogan until industrialization is achieved" (Nkrumah, 1973;p.190). He

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[1]Ghana was the name of ancient sub-Saharan kingdom which flourished in the Western Sudan between the 8th and 10th centuries A.D. The name was adopted at the time of independence perhaps to demonstrate the African authenticity of the new state, to evoke pride of self-rule and to cherish the rustic glories of the ancient kingdom.

went on to reiterate, "Let me make it clear that our socialist objectives demand that the public and co-operative sector of the productive economy should expand at the maximum possible rate, especially in those strategic areas of production upon which the economy of the country depends" (Nkrumah, 1973; p.191).

Nkrumah was at times not very clear about his choice of a socialist ideology. Nor were the goals of socialism clearly defined. At one point he stated: "This choice is based on the belief that only a socialist form of society can assure Ghana of a rapid rate of economic progress without destroying that social justice, that freedom and equality, which are a central feature of our traditional way of life" (7-Year Development Plan, 1963; p.1). At another, he stated that the socialist transformation would "eradicate completely the colonial structure of our economy" (Nkrumah, 1973;p.189). By "colonial structure" he meant Ghana's dependence on a single primary produce, cocoa.

> "Under colonial rule, foreign monopoly interests tied up our whole economy to suit themselves. We had not a single industry. Our economy depended on one cash crop, cocoa. Althouth our output of cocoa is the largest in the world, there was not a single cocoa processing factory. There was no direct rail link between Accra and Takoradi. There were few hospitals, schools and clinics. Most of the villages lacked a piped water supply. In fact the nakedness of the land when my government began in 1951 has to have been experienced to be believed" (Nkrumah, 1973;p.395).

Thus,

> "Ghana inherited a colonial economy and similar disabilities in most other directions. We cannot rest content until we have demolished this miserable structure and raised in its place an edifice of economic stability, thus creating for ourselves a veritable paradise of abundance and satisfaction. Despite the ideological bankruptcy and moral collapse of a civilization in despair, we must go forward with our preparations for planned economic growth to supplant the poverty, ignorance, disease, illiteracy and degradation left in their wake by discredited colonialism and decaying imperialism" (Nkrumah, 1973; p.185).

Nkrumah was constantly haunted by the specter of imperialism and neo-colonialism which "is only the old colonialism with a façade of African stooges". He believed only socialism could effectively check the evil machinations of neo-colonialism and he felt obliged to enlighten his fellow African Heads of State. His socialistic pretensions went beyond Ghanaian borders and he became an ardent Pan-Africanist.[2] The socialist state he envisioned for Ghana was to be,

> "In the vanguard of the African revolutionary struggle to achieve continental liberation and unity... Ghana, under my government, was a haven for the oppressed from all parts of Africa. Freedom fighters trained there. Ghana was revered all over the African continent, as a country which all who fought oppression and exploitation could depend upon. Our political and economic achievements were closely studied and admired" (Nkrumah, 1973; p.419).

And,

> "In keeping with my government's policy of linking Ghana's progress with Africa's total development provision was made in the 7-Year Plan for economic co-operation with other African states, viz, sale of electricity to Togoland, Dahomey (Benin) and Upper Volta" (Nkrumah, 1973;p.401).

Nkrumah's socialist transformation of Ghana was to be rapid in order to "achieve in a decade what it took others a century". There was to be a rapid expansion of the state sector and "various state corporations and enterprises were to be established as a means of securing our economic independence and assisting in the national control of the economy" (Nkrumah, 1957;pp.398-99), because "capitalism is too complicated a system for a newly independent state; hence the need for a socialist society" (Nkrumah, 1957; pp.xv-xvi).

He spurned the efficacy of the market mechanism as a means to the economic development he was determined to achieve. Planning was to be

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[2] Once he declared that "The political independence of Ghana is meaningless unless it is linked up with the total liberation of Africa" (Nkrumah, 1957;p.4).

the tool because "government interference in all matters affecting economic growth in less developed countries is today a universally accepted principle" (Nkrumah, 1963;p.109).

Thus Nkrumah's brand of socialism was to serve no less than six purposes, some of which were vaguely defined and conflicting with others;

(i) to generate rapid economic growth,
(ii) to create "a veritable paradise of abundance and satisfaction",
(iii) to check the "evil machinations of imperialism and neo-colonialism",
(iv) to foster "economic independence" in adverse colonial heritage,
(v) to serve "in the vanguard of the revolutionary struggle" to liberate the oppressed continent of Africa.[3]

Nkrumah's socialist experiment failed and in February 1966 he was thrown out of office but he never admitted the failure. Writing in exile from Conakry, Guinea, he maintained that the charge that he mismanaged the economy and plunged the country into an economic chaos was "a big lie" for "how can the obvious evidence of modernization and industrialization of Ghana such as new roads, factories, schools and hospitals, the harbor and town of Tema, the Volta and Tefle bridge and Volta Dam be reconciled with the charge of wasted expenditure" (Nkrumah, 1973;p.418).

Since his overthrow in 1966 there have been six Ghanaian governments. The National Liberation Council (NLC), a military junta, ruled from 1966 and handed over to a popularly-elected civilian government headed by Dr. Busia in 1969. Busia was ousted from power by Colonel Acheampong in 1972 and the National Redemption Council was formed. In June 1978, Lt/Colonel Akuffo ousted Colonel Acheampong from power. However Akuffo's regime (SMC II) lasted for only one year; it was replaced by the Armed

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[3] For evaluations of his achievements of the non-economic objectives, see Fitch and Oppenheimer (1966), Dumont (1966), Bing (1968), Apter (1972), Howell (1972), Woronoff (1972) and Killick (1978).

Forces Revolutionary Council (AFRC) under Ft/Lte Rawlings in June 1979.[4] Less than four months later Rawlings handed over power to a democratically elected civilian government headed by President Limann.

In terms of ideology, what was conspicuously absent in the regimes that succeeded Nkrumah's was the socialistic rhetoric in government pronouncements. The NLC had no ideology, they were pragmatists in character, more interested in stabilizing and bringing some order into government business. Busia was a "free thinker" and a disciple of the market system. However, Acheampong was an Nkrumah in army uniform except that his public pronouncements lacked the socialistic invective so characteristic of his master. Akuffo was also not interested in any political ideology. Neither was Rawlings except that he was a revolutionary in the true sense of the word. Limann is also an Nkrumaist and in fact held public office under Nkrumah. Since his election, he has "made a pilgrimage to Nkroful, Nkrumah's birthplace, for inspiration and guidance" (West Africa, September 3, 1979;p.1625).

Despite their various ideological leanings, most Ghanaian governments since 1966 have been "socialistic" in deed. After 1966, there was no appreciable dismantling of the interventionist machinery set up under Nkrumah's socialist banner. Successive governments generally followed Nkrumah's economic strategies; economic activity was centrally directed and a large participatory role in the economy was assured for the state (chapter 6).

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[4] In 1976, the NRC re-constituted itself as the Supreme Military Council (SMC), a name which Akuffo retained. Thus to distinguish between them SMC I and SMC II are used to refer to governments before and after June 1978 respectively.

2. Other Features of the Political Environment

Chronic Instability

Political instability is so endemic that it has become the chief characteristic of the Ghanaian political system. The instability derives from two sources; constant political dilemma and an economic predicament.

It has been argued that African governments, in their pursuit of development, often find themselves in a political quagmire. According to Barker (1971),

> "The government which systematically pursues development contributes to its own instability and reduces its capacity to take the kind of strong consistent action development requires...They (African governments) are obliged to choose between a different set of actions which favors development and a completely different set which favors support for the government and political stability" (p.48)

Barker called this political dilemma "a paradox of development". Apter (1965) also noted that "modernization itself creates those conflicts that political leaders must solve in order to pursue modernization" (p.433). Even John Stuart Mill (1951), in considering the social and cultural pre-conditions to representative governments noted that "uncivilized" people are not capable of supporting governments which could start them on the road of progress through representative institutions; "A representative assembly drawn from among themselves would simply reflect their own turbulent insubordination" (p.296).

The underlying cause of the political dilemma appears to be the fragility of the state administrative machinery. This machinery is relatively recent and lacks experienced indigenous administrators. This has meant that the bureacracy is small and the effectiveness of central government decisions are quite limited. Economic development invariably involves decision making by the small bureaucracy that may

be binding on all groups or even harmful to some groups. For example, to extend their rule over their territories the colonialists found it necessary to abrogate the traditional powers of the Gold Coast chiefs. The new Ghanaian leaders also found it equally necessary to restrict chieftain powers not only to consolidate the position of the central government but also to bring about some changes needed for development; land tenure reforms for instance. But after independence, many chiefs agitated for most of their powers to be re-instated.[5] To this end, they sought "unholy" alliances with the workers and some of the elite to thwart government policies and undermine its authority. On many occasions the chiefs effectively challenged and put a dent in the fragile state bureaucracy. Their success demonstrated the vulnerability of the government and often encouraged other pressure groups to follow suit. Thus, in extending the rule of law to legitimise themselves, Ghanaian governments frequently incite discontent among groups who subsequently operate to undermine their legitimacy. This political dilemma is akin to a general type of dilemma in the field of development where the process of development tends to create situations and attitudes that are inimical to further development, for example, education and elitism or education and discontent (Ridker, 1967).

The economic predicament derives from the uncertainty of state revenue. The tax base is narrow; taxes on income and property account for some 20% of revenue while indirect taxes, import and custom duties, may account for as much as 70%. With this revenue base Ghanaian governments have to cope with mass pressure for very expensive items, listed in

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[5] For an account of this constant source of tension during the Nkrumah regime in Ghana, see Lofchie (1971;pp.65-92).

approximate order of priority: educational expansion, expansion of wage-earning opportunities, infrastructure and welfare. The educated urban middle class make similar demands. They want expensive universities, overseas scholarships, salary levels for the bureaucracy and political cadres comparable to international scales and expect many fringe benefits such as financing of personal automobiles, international travel, expense accounts and even loans for houses. Foreign companies also expect considerable government assistance such as subsidized facilities for foreign personnel, tax holidays and guarantees of risks. The government has been expected, and at times feels obliged, to respond to all these demands.

The smallness of the bureaucracy and the abundance of frontiers as well as "assistance" from venal tax collectors make it relatively easy to evade taxes. Consequently, budget expenditures persistently outrun revenue. In fact since 1960, all Ghanaian governments have consistently run budget deficits (Lofchie, 1971; p. 23). If they attempt to raise revenue by increasing indirect taxes, consumer prices rise. This may provoke widespread discontent with which the bureaucracy is incapable of dealing, as was the case with Nkrumah's overthrow in February 1966. If they attempt to curtail expenditures on the military or education the result is a military putsch as by Acheampong in 1972 or student demonstrations as in 1976. This is the Ghanaian political predicament. In the words of Wallerstein (1971), "as long as the state machinery remains fragile and the state'e revenue so uncertain, there will be a chronic gap between promise and reality and hence chronic instability" (p.33).[6]

[6]Similar views have been expressed by O'Connell (1967).

Kleptocracy as a System of Government

No nation can be said to have divested itself completely of corruption and nepotism. Kleptocratic tendencies manifest themselves in the DCs in subtle forms as kick-backs, influence-peddling (lobbying), "old school boyism", free trips and so on. Even in socialist countries such as Poland, the act of passing a bribe has been nick-named 'a socialist hand-shake'. Venality, then, is not peculiar to Ghana alone except that it is more blatant and pervasive in that country. Matthews (1966) adds that, "bribery is so ever-present that there is even a stock phrase 'the corruption index' for which it will cost a foreign businessman to see a Minister"(p.12).

After only a few years or even months in office, top Ghanaian politicians amass fortunes several hundred times their salaries. Many politicians exact illegal commissions on government contracts. In Ghana the customary commission used to be 5% but has gone up with inflation to 15%. Politicians and senior civil servants divert public funds and materials to their own personal use with impudence. Public property is misused, official cars used for private pleasure and public funds for personal aggrandizement.

The susceptibility of the elite to peculation percolates to the sub-elite (clerks, typists et cetera). Clerks who deal with innumerable small formalities expect gratuities before they carry out their service to the public. Otherwise they attend to the matter with deliberate lethargy or invent a pretext for shelving it forever. Even the police are notorious for imposing "on the spot fine" for fictitious traffic offences, fines that deviously end up in their pockets. It is probably more accurate to describe them as disciplined extortionists or uniformed

bandits than as law enforcers.

Collection of taxes, excise and custom duties offer ample opportunities for ignoble personal enrichments. A company that owes a substantial amount in taxes can get off the hook by paying about one-tenth of that amount to the right civil servant who will ensure that the tax assessment records mysteriously disappear. Similarly, private individuals can escape the payment of income taxes or excise duties by the payment of an appropriate bribe.

Of the country's foreign exchange earnings, part is stolen or diverted by the Head of State and his Ministers. Officials responsible for the management of Ghana's foreign exchange resources are susceptible to corruption. Even private individuals, with the connivance of Bank of Ghana officials, succeed in transferring considerable sums of foreign exchange out of the country.

Venality and peculation have become so pervasive as to become legal iniquities. All too often, upon assuming office, politicians with otherwise impeccable rectitude find themselves co-opted by an administrative system in which probity is a constant casualty. Extensive discussions of the kleptocratic practices of ex-Heads of State in Ghana can be found in LeVine (1975), especially pages 20-39. Although much of what follows in this section is culled from that book, we have supplemented it with revelations at Commissions of Enquiry currently sitting in Ghana. The aim is to provide the reader with some idea of the extent and seriousness of the venality problem. In chapter 7, section A, we discuss its economic or developmental consequences.

The Nkrumah era was characterized by over-spending, wasteful practices, wilful extravangence with public funds and financial irregularities and profligacies. The 1955-56 Auditor's Report cited 156 cases of financial irregularities. The Prime Minister, Nkrumah, himself was cited as having exceeded official budget by 200%. Although losses were meagre, some ¢90,000, cases of financial mismanagement jumped to 202 and the losses to ¢156,000 in 1957 (LeVine, 1975; p.20).

By 1961 the situation was getting worse. The Auditor's Report noted large-scale default loans, failures and liquidations of at least 6 government corporations, There were proliferating travel allowances and mileage claims, excessive drawing on amenity and family allowances, widespread unauthorized bookings of passage to England for families of officials, over-payments on contracts (12 cases noted) inflated building contract estimates and too frequent purchases abroad of expensive goods available more cheaply in Ghana. The Report noted a Ministry of Defence purchase of ¢200,804 worth of furniture from England. "The purchase of expensive carpets for use in offices", the Report also noted, "has become increasingly common". In one instance, a number were purchased and the payment charged to "Election Expenses" (LeVine, 1975; p.20. Quotes are also contained therein).

The Ministry of Foreign Affairs "abused its priveleges", increased representational allowances without authorization, took on much redundant staff and permitted excessive payments abroad for medical care, air travel, communications and local transportation. The London High Commission alone, reported expenditures of ₤18,735 in 4 months on taxis and automobile rentals. The Paris Mission paid ¢208, 432 for an apartment in Paris and ¢24,000 was paid for another in Accra (LeVine, 1975;p.21).

From 1961-63, again "in keeping with past practice, missions have continued to spend extravagantly at the least opportunity" (Auditor's Report, 1962-63; p.17). The Ghanaian Embassy in Washington D.C. negotiated and paid ¢428,000 for a building previously rejected by the Indian Mission on an architect's advice that it was too old for effective repairs. In all 29 of the 56 gazetted diplomatic missions overspent their estimates between 1961 and 1963 and their personnel were also involved in a wide range of illicit and corrupt dealings. The London Mission, for example, drew up a four-month expenditure of ₤17,328 for telegram and one ambassador charged his mission for the rental of his own personal typewriter! Another diplomat authorized the purchase of a bouquet and a coffin at government expense for a deceased relative and another rewarded his wife's pregnancy with a generous and illegal cash allowance (LeVine, 1975; p. 21).

President Nkrumah himself was involved in a wide variety of corrupt transactions and others took place with his benign acquiescence. There is some disagreement on the extent of his personal fortune at the time of his divestiture. Nye (1967) put the figure at $30 million while the Apaloo Commission which enquired into his properties arrived at a figure of ₤2,322,009 0s 10d in cash and physical assets. This figure, however, was at best conservative since investigators were hampered by difficulties in tracing the ex-President's assets. Nevertheless he used public funds to distribute largesse to his favorites — he tapped the President's Contingency Vote and at least two public corporation votes to buy cars for mistresses and give "gifts" to relatives, friends, associates and ideological cronies. He set up a special government agency, National Development Corporation Limited (NADECO), to facilitate the collection

and handling bribes and the price paid by the government for properties purchased from a Greek businessman, A. G. Leventis, was deliberately inflated so that ¢2 million could be turned back to Nkrumah for his own use (LeVine, p.29). The Apaloo Report (1967) noted that, at least ¢180,000 from the Leventis transaction went into Nkrumah's private bank account in Switzerland. One Henry K. Djaba, under prosecution for fraud in the Ministry of Agriculture, apparently hoping for a quashed indictment, presented Nkrumah with a ₤2,500 Mercedes Benz sports car, a bullet-proof Mercedes Benz 600 worth ₤12,000 and some ₤25,000 in cash and a ₤1,500 glider. Nkrumah accepted the gifts but Djaba was convicted and jailed only to be released after two years (LeVine, 1975;p.29).

The Apaloo Commission (1967) revealed that Nkrumah sat at the apex of a pyramid of government and party officials who had succeeded in institutionalizing political corruption at the highest levels. At least 5 government bodies set up for ostensibly legitimate purposes turned out to be agencies for institutionalized political corruption. NADECO, the Ministry of Trade (in its import licensing role), the Guinea Press, Ghana Bottling Company and the National Papers Distribution Corporation (NAPADO). The Guinea Press was considered by Nkrumah to be his own property. It received over ₤1.8 million from government sources and another ₤146,000 from the CPP (Nkrumah's Party). When an American friend told Nkrumah that political parties there were financed by companies, Nkrumah decided to create NADECO as receiver of the 5 to 10% commission he wanted levied on the price of all contracts negotiated by Ministers, principal secretaries and public corporations. One of his Ministers, Krobo Edusei remarked that "When many bribes started flowing in, NADECO

was formed for all the bribes to be channelled into" (Azu Crabbe Report, 1966; pp. 3-4 and pp. 31-33).[7]

Not only were government employees forced to insure their automobiles with NADECO but also foreign companies were required to use it as their agents. The company's principal sources of funds were bribes, commissions and "gifts" that were either given freely or extorted from European companies operating in Ghana as well as a number of Ghanaian building contractors. Among the firms contributing to NADECO's coffers were ZIM Navigation, an Israeli firm operating Ghana's merchant marine under contract; Parkinson-Howard, a British consulting contractor; Henschel, a German truck manufacturer and Duncan Gilbey and Matheson, the British firm that makes Gilbey's gin (LeVine, 1975; p.31).

The Azu Crabbe Commission found that by 1966, NADECO had received a total of ¢3,394,000 from a variety of sources. Of that amount, some ¢180,000 went into Nkrumah's private bank account, another ¢430,000 went to the CPP Appeal Fund and various other sums were disbursed on Nkrumah's pet enterprises (for example, ¢10,374 to the Ghana Bottling Company and as gifts, disguised as loans, to several of Nkrumah's girl-friends). Still other sums were simply directed by Nkrumah to private uses (as, for example, to construct houses for his former cook and three of his relatives).

On mal-practices in the allocation of import licences (we look at some recent evidence in chapter 6) LeVine (1975) contends that of the 52

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[7] Krobo Edusei, perhaps the most corrupt and less enlightened of all Nkrumah's ministers, once remarked that, "Socialism is a system where all men are equal like my ten fingers". In reference to the perquisites of power, LeVine (1975;p.v) qoutes him as saying "The sweetness of the pudding is in the eating thereof!". Edusei's assets and physical property were seized when Nkrumah was overthrown in 1966. They were partially returned when Acheampong came to power in 1972 but only to be seized again in 1978 when Acheampong was ousted.

transactions investigated by the Ollennu Commission alone (there have been more than four commissions on the issue of import licences), 17 brought in ¢240,000 in illegal commissions and bribes (LeVine, 1975; p.32).

LeVine further maintains that:

> "The four agencies (discussed above) represent merely a part of the visible tip of the iceberg of political corruption during Nkrumah's regime.... Post-coup inquests produced ample evidence of political corruption in other governmental and quasi-governmental agencies and corporations, in municipal and urban councils and even in the country's three Universities..... In all, some 42 governmental and semi-governmental units were investigated after the 1966 coup" (p.33).

This then is evidence of the organized and institutionalized form of political corruption that prevailed during Nkrumah's era. It hardly comes as surprise that the State Farm Corporation, perhaps the most corrupt-ridden of all the state agencies, should manage to accumulate a net deficit of ¢17,248,784 by the end of 1965, after only three years of operation (LeVine, 1975; p.34). In fact in this era, it hardly made any sense to talk about efficiency or efficient management of economic resources. To whom would one relegate such responsibility? Use "one set of corrupt men to check another"? Yet these public officials have the effontery to attribute their economic problems to foreign "imperialist" forces.[8] What was the record after Nkrumah?

For one thing the blatant forms of corruption appeared to have vanished after Nkrumah, but it assumed a more disguised form. Prior to April 1969, the military junta (NLC) that overthrew Nkrumah in 1966 had had a clean record. In April 1969 a major scandal ripped through the country when it was revealed that the Chairman of the NLC, General

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[8] It is incredible how Ghanaian leaders persist in blaming foreigners to cover their own inadequacies. As we shall see in chapter 4, Busia blamed "forces moving in on us from overseas" and Acheampong blamed the "weather".

Ankrah had wittingly sanctioned a covert collection of money on hehalf of his own possible candidature of the country's presidency.[9] In 1969 a civilian government headed by Busia took office and when it was overthrown in January 1972, the Anin Commission of Enquiry was set up. The Commission concluded that Busia's government was also riddled with corruption but not on the scale attained during the Nkrumah regime.

Busia himself refused to testify before the Taylor Assets Committee which was set up by his government to enquire into the assets of Members of Parliament. His refusal to do so prompted suspicions that his assets over $800,000 by his own declaration, were illegally acquired. When in office he built a house costing as much as $300,000 in his home-town, Wenchi, but claimed it cost only $155,000. Investigators were also interested to know the source of the approximately $74,000 in cash he brought into the country in a trunk when he returned to Ghana in 1966. The $12,000 collected by a friend for the former Minister of Interior and three deposits totalling $99,000 made in three months to the private account of G.D. Ampaw, former Minister of Health and a string of company directorships and businesses acquired by B. J. da Rocha after he became the Progrees Party general secretary were all matters of speculation (LeVine, 1975; p.36).

At lower levels of government the Auditor's Report for 1967-69 showed that not much had changed since the Nkrumah days. Of the 142 separate local government units operating in the country, 105 reported

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[9] One F.A. Nzeribe, a Nigerian-born businessman operating in Ghana, collected ¢30,000 (about $28,000) from certain expatriate firms for the alleged purpose of conducting an opinion poll on Ankrah's prospects for the forthcoming presidential election. Nzeribe admitted collecting the money and said he had turned it over to Ankrah after deducting his agreed commission. Nzeribe was deported and Ankrah agreed to resign only after Lt. Afrifa (Member of the NLC) threatened to shoot him if he did not (LeVine, 1975;p.138, footnote 69).

on the accounts for 1967-68 and 90 for 1968-69. However 65% of those units reporting for the two-year period showed losses.[10] Of the local officials displaying the greatest mendacity, tax and revenue collectors led all the rest, followed by treasurers and secretary-treasurers of all local councils.[11] The 100 public boards and state corporations during 1967-69 suffered losses amounting to ¢37,187,406 which represented 5% of the total government budget expenditure for the two year period (LeVine, 1975; p.36).

The situation got worse in the 1970's. Of all the ex-Heads of State of Ghana, the one who displayed the greatest predacity was General I. K. Acheampong ousted in June 1978. He is reputed to have stashed away in Swiss, British, American and French banks amounts totalling ₤45 million.[12]

"Reference Image Paranoia" or "Negative Competition"

A final distinctive and perhaps counter-developmental feature of Ghana's political system is what Damachi (1976) calls negative competition:

> "By this concept, a political leader who succeds to power tends to do everything possible to obliterate the legacy of his predecessor. The fear that the citizens may tend to compare him to his predecessor, who normally is ousted on charges of corruption or economic mismanagement, is so great that he prefers to outlaw anything that may remind the population of the past" (p.105).

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[10] Those that did not report may be assumed to have made losses. This in itself gives some idea of public accounting practices. Public corporations submit accounts at will because of inadequate controls or lack of accountability.

[11] How about this for "inelasticity of government tax revenue"?

[12] See the Ashanti Pioneer, August 4, 1978. Also contained in the August issues of that newspaper are reports, unconfirmed officially, about attempts by his wife, Faustina, to smuggle ₤78,000 into London in a suitcase.

This reference image paranoia may perhaps originate from innate feelings of inferiority or incompetence or sheer vindictiveness. Not only is the statue of the predecessor hauled down but also almost every development project or program associated with him is halted or cancelled. There is no critical examination or appraisal of the projects started by ousted leaders. The developmental consequences of this reference image paranoia are very profound and negative. In view of the short life expectancy of Ghanaian governments, two years at best, negative competition means that development proceeds in jumps and starts in a jack-rabbit fashion. Consistent or sustained effort at development is therefore lacking.

B. ECONOMIC FEATURES

1. Agriculture

Ghana is a small country by population (10 million - 1975 census) and geographical size. The geographical area of 92,000 square miles (238,537 square kilometres) is about the same size as the UK.

Ghana is a developing country although some writers such as Higgins (1959) consider it "semi" or "partially" developed. Economic activity is predominantly agricultural and rural. Agriculture, broadly defined to include livestock-raising, fishing and forestry, accounts for more than 40% of GDP. It is also the biggest single employer of labor (about 60% of the total labor force) and the most important source of foreign exchange (accounting annually for some 70% of total export earnings) (Five-Year Development Plan, 1975-80;p.1).

Farming constitutes the predominant type of rural activity. Generally, land is communally held although recent changes in the land

tenure system have produced some trend towards private land ownership. In spite of the fact that more than 50% of the land surface of Ghana is suitable for the production of all types of tropical agricultural produce, only about 60% of this area was under cultivation in 1970; and of the cultivated land only 43% was under food crops, the remainder under tree or cash crops like cocoa, rubber, kola nuts and palm oil (5-Year Plan, 1975/76-79/80;Part II,p.1).

Farming is dominated by small-scale (peasant) farmers who constitute about 95% of the total farming population. The rest of the operations in the agricultural sector is in the hands of medium and large-scale private individuals, commercial firms, public corporations and co-operatives. These however are not significant; in 1974 they (medium and large-scale farmers) accounted for less than 5% of total production in the agricultural sector. Only recently in rice production did the large-scale operators account for about 25% of the total output (5-Year Plan, 1975/76-79/80;p.1).

Land holdings under peasant farming are usually small - often they do not exceed two hectares (5 acres) per farm family - and are scattered all over any given agricultural area. The dispersion of small holdings follows a traditional system of land rotation which Killick (1978) describes as,

> "...a rather efficient response to an abundant supply of land, soils which are easily exhausted and the scarcity of capital funds, for it embodied techniques which maintained the fertility of the soil with large inputs of land (often known as shifting cultivation but better described as land rotation), a more modest application of labor and scarcely any use of purchased capital" (p.6).

Under the system of land rotation, the farmer cultivates an area of land in the vicinity of his normally permanent settlement (or house) for

for a period then leaves it fallow to return to bush.[13] While soil fertility is being restored in the fallow period the farmer turns to farm another area in the vicinity.[14] Thus at any one time the farmer will have some land under cultivation and some under fallow. The use of capital equipment is limited and generally restricted to simple implements such as hoes, cutlasses and pick-axes.

Among the important food crops grown by peasant farmers are plantain bananas, cocoyam, cassava, maize, millet, yams, ground-nuts (peanuts), palm oil, rice, legumes and vegetables. A large portion of these produce is intended for own-consumption, Estimates however vary; the 5-Year Development Plan (1975/76-1979/80;p.1) estimates that no more than 50% of the agricultural output of the peasant farmers enters the distribution system, i.e., offered for sale. Omaboe, on the other hand, estimates that the proportion of own-produce consumed may be as low as 31% (see Birmingham et. al., 1966;p.20).

Since peasant farming is characterized by an extensive use of land, simple implements, hardly any large purchased input of capital equipment and small holdings, it is very easy for the unwary or uninformed to label it as nothing more than "primitive back-yard gardening". On the contrary, without the use of capital and fertilizers these peasant farmers were able to achieve yields per acre in groundnut cultivation of 419 pounds which exceed yields elsewhere in Africa (255 pounds) and in the world

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[13] Birmingham et. al., (1966) also argue that this system is one of land rotation and not shifting cultivation. The latter strictly applies to a situation where the farmer and his family moves to a new area, farms it for a length of time and then moves on (p.215).

[14] For the original fertility of forest land (southern Ghana) to be restored after cropping a fallow of about 5 years is needed but in the savanna zone(northern Ghana) a fallow of up to 10 years may be required. (Birmingham et. al., 1966;p.215)

(318 pounds).[15] In fact, Hill (1970) and Killick (1978) would assert that peasant farming practices are rather an "efficient response" to the peculiarities of their physical and social environment. These aspects of peasant farming were not recognised and appreciated by Ghanaian governments. They neglected the peasant farmers and poured millions of scarce foreign exchange into highly mechanized state farms which were later found to be less efficient than the peasant farms (chapter 6).

2. Exports

Ghana is "a classic example of an open economy" (Killick, 1978;p.3). Although its index of dependence on foreign trade - the foreign trade ratio - has been declining since 1955, it has nevertheless remained high.[16] This ratio was 46% in 1955, remained constant around 43% between 1955 and 1961 before declining in 1962 to 39% (Birmingham et. al., 1966;p.43). In 1974 the ratio was 31%. Thus, foreign trade continues to play a dominating influence on the level of economic activity.

Of the agricultural produce that earns the country foreign exchange, a single cash crop, cocoa, dominates all others. It alone accounts for about 60% of all export earnings and has aptly dubbed the "golden pod".

Besides being the foremost foreign exchange earner, the cocoa industry has provided the country with a degree of capitalization believed to be the highest in the developing world. Szereszewski estimated that:

> "The total value of the capital stock of Ghana was ¢2,328 million in 1960. This includes the capital value of the cocoa industry estimated to be about ¢720 million. These estimates

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[15] These are 1959 figures in a study by the FAO, World and Africa, cited in Birmingham et. al., 1966;p.230.

[16] The ratio is computed by dividing the sum of exports and imports by the sum of GDP and imports - the latter sum being the total of available resources (Kuznets, 1956; Lecture V).

> reveal a relatively high capital stock amounting to ¢246 per head of the population" (in Birmingham, et. al., 1966;p.17).

Most observers believe that the high rate of capitalization engendered by the cocoa industry enabled the country to become the world's leading cocoa producer (some 30% of the world's supply in 1970) and also to take a high place among the developing countries with an income per capita of $252 in 1959. Recent indications however are that the capital stock in cocoa trees has undergone significant depreciation and new investments in that sector would have to be made if the leadership role in production is to be maintained in the 1980s (5-Year Development Plan, 1975/76-1979/80;p.5).

The next contribution of the cocoa industry comes in the form of taxes (export, local and excise duties). The cocoa industry has been an important source of government revenue. In 1974 for example, taxes collected from the industry amounted to ¢167 million - about 26% of total government revenue. There is a draw-back to this state of affairs though. The heavy dependence of government revenue on cocoa, whose price fluctuates on the world market, introduces an element of instability into government finances.

Other primary produce currently exported are timber (12% of total exports in 1974), kola nuts, vegetable oils, crude rubber, oil seeds and kernels, together accounting for 8% of total exports in the same year.

Besides agricultural produce, the country exports a few minerals. The traditional ones have been gold, bauxite, manganese and diamonds; recently in 1972 aluminium was added. These raw minerals together accounted for 19% of total exports in 1974, down from 31% in 1957. This downward trend is expected to continue as deposits are getting exhausted.

Manufactured goods have played little role in Ghana's exports. Since 1969 some light manufactured goods like textiles, leather, rubber manufactures and transistor radios have been exported to West African countries like Upper Volta, Togoland (which border on Ghana) and Nigeria. These however have been insignificant considering that in 1974 only 1.6% of Ghana's exports went to African countries.

Cocoa, then, is the back-bone of the Ghanaian economy and we take a closer look at this industry below.

The Cocoa Industry

Cocoa was introduced in 1871 by a Ghanaian named Tetteh Quarshie. The crop spread rapidly through Ghana because climatological conditions were ideal for its cultivation and also the British missionaries, enjoying strong local influence, succeeded in persuading young Ghanaians to take up its cultivation.

The industry as it stands today is characterized by many small-scale cocoa farmers who generally operate their own farms with assistance from other members of their family. A survey done by Addo (in Kotey et. al., 1974;p.204) found the farmers to be aged; males averaging 54 years of age and females 57 years. 85% of the farmers surveyed had no formal education. The males had on average two wives and eight living children, the average household being 12. About 35% of the farmers also worked part-time as palm-wine tappers, gold/blacksmiths, weavers/carvers, traders/shopkeepers, herbalists, priests, chiefs, drivers, hunters and clerks.

The 1970 Census of Agriculture recorded that cocoa was grown on 3.6 million acres, i.e. on 70% of the cultivated land in Southern Ghana or 56% of the cultivated land in all of Ghana. On 1.4 million acres, cocoa was inter-cropped with food crops such as cocoyam and plantain. Individual farm acreage however tends to be small, 3-5 acres, although farmers

generally have two or more farms. If labor requirements exceeded that of immediate family and dependants alien migrant labor — usually from neighboring African countries like Togoland and Upper Volta — are hired on a share-cropping basis. The most common practice is the ABUSA by which a tripartite division of the crop value is effected and a third goes to the worker. Less common is the ABUNU system under which the shares are equal.

Relatively simple techniques are used in the cultivation of cocoa — a forest product — and the amount of purchased capital goods is very small. Although the yield is positively related to the age of the trees. the relationship is very complicated.[17] A sample survey of the Eastern Region in December 1960 gave the following age-yield data,

Age	Number of Pods
0-7 years	79.3
8-15 years	157.5
16-30 years	274.4
Over 30 years	400.5

Source: Birmingham et. al., 1966; p. 242.

Thus, the trees reach their full maturity after 30 years of age.

Besides age, a host of other factors affect cocoa output but little consensus exists among the cocoa experts on their relative importance.

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[17] Differences in varieties of trees, incidence of swollen shoot, and capsid diseases, soil fertility and rainfall also affect yield.

First, like any other crop, cocoa harvest is affected by soil nutrients, humidity and amount of rainfall. Too much rain in July-October instigates black pod development which damages the main crop, and too little rainfall reduces the crop.

Second, cocoa output is affected by the incidence of the cocoa diseases swollen shoot and capsid. Capsid reduces the yield of a cocoa tree by 30 to 40% whilst the swollen shoot disease kills the tree entirely. There is no known method of exterminating the swollen shoot virus. The best that can be done is to prevent the spread of the virus by cutting down infected and "contact" trees. The capsid insect can be checked by the application of the insecticide GAMMALIN '20'. But the insecticide is most effective when applied in the first 4 years of the seedling's life; effectiveness diminishes with the age of the tree (Bateman, 1974; p.293). The Ghana Cocoa Marketing Board (CMB) supplies spraying machines and insecticides to farmers at subsidized rates. The actual costs (subsidized prices in parentheses) of a spraying machine and a gallon of insecticides in 1976 were ¢220.80 (¢192.80) and ¢48.45 (¢46.45) respectively (Aforo-Addo, 1978; p.1). To complicate matters, a substantial proportion of the spraying machines and insecticide is smuggled across the border to the neighboring countries of Togoland and Ivory Coast where they fetch higher prices (Aforo-Addo, 1978; p.1). This raises doubts about the importance of Gammalin 20 applications in the Ghanaian cocoa output.

Third, cocoa is also affected by the availability of alien itinerant labor, if timely harvesting is to be done. The quality of cocoa beans deteriorates rapidly if ripened pods remain on trees for too long. The alien laborers come mostly from Upper Volta, Nigeria,

Togoland and Ivory Coast. For the whole of southern Ghana the aliens account for ¼ of total farm employees but they are more important in the Volta and Ashanti cocoa producing areas as the following table indicates.

TABLE 2.1

MIGRATION STATUS OF FARM EMPLOYEES BY REGION IN WHICH EMPLOYED (SAMPLE SURVEY) PERCENTAGES

Origin of Employees	Central	Western	Eastern	Volta	Brong Ahafo	Ashanti	Southern Ghana
1. Aliens (from another country)	10.2	7.1	17.8	68.6	22.8	29.1	25.0
2. Migrants from another region	61.0	16.6	32.2	16.2	57.9	46.9	45.4
3. Citizens of the Region	28.8	76.3	50.0	15.2	19.3	24.0	29.6
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Kotey et. al., 1974; Table 10, p.212.

A number of factors have complicated the farm labor situation. On November 18, 1969, an Aliens Compliance Order stipulated that all aliens resident in Ghana who did not possess the necessary immigration papers as required by the Aliens Act of 1963 and the Aliens (Amendment) Act of 1965, should obtain them within two weeks from the date of publication of the order, and failure to do so necessitating their departure from the country. Since then, the supply of alien laborers has dried up. The supply of domestic immigrant labor has also been drying up. In 1960, the introduction of compulsory primary education — which was free —

drove the young farm hands into classrooms. Furthermore, economic conditions have made farming unattractive to domestic migrant labor who are mostly able-bodied and young men. They would rather migrate to the towns and cities and seek employment there.

Fourth, cocoa output is affected by marketing arrangements and prices. The Ghana Cocoa Marketing Board (CMB), established in 1947, has the sole monopsonistic right to purchase and export cocoa. The CMB operates a system of buying centers - over 1,700 in 1974 - scattered throughout the cocoa producing areas. Upon taking his produce to the buying center, the farmer is paid a set price known as the "producer price", formally fixed by the Board but subject to the prior approval of the government. The producer price is the same at all buying stations and the cost of carting his cocoa to any station is borne by the farmer himself. The producer price has generally been far lower than the world market price so that over the 1947-1961 period payments to the farmers amounted to only 54%[18] of the total proceeds obtained by the CMB.[19] The accumulated reserves of the CMB have often been used to finance development projects, budget deficits and to provide assistance to the farmers.

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[18] The percentage falls to 52% if the farmers' "voluntary contribution" of ¢32.2 million to the Second Development Plan of 1959 is deducted. See Birmingham et. al., 1966; p.367.

[19] In the early 1960s a pedantic debate raged over the normative desirability of paying cocoa producers prices less than the world market price. Bauer, 1967, (see especially part 5 of his book) the provocateur, argued that the Marketing Board's policy of withholding large proportions of the prices amounted to compulsory socialization of savings and this has stunted the growth of the habit of voluntary savings by the cocoa-growing community. Furthermore it was doubtful whether the return on the public investment of the Board's accumulated funds was greater than investments by the farmers themselves. Thus the Board's withholding has held back the growth of the cocoa industry, hence growth of the whole economy and world standard of living. For an opposing view see E. Omaboe in Birmingham et. al., 1966; p.365.

All cocoa experts agree that the real producer price is an important determinant of cocoa output. However it is not clear whether it is the real producer price in absolute or relative terms that is important or not. Bateman (1974) advanced the position that cocoa farmers seemed to have a "reserve" producer price below which harvesting would not be done.[20] Thus, it would seem that the producer price relative to this reserve price is the determining factor but where this reserve price should be set is an elusive question.

Fifth, cocoa output is also affected by the volume of smuggling to the neighboring countries where producer prices are higher. According to the Paterson, Simons and Ewart Cocoa Report for 1978, Ghana lost 40-60,000 metric tons (tonnes) from smuggling to the Ivory Coast and Togoland; this was 13 to 19% of the expected 1978 output of 308,000 tonnes. The report also noted that,

> "A (Ghanaian) price of $40 per headload proved quite inadequate during the 1977/78 main crop in so far as it could not contain the degree of smuggling within acceptable limits. It is reported that buyers in the Ivory Coast were able to pay in cedis a price of some ¢200-¢240 per 30 kilos (headload)" (p.4)

Cocoa smuggling may be seen as a response to declining producer price in real terms. The nominal producer price is a policy-determined parameter and revised upwards infrequently either when the disparity with the world market price widened or political expediency necessitated it.

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[20] He estimates this reserve price to be ¢10 per load (30 kilos), which is the price that will elicit "50 per cent planting effort" from the farmer. Since "planting effort" cannot be rigorously measured one can only at best dismiss this reserve price as arbitary.

Consequently, it tends to lag behind other prices, especially food prices, in times of domestic inflation. This reduces real incomes to export producers, inducing them to curtail production and/or switch into food crop production (Mansfield, 1980).

Switching into food crops may prove difficult to accomplish in practice because of the perennial nature and the growth cycle of the cocoa tree. These render short-run output adjustments to changing market conditions extremely difficult to carry out. Cocoa farmers therefore generally tend to respond to declining real producer prices in two ways. With plentiful supply of land the first type of response has been to abandon their cocoa farms and take up food cropping temporarily elsewhere. When conditions improve, they tend to return to their old and abandoned farms. The second type of response has been to curtail sales of cocoa to the CMB and smuggle the produce to neighboring countries.

Sixth and finally, cocoa output is affected by road and transport conditions as the farmers themselves are responsible for the transportation of their produce to the buying centers. For this service they rely on private transport owners, who if road conditions are poor may either refuse the service or charge exorbitant fees. There have been many instances where cocoa has been left to rot on farms for lack of transportation.

In all then, we have seven factors (tree age, soil or weather conditions, disease, alien labor, producer price vis á vis reserve price, smuggling and transportation) that affect the output of cocoa. Some of these factors or variables will be used in the specification of the cocoa supply function in chapter 4.

3. Imports

The import sector of Ghana is characterized by two distinctive but related features; changing composition of imports by end-use and import controls. The following table indicates that there has been a dramatic change in the composition of imports at the beginning and end of the period under study (1957-1974).

TABLE 2.2

IMPORTS BY END-USE, 1957 and 1974 (Percentage of Total)		
	1957	1974
1. Non-Durable Consumer Goods	48	18.6
2. Durable Consumer Goods	9	5.2
3. Raw and Semi-Finished Materials	24	40.1
4. Capital Equipment	13	19.7
5. Fuels and Lubricants	6	16.4

Sources: Birmingham et. al., 1966; Table 14.2, p. 334.
Economic Survey, 1972-74, Table 3.3, p.37.

The shift from consumer goods, both durable and non-durable, may be attributed in large part to the import licensing system that has been operating in Ghana. Although successful in this aspect we shall see in chapter 6 that import controls failed to restrict the volume (or level) of imported consumer goods and consequently failed to protect the country's external reserves. Since imported consumer goods play a critical role in this thesis we describe in detail below the objectives and administration of import controls.

Introduction of Controls

Import restriction were introduced into the country by the Imports and Exports (Restriction) Order No. 113 of 1948. This order stated that,

> "1. The importation into the Gold Coast of any article is hereby prohibited except under licence granted by the Comptroller of Imports and Exports and subject to such terms and conditions as

may be contained therein.

2. The exportation out of the Gold Coast of any article is hereby prohibited except under licence granted by the Comptroller of Imports and Exports and subject to such terms and conditions as may be contained therein."[21]

However, import restrictions as we know them today came into effect on December 1, 1961. A memorandum by the Bank of Ghana gave the following explanations,

"(a) Ghana's balance of payments had, prior to 1955, recorded a surplus on current account which added to the reserves. Between 1956 and 1959, the external payments turned into moderate deficit leading to some loss of reserves. Since 1959, however, the balance of payments has undergone a rapid deterioration with consequent drain on reserves..... The Government therefore deemed it necessary to take positive and urgent steps to remedy the situation and stem the drain on reserves.

(b) In consequence, import controls were imposed towards the end of the year. In a number of notices to importers and exporters published in the Commercial and Industrial Bulletin of the 1st December, 1961, all open general licences and quota licences were revoked and importers and exporters were required to apply for specific licences from the Trade Division of the Ministry of Trade and Finance, for all items of imports, except those specifically exempted by notice of the Official Gazette.

(c) The restriction on imports were required to fulfil two main purposes:-

(i) To regulate the flow of imports into the country with a view of excluding the importation of non-essentials as a means of improving the balance of payment position and

(ii) To bring about a balance between total imports and total exports of goods as a means of halting the drain of the reserves.

(d) In addition, the restrictions were required to fulfil two other objectives. Firstly, as a result of payments and trade agreements concluded with a number of Socialist countries during 1961, it was anticipated that exports, particularly of cocoa and timber to these countries would increase and that in accordance with agreements, there should be an increase in imports from them.

(e) Secondly, the restrictions had a protective aim in so far as they were designed to discourage the importation of certain goods which were or could be produced locally in sufficient quantities to meet the entire domestic demand. This, apart from encouraging local industry, might exercise a beneficial effect on the balance of payments position by cutting down such imports".

(Gaisie Report, 1975;p.13)

On the 17th of April, 1965, four years later, President Nkrumah

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[21]This order was cited by the Gaisie Report, 1975; p.12.

reiterated these explanations more succinctly in a broadcast message to the nation;

> "It is our Government's deliberate policy to cut down on our imports of consumer goods. Such action will enable us to save on our foreign exchange and spend more on imports of machines, equipment, spare parts and raw materials for our factories" (Abrahams Report, 1965;p.13).

Notice the remarkable congruity between that quotation and our concept of effective savings. Even more remarkable is a passage in the 5-Year Development Plan, 1975/76-1979/80, recently published in January 1977;

> "The restrictions on consumer goods was expected to raise the EFFECTIVE SAVINGS RATES and thereby provide resources for financing the investment program" (p.63). [Capitals ours.]

Despite these clear objectives, the Ghanaian experience with import programming evokes little admiration or even sympathy. Since 1961 when they were imposed, import controls have gone through phases of stringency and liberalization.[22]

The Liberal Regime 1950-1961

At independence, 1957, Ghana had a sizable build-up of external reserves following the boom in cocoa prices during the Korean War. It was out of these reserves that the country financed its industrialization drive. In the 1959-61 period cocoa prices started their descent to the pre-war normal levels. With the country's reserves depleted to low levels, it became apparent that Nkrumah's investment drive could not be sustained without precipitating a foreign exchange crisis and an import control program was hastily instituted to forestall such an imminent crisis.

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[22]An excellent account of the restrictive exchange rate regime can be found in Leith (1974), especially chapter II.

The Control System and Its Collapse, 1961-66

The system started with the removal of a few consumer goods from general open licence and requiring specific licences for their importation. The list was gradually extended to include other consumer goods and frequent changes were made. However corruption, pressure of pent-up demand and extensive use of supplier's credit cracked up the system and culminated in a splurge on imports, a huge foreign debt amounting to almost one-half of GDP and no substantial new lines of credit at the time of the 1966 coup.

Austerity and Devaluation, 1966-67

The military government (NLC) that replaced Nkrumah retained import controls but attempted to introject some economic rationality into the system and expunge corruption. Some temporary debt relief was obtained through debt rescheduling but these were not enough to alleviate the pressures on the balance of payment. In July 1967 a major devaluation was carried out.

Import Liberalization and Collapse, 1967-72

Underlining the 1967 devaluation was a belief in market forces to check import demand. The list of commodities on specific import licences was gradually reduced and by 1970 about 60% of all imports had been freed from controls (the percentages for 1967, 1968 and 1969 were 3%, 17% and 37% respectively). A further liberalization announced in mid-1971 was expected to raise the proportion to 75%. The movement toward liberalization gathered momentum following a huge windfall in cocoa export earnings in 1970 (see Table 4.4). After the windfall was dissipated on consumer goods and cocoa prices started declining from their record highs,

it became apparent that market forces alone could not contain the import demand. Supplementary tax measures were not forthcoming and the government showed little preparedness to reduce its expenditures which were feeding the excess import demand. With no debt relief nor new lines of credit in sight and coupled with a fall of 28% in cocoa export earnings in 1971, a massive devaluation of about 80% was announced. This proved too much and the army once again assumed power.

Re-Imposition of Stringent Controls, 1972-77

Strict controls were re-imposed in 1972 ending the experiment with liberalization. Controls were well administered in this period and the balance of payments made a remarkable recovery. For the first time since 1958, the current account showed a surplus of $143.4 million and net external reserves recorded an increase of $136.1 million (Table 4.3). Had it not been for the oil crisis of 1973, controls would have been abandoned sooner than 1977.

Administration of Import Controls

When controls were imposed in December, 1961, it seemed the government did so reluctantly. The then Minister of Finance had earlier remarked that,

> "I do not believe that the imposition of quantitative import controls will serve our objectives; such controls are expensive in terms of manpower and often lead to corrupt practices which we must avoid at all costs."
>
> (Parliamentary Debates, Volume 24, 7th July 1961. Column 121).[23]

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[23] The Minister's reasons do not constitute, in our view, sufficient grounds to dismiss controls per se. Perhaps he had a more cogent reason which he was not prepared to divulge in public. In any case, this same Minister (Mr. Djin) was found guilty of malpractices in the issue of import licences (see the Ollennu Report 1967, Part III).

However on November 24, 1961, the existing licensing system was hurriedly altered from one in which virtually all commodities were on Open General Licence (OGL) to one in which specific licences were required for everything except the following:

(a) single copies of books and periodicals addresses to individuals and
(b) non-merchandise articles - trade samples, personal effects and small gifts.

Initially, administration of controls were on an ad hoc and arbitrary basis. Public dissatisfaction, shortages of specific items and rumors of corruption led to a commission of enquiry and an over-haul of the system.[24]

Some attempts were made to streamline the administration of the system. A foreign exchange budget was drawn up by the Ministry of Trade in consultation with the Bank of Ghana, the Planning Commission and with the officials of the Ministries of Finance and Industries. Then specific allocations were made to the principal heads or categories; industries, commerce, etc., and these were broken down into sub-heads. After this a notice was sent out in the Commercial and Industrial Bulletin calling for applications for licences. All industrial concerns had (and still have) to be registered with the Ministry of Industries and all applications had to be sent through that ministry for allocations to be made. On receipt of applications, a schedule officer drew up schedules (one for each commodity) which comprised names, addresses, registration numbers and the grades of applicants. There were seven grades of importers — Grade A,

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[24]The Commission of Enquiry was headed by Justice F. Akainyah. The Akainyah Report was published in February, 1964. Unfortunately for the cause of official credibility Justice Akainyah himself was caught up in an investigation concerning import licences by the Ollennu Commission (1967) which pointed out that the third chapter of the Akainyah Report was never published because it contained information embarrassing to the government.

B, C, D, E and F — and these determined the value of import licence issued. For example, an importer of category B could "theoretically" expect an import licence of a maximum value of ¢1 million, allocations under A would be higher. The grades were determined on basis of each importer's historical shares, current size of their operations, payment of taxes, employment and credit facilities. Once the grades were determined the actual value of the licence given might be equal or fall short of the "theoretical" maximum, depending upon the priority the Ministry of Trade attached to the particular commodity for which licence was sought.

The sheer paper work under this system was horrendous. A witness at the Ollennu Commission lamented that, since applications were for specific commodities, it took him and three or four senior officers "a greater part of the whole day" to gather all applications submitted by a single firm, the United Africa Company (Ollennu Report, 1967;p.15). When asked to explain, he remarked that,

> "It is because we had about 10,000 different items and we had on record upwards of about 4 to 5,000 applicants putting in about 50 applications, some 100 and some 200, so that we had a lot of paper work. All these things had not been sorted out by commodity" (Ollennu Report, 1967;p.16).

In 1965, following increasing public criticism, dissatisfaction with import controls and alleged corrupt practices, another commission of enquiry was conducted and an attempt was made to improve the functioning of the system.[25] The first foreign exchange budget was published in 1965 to bring imports more in line with foreign exchange

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[25]This was the Abrahams Commission set up on August 30, 1965. The Report of that Commission noted that "Among the immediate causes of the shortages (of commodities) were, first and foremost, the non-issuing of import licences in a rational manner" (p.18)

availability. The Bank of Ghana estimated foreign exchange availability and certain Ministries were made solely responsible for certain imports viz, the Ministry of Trade for commercial imports, Ministry of Industries for imports for private industrial use, State Enterprises Secretariat for imports for State enterprises and Ministry of Economic Affairs for government imports. The final issuance of licences remained with the Ministry of Trade but the resulting allocations, this time, were published in the Commercial and Industrial Bulletin.

It was not until 1968 when a serious attempt was made to implement a foreign exchange budget —— previous budgets were mere scraps of paper. In drawing up a foreign exchange budget, two import programs — "desirable import program" (DIP) and "operational import program" (OIP) — were prepared under different assumptions regarding foreign aid. The "operational" program was based on expected foreign exchange availability including already committed foreign aid, whereas the "desirable" was an assessment of the imports the country would need to achieve stated economic objectives (rate of growth for instance). The difference between the two was then used to support Ghana's case for more aid. It was the OIP — the operational — that was used as the basis of import licencing but was modified as and when additional foreign exchange became available. For example in 1969 imports envisaged under the DIP were to be ¢347 million but ¢305 million under the OIP; actual imports were ¢337 million, thanks to more aid (Bhatia, 1973).

C. THE MONETARY AND FINANCIAL SYSTEM

To facilitate the exposition and comprehension of the inflationary processes analysed in chapter 5 we provide background information on the structure of the monetary and financial system in Ghana.

1. Structure and Operations

The Banking System

Ghana's financial system is made up of a Central Bank (Bank of Ghana), three commercial banks (Barclay's Bank D.C.O., Standard Bank of West Africa and the Ghana Commercial Bank) and several non-bank financial intermediaries.

The Bank of Ghana

On March 1, 1957, just five days before Ghana gained its independence, legislation was passed creating the Bank of Ghana as the country's central bank with a paid-up capital of ¢10 million. Prior to 1957, the currency in circulation in Ghana, and also in other British West African colonies, was primarily the British West African pound issued by the West African Currency Board under the so-called "colonial exchange standard".[26] The Board was required to maintain a 100% cover of their currency liabilities with British pounds and it exercised no discretion over the amount of currency issued. The currency was redeemable in pounds sterling and vice versa.[27]

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[26] The essential features of this standard is discussed in Hawkins, 1958; pp. 354-361.

[27] An interesting product of this system was that the domestic money supply was automatically linked to the country's balance of payments situation. A deficit contracted the money supply, conversely for a surplus — a mechanism almost identical to Hume's price-specie-flow or adjustment under the gold standard.

For the first three years of its existence, the Bank of Ghana played a rather passive role. Although it was empowered by the 1957 Bank of Ghana Ordinance (Section 28.2) to create a fiduciary issue up to a maximum value of ¢24 million, it was not until April 1961 that a fiduciary element was actually created in the currency supply. Before then, all the Bank's currency liabilities were backed 100% by pounds sterling.

The functions and duties of the Bank were spelt out comprehensively in the Bank of Ghana Act of 1963. This Act defined more sharply for the Bank of Ghana the traditional functions of a central bank[28] and set out clearly its principal objectives, among which were:

(a) "....to regulate and direct the credit and banking system in accordance with the economic policy of the Government and the provisions of the Act,
(b) to promote by monetary measures the stabilization of the value of the currency within and outside Ghana,
(c) to propose to the Government measures which are likely to have a favorable effect on the balance of payments, movements of prices, the state of public finances and the general development of the national economy and monetary stability" (Section 3)[29]

In addition, the 1963 Act laid down certain restrictions on the composition of the Bank's balance sheet. The assets of the issue department were to include only gold, convertible currencies, treasury bills, bills of exchange and government securities denominated in convertible currencies, Treasury Bills and marketable securities of the Government of Ghana of up to 20 years maturity. Not more than 40% of the assets of the issue department may consist of foreign government securities and not more than 40% of the assets may consist of treasury

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[28] The traditional functions are sole issuer of currency, banker for the government, bankers' bank, regulator of the financial system and lender of last resort.

[29] The provisions of the Act essentially made the Bank of Ghana subservient to the needs of government's economic policy and inevitably led to a conflict between monetary stability and fiscal objectives. We expatiate on this issue at a later stage.

bills and securities of the Government of Ghana except that the Minister of Finance may, by legislative instrument, increase the latter limit to not more than 60%.

Furthermore, under the Act, the Bank of Ghana was authorized to make "Ways and Means Advances" to the government in respect of temporary deficiencies of budget revenue. The Act however stipulated that:

> "The total amount of such advances shall not at any time exceed ten per centum of the estimated budget revenue, as laid down before the National Assembly, for the financial year in which the advances are made....
>
> Subject as aforesaid, the Bank may in certain cases make advances not exceeding fifteen per centum of the estimated budget revenue if the President so requests..... and any advances made under this section shall be repaid within three months of the end of the financial year to which it relates: and if any such balance remains unpaid after that date the power of the Bank to make further advances in any subsequent financial year shall not be exercisable unless the amounts due in respect of the outstanding advances have fully been re-paid" (p.18, para.37 section 1-3).

There were slight amendments to the Act in 1967, 1969, 1970 and 1972 with regards to the fiduciary issue and the Bank of Ghana's control over the financial system. For example, the amendment by an NLC decree in February 1967 permitted the Bank to raise the fiduciary issue ex post facto from July 1, 1965 to a maximum of 75%. The same decree empowered the Member of the NLC in charge of Finance to suspend this ceiling altogether.

The Commercial Banks

Of the three commercial banks, two (Barclays Bank and Standard Bank of West Africa) are foreign-owned.[30] The third, Ghana Commercial Bank, is state-owned and the largest of the three, holding more than 50% of the

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[30] Barclays Bank D.C.O. is a subsidiary of the British Barclays Bank Limited and the shareholders of Standard Bank include other major British banks as Lloyds, Westminster, National Provincial and Midlands.

total deposits of the public institutions and the private sector. As a state-owned concern it was given a near-monopoly in handling the business of government bodies, state enterprises, public corporations and other quasi - public bodies. In 1963, for example, nearly 90% of its total deposit liabilities were owned by the public sector.

In 1970, legislation was introduced (1970 Banking Act) which, for the first time, detailed the statutory obligations of commercial banks operating in Ghana. All banks must be locally incorporated and licensed by the Bank of Ghana with a required minimum paid-up capital. Specific rules were laid down for the operation of banks including such matters as the opening and closing of branches and administrative procedures for the granting of advances. In addition, the banks were prohibited from engaging in commercial, agricultural or industrial activities and from dealing in immovable property. Furthermone, provision was made for the appointment of a chief examiner to supervise banking operations and compliance with the Act.

Non-Bank Financial Intermediaries

These are made up four development banks, a Post Office Savings Bank (or Ghana Savings Bank), a building society and 12 insurance companies locally registered. The development banks (The Agricultural Development Bank, Bank for Housing and Construction, National Finance and Merchant Bank and National Investment Bank), as their names imply, have a more restricted sphere of operations. They all seek to attract medium or long term funds from the public (savings and time deposits).

The Agricultural Development Bank (ADB), formerly the Agricultural Credit and Co-operative Bank, commenced operations on August 1, 1965 when it took over the net assets of the Bank of Ghana's Rural Credit

Department. Its main sphere of work is credit to peasant and medium-scale agriculture.

The Bank for Housing and Construction was created in mid-1973 with the primary purpose of increasing the availability of credit for industrial and commercial construction as well as public housing.

The National Finance and Merchant Bank was established in 1972 as a merchant bank with capital subscribed by the Ghana Government and National & Grindlays Bank Limited of Britain. Deposits with this bank, mainly time deposits, are held by companies and public corporations.

The National Investment Bank began operations in June 1963 to finance and promote enterprises in all sectors of the economy with emphasis on the industrial sector. Despite its name, it is not a commercial bank. It only attempts to meet the needs for medium and long term finance and its sources of funds are from the government as well as borrowing from the public, both inside and outside Ghana. Its well-known Development Service Institute provides technical assistance to private investors by preparing feasibility studies of new investment projects and assisting in the improvement of efficiency of already existing enterprises.

The First Ghana Building Society was established in 1957 to finance the construction and marketing of buildings, especially private dwellings. The Post Office Savings Bank was established mainly for small savers to invest in government debt. It accepts deposits (time) from the public up to a maximum of ¢10,000 and depositors may withdraw up to ¢20 on demand; for larger sums notice is required. This Bank is subject to the provisions of the 1970 Banking Act and may engage in general banking business including the granting of loans and over-drafts to entities

other than the government.

Of the twelve insurance companies, the State Insurance Corporation and the Marine & General Brokers Company account for the bulk of insurance business in Ghana. Under the Insurance Act of 1972, insurance companies must be officially registered and locally incorporated with a minimum laid down capital of which at least 40% should be paid in Ghana. Insurance companies are further required to invest 50% of their funds in government stock and 50% in other claims approved by the Insurance Commissioner.

The operations of these non-bank financial intermediaries are in general small as compared with those of the banking system. In 1972, for example, an estimated 9% of total private sector claims on financial institutions were held with non-bank financial intermediaries and the domestic credit operations of these institutions accounted for about 14% of the total net credit extended by all financial institutions (IMF, 1975; p.156).

The Traditional Money Market

Mention should also be made of the traditional system of credit which has long existed in the country — the local money lenders. Although the scale of their operations has declined since the 1950s, they were important to warrant investigation and regulation. The 1957 Report of the Committee on Agricultural Indebtedness put the number of registered money lenders at 476 for the whole country with 39 in Accra and 357 in Ashanti, the principal cocoa-growing area (Birmingham et. al., 1966; p.304).[31]

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[31] A Money Lenders Ordinance, subsequent to the Report, limited interest to a maximum of 15% per annum.

Information on rural credit is not readily available and scanty. A loan may usually be secured against the pledge of the debtor's farm. "Pledging is a kind of indigenous mortgage system which usually, though not always, involves the use of the farm by the lender (who then takes temporary possession) and often involves the sub-division of (the value of) the usufruct in an agreed manner" (Hill, 1958; p.5).

Loans may be for a variety of purposes, productive and non-productive. The most common are for litigation, education and funerals. Rates of 50 to 100% are frequently cited but these relate to the entire period of the loan not to the annual interest. Generally, "the longer the period of the loan the lower the rate of interest" (Birmingham et al., 1966; p.305).

Finally, there are other types of credit for which no quantitative data exists. These are,

(a) Credit given by trading companies to customers on wholesale transactions, especially market mammies;
(b) Credit given by shops and traders to their customers on retail transactions; all the department stores operate credit accounts and similarly many transactions at the markets;
(c) Loans by employers (public and private) to employees for such purposes as house-building or buying a car;
(d) Loans by relatives to other members of the family for such purposes as education, purchase of mammy-lorry or taxi and so on.

2. Banking Controls: Instruments of Monetary Policy

In the first few years of its existence, the Bank of Ghana was not active in the field of monetary policy as we earlier noted. Its main pre-occupation was to achieve a smooth transition or change-over from the currency of the West African Currency Board to the new national currency. It was not until 1963 (1963 Act) that it acquired a battery

of powers to control the operations of the commercial banks. The 1963 Act empowered the Bank of Ghana to enforce the following minimum asset ratios on the commercial banks;

— Cash, balances with banks in Ghana and current account deposits with the Bank of Ghana 8%
— Liquid Assets (March-August) 40%
— Liquid Assets (September- February) 46%
— Special Deposits with Bank of Ghana 5%
— Ghana Government Stocks 18%

Liquid assets were defined as Treasury Bills, approved agricultural loans and approved industrial loans.[32] The two liquidity ratios emanate from the fact that the money supply in Ghana, as in many other developing countries, is subject to pronounced seasonal fluctuations. It is higher during the cocoa harvest season (September to February), reaching a peak in December when the Cocoa Marketing Board (CMB) purchases cocoa from the farmers.[33] The asset ratios may be enforced through the imposition of fines on delinquent banks, although in practice the Bank of Ghana has never imposed such fines. In addition, the Central Bank was empowered to set credit guidelines and to fix borrowing and lending rates.

In 1970, a new Bank Act broadened and strengthened the powers of the Bank of Ghana to exercise direct regulation over the foreign borrowing of commercial banks, including the terms on which payment for imports may be effected. Until 1971, the central bank relied chiefly on credit guidelines to control domestic monetary developments. However

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[32] The effect of the liquid asset ratio was to restrict non-approved loans and advances, including loans to commerce, to a maximum of 29% or 23% depending upon the time of the year.

[33] For this reason, it is best to use the month-average rather than year-end data of the money supply. However, the month-average data are not consistently reported by the Central Bureau of Statistics (CBS).

beginning in 1971, the Bank assigned a more active role both to interest rate policy and to the composition and manipulation of reserve ratios in addition to the use of special deposits.

Reserve Ratios

Since February 1969 the Bank of Ghana has used two types of reserve requirements to regulate commercial banks' ability to lend, namely a cash ratio and a liquidity ratio. In February 1969, the minimum cash ratio was fixed at 15% and the liquidity ratio set at 20%. However, the cash ratio was raised to 25% on February 15, 1970 but was lowered to 20% on August 1, 1971 in connection with different monetary and credit programs introduced on these dates. The liquidity ratio remained unchanged at 20% but in August 1971 the banks were permitted to include as eligible assets cocoa bills and credit for export, ostensibly to encourage the banks to lend to the export sector.

On August 30, 1973, the Bank of Ghana announced that the 20% liquidity ratio would be a maximum rather than a minimum requirement. However, the banks were to maintain a minimum total reserve ratios (cash and liquid assets) of 40%. The purpose of the new regulation was to build more flexibility into the control system and enable banks to seek more productive outlets for credit out of the government securities market.

Credit Guidelines or Selective Credit Controls

These are the instruments most frequently employed by the Bank of Ghana. First introduced on April 1, 1964, the Bank attempted to use these instruments to influence directly the volume and distribution of commercial banks' credit to public institutions and the private sector by setting guidelines for <u>total</u> commercial banks' credit expansion,

excluding that for cocoa which has mainly been seasonal. Under the credit control program, the Bank of Ghana first identifies "priority" and "non-priority" sectors in accordance with the government's overall economic program.[34] Sectoral ceilings are then set to influence the distribution of credit in such a way that resources are channelled into activities considered most beneficial for the economy. For example, the February 1969 Credit Control Measures directed that "expansion in commercial bank credit to the production sector should not exceed 15% of the level at the end of 1968 and a maximum of 10% was set for the non-productive sectors i.e. loans for imports, service, construction and other allied sectors.....credit to the private sector (for purposes other than cocoa financing) was not to exceed ¢10 million or about 12% during 1969" (Economic Survey, 1969-71; p.53. para. 4.27).

A year later, the new Credit Control Measures (February 1970) set new ceilings and attempted to direct credit into priority sectors. Commercial banks overall credit expansion in 1970 was limited to 20.6% over the level existing at the end of December 1969. The permitted expansion to non-priority sectors was lowered from 10% to 9% (Economic Survey, 1969-71; p.54, para. 4.28).

Discount and Interest Rates

Between 1960 and 1963 the Bank of Ghana's re-discount rate was set at only 1/8% above the Treasury Bill rate of 4%, hardly a truly penal rate. Financial instruments fully re-discountable at the Central Bank

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[34] The designation of priority and non-priority sectors is subject to change in accordance with economic conditions and government policy. In general, however, the priority sectors have comprised agriculture, manufacturing, transport, exports, storage and communications whilst the non-priority sectors have designated domestic commerce, mining, utilities and other allied activities.

were treasury and cocoa bills.[35]

The Bank imposes maximum interest and lending rates to certain sectors. Most often, the rates are explicitly laid down in directives to the commercial banks. For instance, on July 31, 1971, commercial banks were required to pay a minimum of 7½% per annum on saving and time deposits and a minimum of 1% on demand deposits in excess of ¢50. Except for the organization of exports for which an interest ceiling of 11% was placed, no ceilings were placed on lending rates to all other activities. However in August 1973, in connection with its policy of channeling credit to agriculture and small Ghanaian businesses, the Bank of Ghana announced a reduction in interest rates. The re-discount rate was revised downwards from 8% to 6% and commercial bank deposit rates were lowered from a range of 7-8½% to 5-6% while the treasury bill rate was scaled down from 6 to 5%. Interest payments on demand deposits were eliminated altogether and lending rates were also lowered from 11-15% to 9-10% with a ceiling of 10% imposed on all credits although credit for agriculture and exports was allowed a preferential 9% rate. Government stock and bonds continued to carry interest rates between 4 and 6%. It is worthy of note that the new interest rate structure in 1973, although somewhat higher than that in force in 1971, consisted of rates significantly less than the annual rate of inflation. In fact for most of the period under study the real rate of interest has consistently been negative.

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[35] Cocoa Bills were created in 1961 by the CMB to finance cocoa purchases and bridge the gap between cocoa purchases and receipts from sale abroad. Until October 1963, the commercial banks were not involved in the re-discounting of cocoa bills.

Special Deposits

These were first introduced as an instrument of monetary policy in beginning of 1963 when the commercial banks were required to maintain a special non-interest bearing account (the "B" account) at the central bank in addition to their ordinary balances and at a level equivalent to 5% of their total deposit liabilities. These deposits, in effect, were a disguised but ingenious way of raising reserve requirements. Following criticisms from the banking sector, they were quickly abolished in February 1969. They were however re-introduced in July 1971 when the Bank of Ghana decided to tighten and centralize foreign exchange regulations. The banks were required to transfer to the Bank of Ghana all funds which were held in respect of arrears on current external payments (mainly matured 180-day import credits) as well as in respect of those deposits normally required at the time of opening import letters of credit and guarantees. Such funds, until then, had been retained by the banks and used for domestic credit purposes. In addition, the banks were required to transfer daily the cedi counterpart of newly maturing import credit and other external payments. These commercial banks' funds, not subject to reserve requirements, were held by the Bank of Ghana under Special Deposits and the Bank assumed the exchange risks on the transferred funds.

The banking system in Ghana therefore operates under rather prolific regulations. Almost every aspect of banking activity is regulated; from closing and opening of branches, payment of interest and lending rates to economic activities they are prohibited from in addition to statutory reserve requirements. This kind of regulation follows the general pattern of "interventionist" philosophy that characterized the government throughout the period of our study.

3. Monetary Developments, 1955-74

The Bank of Ghana, as we saw earlier, did not pursue any active monetary policy in the first three years of its existence; it was more concerned with achieving a smooth change-over from the sterling exchange standard to the newly created national currency. It was not until 1960 that the Bank expressed a willingness to use the monetary powers conferred upon it by the 1957 Ordinance. Hence, for the period up to 1960, the monetary system was essentially the same as the colonial system.

The total money supply, conventionally defined in Ghana as currency in circulation plus demand deposits (narrow definition) has increased consistently, except in 1958 when a small decrease was registered, as the following table indicates,

TABLE 2.3

THE SUPPLY OF MONEY	¢ MILLIONS					
	1954	1955	1956	1957	1958	1959
Currency with Public	52.0	52.8	57.2	57.6	52.4	57.0
Demand Deposits	30.6	30.8	33.0	34.2	38.0	43.8
Total Money Supply	82.6	83.6	90.2	91.8	90.4	100.8

Source: Birmingham et. al., 1966; p.313, Table 13.7.

The principal source of increase in the money supply was the accumulation of external assets by the banking system as the following table shows,

TABLE 2.4

CHANGES IN THE MONEY SUPPLY AND SOURCES OF CHANGE 1954-59.							
CHANGES IN MONEY SUPPLY	1954	1955	1956	1957	1958	1969	1954-59
Currency in Circulation	-0.1	+0.4	+2.2	+0.2	-2.6	+2.3	+2.4
Demand Deposits	+1;4	+0.1	+1.1	+0.6	+1.9	+2.9	+8.0
Total Money Supply	+1.3	+0.5	+3.3	+0.8	-0.6	+5.1	+10.4
SOURCES OF CHANGE:							
Overseas Assets of Banking System	+2.2	+3.9	+0.8	-3.6	+4.8	+3.5	+11.6
Bank Loans and Advances	+0.6	+0.8	+1.7	+0.9	+1.6	+2.2	+6.8
Government Bills and Securities held by banks	+0.1	-	-0.1	-	+0.1	+0.1	+0.2
Net Money Creation by banks (a)	-	+0.2	+0.8	-0.2	+0.4	+0.2	+1.4

(a) Net of increases in saving and time deposits.

Source: Birmingham et. al., 1966; p. 315, Table 13.5.

Paradoxically, the banking system accumulated foreign assets at a time when the country was running substantial balance of payment deficits (see Table 4.5). Under the sterling exchange standard such deficits should have resulted in the contraction of the money supply. But Birmingham et. al. (1966) explain that "to a much greater extent changes in the external assets of the central government and the CMB provided the counterpart of the surplus and deficits in the balance of payment. Indeed in the years 1956, 1959 (and 1960) the non-banking external assets had to 'pay for ' the balance of payment deficits and an increase in the external assets of the banking system " (p.318).

It may also be observed from Table 2.4 that commercial bank lending was small and in fact negligible if we take bank lending as net of increases in time and saving deposits. Birmingham et. al. (1966) concluded that "the banks were insignificant as net creators of money in

1950-59. Net bank lending was only ¢1.6 million or under 4% of the total increase in the money supply" (p.321). So far as the banks were concerned, Ghana was an area with surplus funds and since only a proportion of the increase in deposits could be employed domestically, there was a substantial net outflow of funds to London.[36]

The reasons for the small amount of domestic lending are already well-known and need only be mentioned briefly here.[37] Foremost was the fact that African borrowers had difficulty providing collaterals as security. Other reasons included the unwillingness of the banks to grant credit on a medium or long-term basis, the type of loans most desired by African businessmen, the lack of any close contact between the European bankers and their potential African customers and the lack of alternative investment outlets.

Nevertheless, the shift out of local into foreign assets gained an impetus following an upward movement of short-term interest rates on the London money market relative to the rates on the Accra market. This differential which was irrelevant to relative domestic economic conditions, ensured that the monetary system was further subjected to another extraneous or "foreign" influence.

The break with the colonial sterling exchange standard came in February 1960 when the Ghana Government Treasury Bills were introduced for the first time and the Bank of Ghana announced its willingness to rediscount them at 4%. This, in essence, amounted to a declaration by

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[36] This was the basis of the contention that under the colonial system, it was the colonies which rather ironically made substantial investments in Britain.

[37] For a fuller discussion see Bauer (1967).

the Bank to create a fiduciary issue which meant that the currency in circulation could be expanded by the acquisition (by the Central Bank) of sterling or Ghana government securities and effectively opened the door to large scale deficit financing as we shall see in chapter 5.

The introduction of the bills led to a rapid decline in the banks' holding of foreign treasury bills and by the end of 1962 the commercial banks had completely run down their portfolios of foreign treasury bills as can be seen from the following table,

TABLE 2.5

ASSET STRUCTURE OF COMMERCIAL BANKS (1959-65) ¢ MILLIONS.

YEAR AVERAGES.	1959	1960	1961	1962	1963	1964	1965
Cash	12.6	9.4	9.0	14.4	10.8	17.4	22.0
Balances with other Banks	23.2	23.2	21.6	4.2	-1.4	4.0	4.0
Ghana Government Treasury Bills	-	8.4	11.6	34.6	35.6	37.6	59.4
Other Bills[(a)]	4.4	3.2	6.0	1.2	4.4	9.2	22.6
Total Liquid Assets	40.2	44.2	48.2	54.4	49.4	68.2	108.0
Ghana Government Securities	0.4	0.4	1.2	2.2	11.0	25.2	27.8
Loans and Advances	21.2	27.0	47.4	49.0	61.6	66.8	80.6
Other Assets	12.6	11.2	11.6	21.8	21.8	23.0	25.6
TOTAL ASSETS	74.4	82.8	108.4	127.4	143.8	183.2	144.6

Notes: (a) Before 1963 when cocoa bills were introduced, "other" bills consisted primarily of foreign treasury bills.
Sources: (i) Killick in Whetham and Curie (1967);p.101 (ii) Ahmad (1970);p.31.

The effect of the introduction of the new treasury bills therefore was to build up the liquidity position of the commercial banks to the extent that by 1964 more than half of the total assets of the commercial banks was in such bills as can be seen from the table on the next page.

TABLE 2.6

COMMERCIAL BANKS' LIQUIDITY POSITION, 1960-65 (PERCENTAGES). (Averages of End-of-Month Figures)

	1960	1961	1962	1963	1964	1965
a. Cash Reserves	33	21	15	8	11	11
b. Other Liquid Reserves	20	22	36	33	56	51
c. Total Liquid Reserves (a+b)	53	43	51	41	67	62
d. Special Deposits ("B" Account)	-	-	-	-	3	3
e. Ghana Government Securities	1	1	2	9	17	17
f. TOTAL RESERVES (c+d+e)	54	44	53	50	87	82

Source: Ahmad, 1970; p.33, Table 2.

1961 witnessed a number of developments which further increased the liquidity in the monetary system. First, the fiduciary issue was created. Second, the Bank of Ghana made its first loan to the government in the form of Ways and Means Advance. These transactions led to a rise in currency in circulation. Third, the Foreign Exchange Act of July 5, 1961, extended exchange control regulations to transactions with all countries including the sterling area.[38] The Act also stipulated that the commercial banks and insurance companies hold only limited foreign balances as were necessary for day-to-day transactions and repartriate the rest of the idle funds to the Bank of Ghana in a bid to centralize all foreign exchange resources. Furthermore, remittances of incomes of non-Ghanaians were restricted to 50% or ¢5,000, whichever was less.

These developments resulted in the repartriation of large sums of money that were previously invested abroad and the commercial banks were

[38] Prior to this date exchange regulations applied only to transactions with countries outside the sterling area.

obliged to seek alternative local avenues for the investment of these funds. The main outlet was credit to the commercial sector, in particular, to finance the import trade. Credit to this sector earned as much as 6 to 9% per annum whereas the discount rate on 90-day treasury bills was only 4%. However with the imposition of import controls in December 1961 the demand for credit in the commercial sector was checked somewhat and the banks invested their idle funds in government treasury bills (Table 2.5). It is worthy of note, nonetheless, that the increase in their holdings of government treasury bills did not prevent the banks from increasing their lending to the non-government sector also (Table 2.5).

The willingness of the commercial banks to increase their holdings of government treasury bills perhaps marked an epoch in Ghana's monetary history.[39] It provided an easy means of financing the growing budget deficits. More importantly, these treasury bills formed part of their statutory secondary reserves and they were fully re-discountable with the Bank of Ghana at no penal rate. Thus the banks remained fairly liquid and their potential capacity for credit expansion was therefore high. This then was the beginning of a system in which lending to the government increased the liquidity position of the banks to permit further credit to both government and non-government sectors.

During 1963, the government disturbed by this potential danger, decided to reduce the liquidity of the banking system by funding ¢20 million worth or 56% of treasury bill holding of the commercial banks into medium-term investment, the Conversion Stock of 1967-1968,

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[39] It is debatable whether the banks acquired government bills voluntarily. It may probably be correct to say that they were indirectly regulated into doing so.

which would not be counted as part of their liquid assets. The exercise was a failure for it had the opposite impact on the liquidity position of the banks (Table 2.6 especially 1963-64) which stood at 67% in 1964, an all-time record. The very same government ran an even larger deficit in 1964 and borrowed from the banks to finance it, with the result that their holdings of treasury bills increased dramatically (Table 2.5). Furthermore, as table 2.5 indicated, the Conversion Stock exercise did not result in any decrease of credit to the private sector.

The credit expansion however led to a significant fall in their cash ratio from 15% in 1962 to 11% in 1964 but "until April 1964 the banks in Ghana were under no legal obligation to maintain any fixed cash and liquidity ratios and therefore kept such voluntary ratios as they found convenient" (Ahmad, 1970;p.35).

A number of other factors helped to aggravate the excess liquidity situation. One was the involvement of the Bank of Ghana in financing the operations of certain state enterprises. Any credit to these enterprises had the potential of increasing high-powered money and in turn the multiple expansion of commercial bank credit. The Bank of Ghana's credit to these semi-public institutions and enterprises rose from ¢5.4 million In 1963 to ¢28.4 million in 1964 and ¢51.2 million in 1965 (Ahmad, 1970; p.61).

The other factor was the introduction of an inland cocoa bill scheme in October 1963. Under this scheme of cocoa financing the CMB was authorized to draw 3-month internal bills on its subsidiary, the Cocoa Marketing Company. These bills were initially to be re-discounted by the commercial banks but at a later stage, the commercial banks could re-discount them with the Bank of Ghana. Prior to 1963, the CMB acquired

local currency by surrending (or discounting) the foreign securities held by its subsidiary based in London to the Bank of Ghana for an equivalent local currency. After October 1963 the CMB could then finance its purchase of cocoa from domestic producers by borrowing internally from the banking system against its future foreign exchange receipts rather than by drawing upon its foreign exchange assets.

The introduction of the cocoa bill scheme resulted in a continuous increase in bank lending to the CMB. Two other factors accelerated this trend. First, due to falling world cocoa price and a fixed producer price, the Board's receipts from cocoa exports persistently fell short of its payments to the cocoa farmers with the result that the Board had to seek accomodation from the banking system. Second, there was a bumper crop in the 1964/65 season but in October 1964, Ghana, Brazil, Cameroon, Ivory Coast, Nigeria and Togoland formed the Cocoa Producers' Alliance to withhold cocoa from the world market until the price rose.[40] With no foreign exchange coming in the Board was forced to borrow even larger amounts from the commercial banks, who, when they were tight for funds, re-discounted the cocoa bills with the Bank of Ghana. Thus the ultimate responsibility for cocoa finance indirectly came to rest with the Bank of Ghana. Out of the total internal cocoa bills of ¢34 million at the end of 1963, the Bank of Ghana held ¢29 million or 83.5%. By the end of 1964, the Bank's holding amounted to ¢32 million or 90% (Ahmad, 1970;p.64).

In 1963-64, the monetary situation was becoming alarmingly chaotic. Disturbed by the reckless lending policies of the commercial banks and

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[40] The period of withholding was October 1964-January 1965. The attempt failed and cocoa sales were resumed in February 1965.

their disregard for sound banking practices, the Bank of Ghana introduced a Bank Act in 1963 to discipline them and regulate the level of their credit. The 1963 Act, as we noted earlier, required them to maintain a cash ratio of 8%; a liquidity ratio of 40% between March and August and 46% between September and February; a minimum of 5% of their total deposit liabilities in a special deposit account (Account "B") with the Bank of Ghana and invest a minimum of 18% of their total deposit liabilities in Ghana Government stock. In addition, they were,

> — to cover sight balances due to banks abroad (including head office, correspondents, foreign branches and subsidiaries) by 100% foreign currency deposits with the Central Bank.
> — to obtain prior approval of the Bank of Ghana before granting loans exceeding ¢10,000 for purposes other than agriculture and industry.
> — to obtain and deposit with the Bank of Ghana a minimum of 15% down-payment before opening a letter of credit in respect of imports of consumer goods including consumer durables (pp.89-90).

These measures were largely ineffective in arresting the growth of commercial banks' credit to the non-government sector. It can readily be seen from Table 2.5 that commercial banks' loans and advances increased rapidly in 1964 and 1965 because the banks were very liquid (Table 2.6). The expansion of the commercial banks' liquid reserves resulted from the resumption of sale of government treasury bills to the banks to finance ever-growing budget deficits. Thus the fiscal needs of the government became incompatible with the restrictive measures introduced in 1963.

In view of the ineffectiveness of the measures introduced in 1963 it became necessary to introduce another round of measures in January 1966. The bank rate was raised from 4.5% to 7% and the commercial banks were requested by moral suasion to reduce their lending for relatively

less productive purposes by rates ranging from 10-50%. Furthermore, in an attempt to reduce their lending to the commercial sector, the banks were requested to submit all letters of credit to the Bank of Ghana for approval and to obtain and deposit with the Bank cash margins of 5% in respect of raw materials and 1% in respect of capital good imports.

The military junta that took power a month later, February 1966, announced a "stabilization program", cut what it considered wasteful government expenditure, terminated certain government contracts and projects. The effect of all these was to trim the deficit and thereby reduce the need for borrowing from the banking system. In 1967 net credit to the government by the banking system increased by only ¢33 million as compared to an increase of ¢60.5 million in 1966 (Economic Survey, 1969-71;p.130).

After the coup, the commercial banks hastened to meet their liquidity ratios and they accomplished this mainly by re-discounting treasury bills with the Bank of Ghana, not by reducing the size of their loan portfolios. By 1967 their holdings of treasury bills had declined from ¢68.5 million to ¢51 million or 25% as the following table (next page) shows.

TABLE 2.7

ASSETS OF THE COMMERCIAL BANKS, 1966-74. ¢ MILLIONS.
(YEAR -END FIGURES)

	1966	1967	1968	1969	1970	1971	1972	1973	1974
Cash[a]	38.9	38.4	38.0	54.8	88.2	79.0	114.1	171.2	215.0
Balances with other Banks	12.0	11.3	7.9	8.0	8.1	12.9	9.7	20.4	19.3
Treasury Bills[b]	68.5	51.0	45.7	50.9	51.6	26.0	102.4	99.2	111.9
Commercial Bills[c]	29.0	32.4	57.9	45.2	11.2	60.3			
Loans and Advances	98.8	99.5	103.7	149.0	175.3	254.4	256.1	283.6	387.0
Securities	36.3	47.3	42.5	46.0	67.4	27.5	49.4	65.6	79.0
Other Assets	37.2	42.1	48.3	35.1	37.8	54.4	167.3	144.6	187.8
TOTAL ASSETS	320.8	322.0	344.1	389.0	439.6	514.5	699.0	784.6	1000.0

Notes: (a) Includes balances with the Bank of Ghana and foreign currency assets.
(b),(c) After 1971 Treasury and Commercial bills were aggregated into one category "bills discounted".

Sources: Economic Surveys, 1969-71;p.134 and
1972-74;p.161.

Furthermore, the commercial banks "voluntarily" held loans and advances in check; these only increased from ¢98.8 million in 1966 to ¢99.5 million in 1967 or by 0.007%. However the banks were still excessively liquid and the Economic Survey (1969-71) noted that,

> ".....at the end of December 1969, the liquidity of the commercial banks at 60.9% was much higher than the minimum requirement of 35%. The total cash reserves of the banks stood at ¢54.8 million or 21.3% as against a minimum of 15% while other liquid reserves amounted to ¢99.7 million or 39.5% compared with a minimum of 20% set by the regulations" (p.55 para. 4.30).

Soon things began to change. Busia had just been elected into office (1969) with a declared promise of dismantling the rigid import control program. The progressive dismantling subsequently led to a rapid increase in demand for imports and concomitantly to demand for bank credit to finance the imports. Total bank credit for commerce alone

increased by 48% from December 1970 to December 1971 and bank credit for imports increased by 23% within the same one year period (Economic Survey, 1969-71;p.133). Indeed, for the Busia era one notices a surge of bank credit from ¢149 million to ¢254.4 million or 70.7% increase in two years (Table 5.5).

Perturbed by the aggressive lending practices of the commercial banks, the Bank of Ghana hastily introduced the Banking Act of 1970 to tighten control over their credit. However the effectiveness of the Act was eclipsed in the same year when the government enacted the Ghanaian Business Promotion Act which aimed at the take-over of alien trading assets in specified fields by Ghanaians and it was made the policy of the Bank of Ghana to assist the commercial banks in financing the promotional exercise. In pursuance of this goal, the Central Bank established a Credit Guarantee Scheme for small-scale industry to induce the commercial banks to lend to small borrowers who were unable to provide the collateral normally demanded by the banks. It therefore became necessary to introduce new measures in September 1971 but it was too little too late to resolve the liquidity crisis; the government was overthrown in a coup on January 13, 1972.

During 1972 and 1973 the overall liquidity position of the private sector improved dramatically. Several factors contributed to this. First, there had been considerable stock-building of imported goods during 1969-71 when import controls were relaxed. When they were re-imposed by the new junta, the NRC, companies were obliged to run down their stocks and thus retain idle balances. Second, a 25% increase in the producer price of cocoa in September 1972 led to a rapid rise in domestic incomes relative to the growth in GDP. Third, the central

government reverted to Nkrumah's "interventionist" economic philosophy which led to a rapid expansion in government expenditures. These factors, coupled with some reduction in the supply of goods and services, forced the private sector to build up large idle balances. In fact, beginning in mid-1972, the commercial banks began to refuse new time deposits as they were unable to find profitable outlets for the funds at the rate they were coming in (IMF, 1975;p.172). Finally, in 1974, the government granted wage and salary increases which further swelled the monetary balances of the private sector and increased the budget deficit, forcing the government to seek credit accomodation from the banking system.

In summary, the salient monetary development of the period, 1955-74, may be classified under two eras,

(a) 1955-60, a period during which the monetary system was essentially the colonial sterling exchange standard under which the Bank of Ghana played no active role,
(b) 1960-74, an era during which excess money balances in the system were gradually built up to a saturation point.

The 1960-74 epoch began first with the introduction of government treasury bills which raised the fiduciary issue and gained impetus with persistent and growing budget deficits, resort to borrowing from the banking system to finance the deficits, the inland cocoa bill scheme in 1963, the liberalization of imports in 1969-71, the increase in producer price for cocoa as well as wage and salary increases in 1974.

To be fair, the monetary authorities did realize how alarming the situation was becoming and attempted some counteracting measures. But each time a tight credit policy was initiated it was over-ridden and negated by some other developments like the Ghanaian Business Promotion Act and Inland Cocoa Bill scheme which required extensive credit assistance

from the Central Bank.

4. Monetary Policy

Objectives

Pursuance of an active monetary policy in Ghana really began with the Bank Act of 1963. This Act, as we noted earlier, defined the objectives of monetary policy as:

(i) maintenance of domestic price stability as well as exchange rate stability,
(ii) promotion of national development,
(iii) careful management of the country's balance of payment, and
(iv) channel credit into the productive sectors such as agriculture and exports.

The same Act however pre-empted the "independence" of the Bank of Ghana by stipulating that these objectives be pursued "in accordance with the economic policy of the Government". Another moderating or dominating influence on these objectives have been balance of payment developments. Extensive evidence exists to suggest that, more often than not, the Bank of Ghana has been quite ready to sacrifice its monetary objectives on these two counts. We have already seen in the previous section how monetary measures taken by the Bank were often negated by government economic policies, the Ghanaian Business Promotion Act in 1970 for instance. As another example, the monetary authorities from late 1971 pursued a cautious credit policy vis-a-vis public institutions and the private sector in line with the need to cut back on imports following the decline in world cocoa prices and the severe balance of payment difficulties which emerged during 1971.[41] During 1973, Ghana benefitted from

[41] In Ghana credit policy is synonymous with monetary policy.

a sustained increase in world cocoa prices to record levels. The balance of payments improved somewhat and in formulating its monetary program for 1973/74 the Bank of Ghana decided to adopt less restrictive guidelines for bank credit to public institutions and the private sector and in line with this policy interest rates were also lowered. But when the balance of payments worsened in 1974 the liberal policy was reversed with new measures in September 1974 (Economic Survey, 1972-74;p.73).

The instruments of credit policy, as we noted earlier, have been asset ratios, special deposits, discount rates and selective credit controls or credit guidelines and ceilings. The targets have been the level of domestic prices and balance of payment deficit. The primary indicator of monetary policy has been the rate of credit expansion rather than the stock of high-powered money. Hence the Bank of Ghana follows the "Liquidity Approach" to monetary management.[42] However the use of bank credit is quite likely to lead to the "indicator problem", a confusion between targets and indicators of monetary policy.[43] This may indeed be the case in Ghana where bank credit is highly correlated with budget deficits or developments in the real sector and as such may not satisfy one of the criteria suggested by Kaufman (1973) for an optimal indicator as "minimum feed-back from the real sector".

Conduct of Credit Policy

The conduct of credit policy follows three basic steps. First, the Bank of Ghana sets a certain rate of expansion in total credit by the banking system, taking into account recent balance of payment

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[42]This approach was popularized by the Radcliffe Report. The Report was discussed extensively by Gurley (1969).

[43]A detailed discussion of the indicator problem may be found in in Saving (1967), Kaufman (1973), Brunner and Meltzer (1967).

developments, decline in the income velocity of circulation or money hoarding as the subsistence sector is monetized and changes in real income and prices.[44] Second, of the permitted increase in total bank credit a certain percentage is set aside to accomodate government budgetary needs. In the final step, directives are issued to the commercial banks with regards to maximum permitted credit expansion to the priority and non-priority sectors. The percentage allocated to the central government has varied between 45 to 60% (Table 2.8) but it is much higher if we take the total public sector. Table 2.8 also shows that since 1965 credit by the banking system has never registered a decrease. Hence one cannot easily distinguish between an "easy" or "tight" credit policy except with reference to the rate of credit expansion. Determinimg the cut-off rate however is likely to be problematical. Nevertheless, if the credit needs of the government turn out larger than anticipated, supplementary directives are issued to the commercial banks to revise downwards credit ceilings set for priority or non-priority sectors or both. For example, the credit policy of the Bank of Ghana made effective from February 20, 1969, directed that expansion in commercial banks' credit to the production sector (priority) should not exceed 15% of the level at the end of 1968 and a maximum of 10% was set for the non-priority sector. On the whole, expansion of credit to the private sector (for purposes other than cocoa financing) was not to exceed ¢10 million (Economic Survey, 1969-71;p.53, para. 4.27). However after worsening government finances in the following year, the Bank of Ghana introduced new measures which reduced the credit ceilings in

[44]The decline in the velocity of circulation may result from additional transaction demand for money in the erstwhile subsistence sector. Besides this, other economic and social factors may contribute to a fall in the velocity through currency hoarding (see chapter 5).

September 1971 to "counteract considerable expansionary influence on the money supply, prices and imports anticipated from Government budgetary spending during the 1971/72 fiscal year" (Economic Survey, 1969-71;p.40, para. 4.4).

Effectiveness of Credit Policy

The evaluation of the success of a credit policy is quite a difficult task but we shall attempt this within the frame-work set in the previous section. That is, a credit policy would be adjudged successful if (i) increasing allocation of credit to the central government is accompanied by a reduction of credit allocation to the private sector, (ii) the commercial banks do not exceed the ceilings set by the Bank of Ghana for the non-priority sector and satisfy the ceiling set for the priority sector.[45]

On the first criterion the following table suggests that the Bank of Ghana's credit policy has met with little success.

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[45]These criteria are at best non-rigorous and do not pretend to be scientific. Nonetheless, they are at least a useful beginning in an area fraught with many problems.

TABLE 2.8

SECTORAL BREAK-DOWN OF CREDIT BY THE BANKING SYSTEM, 1965-74. ¢ MILLIONS										
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Central Government (Net)	192.1	239.3	285.3	327.8	312.8	291.8	286.3	323.4	343.3	584.3
Public Institutions	35.0	30.3	25.2	24.9	47.0	93.5	147.9	224.3	178.1	275.4
Total Public Sector	227.1	269.6	310.5	352.7	359.8	385.3	434.2	547.7	521.4	859.7
Private Sector	48.3	59.3	60.5	66.6	91.6	126.2	175.2	175.3	187.1	255.9
Cocoa	84.0	109.2	127.6	125.9	119.5	82.0	111.9	77.7	106.3	183.5
TOTAL CREDIT	359.4	438.1	498.6	545.2	570.9	593.5	721.3	799.5	814.8	1299.1
% of Gov't to Total	53.5	54.6	57.2	60.1	54.8	49.2	39.7	40.5	42.1	45.0
% of Public Sector to Total	63.2	61.5	62.3	64.7	63.0	64.9	60.2	68.5	64.0	66.2

Sources: Economic Survey, 1969-71;p.130, Appendix XII,
Economic Survey, 1972-74;p.157, Appendix XIII.

The table reveals that not less than 60% of the credit by the banking system is allocated to the public sector as a whole. Except in 1973, credit allocation to the public sector has increased consistently, and so has credit allocation to the private sector. Therefore increasing allocation of credit to the public sector was not matched by any corresponding decrease to the private sector. More dramatically, the credit control measures taken at the end of 1968 stipulated that "on the whole expansion in credit to the private sector was not to exceed ¢10 million or about 12% during 1969" (Economic Survey, 1969-71;p. 53, para.4.27).

On the other criterion, the following table also suggests that the Bank of Ghana has achieved little success in influencing the sectoral allocation of credit.

TABLE 2.9

PERMITTED AND ACTUAL EXPANSION OF COMMERCIAL BANK CREDIT TO THE NON-GOVERNMENT SECTOR, 1969-70. (PERCENTAGES)

	1969		1970	
	PERMITTED	ACTUAL	PERMITTED	ACTUAL
Priority Sectors	15	76	33.3	29.3
Non-Priority Sectors	10	32	9.0	24.9
TOTAL INCREASE	12.5	51.3	20.6	26.8

Source: Calculated from Economic Survey, 1969-71.

Scanty data permit only limited comparisons for 1969 and 1970. Nevertheless, in both years ceilings with respect to total credit expansion were exceeded. Furthermore, the ceiling set for the priority sector in 1969 was exceeded by almost 400%. Similarly the ceilings for the non-priority sector in both years.

Evidence from elsewhere suggests that this trend was continued. In 1971, the permitted increase of credit to borrowers other than the central government was ¢10-15 million. The actual increase was ¢34 million million (Killick, 1978;p.324n). Between 1970 and 1972, commercial bank credit for imports expanded by 150% despite a ceiling 30% (Killick, 1978; p.324n).

The situation got even worse in 1972. New measures introduced on July 31, 1971, required that (actual increases in parentheses) "lending to the priority sectors was permitted to rise by not more than 20% (-4.7%) of the level on July 31, 1971. In the case of non-priority sectors, no increase (6.9%) was allowed and in the case of imports, the commercial banks were to reduce the credit as of July 31, 1971 by 30% (-19.6%) (Economic Survey, 1969-71;p.54, para. 4.29).

The 1973/74 credit guidelines envisaged an expansion in total commercial bank credit of nearly 15%. Of this, the permitted rate of increase to the main priority sectors was set 20%. Construction and non-priority sectors were permitted a 10% increase in credit, while the import trade and services were allowed 5%. Performance was disappointing. "Credit to priority sectors showed almost no change (20% increase permitted) while credit to non-priority sectors rose by ¢19.3 million or 20% (10% permitted). A substantial portion of the credit went to the import trade, ¢7.5 million or 38% compared to allowed maximum of 5%" (IMF, 1975;p.167).

The reasons for the ineffectiveness or the general failure of credit policy are not hard to find. They are:

(i) Conflicts among the objectives of credit policy;
(ii) Excess liquidity of the commercial banks;
(iii) Multiplicity of development banks with objectives incompatible with monetary control;
(iv) Ineffective discount rate policy and/or absence of a penal rate;
(v) Absence of disciplinary actions on deliquent banks.

(i) Conflicting Objectives of Credit Policy

We have earlier noted the paramount conflict between "regulating and directing the credit and banking system in accordance with the economic policy of the government" and monetary stability. Other conflicts include the maintenance of internal price stability and/or balance of payment equilibrium on one hand and the promotion of development of the national economy of the other. The latter objective has meant the subscription of a large portion of paid-up capital of development banks by the Central Bank as well as extensive credit allocation to these banks.

As the Economic Survey (1972-74) puts it,

> "It (the Bank of Ghana) pursued a policy of direct participation in financing the establishment of development banks and other development projects in the fields of agriculture, commerce and industry. The Bank has schemes for providing guarantees to approved banks to cover their loans and advances to small borrowers" (p.53).

(ii) Excess Liquidity of the Commercial Banks

The following table shows that the commercial banks have often carried considerable idle funds and are quite likely to take advantage of loop-holes in existing credit regulations to find profitable outlets for these funds.

TABLE 2.10

RESERVE REQUIREMENTS OF COMMERCIAL BANKS, 1969-74. (PERCENTAGES).

	1969	1970	1971	1972	1973	1974
CASH						
Minimum Ratio Required	15.0	30.0	20.0	20.0	20.0	20.0
Ratio Returned	21.3	23.4	17.5	29.1	29.1	29.7
OTHER LIQUID ASSETS						
Ratio Required	20.0	20.0	20.0	20.0	20.0	20.0
Ratio Returned	39.5	35.0	34.7	34.0	31.4	17.1
TOTAL RESERVES						
Ratio Required[(a)]	35.0	50.0	40.0	40.0	-	-
Ratio Returned	60.9	58.4	52.2	63.0	60.5	46.8

Note: (a) Addition of cash and other liquid asset ratios was discontinued effective September 1973.

Source: Economic Surveys, 1969-71; Appendix XV, p.135.
1972-74; Appendix XVI, p.163.

From the table it is apparent that the commercial banks have generally over-satisfied their reserve ratios except in 1970 and 1971. But as the next section would argue their excess holdings of government treasury bills was as good as cash since they could be discounted into cash at the discount window which was always open at the Central Bank.

The fact however remains that they generally carried excess reserves with considerable potential for credit expansion.

In 1970-71, very little of this potential credit was extended to the priority sectors (see Table 5.7). The Economic Survey (1969-71) lamented that,

> "It is rather disappointing that agriculture, forestry and fishing had comparatively low priority in the lending by the commercial banks. At the end of December 1971, the share of agriculture, forestry and fishing was only 5.6% of the total loans and advances by the commercial banks" (p.52, para. 4.22)

If we take the view that the commercial banks are only "passive creators" of money or credit (Tobin; 1963) then they could be absolved of much blame in their short-sightedness with respect to their investments. According to this view, the commercial banks want to satisfy their customers, hence the crucial factor is the general public demand for credit. There is very little the banks can do to direct public demand for credit away from non-priority to priority sectors such as agriculture, forestry and fishing which the public generally regard as "inferior" economic activities. The banks may attempt to use higher lending rates to regulate credit to the non-priority sectors but the effectiveness of this is circumscribed by the fact that all real interest rates have been negative.

In general, then, one has a situation where the incentive to borrow for non-priority activities remains high and the commercial banks are continually saddled with excess reserves. This type of situation would prove troublesome for any Central Bank.

Multiplicity of Development Banks

Very little co-ordination exists among the activities of the four development banks as well as with those of the commercial banks. The Agricultural Development Bank was set up specifically to cater for the needs of the agricultural sector. It makes medium and long-term loans at a rate of 6% fixed by the government. Yet the commercial banks are required to lend to this same sector at the same rate when they can obtain 10-15% on loans to other sectors.

Furthermore, there is considerable overlapping of the functions of the development banks. They have all lent extensively to the agriculture and construction despite their declared specializations (Economic Survey, 1972-74;p.71). Moreover, much of the paid-up capital of these banks was initially subscribed by the government and the Bank of Ghana and received additional contributions from these same sources. This structural peculiarity frequently introduces an element of "slippage" into monetary control. Having direct access to credit by the Central Bank, the development banks can frustrate a policy of monetary restraint. For example, in 1970-72 period when credit policy was supposed to be tight, loans to the development banks by the Bank of Ghana increased from ¢2.1 million in December 1970 to ¢19.9 million in December 1972 (Economic Survey, 1972-74;p.75). The increase in credit to the development banks was especially marked in 1972 when the government introduced the Operation Feed Yourself (OFY) program and the Agricultural Development Bank was expected to assist with extensive credit for agricultural programs.

Ineffective Discount Rate Policy

The wide discrepancy between the Bank rate, the rediscount rate and the Treasury Bill rate (which are almost the same) on one hand and the commercial banks' lending and deposit rates on the other has contributed to frustrate many measures of monetary control. For example, in 1971 because the Treasury Bill rate of 6.5% was below the 7.5% on 3-month time deposits, there was a disruptive switch in asset holdings of the private sector (mainly companies) from treasury bills into time deposits. Since there was no penal rate, the commercial banks discounted these bills, unloaded by the private sector, at the Central Bank.

Although the commercial banks have generally had excess reserves, they have on many other occasions taken advantage of the discount window when they feel the effects of monetary stringency imposed by the Bank of Ghana. Ironically the same Central Bank has been ready to assist them out of their difficulties. One such instance was the re-introduction of "special deposits" in July 1971. Between August and December 1971 the commercial banks transferred a total of ¢77.2 million to the Bank of Ghana for the special deposits but during the same time they discounted ¢52 million of government bills at the Central Bank to meet the requirement (IMF, 1975;p.164). Another example we noted earlier was in October 1963 when the inland cocoa bill schene was introduced to encourage the commercial banks to lend for cocoa finance. We saw that through extensive re-discounting of these bills, the Bank of Ghana came to hold about 90% of them.

The discount window therefore constitutes a big loop-hole in monetary control. The Bank of Ghana could have plugged this hole, but then it might appear as un-supportive of government debt. This dilemma is

really a product of the conflicting objectives of monetary policy.

Absence of Disciplinary Actions

The 1970 Banking Act empowered the Bank of Ghana to impose fines on delinquent banks in order to enforce prescribed asset ratios. In practice however this measure has never been invoked. Reference to Table 2.6 indicates that although collectively the three commercial banks over-satisfied their minimum cash and liquidity requirements, on the whole they failed to fulfil other statutory obligations. Their special deposits with the Bank of Ghana remained considerably below the minimum 5% and were also unable to invest 18% of their total deposit liabilities in Ghana Government securities.

Perhaps the absence of any disciplinary action stemmed from the fact that the commercial bank most noted for its deliquency was the state-owned Ghana Commercial Bank. It could not even fulfil the minimum cash and liquidity requirements up to the middle of 1966 (Ahmad, 1970;p.38n).

In concluding, it is admitted that this section of the chapter is rather lengthy but it was necessary to sketch out carefully the Ghanaian monetary system in order to understand the Ghanaian variety of inflation and to evaluate the possibilities of bringing it under control.

The Ghanaian monetary system we sketched is rife with detailed regulations on practically all aspects of banking activity and saturated with excess liquidity. It is also a system which is so closely tied up with government's fiscal operations that it is almost futile to distinguish between fiscal and monetary policies. Thus, given the fiscal propensity to deficit-spending, the Ghanaian monetary system possesses built-in elements of instability. Within this system it hardly makes sense to

talk of "independent" monetary control. In fact, monetary control really means restraint on fiscal profligacy. Even worse, the system is replete with loop-holes that limit the scope of credit or monetary policies or render them hopelessly ineffective.

In summing up the contents of this chapter, the political system that exists in Ghana is characterized by chronic instability, socialism as an ideology and kleptocracy as a system of government. Economically, the country is essentially agricultural, deriving much of its foreign exchange from a single crop, cocoa. The sale of this crop to the CMB is influenced by real producer prices and smuggling, among others. In an effort to save foreign exchange import controls were instituted in 1961 and have remained in effect since then.

The success in earning or saving foreign exchange is much influenced by the country's domestic rate of inflation. Of the monetary and financial system, the principal features of monetary chaos, excess liquidity, extensive government incursions and ineffective banking controls discussed make it almost impossible to bring inflation under control.

These features, political instability, kleptocracy, corruption in the administration of import controls, smuggling and monetary incontinence delineate the "environment" within which development is taking place. More importantly, they directly or indirectly influence Ghana's ability to earn or save foreign exchange (or increase its effective savings).

CHAPTER 3: EFFECTIVE SAVINGS: AN ALTERNATE APPROACH TO DEVELOPMENT

> "The late Colonel Acheampong, ex-Head of State of Ghana, is reputed to have stashed away in Swiss and other foreign bank accounts ₺45 million of Ghana's wealth" (Ashanti Pioneer, August 4, 1978).
>
> "Ghana lost from 40,000 to 60,000 metric tons (13-20%) of its main export crop, cocoa, to smugglers" (Patterson, Simons & Ewart Cococa Report No. 1/78; p.1).

Are all the intractable problems of development "externally" generated by multi-national companies, deteriorating terms of trade, restrictive trade practices of the DCs etc.? Are scarcities of physical economic resources the sole constraints on economic development? What are the developmental implications of mal-distribution of wealth, predacious propensities of autocratic Heads of State, smuggling and other defects in the political, economic and social environment of an LDC?

As we saw in chapter 1, orthodox development theory tended to skirt these internal problems of capital formation, pre-occupying itself with fundamentalist dogmas. However, in the literature, there were some sporadic attempts to introduce socio-economic and political factors into development analysis.[1]

Many of these attempts faltered because of reference to indigenious cultural traits and such variables as "achievement motivation" (McClelland, 1953) and "degree of breakdown of extended family system" (Adelman, 1957) which are problematic in inter-country comparisons.

Quite recently, a new attempt was made by Robinson (1971) and subsumed under a "Socialistic Theory of Development". According to this

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[1] On culture, religion and climate the following are a sample: Weber, 1930; Huntington, 1945; Lee, 1957; McClelland, 1953; LeVine, 1966; Hagen, 1962 and Adelman, 1967.

On some aspects of the political system the following are a sample: Fallers, 1963; Apter, 1965; O'Connell, 1967; Nye, 1967; Ridker, 1967; Heidenheimer, 1970; LeVine, 1975 and Damachi, 1976.

theory:

> "It is not essentially the shortage of capital that holds agriculture in check; it is often the political preference for investing large amounts of scarce capital in a few spectacular industries and public works...
>
> The ruling elites use their governing authority to extract wealth from the productive classes and spend it on prestigious status symbols, luxurious living as an imitation of the standards of the richer metropolitan countries. Certainly the grand public buildings, airlines, Rolls Royces, political patronnage and corruptions all represent formidable obstacles to internal capital formation and productive investment. These barriers are not likely to be removed by supplying missing economic factors of capital, education and enterpreneurship from outside. What incentive does the peasant farmer have to produce more when through taxation the surplus is siphoned off to be spent in conspicuous consumption?" (p.43).

The uniqueness of this theory derives from several reasons. First, besides recognising the potential threat certain adverse features of the politico-economic millieu could pose to development, it stresses that these defects are man-made and do not derive from any innate cultural traits or propensities linked to pigmentation. Second, it is a remarkable improvement over earlier attempts. Third, it stresses domestic "obstacles to internal capital formation and productive investment". Fourth and perhaps most important of all, the epistemology adopted, in contrast to the gap-models or orthodoxy, is of the existential tradition which seeks explanations in the totality of things and their interaction.

However, the weakness of the theory is that it does not treat the "domestic obstacles" rigorously and systematically in a formal analysis. The aim of the present chapter is to strengthen the theory in these respects.

A. EFFECTIVE SAVINGS

1. A Re-Examination of the Contemporary Concept of Savings

The view that scarcities of foreign exchange may act as a bottleneck on economic development was first suggested by the gap-models developed by Chenery et. al. and McKinnon (1964). According to the gap-models,

many goods have strategic importance in efficient industrial growth but cannot be produced domestically in the early stages of industrial development in the LDCs. The importation of these essential goods entails foreign exchange expenditure. Scarcities of foreign exchange therefore may constrain capital formation and growth.

Recourse to expansion of exports to earn more foreign exchange may be limited because "exports of primary products in many under-developed countries are now very much tied down by world-wide marketing arrangements, so that additional quantities cannot be sold even if the seller were willing to accept very unfavorable terms of trade" (McKinnon, 1964;p.388). In addition, adverse income and price elasticities may frustrate export expansion.

In other situations, the rate of saving may be far below that required to generate a decent level of investment to sustain a target rate of economic growth. This low rate of savings is generally attributed to the notorious vicious circle of poverty.

Under any of these circumstances, foreign aid can perform a vital role in development in either permitting the importation of the critical capital goods and/or relieving the savings bottleneck by supplementing domestic savings.

The gist of the gap-models may be summarized into a simple model consisting of five functional equations and four identities.[2]

$$\Delta Y_t = (\frac{1}{z})\Delta K_t = (\frac{1}{z}) I_t \qquad (1)$$

$$S_t = sY_t \qquad (2)$$

$$M_t = mY_t \qquad (3)$$

---

[2]See Voivadas (1973) for the specification and fuller discusssion of this model.

$$X_t = X_o(1 + \varepsilon)^t \tag{4}$$

$$I_t = \min\ (aM_t^k,\ bI_t^h) \tag{5}$$

$$I_t - S_t = M_t - X_t \tag{6}$$

$$F_t = M_t - X_t \tag{7}$$

$$M_t = M_t^k + M_t^c \tag{8}$$

$$I_t = I_t^h + M_t^k \tag{9}$$

where,

ΔY = Change in output,

$\Delta K = I$ = Change in capital formation = investment,

S = Total savings,

M = Total Imports,

X = Total Exports,

M^k = Imports of capital goods,

I^h = Domestic investment resources,

F = Foreign aid,

M^c = Imports of consumer goods,

z = Incremental capital-output ratio,

ε = Growth rate of exports,

s and m = Propensities to save and import respectively.

Equation 1 relates changes in output to changes in capital formation or investment. Thus the underlying assumption is that of an absense of a labor constraint on output growth. The investment function (equation 5) distinguishes between two components of capital formation: the domestic, I_t^h, and the foreign, M_t^h. The two components are assumed to enter the production function in fixed proportions. Equations 2 and 3 depict savings and imports as linearly related to output. In the model exports (equation 4) are assumed to be an exogenous variable whose rate of growth depends on the rate of growth of foreign output as well as the foreign elasticity of demand. Equation 5 is the familiar condition for equilibrium.

An important feature of the model is the assumption that there are two limits to capital formation. The first limit is operative when capital formation and growth are constrained by insufficiency of domestic investment resources. Under these conditions,

$$I_t = bI_t^h \tag{10}$$

and

$$\Delta Y_t = (\frac{1}{z})bI_t^h \tag{11}$$

Substituting equation 10 into 6 yields,

$$I_t = bI_t^h = sY_t + mY_t - X_t$$

which, when substituted into equation 11 yields,

$$\Delta Y_t = (\frac{1}{z})(sY_t + mY_t - X_t) \tag{12}$$

Dividing both sides of equation 12 by Y_t gives,

$$\frac{\Delta Y_t}{Y_t} = (\frac{1}{z})(s + m - \frac{X_t}{Y_t}) \tag{13}$$

Or,

$$\frac{I_t^h}{Y_t} = \frac{1}{b}(s + m\,\frac{X_t}{Y_t}), \text{ using equation 11.} \tag{14}$$

Equation 13 postulates a <u>negative</u> relationship between the rate of growth of output and the ratio of exports to total output, rather unusual. Notice that the negative relationship would still remain even if foreign aid (F_t) relieves the bottleneck on investment. In this case equation 10 would become $I_t = bI_t^h + F_t$ and equation 13 would become,[3]

$$\frac{\Delta Y_t}{Y_t} = (\frac{1}{z})(s + m - \frac{X_t}{Y_t} + \frac{F_t}{Y_t})$$

The second limit to capital formation occurs when inadequate imports of capital goods constitute the constraint. In that case,

$$I_t = aM_t^k \tag{15}$$

and

$$\Delta Y_t = (\frac{1}{z})aM_t^k \tag{16}$$

[3]See Voivadas (1973) for these results.

From equations 7 and 8, we obtain,

$$M_t^k = F_t + X_t - M_t^c \qquad (17)$$

Substituting equation 17 into 16 and dividing by Y_t yields,

$$\frac{\Delta Y}{Y}t = (\frac{1}{z})(\frac{F}{Y}t + \frac{X}{Y}t - \frac{M^c}{Y}t) \qquad (18)$$

Equation 18 specifies a positive relationship between the rate of growth of output and the ratio of exports to total output, with a positive relationship between exports and capital imports.

The gap models made a significant contribution to development analysis in suggesting two possible limits (internal and external) to domestic capital formation, demonstrating the importance of foreign exchange availability to successful economic growth and the vital role foreign aid could play in the development process. However, a number of difficulties still remain with those models.

First, the gap models tend to over-emphasize the usefulness of foreign assistance, causing many to question its usefulness. Because aid is often linked to balance of payment deficits, the recipients are encouraged to embark on grandiose schemes involving large expenditures financed by inflationary monetary and fiscal policies and thus contributing to external deficits which in turn provide arguments for further assistance. Aid also induces recipient governments to adopt "unsuitable external models, such as western-style universities, whose graduates cannot get jobs, western-style trade unions which are only vehicles for the self-advancement of politicians, and a western pattern of industrialization even where quite inappropriate" (Bauer in Meier, 1976;p.354).[4]

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[4]Similar criticisms may be found in Tinbergen (1970), Pincus (1970), Findlay (1971) and Lal (1972).

Bruton (1969) was even more abrupt:

> "aid is gap-producing and not gap-filling...and it (aid) prevents the country from making the painful adjustments necessary to set it on a path of sustained economic growth".

Second, the gap models adopted an institutional approach to the internal obstacles to capital formation and tended to focus more on the external constraints. For example, McKinnon (1964) postulated his savings function as max. $S = sY$, $0<s<1$, to reflect "the institutional problem of appropriating domestic savings for capital formation" (p. 390).

As solutions towards the institutional problem, he argued that,

> "The presence of an enterpreneurial class which appropriates a significant proportion of the final product and has a high marginal propensity to save is one solution. However, what is likely more feasible in under-developed countries where price and profit incentives are lacking is that the government acts to some degree as a financial intermediary. Either taxes or savings encouraged by government-sponsored savings banks can be used to finance new investment expenditures...Inflation should be avoided if private savings incentives are relied on.
>
> Besides concern for potential saving, there are a number of factors which affect the productivity of new investment expenditures in general, and this makes the pay-off on complementary foreign transfers somewhat higher. The effective capital stock in an economy consists of human resources as much as physical plant and equipment... The absense of a well-trained labor force means that significant investment resources in labor training must accompany investment in new plant and equipment. This has the effect of lowering the output/capital output". (p.391).

This type of institutional approach, although useful, has many deficiencies. First, it rings of note of fatalism, i.e., there is little an LDC can do to increase savings unless the institutional barriers are removed, which may take forever. This tends to predispose LDCs towards resignation and induce them to look "outside" for economic salvation.

Second, the institutional approach appears to be out of touch with current realities. Instead of the "enterpreneurial class which appropriates a significant proportion of the final product and has a high marginal propensity to save" that McKinnon hopes for, we have in the LDCs

an elite class which appropriates a significant proportion of national income and "wastes" this on Mercedes Benzes and champagne.

Third, and perhaps the most serious deficiency in our view, the institutional approach and the gap models generally ignore the role of government policies and various illegal practices as determinants of the trade and savings gaps.

In their classic study, Chenery and Strout (1966) found that, in the 40-odd sample of LDCs, the trade gap was the more predominant or operative of the two gaps in a majority of the LDCs in the sample. By implication, the inability to import capital goods constitutes the greater obstacle to capital formation, i.e., the savings constraint was not binding. This, in turn, would mean that current savings out of disposable income, the contemporary concept of savings, are not "effective" in relieving the capital import bottleneck. Or, current savings are not "effective" for investment purposes.

2. The Concept of Effective Savings

Since a large proportion of investment goods have to be imported in many LDCs, channelling savings into investment is not an easy and "automatic" process. It necessitates the use of a foreign exchange medium.

The foreign medium may be inserted into the saving-investment process in two general ways. One is to view the process as composed of two parts: the conversion of savings into foreign exchange and then from foreign exchange into investment. The other way, which is less complicated and adopted for this study, is to re-define the purview of the act of saving and place it in a context more relevant for investment and hence development. With this in mind, we define "effective savings" as abstaining from consuming <u>foreign</u> income, i.e., the difference between and LDC's

income from abroad and its imports of consumer goods.

Foreign income may be earned from a variety of sources (from exports, invisibles, tourism et cetera) and may be spent in a variety of ways (on imports, invisibles, shipping, travel et cetera). We exclude from the analysis the invisibles and the capital account of the balance of payment and concentrate only on merchandise trade. Using this "narrow" concept of effective savings simplifies the analysis tremendously with little loss of generality or substance.

Such a definition has a number of advantages. First, it retains the traditional essence of the act of saving, abstaining from consumption. Second, it is in a format relevant for investment. Third and perhaps most important, it marries into one two important constraints on economic development, namely, savings and foreign exchange. Fourth, the concept in sensitive to certain political and social variables that we consider important in the development process. We now turn to the determinants of effective savings.

Exports

The exports of many Black African countries consist of a few primary products, perenial tree crops in particular. In Ghana this tree crop is the cocoa, accounting for about 65% of the value of total exports.

As we saw in chapter 2, cocoa farmers as a general practice inter-crop cocoa trees with food-crops. Furthermore, the farmers are paid a fixed price (producer price) which is determined by the CMB with prior approval of the government. This nominal producer price tends to lag behind other domestic prices in times of inflation, reducing real incomes of the farmers and inducing them to curtail production and/or smuggle their produce to the neighboring countries. The incentive to smuggle is

particularly strong in Ghana as the producer price is higher in neighboring countries. Although smuggling occurs for a variety of reasons it may partially be seen as a response to declining real prices (Mansfield, 1980).

This suggests that a negative relationship may exist between an LDC's capacity to earn foreign exchange and its domestic rate of inflation if export producer prices lag. Furthermore, pilferage and diversion of foreign exchange by Heads of State, corruption and quasi-smuggling may also contribute to rob an LDC of part of its export earnings.[5]

Imports

As in the gap models, we assume that there are two broad categories of imports - consumer and investment goods. But unlike those models, we assume further that imported consumer goods are subject to import controls as many LDCs operate some kind of an import licensing system, the chief objective of which is to curtail imports of consumer goods in order to "free" foreign exchange for investment goods. However, considerable difficulties present themselves in this exercise. The susceptibility of the licensing authorities to bribery and mal-administration of controls as well as the Mercedes Benzes and the conspicuous consumption of the elites may all conspire to push imports of consumer goods out of control. Successful control of imported consumer goods, the flip side of the effective savings concept, thus entails a self-imposed sacrifice by the very group of people who hold the reins of power and are responsible for the administration of controls - the elites.

Thus, we see that an LDC's ability to earn or save foreign exchange may also be impeded by domestic and non-economic factors. In the next section we explore more formally the concept of effective savings.

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[5]Smuggling and quasi-smuggling phenomena such as over and under-invoicing of legal trade transaction are receiving increasing attention in international trade literature. See Bhagwati (1974) for an analysis of their normative aspects.

B. THE THEORETICAL MODEL

We begin by making the following assumptions,

(i) all capital goods are imported,
(ii) imported consumer goods are subject to import restrictions,
(iii) the capital account and invisibles are excluded from the analysis or assumed fixed, i.e., no foreign aid, debts etc.,
(iv) a market for securities does not exist making it infeasible to borrow from the public to finance budget deficits.

Note that the gap models made a weaker version of the first assumption.[6]

1. The Production Function

We specify that real output, y_t, is a distributed lag function of gross capital formation, I_t, with the weights declining exponentially,[7]

$$y_t = \rho \int_{\infty}^{t} e^{-\rho\tau} \beta I(t-\tau) d\tau \qquad (1a)$$

Substituting $x = t - \tau$ so that $dx = -d\tau$ gives,

$$\frac{1}{\rho} e^{\rho t} y_t = \int_{-\infty}^{t} e^{\rho t} \beta I(x) dx$$

Differentiating both sides with respect to t,

$$e^{\rho t} y_t + \frac{1}{\rho} e^{\rho t} Dy_t = e^{\rho t} I_t$$

where D is the operator $(^{d}/_{dt})$.[8]

Dividing through by $\frac{1}{\rho} e^{\rho t} \neq 0$ we obtain the differential equation,

$$Dy_t = \rho(\beta I_t - y_t) \qquad (1b)$$

where ρ is the speed of adjustment and β is the productivity of investment

---

[6] These assumptions were made to impose "tough" restrictions on the model. Some of them may be relaxed with little difficulty. For example, the first is relaxed in the next chapter in view of the fact that investment generally entails ancillary expenditures on domestic materials and labor.

[7] An exponential lag was chosen on the basis of ease in mathematical exposition; a geometrically distributed lag could have been used also.

[8] For these operations see Allen, 1973;p.89.

and $0<\rho<1$. We shall use this simplified form (1b) throughout the analysis analysis.

2. The Import Function

As in the gap models, imports comprise of investment (I_t) and consumer goods (M_t^c) but the latter are subject to import controls.[9] We assume further that only a certain proportion (γ) of total imports is allowed in as consumer goods in accordance with the import control program and that this proportion is a policy-determined parameter. Thus,

$$\bar{M}_t = I_t + M_t^c \tag{2a}$$

$$M_t^c = \gamma \bar{M}_t \tag{2b}$$

where,

$\bar{M}_t$ = The total import bill,

γ = Policy-determined proportion.

Substituting (2b) into (2a) and simplifying we have,

$$I_t = (1 - \gamma)\bar{M}_t \tag{2c}$$

This equation suggests that imports of investment goods can be raised by either raising the total import bill ($\bar{M}_t$), by cutting down on imported consumer goods ($\gamma\bar{M}_t$), or both.

3. Effective Savings

Since we have assumed away foreign aid, debts, borrowings or recourse to them and furthermore that the level of foreign exchange reserves is to remain intact, imports can only be financed out of current foreign exchange receipts. Thus the total import bill cannot exceed the country's

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[9] Alternatively, one can assume that the total level of imports and investment goods are subject to controls. This however would make little difference to the analysis. Notice incidentally that the gap models did not make this assumption.

export earnings.[10] Accordingly,

(3a) $\bar{M}_t = X_t$

(3b) $S - I = X - M$ ..... National Income Equation.

When we substitute equations (2c) and (3a) into the national income equation (3b), an important result emerges,

(3c) $S_t = X_t - \gamma\bar{M}_t$

or (3d) $S_t = (1 - \gamma)\bar{M}_t$ using equation 3a.

Equation 3c is of extreme significance for our analysis. It states that the country's savings, ex post, are equal to its exports less its imports of consumer goods. But, this is exactly what we defined as "effective savings"; effective because they are in the foreign exchange medium that can be used for the direct importation of investment goods.[11]

Furthermore, equation 3c is a re-statement of the familiar S=I condition as can be easily proved,

$S_t = (1 - \gamma)\bar{M}_t$ from equation 3d.

$S_t = I_t$ using equation 2c.

---

[10] Again, this is in line with our policy of imposing tough conditions on the model. The introduction of credit may permit imports to exceed exports but then there would be the real possibility that the "buy now, pay later" scheme may be abused as is often the case. Second, we wish to emphasize the elementary fact that an LDC can only buy more abroad by selling more abroad. Use of reserves and foreign borrowing merely postpone the day of reckoning.

[11] Alternatively, if we assume that only a certain proportion of investment is imported then equilibrium would require that effective savings be equal to the import-content of investment, provided of course that there are no constraints on domestic supplies of ancillary investment goods. In any case the principle is the same; that is, there should be sufficient foreign exchange (or effective savings) to cover whatever proportion of investment goods that is imported.

4. Gap Analysis

Since effective savings have been defined exclusively in terms of foreign exchange, it becomes intuitively obvious that only one gap, that between effective savings and investment, exists for development purposes and not two (the trade and saving gaps) as in contemporary gap-models. Given our assumption that all capital goods are imported, we can demonstrate that, with the use of the effective savings concept, bridging any of the two contemporary gaps would automatically close the other also.

Suppose we assume for argument's sake that the country's import bill exceeds its export earnings and it seeks foreign aid (F_t) to close this gap,

(4a) $$F_t = \bar{M}_t - X_t$$

From equation 3c we have,

$$S_t = X_t - \gamma\bar{M}_t$$

Eliminating X_t from these two equations, we have,

$$S_t + \gamma\bar{M}_t = \bar{M}_t - F_t$$

$$S_t = (1 - \gamma)\bar{M}_t - F_t$$

$$S_t = I_t - F_t \quad \text{using equation 2c.}$$

Hence,

$$F_t = I_t - S_t$$

External assistance also bridges the saving-investment gap.

5. Growth Analysis.

From our initial assumptions, the operative constraint on investment is the country's level of effective savings. Thus,

(5a) $$I_t = X_t - \gamma\bar{M}_t \quad \text{using equations 2c and 3c.}^{12}$$

---

[12] Foreign aid or capital inflow (F_t) can readily be incorporated into the analysis by expanding equation 5a to $I_t = X_t - \gamma M_t + F_t$.

Substituting equation 5a into the production function 1b, we have,

$$(5b) \qquad Dy_t = \rho\{\beta(X_t - \gamma\bar{M}_t) - y_t\}$$

Dividing through by y_t yields,

$$(5c) \qquad g = 1/y_t Dy_t = \rho(\beta s - 1)$$

where,

g = the real rate of growth,

$$s = \frac{X_t - \gamma\bar{M}_t}{y_t}, \qquad \frac{ds}{dX_t} > 0 \text{ and } \frac{ds}{d\gamma} < 0$$

Thus the real rate of growth of national income is determined by the gestation lag of investment or its speed of adjustment (ρ), the productivity of investment (β) and the effective propensity to save (s).

With the help of equation 5c we can see how political and social factors may influence the real rate of growth. Corruption, administrative ineptitudes, as well as the prevailing tendency to invest in "prestigious" projects, may undermine the quality of investment and its productivity (β). Second, smuggling and under-invoicing may lower export earnings (X_t) thereby impairing the country's effective capacity to save (s) and hence the real rate of growth (g). Third, over-invoicing and corruption may raise γM_t with negative growth consequences (equation 5c). These then suggest formally that an LDC's poor growth performance can be attributed to defects in its social and political environment.

Although we are not concerned with foreign aid <u>per se</u>, the analysis may be extended to consider its role as a matter of interest. Equation 5a may be expanded accordingly and the growth equation, 5c, would become,

$$(5d) \qquad g = \rho\{\beta(s + f) - 1\} \text{ where } f = \frac{F}{y}t$$

Foreign aid can be seen as serving a necessary but not sufficient condition for the attainment of a higher real rate of growth. Its role

is merely permissive. An increase in f (increased aid) may be sufficiently offset by a decline in β or s (through corruption or increase in imports of consumer goods) as to have no real impact on the real rate of growth (g).

6. The Export Function

Exports play a critical role in this model, having seen how growth performance hinges on their expansion. Following our discussion in section A of the adverse effects of domestic inflation, especially that of local food prices, on export cash crops we specify exports as an exponentially lagged function of real producer prices,

$$(6a) \qquad (D + \mu)X_t = \mu(PP - P)$$

where,

PP = Producer price of the export crop in natural logarithms,

P = Aggregate price index in natural logarithms,

μ = The speed of adjustment, ($0<\mu<1$)

Strictly speaking, the index of local food prices in the rural areas would have been the more appropriate one to use in determining the real producer price. However the general price index has been used not only for sake of simplicity but also because the two indices tend to move in the same direction.[13]

The export function states that exports adjust positively to real producer prices with a lag. This specification of the export function reflects adjustment difficulties with perennial cash crops and marketing arrangements (marketing board system). It may be noted that our export function suggests domestic factors as possible causes of export stagnation

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[13] In any case and at the cost of complicating the analysis, the local food price index may be introduced explicitly by employing appropriate weights to define $P = wP_f + (1-w)P_{nf}$ where P_f and P_{nf} are food and non-food prices respectively.

in contrast to the gap models which suggest world-wide marketing arrangements (McKinnon, 1964) and adverse foreign income as well as demand elasticities.

Of the domestic factors, equation 6a isolates the producer price of export crop vis á vis the domestic price level. In particular, tardy upward adjustments in the producer price of cocoa for Ghana, in the face of steady inflation may hamper the growth of exports and hence real output using equation 5b.

7. Monetary Sector

The analysis above suggests domestic inflation, defective government policies towards export producers and inadequate price incentives as possible causes of export and hence real income stagnation in Ghana. In this section we take our analysis one step beyond the gap models in adding a monetary sector to investigate the processes of inflation in a developing country such as Ghana.

For the demand for money we postulate a simple quantity theoretic relation,

$$(7a) \qquad M_t^d = by_t + P$$

where,

M_t^d = Natural logarithm of the demand for nominal money balances,

P, y_t = Natural logarithms of real output and the price level.

Equation 7a simply asserts that the demand for money balances is a log-linear function of real output or real income. This type of function has been found to be more appropriate for developing countries rather than the alternative hypothesis that the demand for money depends upon permanent income (Adekunle and Ezekeil, 1969).

We denote the money supply in natural logarithms as,

(7b) $$\ln M_t^s = \ln(mBM)$$

where,

m = "Money" multiplier,

BM = Base money stock

The base money stock is derived from the balance sheet of the Central Bank. On the liability side of the sheet, base money consists of notes and coins in circulation plus government and commercial (chartered) banks' deposits at the Central Bank. These liabilities are identically equal to the sum of,

(a) accumulated total public sector or government debt held by the Central Bank which we denote as TPS,

(b) advances by the Central Bank to the commercial banks denoted as C, and

(c) net holdings of foreign exchange denoted as FXR and assumed to remain intact (no debt obligations).

Thus, the money base is the arithmetic sum of Central Bank credit to the total public and the commercial banks as well as net holdings of foreign exchange, i.e.,

(7c) $$BM = TPS + C + FXR$$ ⇒ an arithmetic sum.

In Ghana, prior to 1960, the primary source of variability in the base money stock was the balance of payments and, in particular, net foreign assets of the banking system, This was because the country was on the "sterling exchange standard" under which the Bank of Ghana maintained a 100% backing of its liabilities with foreign exchange (pounds sterling). The automatic link between the balance of payments and the money stock was broken in February 1960 when the Ghana Government Treasury Bills were introduced for the first time and the Bank of Ghana announced its willingness to re-discount them at 4%. Subsequently in 1961 a

fiduciary element was created and since then borrowing by the government and other public institutions (TPS) have steadily supplanted FXR as the principal determinant of base money stock. The Bank of Ghana's net claims on the commercial banks (the second term in equation 7c) have traditionally been insignificant. (These monetary developments were discussed at length in chapter 2, section C). Thus, we may express the base money stock solely in terms of TPS and write BM as a multiple (σ) of TPS,[14]

(7d) $$BM = \sigma TPS$$

Making the necessary substitutions the money supply can be expressed entirely in terms of Central Bank credit to the total public sector,[15]

(7e) $$\ln M_t^s = \ln(m\sigma TPS)$$

Assuming that the demand for money is equal to the actual stock in each period, that is the money market is always in equilibrium, we can drop the superscripts and write,

(7f) $$m\sigma TPS = by + P$$

Hence,

(7g) $$P = m\sigma TPS - by$$ ...(All variables are in natural logs).

Equation 7g indicates that the domestic rate of inflation can be attributed to excessive increases in the money supply which in turn can be attributed to excessive credit allocations by the Central Bank of Ghana to the total public sector (or government), presumably to finance budget deficits.

Thus, our analysis suggests that real income stagnation may be linked to export stagnation and in turn to domestic inflation and budget deficits.

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[14] For the period 1970-74, σ ranged from a low of 165 to a high of 243.5 (Table 2 in chapter 5).

[15] We may in fact express the money supply entirely in terms of accumulated budget deficits as we do in chapter 5. For such an approach see Aghevli and Khan (1978).

However, as presented above this analysis is partial. To investigate the full ramifications of budget deficits, taking into account interdependencies and feed-backs, the commodity and money markets need to be integrated.

8. The Complete Model (Commodity and Money Markets) and Modus Operandi

Bringing down the results, our complete model is represented by the following system of differential equations,

$$\begin{aligned} Dy &= -\rho y + \rho\beta X - \rho\beta\gamma M && \text{equation 5b} \\ DX &= \mu(PP - P) - \mu X && \text{equation 6a} \\ P &= m\sigma TPS - by && \text{equation 7g} \end{aligned} \tag{8a}$$

Substituting equation 7g into 6a and re-arranging, we have the system,

$$\begin{aligned} Dy &= -\rho y + \rho\beta X - \rho\beta\gamma M \\ DX &= \mu by - \mu X + \mu(PP - m\sigma TPS) \end{aligned} \tag{8b}$$

This system of two differential equations may be solved for the long-run equilibrium (steady state) values of the two unknowns y and X. We designate the steady state solution as,

$$\begin{aligned} y^* &= \rho\beta(X^* - \gamma M) \\ X^* &= \mu(PP - P^*) \\ P^* &= m\sigma TPS - by^* \end{aligned} \tag{8c}$$

where,

$$y^* = \frac{\beta(PP - m\sigma TPS - \gamma M)}{(1 - b\beta)}$$

$$X^* = \frac{PP - m\sigma TPS - b\beta\gamma M}{(1 - b\beta)}$$

The y^* and X^* are the stable particular solutions to the non-homogenous part of the differential equation system. A rigorous mathematical demonstration is provided in the Mathematical Appendix at the end of this chapter. Notice how the producer price for the export cash crop (PP), Central Bank credit to the public sector (TPS), presumably to finance budget deficits, and imported imported consumer goods (γM)

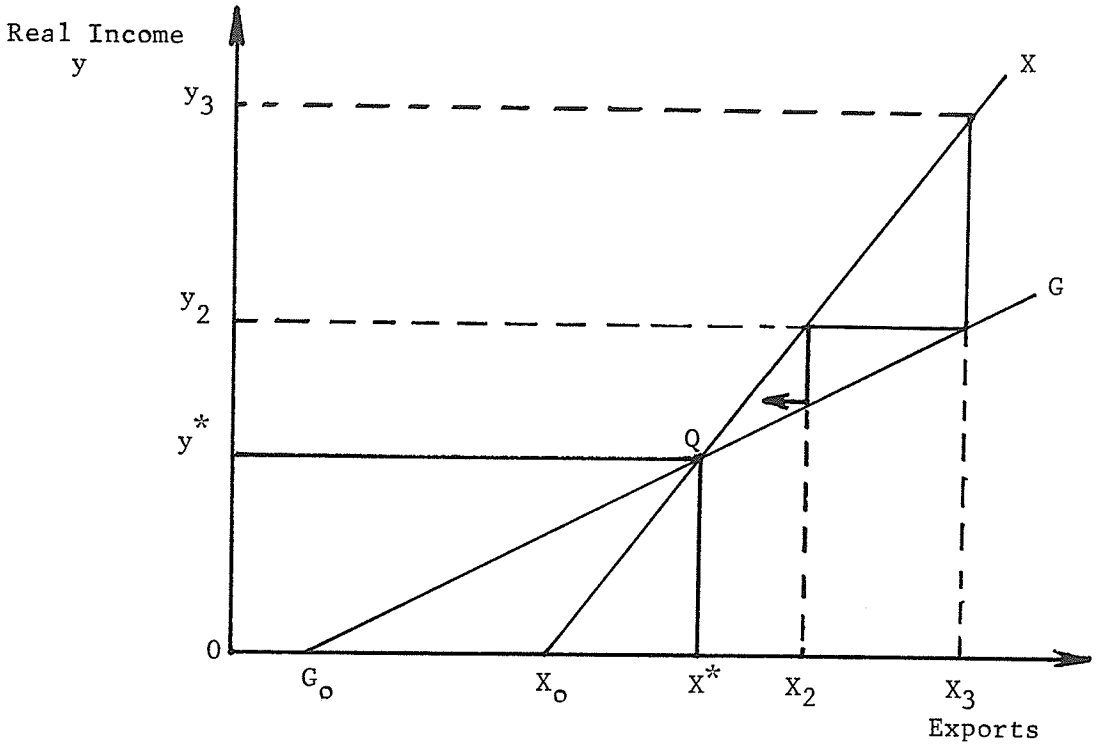
enter the solution. Other things being equal, an increase in the producer price of cocoa (in Ghana) would increase both the long-run equilibrium levels of real income and exports because the producer price increase would lead to export expansion. On the other hand, government deficits and imports of consumer goods would both have negative effects on real income and exports. The negative effects of γM (imported consumer goods) on y^* and X^* are of considerable significance. It vindicates our earlier assertion that elite pre-occupation with imported consumer goods as status symbols and various illegal activities such as smuggling impede further growth. Furthermore, the stationary solution has two important properties. It is neutral with respect to

(a) equi-proportionate changes in PP and P,
(b) equi-proportionate changes in M^s (or TPS), PP and P.

In economic terms, the long-run equilibrium level of real income would remain invariant if the producer price of cash crops and prices of all other goods increased by the same proportion, i.e., real producer prices are held constant. Similarly, equilibrium would not be disturbed if the money supply (or budget deficit), producer and general prices increased by the same proportion. Notice also that the system is <u>not</u> neutral with respect to changes in the stock of money alone.

We diagram below the static equivalent of the differential equation to explain its <u>modus operandi</u>.

Figure 3.1: LONG-RUN EQUILIBRIUM



The GG (growth) and the XX (export) curves are derived from equation 8b by setting Dy and DX equal to zero respectively. y^* and X^* are stable steady state values. The XX curve is drawn with a greater slope than the GG curve - a requirement for dynamic stability, a direct application of Samuelson's Correspondence Principle.[16] Conditions for dynamic stability are also treated more formally in the Mathematical Appendix. Suppose for some inexplicable reason the level of exports happens to be at X_3. The income level needed to support that volume of exports would be y_3 but the actual level of income generated by X_3 of exports is y_2. However, the income level of y_2 would only induce X_2 in exports and so on we proceed until we reach the point Q. We now examine shocks to the system.

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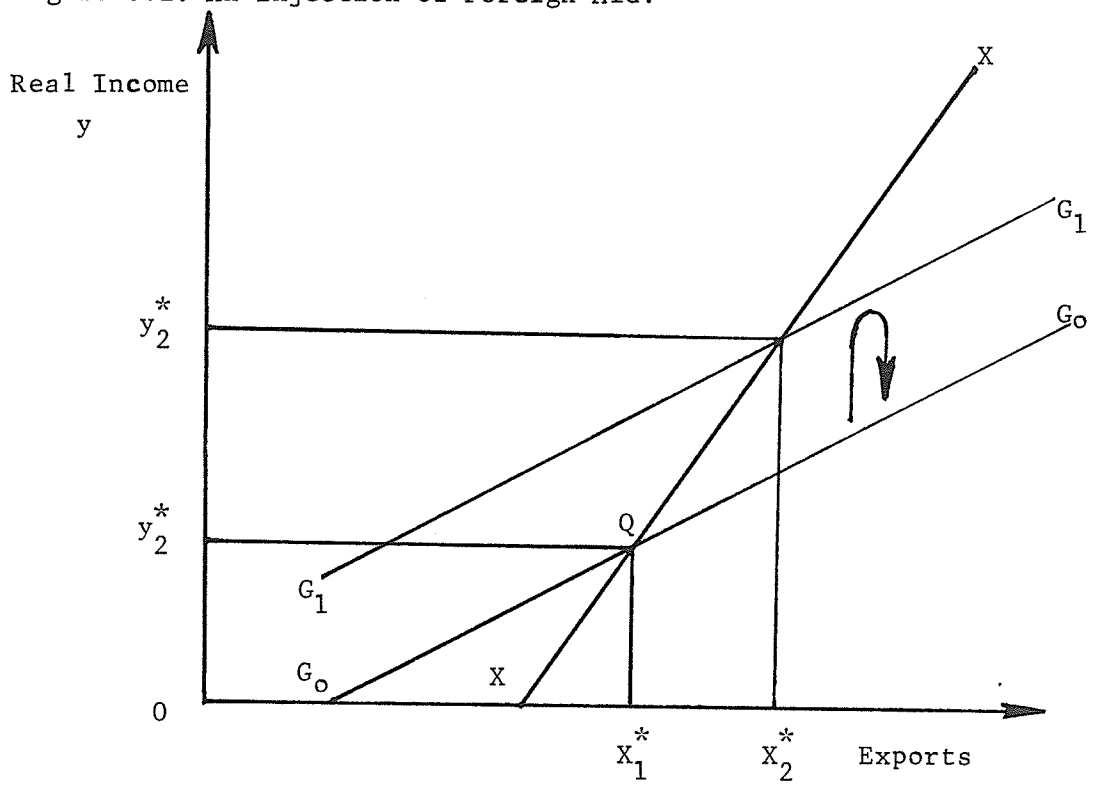
[16] The Correspondence Principle refers to the use of dynamic stability properties or requirements in static equilibrium analysis, see Samuelson (1947), p.258.

Case 1: An Increase in Foreign Aid

Ceteris paribus, this would shift the GG curve upwards producing a higher steady state level of real income, y_2^*, and exports, X_2^*, as illustrated:

Figure 3.2: An Injection of Foreign Aid.



The implicit assumption is that the aid is used to expand the country's productive capacity. However if elite hedonomania or corruption prevails and the external assistance is "wasted" on imported luxuries, the GG curve shifts up but returns to its original position with the result that there is little or no impact on development.[17]

Case 2: Excessive Increases in the Money Supply (or Government Deficit)

These would not only produce inflation in the model but also dynamically unstable equilibria. If the producer price lag behind in the

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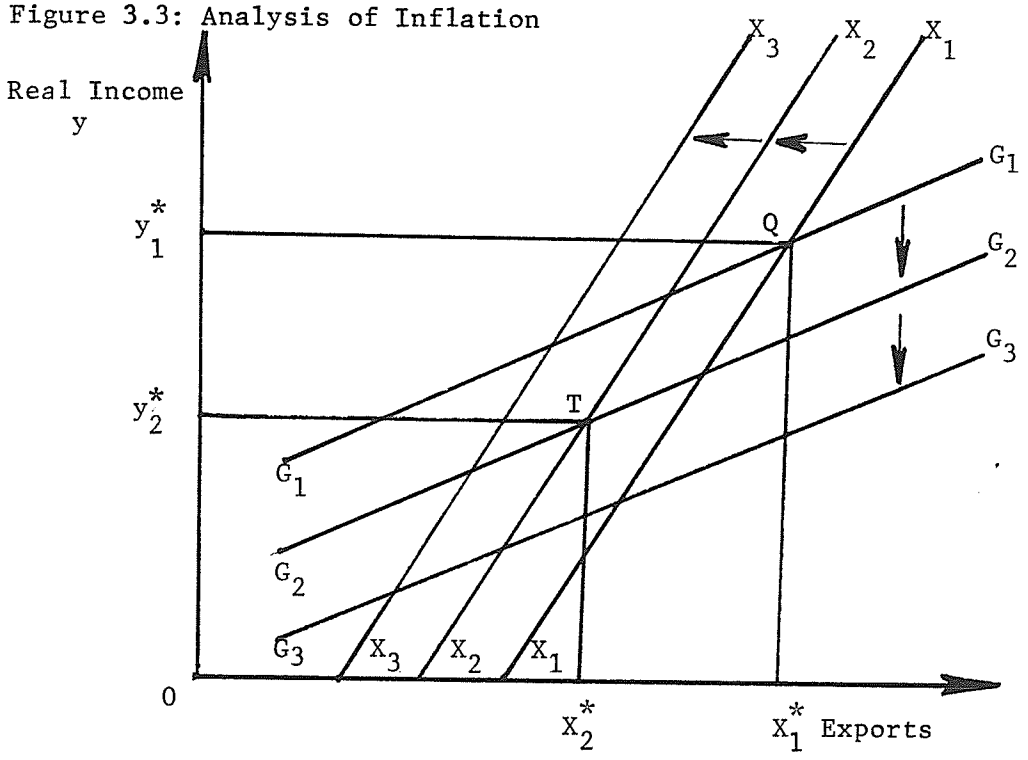
[17] This and subsequent cases are analysed mathematically in the appendix.

resultant inflation of domestic prices, especially food prices, either resources would be transferred out of the export sector into say food production or an incentive to smuggle the export crop may be created. In either event, export earnings fall off, hence effective savings, and this would adversely affect investment activity and hence the level of real income. Inflation shifts the GG curve down and the XX curve to the left producing lower levels of real income and exports as illustrated in figure 3.3 below,

Figure 3.3: Analysis of Inflation



If the producer price of the export crop is raised in step with the domestic rate of inflation, the system would remain in equilibrium at Q. However, if there is a delay in raising the producer price the system would settle at a point such as T. Ghanaian experience shows that the government generally hesitates about upward revisions in the producer price of cocoa and other export crops since it derives some 35% of its revenue from taxes on cocoa and its related products. Raising the

producer price would entail a decline in revenue and a probable budget deficit. On the other hand, reluctance to raise the producer price may result in export stagnation and also lower cocoa export tax revenue. Thus, either alternative may lead to lower proceeds from cocoa and contribute to a budget deficit. If the government resorts to borrowing from the Central Bank to finance its deficit as it has frequently done in the past, it is quite easy to have an explosive cycle of inflation, export stagnation, decline in cocoa tax revenue, budget deficits, Central Bank finance and more inflation. (We shall discuss this unstable phenomenum in greater detail in chapter 5, section D). We have shown this in the diagram above by progressive leftward and downward shifts in the XX and GG curves respectively. In the case at hand, one cannot determine a priori where the system would eventually settle. Note incidentally that the shifts in the XX and GG curves would only be arrested if the producer price is raised. (We shall discuss at length in chapter 6 the organization of the cocoa industry in Ghana and government's policies towards the industry).

Case 3: Others

We state other results here without elaboration; proofs can be found in the mathematical appendix. Ceteris paribus, an increase in the producer price (or imported consumer goods) would result in higher (lower) levels of y^* and X^*.

An even more important but disturbing result emerges when this analysis is extended to the so-called "export instability" of the LDCs. It can be deduced that this instability may originate from domestic sources, especially such factors as smuggling, corrupt practices in the exercise of import controls and the misuse of foreign exchange on status symbols.

Indeed, we show in the mathematical appendix that smuggling and corruption can either produce export, and hence income, instability or exacerbate an existing potential for instability.

To sum up, we contrast our model with the simple version of the gap models.

	GAP MODELS	OUR MODEL
Commodity Market		
1. Production function	$\Delta Y_t = (\frac{1}{z})\Delta K_t = I_t$	$Dy_t = \rho(\beta I_t - y_t)$
2. Savings function	$S_t = sY_t$	$S^e_t = X_t - \gamma M_t$
3. Imports function	$M_t = mY_t$	$M_t = \overline{M}_t$
4. Exports function	$X_t = X_o(1 + \varepsilon)^t$	$DX_t = \mu(PP - P) - \mu X_t$
5. Investment Function	$I_t = \min(aM^k_t, bI^h_t)$	$I_t = (1 - \gamma)\overline{M}_t$
6. National Income Equation	$I_t - S_t = M_t - X_t$	$I_t - S_t = M_t - X_t$
7. Foreign aid	$F_t = M_t - X_t$	$M_t = X_t$ (no foreign aid)
8. Import composition	$M_t = M^k_t + M^c_t$	$M_t = I_t + M^c_t$
9. Source of capital goods	$I_t = I^h_t + M^k_t$	$I_t = S^e_t$ (all capital goods imported).
Money Market		
11. Demand for money	———	$M^d_t = by_t + P$
12. Supply of money	———	$M^s_t = m\sigma TPS$
13. Money market equilibrium	———	$P = m\sigma TPS - by_t$

The essential differences between our model and the gap models lie in the savings, exports, imports and the investment functions in addition to the fact that we have assumed import controls, no foreign aid, all capital goods are imported and appended a monetary sector.

In both models exports play a critical role, serving as the "engine of growth", although this is not identical in the two models. In the gap models the role of exports in capital formation is indirect. In our model

this role is more active since exports are a principal component of effective savings, the source of investment finance.

However, despite this critical role assigned to exports, the two models differ significantly in the specification of the export functions. Whilst the growth of exports is determined by exogenous or external factors in the gap models only such "domestic" variables as inflation feature in ours. Needless to say, different specification of the export function lead to different conclusions about income stagnation.

Furthermore, in making effective savings the principal source of investment finance and defining effective savings as the difference between exports and imported consumer goods we introduce additional domestic variables as possible causes of income stagnation. Specifically, smuggling, mal-administration of import controls, corruption, etc., may all reduce the foreign exchange Ghana has for capital formation.

Our monetary sub-model serves to introduce yet another domestic factor, persistent budget deficits, as a possible cause of income stagnation. This sub-model establishes a link between the domestic rate of inflation, the principal cause of export decline, and the cumulative growth in budget deficits.

Thus, in contrast to the gap models which tend to suggest "expernal" factors as causes of real income stagnation, our model draws attention to such domestic factors as inflation, persistent budget deficits, smuggling and corruption as possible causes of income stagnation in Ghana.

In the next chapter, we attempt to explain Ghana's poor development performance in terms of the concept of effective savings and investigate how these savings may be increased. Since exports play an important role in the concept we attempt to show how their growth in Ghana has been

hampered by excessive rates of inflation. Chapter 5 is a review of the inflationary processes in Ghana and in section D of that chapter, we examine the unstable vicious circle that may exist between inflation and budget deficits. Economic development is centrally directed in Ghana and in chapter 6 we investigate how government policies have enhanced or impaired the country's effective capacity to save. In chapter 7, we outline how certain social and political factors (corruption, smuggling, over and under-invoicing of legal trade as well as foreign swindles) affect the development process via their impact on effective savings. These next four chapters, then, give the concept of effective savings an empirical content, using Ghanaian data.

C. MATHEMATICAL APPENDIX: DYNAMIC PROPERTIES AND STABILITY CONDITIONS

We have relegated these to an appendix because they are more of seminal interest in ensuring that certain formalities are satisfied. Ghanaian governments in practice are hardly interested in stable regimes nor are they constrained to establish them. Nevertheless, it is useful to consider these stability conditions from the practical point of view since government actions could contribute to instability.

Recalling our system of equations 8b, we had,

$$\begin{aligned} Dy &= -\rho y + \rho\beta X - \rho\beta\gamma M \\ DX &= \mu by - \mu X + \mu(PP - m\sigma TPS) \end{aligned} \qquad (1)$$

This is a non-homogenous differential equation system. In matrix form,

$$\begin{bmatrix} Dy \\ DX \end{bmatrix} = \begin{bmatrix} -\rho & \rho\beta \\ by & -\mu \end{bmatrix} \begin{bmatrix} y \\ X \end{bmatrix} + \begin{bmatrix} -\rho\beta\gamma M \\ \mu(PP - m\sigma TPS) \end{bmatrix}$$

Assuming that $A = 0$ (or $1 - b = 0$), where the A matrix is,

$$A = \begin{bmatrix} -\rho & \rho\beta \\ by & -\mu \end{bmatrix}$$

After setting Dy and DX equal to zero the particular which is the steady state equilibrium values, becomes,

$$\begin{aligned} y^* &= \frac{\beta(PP - m\sigma TPS - \gamma M)}{(1 - b\beta)} \\ X^* &= \frac{PP - m\sigma TPS - b\beta\gamma M}{(1 - b\beta)} \end{aligned} \qquad (2)$$

For the homogenous part, we try the solution,

$$\begin{aligned} y &= Be^{\lambda t} \\ X &= De^{\lambda t} \end{aligned} \qquad (3)$$

where B, D and λ are unknown constants.

Substituting equation 3 into 1 we have,

$$\lambda Be^{\lambda t} = -\rho Be^{\lambda t} + \rho\beta De^{\lambda t}$$
$$\lambda De^{\lambda t} = Be^{\lambda t} - \mu De^{\lambda t}$$

Dividing through by $e^{\lambda t}$ and arranging terms,

$$0 = (-\mu-\lambda)B + \rho\beta D$$
$$0 = \mu bB + (-\mu-\lambda)D \qquad (4)$$

For a non-trivial solution the determinant,

$$\begin{vmatrix} -\rho-\lambda & \rho\beta \\ \mu b & -\mu-\lambda \end{vmatrix}$$

must vanish. Expanding the determinant yields a polynomial of second degree in λ,

$$(-\rho-\lambda)(-\mu-\lambda) - \mu b\rho\beta = 0$$
$$\lambda^2 + \lambda(\rho+\mu) + \rho\mu - \mu b\rho\beta = 0 \qquad (5)$$

Equation 5 is the auxilliary or characteristic polynomial of the equation system (1). The characteristic roots, λ_1 and λ_2 are determined by,

$$\lambda_{1,2} = \frac{-(\rho+\mu) \pm \sqrt{(\rho+\mu)^2 - 4(\rho\mu - \mu b\rho\beta)}}{2}$$

The characteristic roots would be real and distinct, real and equal, conjugate complex according as the terms under the radical is greater than, equal to or less than zero respectively. That is,

$$(\rho+\mu)^2 - 4(\rho\mu - \mu b\rho\beta) \gtreqless 0$$

Or,

$$\rho^2 - 2\rho\mu + \mu^2 + 4\mu b\rho\beta \gtreqless 0 \qquad (6)$$

Recall that ρ is the speed of adjustment of real income to investment expenditures, μ is the adjustment co-efficient or exports to the real producer price of cash crops and β is the productivity of investment. The only restrictions we have imposed on the model are that ρ and μ should all be greater than zero but less than unity. This however is not

sufficient to ensure the evaluation of the inequality 6. Without any information on the actual values for ρ, μ and β we can experiment with the following assumptions.

CASE A. $\rho = 1$, that is real income adjusts instaneously to changes in investment, a highly unrealistic possibility. Nevertheless, the inequality 6 would become,

$$1 - 2\mu + \mu^2 - 4\rho\beta b \gtreqless 0$$

Or,

$$(1 - \mu)^2 \gtreqless 4b\rho\beta \qquad \text{which leads nowhere.}$$

CASE B. $\rho = 0$. This is another unrealistic assumption that real income does not adjust to investment. In this case, there is only one characteristic root, $\lambda = -2\mu$ since the term under the radical reduces to $\mu^2 \gtreqless 0$. Hence the solution,

$$y_t = ye^{-2\mu t} + Z_t$$

$$X_t = Xe^{-2\mu t} + Z_t$$

where Z_t is the particular solution from equation 2. This general solution would imply that real income and exports decline over time, an event which is implausible <u>a priori.</u>

CASE C. $\beta \to 0$. Alternatively, if we assume that corruption and "wastage" of foreign exchange on "prestigious" projects impair the productivity of investment then would tend towards zero. In this case, the inequality 6 reduces to,

$$\rho^2 - 2\rho\mu + \mu^2 \gtreqless 0$$

$$(\rho - \mu)^2 \gtreqless 0$$

$$\rho \gtreqless \mu$$

The more likely possibility is $\rho<\mu$ i.e. export adjustment co-efficient exceeds that of income. In this case the expression under the radical becomes negative and there is a real possibility of cycles and fluctuations in real income.

CASE D. $\beta \to 0$ and $\mu \to 1$. That is, a combination of corruption, unproductive investment expenditures ($\beta \to 0$) and a high incidence of smuggling ($\mu \to 1$). Since ρ has been assumed to be less than one this combination would introduce another possibility of real income oscillations.

OTHER CASES: Assuming that $\mu = 0$ leads to a result similar to case B. By this assumption we shall have one characteristic root, $\lambda = -2\rho$ and real income would decline over time, an unrealistic event. On the other hand, assuming $\mu = 1$ leads to nowhere.

Despite the inconclusiveness of some of these cases, it may nevertheless be noted that corruption and smuggling may increase the potentialities for fluctuations in real income and exports. Clearly then, it is quite possible for the so-called "export instability" of an LDC to originate from domestic sources.

As an example of what form the general solution would look like we work out the case of real and distinct roots, i.e. we assume that the term under the radical is positive. This would give two non-trivial and linearly-independent solutions of the form,

$$y = B_1 e^{\lambda_1 t} \quad \text{and} \quad y = B_2 e^{\lambda_2 t}$$

$$X = D_1 e^{\lambda_1 t} \quad \text{and} \quad X = D_2 e^{\lambda_2 t}$$

where,

$$\lambda_1 = \frac{-(\rho+\mu) + \sqrt{(\rho+\mu)^2 - 4(\rho\mu - \rho\mu\beta b)}}{2}$$

$$\lambda_2 = \frac{-(\rho+\mu) - \sqrt{(\rho+\mu)^2 - 4(\rho\mu - \rho\mu\beta b)}}{2}$$

B_1, D_1, B_2 and D_2 are found by substituting λ_1 and λ_2 alternatively into equation 4 and solving.

Given the initial conditions, the general solution would be,

$$\left.\begin{aligned} y &= C_1B_1e^{\lambda_1 t} + C_2B_2e^{\lambda_2 t} + \frac{\beta}{(1 - b\beta)}(PP - m\sigma TPS - \gamma M) \\ X &= C_1B_1e^{\lambda_1 t} + C_2B_2e^{\lambda_2 t} + \frac{1}{(1 - b\beta)}(PP - m\sigma TPS - \gamma M) \end{aligned}\right\} \quad (7)$$

where C_1 and C_2 are arbitary constants obtained from the initial conditions y_o and X_o by,

$$\begin{bmatrix} C_1 \\ C_1 \end{bmatrix} = \begin{bmatrix} B_1 & B_2 \\ D_1 & D_2 \end{bmatrix}^{-1} \begin{bmatrix} y_o \\ X_o \end{bmatrix}$$

Notice that the particular solution (equation 2) has been added to obtain the general solution in equation 7.

GLOBAL STABILITY

A system of differential equations is globally stable if following a disturbance from its initial conditions, y_o and X_o , it tends to return to its stationary equilibrium values y^* and X^* as time tends to infinity, assuming of course that such a stationary equilibrium exists (Quirk and Saposnik, 1968;p.162 and Intriligator, 1971; p.242). Global stability is defined as,[1]

$$\begin{aligned} &\underset{t \to \infty}{\text{Limit}} \quad y_t \to y^* \\ &\underset{t \to \infty}{\text{Limit}} \quad X_t \to X^* \end{aligned}$$

where y_t and X_t are given in equation 7 and y^* and X^* as given in equation 2.

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[1]Local stability, on the other hand, is where the system tends to return to its stationary equilibrium values only from initial conditions that lie sufficiently close to that stationary state. The existence of global stability implies local stability as well (Quirk and Saposnik, 1968; p.162). Hence local stability is not treated in the text.

To test for global stability we examine the characteristic equation,

$$\lambda^2 + \lambda(\rho+\mu) + \rho\mu - \rho\mu\beta b = 0 \qquad (8)$$

The necessary and sufficient condition for stability of a differential equation system with constant co-efficients is that the real parts of the roots of the characteristic polynomial should all be negative, i.e., the roots must all be in the left-hand half of the complex plane (Samuelson, 1947;p.429). Thus, we require for stability,

$$\lambda_1 < 0 \text{ and } \lambda_2 < 0$$

for the case of real roots and $r < 0$ for the case of complex roots.

Fortunately, it is not necessary to solve equation 8 for the roots in order to determine whether stability conditions are satisfied or not. We can avail ourselves of a theorem, the Routh-Hurwitz Theorem[2], which states that for dynamic stability, tr A <0 and det A >0, where

$$A = \begin{bmatrix} -\rho & \rho\beta \\ \mu b & -\mu \end{bmatrix}$$

Thus, we require,

$$\text{tr } A = -\rho - \mu < 0$$

$$\text{and det } A = \rho\mu - \rho\mu\beta b > 0$$

Our earlier restrictions that ρ and μ be greater than zero but less unity ensures the satisfaction of the trace condition. The determinantal condition may be simplified to

$$|A| = \rho\mu(1 - b\beta) > 0$$

$$= (1 - b\beta) > 0$$

$$= b\beta > 1$$

---

[2] See Samuelson (1947), p.430 and Intriligator (1971), p.494. An alternate rule, Descartes' Rule of Signs, may be applied. This rule states that the maximum number of negative real roots of a polynomial $f(\lambda) = 0$ with real co-efficients is at most equal to the number sign changes occuring in $f(-\lambda)=0$. In the present case we shall have (+ - +) and hence a maximum number of negative roots of two. However in a two equation system as we have above the Descartes' Rule and Routh-Hurwitz Theorem yield identical results.

Hence, $\beta > {}^{1}/b$ or $b > \beta$ for the second condition to be satisfied. This second condition was used as the basis of the diagrams in the text and also to evaluate impact multipliers in the next section (Samuelson's Correspondence Principle).

IMPACT MULTIPLIERS

We may determine the impact effects of shocks to the system by setting Dy and DX in equation 1 in this appendix equal to zero, adding F to include the possibility of foreign assistance and totally differentiating,

$$-\rho\, dy + \rho\beta\, dX = -\rho\beta dF + \rho\beta\,\gamma dM$$
$$\mu b\, dy - \mu\, dX = \mu(dPP - m\sigma dTPS)$$

In matrix form,

$$\begin{bmatrix} -\rho & \rho\beta \\ \mu b & -\mu \end{bmatrix} \begin{bmatrix} dy \\ dX \end{bmatrix} = \begin{bmatrix} \rho\beta(\gamma dM - dF) \\ -\mu(dPP - m\sigma dTPS) \end{bmatrix}$$

CASE 1: AN INCREASE IN FOREIGN AID

The impact effects of this case may be evaluated by assuming $dF > 0$ and setting changes in all other parameters (dM, dPP and dTPS), equal to zero. Using Cramer's Rule and the stability condition that $|A| > 0$,

$$\frac{dy}{dF} = \frac{\mu\rho\beta}{|A|} > 0$$

$$\frac{dX}{dF} = \frac{\mu b\rho\beta}{|A|} > 0$$

Thus, foreign aid would increase equilibrium levels of y and X. Note however that if the aid is used to finance imports of consumer goods, i.e., $dF = \gamma dM$, then $\frac{dy}{dF} = \frac{dX}{dF} = 0$, that is, there would be no effect on real income and exports.

CASE 2: EXCESSIVE INCREASES IN THE MONEY SUPPLY (OR GOVERNMENT DEFICITS)

In this case $dTPS > 0$ and $dM = dF = dPP = 0$. Using Cramer's Rule,

$$\frac{dy}{dTPS} = \frac{-\rho\beta\mu m\sigma}{|A|} < 0$$

$$\frac{dy}{dTPS} = \frac{-\rho\mu m\sigma}{|A|} < 0$$

Equilibrium levels of real income and exports would all decline. Notice that if the producer price of cash crop is increased in step with the inflation (i.e. $dPP = m\sigma dTPS$), the impact effects on y and X would be zero, that is the equilibrium levels of real income and exports would remain unaffected.

CASE 3: "WASTAGE" OF FOREIGN EXCHANGE ON IMPORTED CONSUMER GOODS

Here $dM > 0$ and all other parameter changes would be equal to zero. The derivatives become,

$$\frac{dy}{dM} = \frac{-\mu\rho\beta\gamma}{|A|} < 0$$

$$\frac{dX}{dM} = \frac{-\mu\rho\beta\gamma b}{|A|} < 0$$

Thus equilibrium levels of real income and exports would all decline.

CASE 4: AN INCREASE IN THE PRODUCER PRICE

That is $dPP > 0$ and all other parameter changes are equal to zero.

$$\frac{dy}{dPP} = \frac{\mu^2}{|A|} > 0$$

$$\frac{dX}{dPP} = \frac{\mu\rho}{|A|} > 0$$

Hence an increase in the producer price would increase the equilibrium levels of real income and exports.

OTHER CASES

We may consider a combination of some of the above. In some cases,

the derivative quotient can be 'signed' unambiguously. For example, increases in imports of consumer goods and government deficits ($dM > 0$ and $dTPS > 0$) would unambiguously lead to declines in y and X. In other cases, the impact effects would be indeterminate. For instance, increases in the producer price and imports of consumer goods.

CHAPTER 4: EFFECTIVE SAVINGS AND BALANCE OF PAYMENT CRISES: THE GHANAIAN EXPERIENCE, 1957-74

> "It has been observed that, with existing structure of the Ghanaian economy, there is the tendency for a trade-off between economic growth and a worsening of the balance of payment problems. Indeed, the post-independence economic history of the country provides examples in which serious balance of payment crises have not only arrested economic growth, but have led to political instability." (The 5-year Development Plan 1975/76 - 1979/80, Part I, p.53)

A. THE PERFORMANCE OF THE GHANAIAN ECONOMY 1957-74 [1]

It is generally unsatisfactory to either evaluate the performance of an economy by reference to a single macro-economic statistic or to restrict assessment to the aggregative level. Aggregate data generally conceal changes in such phenomena as the quality of life, welfare or hardship of the common man on the street. However, considering the paucity of statistical information at the micro level in Ghana we have little choice but to fall on aggregate data. Attempts nevertheless have been made to supplement the national income accounts with sectoral information to afford some insight into the multi-faceted changes that occurred in the economy throughout this period.

To facilitate discussion, the period under study has been divided into four. These are,

(a) 1957-1960, Era of Orderly Growth,

(b) 1961-1966, "Investment Without Growth",

(c) 1967-1971, Era of Stabilization and Uncertain Growth

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[1] At the time of writing this thesis, official time series data for Ghana only come up to 1974.

TABLE 4.1

GROSS DOMESTIC PRODUCT, POPULATION AND RATES OF GROWTH, 1956 - 1974

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
G.D.P. (¢ Millions)																			
(a) Current Prices	668	690	740	890	956	1022	1094	1208	1357	1466	1518	1504	1700	2001	2259	2501	2815	3501	4661
(b) Constant 1968 Prices	1076	1139	1193	1179	1347	1448	1500	1573	1627	1662	1717	1644	1700	1802	1929	2082	1978	2088	2195
POPULATION (Thousands)	4691	4763	4836	4911	6777	6960	7148	7340	7537	7740	7945	8139	8376	8602	8623	8856	9100	9300	9600
RATES OF GROWTH																			
(a) G.D.P.																			
(i) Current Prices	.033	.073	.054	.141	.074	.069	.070	.104	.123	.185	.109	-.003	.163	.13	.129	.107	.126	.244	.331
(ii) 1968 Prices	.059	.048	-.013	.143	.075	.036	.048	.035	.021	.014	-.022	.041	.014	.060	.070	.079	-.050	.055	.052
(b) Population	.015	.015	.015	.015	.38	.027	.027	.027	.027	.027	.026	.024	.029	.027	.002	.027	.028	.022	.032

SOURCES: 1. Birmingham et. al., 1966.
2. Killick, 1978.
3. Leith, 1974.
4. Economic Survey Various issues.

(d) 1972 - 1974, Period of Rejuvenation and Moderate Growth

1. Trends in Some Selected Economic Indicators

1957-1960: Era of Orderly Growth

As Table 4.1 shows this period was one in which GDP in constant prices grew well in excess of 5% for the entire period. Even if a population growth rate of 3% is taken as average[2] for the period under consideration, there was a marked improvement in living standards. Prices were relatively stable except in 1959 when the rate of inflation was 2.7%, the rate for other years was either zero or less than 1%. Perhaps a better indicator of welfare would be real income (wage) of the unskilled Ghanaian laborer and/or consumption per capita, as given in the following tables.

TABLE 4.2

INDICES OF WAGE AND SALARY PAYMENTS AND EARNINGS IN PRIVATE ENTERPRISE - ALL INDUSTRIES, 1957-62

	1957	1958	1959	1960	1961	1962
1. Wage and Salary Payments (including overtime and bonuses)	104	108	112	119	137	143
2. Earnings	97	98	103	112	130	133
3. Real Earnings	100.6	101.6	103.9	112	121.6	113.8

Sources: (a) Birmingham, et. al., 1966.

(b) Table 4.1 in present chapter.

Minimum wage legislation was introduced in July 1960. This fixed the national minimum wage at 6 shillings and 6 pence (6s. 6d = ¢0.65 or

[2] Population estimates prior to 1960 are generally considered inaccurate.

65 pesewas). Earnings prior to 1960 were generally low. Nevertheless, as the table above shows, there was a steady increase in real earnings of unskilled labor up to 1961.

TABLE 4.3

PRIVATE CONSUMPTION PER CAPITA IN CONSTANT 1960 PRICES IN CEDIS								
	1955	1956	1957	1958	1959	1960	1961	1962
1. GDP per Capita	120	124	124	120	132	140	138	138
2. Private Consumption/capita	94	92	96	90	96	100	106	94

Source: Birmingham et. al., 1966; Table 2.10, p.55.

Figures on private consumption per head were not very encouraging; they seemed to have remained constant over the 1955-62 range.

With GDP growing at 5% and private consumption stationary, considerable resources were released for investment. The rate of investment rose steadily from 15.6% of GDP in 1955 to a high, by developing world standards, of 20.3% in 1960.

Much of the investment undertaken in this period was in social infrastructure, a trend which was set by the colonial government. In 1951 it (the colonial government) launched a "Ten-year Plan for the Economic and Social Development of the Gold Coast". The financial allocations in the 1951 plan were set down as follows:

	¢ Million	% of Total
1. Econ. & Productive Services	24.89	16.9
2. Communications	52.22	35.3
3. Social Services	49.08	33.1
4. Common Services and General Administration	21.79	14.8
PLANNED TOTAL INVESTMENT	¢147.98	

Source: Birmingham et. al., 1966;p.42.

The mode of financing the plan was indicative of the bouyancy of the economy at that time. It was envisaged that only ¢52 million (36% of total investment) was to be obtained through loans and grants. (It was hoped that the Colonial Development and Welfare Funds would contribute ¢6 million and ¢46 million to be borrowed). The rest was to be financed from the country's existing assets and increased taxation mainly on cocoa.

Shortly after the 10-year Plan was launched, Dr. Kwame Nkrumah, leader of the Convention People's Party (CPP) won the national elections to the new Legislative Assembly and formed the first Ghanaian government. It was then decided to modify the 10-year Plan and implement it in five years. By June 1957 the government felt the First Development Plan (the modified 10-year Plan) had been completed. After a two year "consolidation period" a second Five-Year Plan was launched on March 4, 1959.

The first and second Development Plans were essentially similar in character; they both concentrated on building a strong social infrastructure as the following indicates,

PROPORTIONATE DISTRIBUTION OF GOVERNMENT INVESTMENT UNDER DEVELOPMENT PLANS (FIRST AND SECOND)

	AGRICULTURE & INDUSTRY	SOCIAL SERVICES & INDUSTRY
First (10-year) Plan	11.2%	88.8
Second (5-year) Plan	20.3%	79.7

Source: Birmingham et. al., 1966; Table 18.3, p.455.

The 1955-1960 period, thus, was one of heavy investment in social overhead capital. It was during this period that an artificial harbor, Africa's largest was built at Tema with a modern township of

TABLE 4.4

EXPENDITURES ON GROSS NATIONAL PRODUCT, 1955 - 1974

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
CAPITAL FORMATION (¢ Millions).																				
(a) Current Prices	104	112	112	110	154	194	210	184	218	232	266	197	174	187	195	271	311	244	268	555
(b) Constant 1968 Prices	169	169	163	163	230	273	281	256	304	311	351	251	195	187	180	231	262	173	172	269
IMPORT-CONTENT OF INVESTMENT.	.824	.667	.664	.633	.641	.608	.719	.626	.782	.636	.743	.827	.919	1.08	1.15	.989	.939	1.03	1.24	1.02
SAVINGS (¢ Millions)																				
(a) Current Prices	112	106	78	138	162	166	108	142	154	210	127	123	118	220	197	257	196	325	470	456
(b) Constant 1968	80	112	100	144	172	166	98	142	152	211	107	101	79	162	201	202	263	319	275	135
SAVINGS/G.D.P. RATIO (Current Prices)	.168	.154	.105	.177	.182	.174	.106	.130	.128	.155	.079	.069	.066	.106	.099	.114	.078	.116	.134	.098
EXPORTS (¢ Millions)		156	162	186	203	207	209	208	195	209	208	174	224	313	308	460	363	549	697	814
IMPORTS (¢ Millions)		178	193	169	226	259	282	238	261	243	320	251	262	314	354	419	443	393	528	944
IMPORTS OF CONSUMER GOODS, FUEL AND LUBRICANTS		138.1	147	174.9	197.7	189.9	171.9	123	102.3	161	32.2	4.41	65.62	81.84	153.6	213.6	116.7	196.3	391.6	630
EFFECTIVE SAVINGS[a]		17.87	15.1	11.07	5.34	17.12	37.08	85.00	92.75	47.99	175.9	169.6	158.4	231.2	154.4	246.4	246.3	352.7	305.4	184

Note: a. Effective Savings are narrowly defined as export earnings minus imported consumer goods, fuel and lubricants.

Sources: 1. Birmingham et. al., 1966.

2. Various Issues of the Economic Survey.

TABLE 4.5

BALANCE OF PAYMENTS AND FINANCIAL INDICATORS, 1955 - 1974

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
EFFECTIVE SAVING-IMPORT CONTENT OF INVESTMENT GAP.(¢ Millions) Cumulative Total= -483.4		-3.4	-43.5	-125	-11.7	43.8	-5.4	35.5	-2.7	-60.8	64.9	-47.1	-137	-94.6	-113	-45.9	-7.5	128	108	-166
BALANCE OF PAYMENTS (¢ Millions)																				
(a) Current Account		-48.1	-52.5	48.9	-36.4	-155	-210	-109	-177	-138	-319	-173	-117	-69	-70	-93	-202	143	146	-192
(b) Capital Account		70.1	27.2	-56.1	77.3	228	183	117	137	107	214	136	73	63	57	100	190	-7.3	-31.3	31.2
(c) Over-all Balance		22.0	-25.2	-7.2	40.8	73.3	-27.0	8.3	-40.2	-31.5	-105	-37	-44	-6	-13	7	-12.4	136	115	-161
(d) International Reserves		542	490	518	485	425	212	193	122	95.2	37.4	53.4	17.4	22.2	19.1	(Excluding IMF Credit)				
									(Including IMF Credit)					-78.3	-88.6	-20.8	-45.2	158	232	22
GOVERNMENT FINANCE (¢ Millions)																				
(a) Revenue			120	134	129	144	154	153	169	216	284	230	253	198	332	437	450	419	444	652
(b) Expenditure			125	147	188	207	211	246	304	336	397	363	324	427	409	511	591	649	621	1314
(c) Balance (Deficit/Surplus)			-4.8	-12.9	-58.9	-62.6	-57.5	-93.5	-135	-121	-113	-134	-80	-129	-77	-74	-141	-229	-177	-463
MONEY SUPPLY (¢ Millions) (Excluding Govt Deposits)	83.9	90.2	91.8	90.6	114	134	146	163	173	242	241	248	241	256	289	305	320	461	564	697
Rate of Growth of the Money Supply		.08	.02	-.001	.11	.18	.09	.12	.06	.40	-.005	.03	-.03	.06	.13	.06	.05	.44	.22	.24
PRICES																				
Consumer Price Index (1963=100)		77.6	78.3	78.3	80.5	81.2	86.8	94.9	100	115	151	171	156	170	182	189	206	227	266	315
Rate of Inflation			.009	0.00	.028	.009	.069	.093	.053	.118	.263	.116	-.084	.088	.071	.037	.093	.100	.216	.184

SOURCES: 1. Birmingham et. al., 1966.

2. Economic Survey; various issues.

35,000 inhabitants. Primary and secondary schools were springing up everywhere in the country; new roads and bridges were built, old ones improved and the transport and communications network extended.[3] Despite this heavy investment in social infrastructure which has long gestation lags and is directly less productive, the real rate of growth of GDP was in excess of 5% as noted earlier.

The savings ratio was also high by low income countries' standards. It averaged around 16% of GDP for the 1957-1960 period, with a high of 18% in 1959 (Table 4.2). Indeed, for saving 16% and investing 20.3% of its GDP, Ghana did not qualify to be classified as "developing" by Lewis's criterion.[4]

In the trade sector, export earnings showed a fairly steady increase. However, imports, which for the most part exceeded exports, showed a rather erratic pattern (Table 4.4). This probably may have resulted from the requirements of heavy investment in social overheads.

Government finances over the period remained fairly stable although a small deficit of ¢4.8 million in 1957 grew larger in subsequent years. The money supply did not show any erratic increase except in 1960 when it rose by 17.5%. In 1958 a small decrease, almost insignificant, was registered.

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[3]Some commentators have argued that the new nationalist government was under strong pressure to provide these social amenities that did not enjoy high priority under the colonial regime. Furthermore the pressure was reinforced by rising and strong expectations in the masses as a reward for their participation in the struggle for independence. See Birmingham et. al., 1966; p.197.

[4]Lewis (1954) defines the central problem of development as a process whereby a community previously saving 4 or 5% of its GDP converts itself to saving 12 to 15% or more (p.353).

In all, the economy without question performed remarkably well in the 1957-1960 period. The performance was even more remarkable considering that substantial investment in social infrastructure was being undertaken.

1961-1966: "Investment Without Growth", Era of Economic Stagnation[5]

The remarkable feature of the economy in this period was its failure to grow despite a massive investment effort. Almost all the macro-economic indicators performed poorly. As Table 4.1 indicates the real rate of growth of GDP fell steadily to a negative in 1966. Living standards seriously deteriorated in absolute as well as real terms. Per capita consumption declined from ¢96 in 1958-9 to ¢86 in 1968-9 (Killick, 1978;p.71) The following data on real wages provide further evidence of worsening living standards.

TABLE 4.6

INDICES OF REAL INCOMES 1960-71

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
1. Minimum wage	100	94	86	83	75	59	56	61	61	57	55	51
2. Monthly Earnings in Private Sector	100	108	101	98	94	80	81	91	94	93	97	-
3. Industrial Earnings	100	108	101	101	93	80	75	89	88	89	94	-
4. Cocoa Incomes	100	80	76	69	79	37	34	59	48	62	60	61

Source: Killick, 1978; Table 4.D, p.94.

[5]The paradox of "investment without growth" was first suggested by Ahmad, 1972; p.111.

TABLE 4.7

INDICES OF PRICES 1960-71

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
1. Local Food Prices	100	106	117	122	137	188	216	184	201	218	228	256
2. Other Items	100	106	115	120	131	148	164	163	173	186	184	194
3. All Items	100	106	116	121	134	169	192	176	189	203	208	227
4. Terms of Trade of Food Farmers	100	100	102	102	105	127	132	113	116	117	124	132
5. Index of Relative Attractiveness of Food Farming over Cocoa	100	125	134	148	133	343	388	192	242	189	207	216

Source: Killick, 1978; Table 4.C, p.93.

As Table 4.6 shows the minimum wage in real terms by 1966 was almost half what it was in 1960. Inflation was double-digit with a high of 26.3% in 1965. The real culprit was the price index for local food items; by 1966 this index had more than doubled. The only group that perhaps gained were food farmers whose terms of trade improved absolutely (line 4 Table 4.7) and relatively with respect to cocoa farmers (line 5 Table 4.7). The rise in food prices was not due to rising incomes because income per capita was stagnant, (see Table 4.1) but rather to inadequate food supplies.[6]

Figures on capital formation (Table 4.4) reveal that by 1965 the investment rate in constant 1960 prices had been pushed further

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[6] Factors that accounted for the inadequate food supplies are discussed in greater detail in chapter 6, section C.

to an extra-ordinary 22.5%, from an already high 20.3% of GDP in 1960.[7] This was Nkrumah's big push which was supposed to launch the economy into take-off. The investment effort was remarkable in two respects; its sheer size and its failure to generate growth.

Killick (1978) estimated that by 1966 Ghana's net accumulation of capital was equivalent to about 80% of the 1960 capital stock (p.67) Estimates of incremental capital-output ratios show either absurdly large or negative numbers. Even the average ratios doubled between 1960 and 1967 as the following table shows.

TABLE 4.8

CAPITAL AND OUTPUT 1960-69 (IN CONSTANT 1960 PRICES)

¢ Millions	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
1. Gross Capital Stock	1684	1959	2183	2460	2727	3034	3232	3312	3363	3420
2. GNP	946	939	955	1004	1048	974	923	928	990	1055
3. Capital/GNP Ratio	1.78	2.09	2.29	2.45	2.60	3.11	3.50	3.57	3.40	3.24

Source: Killick, 1978; Table 4.2, p.69.

From Table 4.4, the savings ratio declined steadily from 17.4% of GDP to about 7% in 1966. This was inevitable since real incomes were declining.

Over the 1961-1966 period, budget deficits persisted and grew larger. By 1962 government reserves have been exhausted and the Bank

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[7] UN(1966) data on investment ratios in 35 low-income countries showed a mean value of 16%; only three had ratios in excess of 23%.

of Ghana became an important financier of budget deficits. Needless to say, the money supply climbed, registering an increase of 40% in 1965 alone (Table 4.5).

The exports position deteriorated; earnings stagnated and even fell. In fact, the export earnings in 1966 were less than that in 1960. The physical volume of cocoa exports increased during this period but declining world prices for cocoa prevented any substantial increase in earnings from materializing. This certainly did contribute to Ghana's economic difficulties at that time but as we shall argue in section B, there were also domestic factors tearing at the performance of the economy.

Imports over the period showed an erratic pattern, thanks to controls instituted in 1961. The controls failed to check the demand (see chapter 6, section B.2 for a fuller discussion) and the high level of imports contributed to the balance of payments crises that emerged in this period. By 1962, the country's external reserves had almost been exhausted and to sustain the investment drive and import levels the government increasingly turned to short-term suppliers credits. Recourse to this source of finanace was so extensive that by 1965 the country's total short-term obligations were equal to 20% of its export earnings. So severe was the exchange crisis that it provoked the army to seize power in February 1966.

1967-1971: Era of Stabilization and Uncertain Growth

The soldiers who staged the coup had a lot of house cleaning and repair work to do besides bringing some order into government administration. To prevent Ghana from defaulting on its short-term loans,

a consortium of Ghana's creditors mostly from USA, Britian and France, was convened in Paris in 1966 to reschedule debt payments. This afforded the new government much needed elbow room to maneuver.

The domestic economic scene was one of chaos; none of the state enterprises hurriedly set up by Nkrumah was producing at full capacity. In one case, the Paper Bag Division of the Paper Conversion Corporation at Takoradi, the rate of capacity utilization was as low as 3.5% (Ahmad, 1970; p.16). Many factories were starved of imported raw materials and spare parts so that Nkrumah could push on his profligate investment drive.

The major preoccupation of the new military regime then was to improve capacity utilization rather than initiate new investment ventures. A sizable portion of the foreign exchange budget was allocated to spare parts and raw materials to keep the factories producing. As later developments were to testify, the exercise however was futile; it amounted to flogging a dead horse since the factories were inefficiently set up in the first place.

Economic growth in this period was poor. With no new investment, capital formation in constant 1960 prices declined from ¢251.1 million in 1966 to ¢180 million in 1969. The real rate of growth of GDP faltered; it fluctuated between -0.043 and 0.06 (Table 4.1). In 1969 effective savings stood at ¢154.4 million, the lowest in five years. The use of suppliers' credit to finance imports had been halted by the new government, so when the weak administrative measures failed to check import demand, the balance of payment crisis re-emerged (Table 4.5).

Bouyed by high cocoa prices in 1969 and 1970 (export earnings increased by some 50%), the Busia government liberalized imports, removing many commodities from import controls. In 1971, the increase in imports amounted to 18%. When cocoa prices returned to their normal levels in 1971 and having spent the windfall in cocoa proceeds on imports, the government found itself without enough external reserves to deal with the rising import demand. Believing more in the potency of market forces than in administrative controls to check the demand, the government devalued the currency by a massive 44% (77.6% in terms of the local currency). The response was a military coup in January 1972 and the new government upon assuming office quickly revalued the currency by 42% (or 29.3% in terms of the local currency).

1972-74: Era of Rejuvenation and Moderate Growth

The second military government under Colonel Ignatius Acheampong started well. After repudiating some of Ghana's foreign debts, he re-scheduled the rest of them unilaterally. Loop-holes in the import control program were plugged and the machinery tightened. To encourage export expansion, the producer price of cocoa was boosted up from ¢8 to ¢ 10 per load of 30 kilos and an export bonus scheme was instituted. For the first time in 13 years Ghana's balance of trade registered a surplus of ¢143.4 million and the overall balance of payments recorded an all-time record of ¢136.1 million. In addition, effective savings exceeded capital imports for the first time in a decade (Table 4.5).

The rate of growth of GDP in constant 1968 prices however did not improve much. Neither did savings and capital formation except in 1974 (see Table 4.4).

Acheampong's record, in spite of the excellent performance on the

balance of payments, was sullied by a series of disturbing events. The budget deficit was seriously getting out of control, reaching a record level of ¢462.7 million in 1974 (42% of the total budgeted expenditure of ¢1,115 million). The rate of increase in the money supply was upwards of 20%; in 1972 alone the increase in the money supply was 44% (Table 4.5). Consequently, the rate of inflation doubled in 1973 and began to undo much of Acheampong's achievements on the balance of payments. In the face of excessive government expenditures, demand pressure forced the government to loosen its tight grip on imports with the result that expenditure on imports increased by 34.2% in 1973 and a record 78.7% in 1974 (Table 4.4)

More disturbing was the trend in the import content of investment. Although capital formation in real terms remained almost the same, the import content of investment was greater than unity for all years after 1971 (Table 4.4). An import content ratio exceeding unity does not make sense. It implies that to generate say $100 in domestic investment, more than $100 in imported capital goods would be needed. This would indicate an alarming situation of severe economic retrogression or atrophy. Either the economic environment was so repressive that a piece of equipment immediately broke down upon arrival in Ghana and additional foreign exchange had to be expended in repairing it before installation, or the trade statistics were inaccurately recorded. The situation in Ghana to our knowledge does not seem to support these two lines of speculation but a quick reference to the Report of the Commission of Enquiry into the Grant of Import Licences furnishes an explanation for the apparent paradox.

Rampant in this period were serious trade malpractices.[8] To transfer foreign exchange illegally out of the country, a number of firms and individuals inflated import invoices and under-invoiced exports. For example, in importing an equipment worth say $50,000, two invoices (sometimes three) were prepared - one for the overseas supplier and the other for the local importer. The overseas invoice would be inflated to say $80,000 and presented to the Bank of Ghana for payment. The local invoice would be deflated and presented to customs for the determination of local import duties and sales tax payable. At other times, an import licence granted to a local importer who could not arrange letters of credit would be sold to another who may use it for purposes other than what it was originally issued for, i.e., a licence for capital goods used to import consumer goods. Also, the licensing authorities were often bribed to inflate licences for capital goods so that the recipient could qualify for government tax concessions. In these ways, then, the country came to buy a lot of capital goods on paper and recorded in the trade statistics (see Gaisie Report, 1973).

Without mincing words, the over-all picture over the entire period, 1957-74, is one of dismal performance and the current situation shows no signs of improvement. It is true that the economy briefly showed some signs of bouyant growth in the early years (1957 to 1960) but these gusts were insufficient to launch it into take-off. In the next section

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[8] We discuss some of these trade mal-practices in greater detail and adduce some evidence in chapter 6, section B.

we attempt to explain why the take-off did not materialize.

2. Effective Saving/Balance of Payment Crises

The basic cause of economic stagnation in Ghana may be found, among many other plausible factors, in the effective savings-investment nexus. Balance of payment crises have played a major role in Ghana's economic difficulties as evidenced from the previous section. In the preceding chapter we enunciated a proposition that to help avert balance of payment crises an LDC would need to either increase its effective savings or set its rate of investment in such a way that there is sufficient foreign exchange (effective savings) to cover the imported component of investment (import-content of investment). Ghanaian experience shows that not only did the imports of capital goods exceed effective savings (Table 4.3) but also Ghanaian governments acted in a manner contemptuous of the foreign exchange constraint. They maintained an investment drive in such a high gear as if the country had unlimited foreign exchange reserves or unfettered access to foreign credit. By 1960 the reserves were almost exhausted and six years later foreign suppliers were insisting on stringent credit terms. Thus, underlying the balance of payment crises was the inadequacy of effective savings to sustain a high rate of investment.

Even more astonishing was the failure of the massive investment drive itself to produce concrete results. In the previous chapter we postulated an aggregate production function where real output was an exponentially-distributed lag function of investment in constant prices, i.e.,

$$y_t = \rho \int_t^{\infty} e^{-\rho\tau} \beta I_t^*(t-\tau)d\tau$$

This equation may be simplified to,

$$y_t - y_{t-1} = \rho(\beta I_t^* - y_t)$$

Or,

$$y_t = \frac{1}{1+\rho} y_{t-1} + (\frac{\rho\beta}{1+\rho})I_t^*$$

To test this relation we ran a regression using,

$$\text{Real GDP}_t = a + b\text{Real GDP}_{t-1} + cI_{t-1} + \text{Dummy} + u_t$$

The dummy was set equal to unity for the years a change in government was effected - 1957, 1966, 1970 and 1972. Our results were,

$$\text{Real GDP}_t = 65.63 + 0.99\text{Real GDP}_{t-1} + 0.098I_{t-1} - 68.58\text{Dummy} + e$$

$$(.65) \quad (18.51) \qquad (.33) \qquad (-1.69)$$

R^2 = 0.96, Adjusted R^2 = 0.95

D.W. = 2.05 - zero auto-correlation (first-order rho = -0.034)

Degrees of Freedom = 15

Number of Observations = 19, t - values in parentheses.

Estimates of ρ and β are 0.0094 and 10.43 respectively. ρ is the speed of adjustment of GDP to changes in I_t. Its value suggests that either the adjustment speed is very slow indeed or that gestation lags are not important. Despite the high R^2 and the absence of auto-correlation, the co-efficient of I_{t-1} is not significant. The nearness of the GDP_{t-1} co-efficient to unity and its high significance at 0.05 level, in addition to the small value of the I_{t-1} coefficient as well as its non-significance, would suggest that Ghana's massive investment drive has had little or no effect on real GDP. By implication, the investment that occured during this period was either of a very poor quality or was mis-directed. In chapter 6, section C, we provide extensive evidence to show that this was indeed the case; millions of foreign

exchange were poured into "prestigious" projects.

Although many factors are responsible for Ghana's problems, in our view, the following two merit primary focus:

(a) inadequacy of effective savings and consequent balance of payment crises,

(b) poor quality and mis-direction of investment.

Needless to say, these factors are inter-related making it difficult to assess their relative importance. It is clear that foreign exchange (or effective savings) are needed for investment. However, the mere existence of effective savings need not generate growth if the investment undertaken has a low output/capital ratio, or simply put, if the investment is unproductive.

In the next section we sketch out and discuss the domestic possibilities of increasing effective savings in Ghana. The poor quality and mis-direction of investment may stem from corruption and a "religion of development" that predisposes Ghana to invest in "prestigious" projects. That topic is developed further in chapter 6, section C.

B. EFFECTIVE SAVINGS IN GHANA

If monetary transaction (allocations of SDRs, IMF tranches and changes in banking system overseas assets), foreign borrowing and investment are excluded then the principal means of increasing effective savings or the availability of foreign exchange are:

(1) Increasing export earnings, and

(2) Curtailing the imports of consumer goods.

We examine each of these possibilities in the light of Ghana's experience.

1. Exports

Before 1890, the two important export products were gold (as the country's colonial name Gold Coast suggests) and timber. These products were quickly superseded by cocoa whose phenomenal growth can be seen in the following table.

TABLE 4.9

SOME EXPORT PRODUCE OF THE GOLD COAST 1899-1951						
	1899-1901	1909-11	1919-21	1929-31	1935-37	1951
1. Cocoa (000's tons)	1	28	145	218	272	230
2. Timber (£000's)	70	123	217	104	112	4977

Source: Bauer, 1967; p.195.

Since the 1940s, a number of products have been added to the export list and the current situation is shown by the following table.

TABLE 4.10

EXPORT OF DOMESTIC PRODUCE 1968-1974

Quantities	1968	1969	1970	1971	1972	1973	1974
1. Cocoa (000's tons)	415	334	409	386	457	411	344
2. Timber (logs) hop. ft.	15,579	19,334	16,667	19,597	26,391	30,233	15,316
3. Timber (sawn) hop. ft.	7,597	7,734	8,506	6,560	8,838	8,465	5,971
4. Bauxite (000's tons)	237	242	211	348	311	307	392
5. Manganese (000's tons)	440	324	397	412	460	285	276
6. Diamonds (000's carrats)	2,997	2,477	2,872	2,367	3,193	2,267	2,556
7. Gold f.o.t.	735	713	697	697	737	722	696
8. Kola Nuts (cwts)	46	132	39	47	75	134	97
9. Aluminium (cwts)	1,510	2,482	1,950	1,748	2,594	2,464	1,656

Source: Economic Survey of Ghana, various issues.

We have reported the physical quantities rather than values in order to exclude fluctuations in the world market prices.

Since our aim is to investigate the possibilities of export expansion, we shall focus our attention on cocoa, timber and diamonds. These are products of indigenious enterprise; the rest are from state-controlled activities except kola nuts which, although from private enterprise, are being excluded because of their insignificance — revenue from kola nuts exports has generally been less than $1 million. Cocoa, timber and

diamonds together account for more than 78% of export proceeds. Cocoa alone accounted for 63% of total export proceeds in 1974 (Economic Survey, 1972-74; Table 3.4, p.41).

The Cocoa Supply Function

Recent econometric studies by Haessel and Bloomqvist (1972) suggest that the long run demand elasticity facing Ghana's cocoa is (absolutely) greater than minus unity and it is of the order of -1.4.[9] Thus, a long run output expansion would increase cocoa export earnings. In the short run, however, Haessel and Bloomqvist found the world demand elasticity to be (absolutely) less than negative one, meaning that a sudden increase in output in the short run would lead to a decline in cocoa revenue. If we take the view that the long run is the more appropriate for development purposes, then it would follow that cocoa expansion would be in Ghana's interest. If the explanatory variables in the cocoa supply were known they could be manipulated to achieve the desired expansion. In practice, however, the exercise does not lend itself to such simple manipulation because a host of factors affect cocoa supply and little consensus exists on them.

In chapter 2, section B, we identified about seven factors that affect Ghana's cocoa supply. These are the age of the tree, soil nutrients and amount of rainfall (or weather), incidence of cocoa diseases such as capsid and swollen shoot, itinerant labor, the producer price relative to cocoa farmer's reserve price, smuggling and transportation. As if sifting through these variables is not enough, two things further complicate the supply relation.

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[9] The estimate is based on a market share of 30%.

First, Bateman(1974) has argued convincingly that there is really not one but two cocoa supply relations; a long run one and a short run. The long run relation attempts to determine what forces motivate the farmer to plant new seedlings to expand capacity or maintain existing capacity by replacing old and diseased trees. The short run relation deals with output harvested from existing acreage. In view of the rising evidence of cocoa smuggling we may indeed advocate a third relation - the very short run supply relation. This would embrace forces that motivate the farmer to sell his produce to the CMB or smuggle it out of the country.

Second, and perhaps the most frustrating of all, is that, there are no statistics on actual cocoa production. The statistics that exist are on CMB purchases from cocoa farmers. The two sets of data would not be identical because of crop wastage (transportation difficulties, untimely harvest or the lack thereof) and smuggling. One could rectify the situation by using acreage under cocoa and yield per acre to estimate actual production. But data on cocoa acreage is fragmentary and estimated yield per acre by the Ministry of Agriculture is objectionable on the grounds that the Ministry determines the estimated yield by dividing CMB purchases by estimated acreage under cocoa. In any case, the yield per acreage itself is affected by the age of the tree, weather and insecticide applications.

In view of the severe data limitations and conceptual difficulties one needs to take with a pinch of salt an econometric work that purports to estimate cocoa production. What one can meaningfully hope to estimate is the supply of cocoa to the CMB and not output on the farms. Meaningful estimation of cocoa production would require data which is independent of CMB purchases. On these grounds, then, empirical estimates of the cocoa production function by Ady (1949), Abbey & Clark (1973) and Bateman (1974)

are suspect. Let us briefly review the more recent studies.

ABBEY & CLARK PRODUCTION FUNCTION

Abbey & Clark (1973) estimated the equation,

$$GQ_t = \gamma_1 P_{t-1} - b\gamma_1 P_{t-2} - c\gamma_1 P_{t-3} + a\gamma_2\beta_1 \Delta P_{t-5} + bGQ_{t-1} + cGQ_{t-2} + Dummy$$

where GQ_t = current cocoa output,

P_t = producer price per 60 lb bag of cocoa divided by the daily wage of labor,

Dummy variable accounted for the suspension of pesticide distribution for 3 years after 1966.

Their estimation results were,

$$GQ_t = \underset{(-0.19)}{-17.26}\ P_{t-1} + \underset{(1.67)}{175.71}\ P_{t-2} - \underset{(-1.30)}{119.39}\ P_{t-3} + \underset{(2.82)}{238.36}\ \Delta P_{t-5}$$

$$+ \underset{(6.11)}{1.47}\ GQ_{t-1} - \underset{(-1.97)}{0.47}\ GQ_{t-1} - \underset{(-2.99)}{107.51066}$$

$R^2 = 0.93$ D.W. = 2.28.

The numbers in parentheses are t-values.

There were many problems with their analysis. First, despite the high R^2, none of the co-efficients of P_{t-1}, P_{t-2} and P_{t-3} were significant and moreover the signs of the price terms P_{t-1} and P_{t-3} were "wrong".[10] Second, they also admitted that ordinary least squares was an inappropriate estimation technique since the equation was over-identified in the parameters b and c. Third, their use of CMB purchases as data for cocoa output was objectionable. Fourth, the rationale for dividing the producer price by the daily wage of labor instead of say the rural price index was not

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[10] They made this admission; see p. 25 (Abbey & Clark, 1973).

clear. This division implies that an equi-proportionate change in both variables would have no effect on cocoa output. This in turn would imply that the cost elasticity of labor input in the supply function is unity.

Fifth and perhaps the most serious problem of all is that inflation in domestic food prices plays no role in their model unless this inflation in taken care of through an automatic upward adjustments in the daily wage rate. However, Table 4.6 showed that over the period 1960-71 real incomes declined, i.e., daily wages did not keep pace with inflation. The seriousness of omitting this "inflation effect" is that, as we argued in chapter 2, section B, inflation in food prices tends to induce cocoa farmers to switch into food production (reducing cocoa output) or to curtail their sale to the CMB and smuggle the produce out to the neighboring countries where producer prices are higher.

BATEMAN'S COCOA PRODUCTION FUNCTION

Bateman expressed the long-run output function which he called "average capacity" equation as,

$X_t = a_1 c_t P_t$ where X_t = Acreage planted, P_t = Real Producer price paid in crop year t and c_t = farmer effort co-efficient computed as a function of P_t. Because of the absence of data on new plantings, acreage and tree stock, he estimated instead the following relation,

$$Q_t^* = \sum_{i=1}^{55} b_i X_{t-i} + a_2 b_2 \sum_{i=1}^{55} b_i X_{t-1} G_{t-1}^* + a_3 G_t^{**}$$

where:

Q_t^* = cocoa production in year t (3 and 5 year averages were also used),

b_i = tree yield coefficient during year i of tree's life,

G_t^* = Gammalin "20" applications weighted by an estimate of their relative importance in preventing capsid damage to young trees during the first four years after planting,

G_t^{**} = Gammalin yield variable.

Although Bateman's attempt was an ingenious way of grappling with the difficulties in this area certain conceptual problems still remain with his analysis. The first was his use of CMB cocoa purchases as cocoa production data as in Abbey & Clark (1973). Second, there is a certain degree of arbitrariness with the coefficient, c_t, the farmer's effort coefficient. He postulated c_t to depend exponentially on the difference between the producer price and the cost of planting (or minimum producer price at which no planting will occur). If the producer price is less than planting costs (negative difference) then c_t is set equal to zero. But when the difference is positive, c_t rises in an S-shaped curve to a maximum of one. The rationale behind this characteristic S-shaped effort coefficient curve was not made clear. This is important because a "backward-bending supply curve of effort" could equally well be postulated.

Third, we took his estimated cocoa capacity and deducted from that sales to the CMB from 1941/42 to 1969/70 and summed the difference over the entire 29 year period. The sum was a negative 52,000 tons of cocoa implying that, on the average, cocoa sales exceeded capacity output by 1.41 thousand tons a year, a conclusion which is clearly implausible.

OUR METHODOLOGY

We postulated that,

$$\ln \text{cocoa} = a + b \ln \text{real GDP}_{t-1} + \text{PPG} - \ln \text{PPIC} + \text{Dummy}$$

where

cocoa = cocoa sales by farmers to the CMB,

PPG = producer price of cocoa in Ghana deflated by the Rural Price Index,

PPIC = producer price of cocoa in Ivory Coast converted by the official exchange rate into cedis and deflated by the Rural Price Index,

Dummy = 1 for 1958 (outbreak of swollen shoot disease), 1966 (change in government), 1970 (Alien Compliance Order) and 1972 (overthrow of Busia Government).

Recall the seven factors we listed earlier as capable of affecting cocoa output — the planting-tree stock-age variable, weather (and soil conditions), real producer price in Ghana, cocoa diseases, alien labor, smuggling and transportation. We excluded from the estimation equation the weather and transportation variables as there is no satisfactory way of defining proxies. Even if we succeed in finding proxy variables there would still be difficulties. First, the difficulty of using average rainfall as a weather proxy is that it is the timing and not the total amount that seems to be important. Second, the difficulty with a "transportation" variable is its a priori possibility of influencing cocoa sales in opposite ways. Better transport facilities could improve cocoa evacuation from farms and hence sales to the CMB but it is also conceivable that the facilities may be used to smuggle the crop out of the country.

The real GDP_{t-1} term may evoke some surprise. The opening up of new areas for cocoa farming, the establishment and care of new farms as well as existing ones and the transportation of the produce all entail substantial capital expenditures which the farmers have to meet from their existing financial resources. As banking facilities are not well established in the rural areas, the general practice has been to seek rural credit by pledging cocoa farms (Hill, 1958) if the expenditures cannot be met. These considerations, then, suggest an income variable in the sales function.[11] A cocoa farmers' income variable in the regression would not only produce a multi-collinearity problem as well as a simultaneous equation bias but would also seem to be inappropriate because cocoa farmers' income is derived from the sales. In view of the extensive interaction between the cocoa industry and the rural economy and the common practice of farm pledging, total rural income would seem to be a better proxy variable. In Ghana, however, a break-down of national income into urban and rural components is unavailable. Hence, our choice of the real GDP_{t-1} as a proxy for the income variable.

Our results were,

$$\ln \text{cocoa} = -11.50 + 2.26 \ln \text{real } GDP_{t-1} + 0.79 \ln PPG - 0.65 \ln PPIC - 0.12 \text{Dummy}$$
$$(-5.94)\quad (9.31)\qquad\qquad (4.48)\qquad (-3.64)\qquad (-2.02)$$

$R^2 = 0.985$ Adjusted $R^2 = 0.98$

D.W. = 2.07 — zero auto-correlation (first-order rho = -0.094)

Number of Observations = 17, Degrees of Freedom = 12, t-values in parentheses. This was a second-order autoregressive model; rho was estimated by grid search (Cochrane-Orcut) and convergence set at 0.01.

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[11] This suggestion was originally made by Killick in Birmingham et. al., 1966; pages 377-78. He suggested total cocoa income but there are problems with this variable as explained in the text.

The results are highly significant; all the co-efficients are significantly different from zero at less than 0.005 level of significance except the Dummy which is significant at less than the 0.1 level.

There are two peculiarities of the price elasticities of cocoa sales to the CMB that merit attention. First, the low co-efficient of the PPG variable (0.79) suggests an inelastic supply which conforms with our expectations given that cocoa is a perennial tree crop that has little alternative domestic uses. Second, although the co-efficient of the PPIC variable is also low, it is not only negative but also fairly close to the co-efficient of the PPG variable. This would indicate that cocoa sales to the CMB are not only sensitive to the producer prices in Ghana and Ivory Coast but also the degree of sensitivity to the two prices are fairly close. Furthermore these degrees of sensitivity would seem to indicate cocoa farmers are indeed "economic men" who respond to price incentives and not "primitive" illiterates as Nkrumah and other government officials regarded them.

A 10% rise in the real producer price of cocoa in the Ivory Coast would reduce sales to the CMB by 6.5% or 20,020 metric tons of the estimated 308,000 metric tons for the 1977/78 crop (Paterson, Simons & Ewart Cocoa Report 1978). We can in fact say more than this; a 10% rise in the rate of domestic inflation over that in Ivory Coast would reduce cocoa sales to the CMB by 14.4% or by 44,352 metric tons. Similarly if the rate of inflation in Ghana is 12% higher than in the Ivory Coast the reduction in cocoa sales would be 53,222 metric tons. Of course this reduction in cocoa sales to the CMB would represent smuggling. Our 53,222 metric tons estimate of smuggling may be compared with Paterson,

Simons & Ewart's estimate,

> "Various sources estimate that Ghana lost from 40,000 to 60,000 metric tons of the main crop, by way of smuggling to the Ivory Coast and Togoland. We tend to support the lower end of the range and assume that of the 45,000 tonnes smuggled out, probably 40,000 tonnes reached the Ivory Coast and 5,000 tonnes were taken to Togo" (Cocoa Report No. 1/78; p.1).

The 12% differential in inflation rates that we assumed is not unrealistic. The World Bank Development Report (1978) puts the average annual rate of inflation in Ghana and Ivory Coast at 23.4% and 11% respectively, a difference of 12.5%.

The PPIC (the producer price in Ivory Coast) variable was converted into Ghanaian cedis using the official Ghanaian exchange rate. In our smuggling analysis it was implicitly assumed that the official rate was constant. This assumption is not unrealistic since both Ghana and the Ivory Coast are on a fixed exchange rate regime.

However, it would have been more realistic to convert the PPIC variable using the black market exchange rate as it may be argued that this rate is more reflective of prevailing economic conditions. Generally speaking, the black market rate is influenced primarily by relative rates of inflation in the two countries. Data on black market rates, of course, do not exist. Nonetheless, in deflating the producer prices by the rural price index and taking relative rates of inflation, as done in our smuggling analysis, the black market exchange rate is indirectly taken account of, even though PPIC has been converted at a fixed official exchange rate.

This analysis indicates that declining real producer prices and smuggling, itself a response to inflation, are contributory causes of the stagnation of the cocoa industry.

Other (Non-Cocoa) Exports: Diamonds and Timber

The record here is no better than the cocoa industry; even worse. The non-cocoa export sector has progressively deteriorated in the absence of any real economic and government incentives. Rising domestic inflation has led to a steady decline in real producer prices and government policies can at best be described as vacillatory, aberrant and downright frustrating. Let us take the timber industry as an example.

In 1960, a Timber Marketing Board (TIMBOD) was set up to handle the sale and export of wawa timber. In the following year its responsibilities were extended to cover all other species and in 1962 it was absorbed into the newly created Agricultural Marketing Board. This dislocation caused a fall in timber exports in 1961 and 1962 (see Table 4.10) and forced a large number of concerns to go out of business. The Agricultural Marketing Board proved itself administratively incompetent to handle the timber export trade. The industry was buried under piles of administrative red-tape and regulations; road transportation of logs was banned to give Ghanan Railways and Port Authority the chance to utilize its excess capacity but the railways could not cope because of the poor state of rolling stock. Regulations regarding replantings and which species to fell were enacted hurriedly and unexpectedly with little advance notice. In 1963, in an effort to untie these administrative knots and stream-line operations, a new Timber Marketing Board was created with more limited powers. However, it soon became unpopular within the industry which claimed that the Board performed no useful function in return for the 3% levy on exports of prime species, and attempts to give it an export monopoly (as in the case of cocoa) led to so much disruption and foreign exchange losses that they had to be abandoned (Killick, 1978; p.120).

In the same year, in pursuance of the government's policy to process a greater part of Ghana's exports at home, timber was sawn for export. This exercise was futile as the country earned more revenue from a log exported unsawn than it did for sawn timber because of high wastage rates.[12]

The Diamond Marketing Board (DIMBOD) similarly entered into a dispute with African diggers, who using "primitive" calabashes accounted for 43% of the diamond carats produced in 1960. A regulation introduced in 1962 stipulated that, beginning in 1963, all diamonds mined in Ghana were to be sold to DIMBOD at a fixed producer price. This producer price failed to keep pace with domestic inflation. Consequently, sales to the Board declined and smuggling escalated as the following table indicates.

TABLE 4.11

DIAMONDS - COMPANIES AND AFRICAN DIGGERS PRODUCTION

Carat '000	1963	1964	1965	1966	1967	1968	1969	1970	1971
Companies	2,119	2,290	2,222	2,771	2,519	2,432	2,384	2,539	2,444
African Diggers	558	379	51	47	19	15	7	8	118
Total	2,677	2,669	2,273	2,818	2,538	2,337	2,391	2,547	2,562

Source: Economic Survey 1969-71, Appendix XX, p.140.

A study of the elasticity of diamond sales to the Board by African diggers, between January 1968 and August 1971, found an elasticity of 2.16 (R^2 = 0.38).[13] Although the fit was poor, the large value of this elasticity reflects switches between sales to the Board and illicit smuggling to other West African countries, Ivory Coast and Sierra Leone,

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[12] A mimeographed study done by Richardson (cited in Killick, 1978; p.120) showed that the domestic resource cost per unit of foreign exchange earned was generally 3 to 4 times greater in saw-milling than in logging.

[13] This was done by Stern and is cited in Killick, 1978; p.357n.

rather than a fall in production.[14] The tragedy of the situation was that the productivity of the African digger with "primitive" equipment has been higher than that of the worker in a government-sponsored company with advantageous access to capital and technology. In 1962, when the industry was relatively calm and before the 1963 regulations, the output per African digger was 276 carats. Worker productivities in companies were 169 for the Akim Concessions, 101 for Cayco (London) Limited, 604 for Consolidated African Trust and 229 for Takrowase Diamond Fields (Birmingham et. al., 1966; Table 11.8, p.269).

Our discourse on timber and diamonds suggest that the non-cocoa export industry is also plagued by inflation-related problems. A study by Leith (1974;p.42) vindicates this view. Regressing total non-cocoa exports on price-deflated effective exchange rates facing these exports, he found that,

$$\ln NC\ X_t = 2.78 + 0.044\ \ln\ (EER_x/P_t)_{t-\frac{1}{2}}$$

$$(9.89)\quad (6.28)$$

$R^2 = 0.91$

D.W. = 1.41, t-values in parentheses.

X_t = Non-cocoa exports in New Cedis

EER_x/P_t = Price-deflated effective exhange rate

$EER_x = (1-t_x)r$, where t_x is the ad valorem export tax and r is exchange rate.

The co-efficient of the EER_x/P_t variable, significant at the 0.005 level, is large, i.e., a 10% decline in the price-deflated effective exchange rate would induce a 4.36% reduction in non-cocoa export earnings valued in constant prices.

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[14] Notice the surge in the production figure for 1971 in Table 4.13; it was the same year the producer price was increased.

Although he had only 6 observations, the significance of his regression results lies in the fact that changes in the price-deflated effective exchange rate stem largely from changes in the domestic price level or inflation. The official fixed exchange rate has only been subject to infrequent changes and tax rates have in fact been declining as Table 4.12 (next page) indicates. Although the effective exchange rates $(1-t_x)r$ in nominal terms have been rising in the table, due to falling tax rates snd stable exchange rate, an opposite movement occurs when deflated by the domestic price level. We see then that changes in price-deflated effective exchange rate are consistent with an explanation of the stagnation of the non-cocoa export sector.

In concluding this section on the export sector generally, we have shown that cocoa sales to the CMB by farmers are sensitive to the real producer prices in Ghana and the Ivory Coast, and also shown that non-cocoa exports are sensitive to the price-deflated effective exchange rates. Since nominal producer prices and exchange rate are adjusted rather infrequently we conclude that the basic cause of stagnation in the export sector may be found in the domestic rate of inflation. This in turn would suggest that the country's capacity to earn foreign exchange has been impaired by domestic inflation.

TABLE 4.12

TAX RATE AND EFFECTIVE EXCHANGE RATES FOR NON-COCOA EXPORTS 1956-1969

	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969
Tax Rate	1.74	1.58	1.65	1.76	1.90	1.85	1.45	1.52	1.41	1.13	1.08	0.87	0.63	0.55
$EER_x=(1-t_x)r$	.702	.703	.703	.702	.701	.701	.704	.703	.704	.706	.707	1.012	1.014	1.015

Source: Leith, 1974; Table II-2, p.13.

2. Imports

The second domestic possibility of increasing effective savings is the curtailment of imported consumer goods. In the beginning of our period (1957) durable and non-durable consumer goods accounted for 57% of total imports by end-use and by 1974 (the end of our period) they were down to 23.8% (Table 2.2).

Imported consumer goods could have been curtailed using the market mechanism by allowing a sufficient rise in their prices to choke off demand. However, after 1961, Ghanaian governments chose instead to institute import controls, fix prices and allocate by rationing, in line with their interventionist philosophy.[15] It is tempting to conclude from the above figures that import controls (or licensing) were successful in altering the composition of imports away from consumer goods. This however was done at a considerable cost to the country. Furthermore and more important in our view, the licensing failed in other directions. We discuss this failure below and examine the reasons in chapter 6, section C.

The Failure of Import Licensing

Import controls in Ghana did not prevent the precipitate decline in international reserves during the Nkrumah period (see Table 4.5) nor were they able to achieve the desired replenishment during the NLC period, 1966-1969. Killick (1978;p.269) has shown that throughout the entire period of 1965-1970, actual imports exceeded the total forecast of import capacity by an annual average of ¢27 million and had total imports achieved the targets which were set, the reserve position would have been better than planned by an average of ¢7 million per annum. Failure to hold

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[15] Some of these imported consumer goods constitute the so-called essential commodities and increases in their prices are touchy issues.

imports to planned levels explains the authorities inability to conserve external reserves and also the accumulation of a larger than intended volume of medium and short-term debt. The following table is an eloquent testimony of this failure.

TABLE 4.13

ACTUAL AND TARGET IMPORTS 1967-1969

¢ Millions	Total Imports			Non-Aid			Aid		
	1967	1968	1969	1967	1968	1969	1967	1968	1969
DIP	345.0	369.0	347.2	213.0	226.5	247.3	132.0	142.5	99.9
OIP	265.8	283.8	304.8	207.0	221.2	242.5	58.8	62.6	62.3
Actual	307.6	296.6	337.4	227.5	248.0	266.3	30.1	48.6	71.1

Source: Bhatia, 1973; p.23.

The table reveals that actual imports exceeded the "operational" level (based on foreign exchange availability and committed foreign aid) which indicates that the authorities must have been either excessively optimistic about foreign aid accommodations or they never attached any practical significance to the targets. There were no grounds for such optimism as the aid actually received was less than that committed in all the three years. Did the authorities make any serious efforts to administer controls effectively? Not so, according to Killick (1978),

> "The truth ... was that imports were quite out of control; licences were issued in 1965 to the value of ¢406 million as compared with the planned level of ¢ 312 million. Fortunately not all the licences were utilized but even so, imports rose to a new record level - a record which still stood seven years later" (p.269).[16]

[16] It may be noted that Nkrumah filled the shops of Accra with imported consumer goods to impress the African dignitaries attending the OAU (Organization of African Unity) Conference in Accra on November 15, 1965. However, pursuance of political ambitions, at the expense of the economy, hardly constitutes sufficient justification for the high import level.

Again in 1968 licences issued totalled ¢440 million against an operational program of only ¢284 million (Killick, 1978; p.272).[17]

Thus, we see that the domestic possibilities of increasing effective savings in Ghana have been obstructed. The export sector has deteriorated in the wake of soaring inflation, declining producer prices and smuggling which is getting out of control. On imported consumer goods, import controls instituted to curtail their imports and conserve foreign exchange reserves have been a remarkable fiasco. How then does the country earn or save the foreign exchange needed for its capital formation?

C. EFFECTIVE SAVINGS: AN EMPIRICAL ANALYSIS

We have already discussed extensively and separately the two components of effective savings — exports and imported consumer goods. In this section we bring them together and attempt some empirical tests.

Recall that we divided exports into cocoa and non-cocoa exports. The export functions with the explanatory variables in parentheses were,

$$X_t = \text{COCOA (real GDP}_{t-1}, \text{PPG, PPIC)} + \text{NON-COCOA (EERX)}$$

where

PPG = Producer price of cocoa in Ghana deflated by the Rural Price Index

PPIC = Producer price of cocoa in Ivory Coast converted into cedis and deflated by the Rural Price Index

EERX = Price-deflated effective exchange rate facing exports.

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[17] The Ollennu Report (1967) also noted that "the whole of the country's import allocation of ¢160 million for 1964 had been indiscriminately issued out during the first quarter of the year" (p.10; para.62).

Since imported consumer goods ($\bar{YM}$) are subject to import licensing we treat them as exogenous. Hence, our effective savings, narrowly defined, becomes,

$$EFFESAV = X_t(\text{real GDP}_{t-1}, PPG, PPIC) - \bar{YM}$$

or $$EFFESAV = H(\text{real GDP}_{t-1}, PPG, PPIC).$$

Because the nominal producer prices are policy-determined parameters and the PPG and PPIC variables in our function are all deflated by a price index, we can simplify the effective saving function to,

$$EFFESAV = H(\text{real GDP}_{t-1}, \text{Price Index}).$$

We then specified a "Keynesian" formulation as,

$$\ln EFFESAV = a + b \ln \text{real GDP}_{t-1} + c \ln CPI + Dummy + u$$

where,

EFFESAV = Effective savings narrowly defined and adjusted for the Terms of Trade effect,

Dummy = 1 for 1962 (introduction of import controls), 1967 (change of government) and 1972 (also change of government).

Our results were,

$$\ln EFFESAV = \underset{}{-52.91} + \underset{(-6.77)}{7.92} \ln \text{real GPD}_{t-1} - \underset{(7.05)}{0.21} \text{CPI}_{t-1} + \underset{(-1.44)}{0.39} \text{Dummy} + \underset{(1.66)}{e}$$

$R^2 = 0.886$ Adjusted $R^2 = 0.857$

DW = 1.95 — zero auto-correlation (first-order rho = 0.0007)

No. of Observations = 16, Degrees of Freedom = 12, t-values in parentheses. This was a second-order auto-regressive model; rho was estimated by grid search (Cochrane-Orcut) with convergence set at 0.01.

The CPI and the Dummy co-efficients are significant at the 0.1 level. All others are significant at less than the 0.05 level. The real income co-efficient is 'significantly' large; a 1% drop in real income would reduce effective savings by 7.92%. Recall that over much of this period, 1957-74, real incomes in Ghana have either stagnated or declined. The

CPI co-efficient is rather low, contrary to our expectations. Nevertheless, its negative sign provides some evidence that domestic inflation has contributed towards the impairment of Ghana's effective capacity to save.

To summarize the contents of this chapter, we have shown that over much of the period under study, 1957-1974, Ghana's economy performed miserably with the possible exception of the first three years after independence. We attributed this poor performance to balance of payment crises originating from inadequate volumes of effective savings. On export expansion, we saw that the export sector is plagued by declining real producer prices and other inflation-related problems such as smuggling. On the flip side of the effective savings concept, we saw that the quantity of imported consumer goods allowed into the country was determined by the import control program. We treated this variable as administratively determined and hence exogenous although the controls failed and actual imports exceeded planned levels.

Thus, the variables in our effective savings function (the difference between export earnings and imports of consumer goods) are almost identical to those in our cocoa sales function and our empirical analysis suggested some sensitivity of effective savings to changes in real income and the domestic rate of inflation. The conclusion we reach is that domestic inflation has contributed to rob Ghana of scarce foreign exchange needed for investment. Is this inflation imported, structural or due to domestic causes? In the next chapter we review the inflationary processes in Ghana to answer this question.

CHAPTER 5: MONETARY ANALYSIS OF EFFECTIVE SAVINGS

A. ANALYSIS OF GROWTH IN THE MONEY SUPPLY, 1957-74

1. Sources of Growth

We saw in chapter 2, section C, that prior to 1960 the primary source of change in the money supply has been developments in the balance of payments and, in particular, changes in the net foreign assets of the banking system (Table 2.4). However, since 1960 the foreign source of change in the money supply has been superseded by internal sources.

In a pioneering work, Leith (1977) attempted to determine the relative contribution of disturbances from the foreign sector vis-a-vis the domestic sector to instability of the money stock. Employing a standard measure of instability, the β-coefficient used extensively in finance literature (e.g. Fama and Macbeth, 1973), he estimated the co-variance of the rates of change in the components of the base money stock with the total growth rate of the base money stock and divided by the variance of the base money stock. For example, if the growth rate of a particular component has zero co-variance with the growth rate of the base money stock, then it can be taken that it contributes nothing to the variability of the base money growth. On the other hand if the co-variance is negative one could regard it as an offsetting influence.

The components of the base money stock identified by Leith were

GD = Net claims on government and official enterprises,
FXR = Foreign exchange reserves = Net foreign exchange assets,
BC = Net claims on commercial banks and other financial institutions plus other net liabilities,
BM = Base money stock = GD + FXR + BC

His estimated variance, co-variance and the β-coefficients of the components are set down in the following table,

TABLE 5.1

VARIANCE, CO-VARIANCE AND β-COEFFICIENT OF BASE MONEY STOCK AND COMPONENTS, 1961-75.			
COMPONENT	VARIANCE	CO-VARIANCE WITH TOTAL	β-COEFFICIENT[(a)]
GD	0.0402	+ 0.0165	0.2759
FXR	0.0440	+ 0.0137	0.2291
BC	0.0388	+ 0.0242	0.4047
BM	0.0598		

Note:(a) β-coefficient is the co-variance of a component divided by the variance of BM (0.0598) or formally as

$$\beta = \left[\text{cov}(g_i, g_{BM})\right] / \sigma^2(g_{BM})$$

Source: Leith, 1977; Table 2, p.14.

The last column in the table suggests that the "principal sources of instability in base money stock growth has been BC, GD and FXR in decreasing order" (Leith, 1977;p.14).

Although Leith's conclusion with respect to the relative contribution of disturbances from the foreign sector vis-a-vis the domestic sector to instability in BM does not run contrary to our expectations, we have two reservations to raise. First, the nature of banking practices in Ghana disguises the "true" volume of primary money. The government and other public institutions use credit facilities at the Central Bank rather extensively. Furthermore, the peculiar nature of the discount mechanism in Ghana by which the commercial banks can discount government bills without penalty to augment their cash reserves implies that government bills are as good as cash.

Second, his BC term, perhaps inadvertently, includes items which should, more appropriately, be included in the GD term. Specifically, "other financial institutions" such as development banks are essentially government or public enterprises and should be included in the GD term. The problem is more complicated than this and it actually derives from inconsistencies in published data. The Bank of Ghana's net claims on the commercial banks, part of the private sector, have traditionally been zero except when their liabilities to the Central Bank stood at ¢12.8 million in December 1971 and ¢3.2 million in June 1972 (IMF, 1975; p.153, Table 22). But the Economic Surveys consistently report that the net credit by the Bank of Ghana to the private sector has been zero since 1965 (Economic Surveys, 1969-71; Appendix XII, p. 130 and 1972-74; Appendix XIII, p.157).[1] These observations, despite their inconsistencies, would imply a BC term which is close to zero or insignificant.

We attempted some rectifications in spite of the data limitations and their inconsistencies. The first issue of "true" volume of primary money was shelved altogether because its determination is quite likely to be complex using existing data and this would unduly detain us here. On the second issue however, central government, state enterprises and public institutions were lumped into one Total Public Sector (TPS) and the following was the results of our efforts for the years 1970-74 for which we have data.

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[1] Ahmad (1970) also laments that:

"Quite frequently, different issues of annual (Bank of Ghana) reports give different figures for the same item; and what is even worse, at times, different tables in the same issue show markedly different figures for the same item...In few cases, a closer examination of the inconsistent figures revealed the use of different concepts" (p.126-27).

TABLE 5.2

BASE MONEY AND COMPONENTS, 1970-74. ¢ MILLIONS.					
COMPONENTS	1970	1971	1972	1973	1974
FXR	-50.7	-175.0	-20.6	206.3	15.5
TPS	275.6	430.0	485.5	451.4	785.2
OTHER	-57.9	-78.4	-230.3	-388.7	-432.7
BM	167.0	176.6	255.8	269.0	368.0
Percentage of TPS in BM	165.0	243.5	189.8	167.8	213.4

FXR = Net foreign exchange assets = Gold, SDR holdings, foreign stocks and treasury bills, foreign currency and balances with banks abroad and other foreign assets minus deposits by foreign institutions and other foreign liabilities.

TPS = Net claims on the Total Public Sector = Ghana Government Securities, loans and advances to government, cocoa bills discounted, loans to development banks and public institutions minus deposits by government and public institutions.

BM = Currency in circulation.

Source: Economic Surveys, 1969-71; p.56 and 1972-74; p.75.

It was not possible to break down the "other" component. We suspected that the TPS would be even larger if the break-down was at all possible. Nevertheless, it is readily seen from the table that net claims on the TPS more than account for BM. Our estimated variance, covariance and the β-coefficients of the components are set down in the following table.

TABLE 5.3

VARIANCE, CO-VARIANCE AND β-COEFFICIENTS OF BASE MONEY AND COMPONENTS, 1970-74.			
COMPONENT	VARIANCE	CO-VARIANCE WITH TOTAL	β-COEFFICIENT
FXR	86.02	+6.33	1.48
TPS	37.83	+10.09	2.36
OTHER	12.85	-7.63	-1.78
BM	4.28		

The large numbers result directly from the smallness of our sample. Nonetheless, the last column indicates that the principal source of instability in currency in circulation has been the total public sector, followed by the foreign exchange reserves component. It is worthy of note that the "other" component has been stabilizing.

2. Deficit Financing

We have just seen that almost all of Ghana's primary money is based on net claims on the total public sector. This however belies the extent of indebtedness of the total public sector to the banking system as a whole. As the following table indicates this indebtedness has grown considerably since 1960.

TABLE 5.4

INDEBTEDNESS TO THE BANKING SYSTEM, 1959-1974. (YEAR-END FIGURES) ¢ MILLIONS.

	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
A. NET CREDIT BY BANK OF GHANA.																
1.To Central Gov't.	-2.6	-2.6	13.0	26.6	32.4	57.2	125.0	135.7	171.0	197.0	175.5	159.9	268.3	367.0	395.7	605.2
2.To Public Institutions	-	-	-	-	-	2.4	0.6	1.1	0.9	2.0	0.2	44.5	68.5	151.9	79.9	128.3
3.For Cocoa Finance	-	-	-	-	29.0	64.0	44.0	72.0	83.0	53.0	63.0	70.0	111.9	30.0	50.0	130.0
B. NET CREDIT BY COMMERCIAL BANKS																
1.To Central Gov't	-3.0	5.4	11.0	25.8	32.0	70.6	68.8	85.6	83.3	73.5	80.0	98.9	31.7	56.5	67.6	50.2
2.To Public Institutions	-	-	-	-	16.0	19.6	34.4	29.2	24.3	22.9	46.8	49.0	79.4	72.4	98.2	147.1
3.For Cocoa Finance	-	-	0.8	21.0	31.8	34.6	40.0	37.2	44.6	72.9	56.5	12.0	60.9	47.7	56.3	53.5
4.To the Private Sector[a]	-	21.0	53.6	40.0	35.8	32.0	50.8	59.3	60.5	66.6	91.6	126.2	175.2	174.1	187.1	255.9
GRAND TOTAL CREDIT[b]	-5.6	23.8	78.4	113.4	177.0	280.4	363.6	420.1	467.6	487.9	513.6	560.5	795.9	899.6	934.8	1370.2
% of Total Credit to Public Sector[c]	-	12	32	65	80	89	86	86	87	86	82	77	78	81	80	81
BUDGET DEFICIT[d]	-59	-62.6	-57.5	-93.5	-134.8	-120.7	-113.0	-133.8	-80.4	-128.9	-76.8	-74.2	-141.2	-229.2	-176.8	-512.7
Domestic Borrowing to Finance Deficit	NA	NA	NA	NA	131.58	82.70	101.16	111.83	51.20	71.13	42.04	57.37	82.52	100.25	69.20	487.73
DEFICIT FINANCING[e]	-	8.4	21.2	28.4	12.0	63.4	66.0	27.5	33.0	16.2	-15.0	3.3	41.2	123.5	39.8	192.1
% of Deficit Financing to Total Deficit	-	13	37	30	9	53	58	21	41	13	0	4	29	54	23	42

NOTES: (a) Pre-1963 data includes credit to Public Institutions and State Enterprises.

(b) Excludes Net Overseas Assets.

(c) Includes credit for cocoa financing.

(d) Deficit for 1974 includes ¢50 million negative balance on cash reserves.

(e) Deficit financing is defined as increase in credit by the Banking System to Central Government and public institutions, excluding cocoa.

SOURCES: Economic Surveys,
1969-71, Appendix XII; p.130.
1972-74, Appendix XIII;p.157.

The table reveals that from a small creditor position, the Central Government has become a mature debtor to the banking system at a very rapid pace. Its debt to the Central Bank in particular has grown astronomically.

Second, the proportion of banking credit allocated to the total public sector has irreversibly grown from 12% to a high of 89%. A sharp turn occurred in 1963 when Nkrumah's 7-Year Development Plan and socialist program were launched. This large allocation of credit to the public sector did result initially in small reductions in credit allocation to the private sector in 1962, 1963 and 1964. However, the private sector recovered in 1965 and since then has enjoyed increasing credit allocation.

Third, since 1957, the Central Government has consistently ran budget deficits which have been growing in magnitude over time. Over much of this period, there have been surpluses on the current account. Thus, it is the capital expenditures that have produced the deficits (see Table 4.5). In the latter part of the fifties, the government financed these deficits by running down both its cash and the country's foreign exchange reserves. By 1961, these reserves had been exhausted and the government turned to the banking system. In 1960 the percentage of the deficit financed by money creation was a mere 9%.[2] In the following year the percentage climbed to 37% and by 1965 as much as 58% of the deficit was so financed. The NLC regime (1966-69) brought about a

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[2]We have defined deficit finance as increases in borrowing by the government from the banking system. Technically speaking, a distinction should be made between borrowing from the Central Bank and from the commercial banks as the former increases the money supply but the latter may not. But, as explained in the next section, the conditions under which government borrowing may not have money-creating effects do not exist in Ghana.

reversal of this trend but after 1970 the old trend was re-established. Thus the period as a whole witnessed extensive banking credit to the government to finance its growing deficits.

B. DEFICIT FINANCE, MONEY AND PRICES: AN EMPIRICAL ANALYSIS

It is well known that borrowing from the Central Bank has an expansionary effect on the money supply since the fiduciary element is enlarged. However government borrowing from the commercial banks may not have any net money-creating effects if,

(i) The commercial banks are without any excess "primary" reserves. In this case, an increase in their credit to the government is offset by a decrease in their credit to the rest of the economy or the private sector.

(ii) Government borrowing from the commercial banks does not lead to an increase in their liquid assets, i.e. takes the form of permanent or quasi-permanent debt.

(iii) The Central Bank is either unwilling or unable to accomodate the commercial banks against the collateral of their holdings of government securities or that a truly penal rate discourages discounting of bills at the Central Bank.

These conditions do not exist in Ghana. As we saw in chapter 2, the commercial banks have generally carried excess reserves. Government borrowing from the banks has taken the form of treasury bill sales which have increased their liquid assets.[3] Furthermore, the absence of a penal rate has meant that the treasury bills are as good as cash.

The nature of banking practices in Ghana therefore suggests that, for a study of the inflationary processes in that country, one needs to

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[3] Except in 1963 when the government made an effort to fund ¢20 million worth of treasury bill holdings of the commercial banks into the Conversion Stock (1967-68). However, that this measure had little impact is reflected in the fact that in 1963 the banks managed to expand their credit by 25% (Ahmad, 1970;p.35).

focus directly on government finances because the banking system has been passive or accomodating to the financial exigencies of the government. Recall the statement by the Governor of the Bank of Ghana that "budget deficits have been the major source of inflation" in Ghana for the past decade (West Africa, December 19/26, 1977;p.2583). In fact, one can relate the entire money supply to government fiscal operations or to its debt to the banking system or even to its deficits.

There are two main ways in which the money supply may be related to government fiscal operations. By the "credit approach", an increase in the money supply is equal to the increase in government borrowing from the banking system (denoted by GB) plus increase in net non-government borrowing from the banking system (NGB) plus accumulation of foreign exchange reserves by the banking system (FXRB) plus increase in the capital accounts of the banking system (BCA)[4] i.e.,

$$\Delta M^S = \Delta GB + \Delta NGB + \Delta FXRB + \Delta BCA$$

The second is the "money multiplier" approach which is used in this study because of its simplicity. By this approach the money supply is related multiplicatively through the money multiplier, m, to the base money stock, MB,

$M^S = mMB$ where $m = \frac{1 + c}{c + l + r}$, c is the currency drain, l is the liquid asset ratio and r is the cash ratio. In view of the general excess liquidity position of the commercial banks it is not very useful to estimate m or assign it a central role in the analysis.

The stock of base money is identical to the net foreign exchange assets or reserves of the Bank of Ghana, plus net claims on the total

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[4] For the adoption of such an approach see Ahmad (1970), pp.47-52.

public sector plus net claim on the commercial banks. Hence,

$$MB = TPS + C + FXR$$

where, TPS = Net claims on the total public sector,

C = Net claims on the commercial banks,

FXR = Net foreign exchange assets of the Bank of Ghana.

In view of the fact that TPS has been the principal source of instability in the base money stock, we can express base money stock solely in terms of TPS and write BM as a multiple (σ) of TPS (see eq. 7d, chapter 3).

$$MB = m\sigma TPS$$

Hence,

$$M^S = m\sigma TPS$$

Or we may argue that increases in net govenment indebtedness to the Bank of Ghana really reflect deficit finance. In which case, the base money stock may be related directly to accumulated budget deficit (BD) as,[5]

$$MB = dBD$$

Therefore,

$$M^S = mdBD$$

Or,

$$M^S = kBD^6 \qquad \text{.....Equation 5.1}$$

We tested equation 5.1 by running the regression,

$$M^S = a + kBD + Dummy + u$$

The dummy was set equal to unity for the years a change in government was effected.

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[5]For a model in which an increase in the fiscal deficit is assumed to result in an equal change in the stock of high-powered money, see Aghevli and Khan (1978).

[6]We have suppressed the parameters m and d because they are not of direct usefulness in this analysis.

Our results were,[7]

$$M^s = 74.15 + 1.47BD + 49.60Dummy + e$$
$$\quad\quad (2.70) \quad (8.37) \quad (2.70)$$

$R^2 = 0.82$

D.W.= 2.07 — zero auto-correlation (first-order rho = -0.053)

Number of Observations = 19

Degrees of Freedom = 16, t - values in parentheses.

The BD co-efficient is significant at the 0.005 level. The rest of the co-efficients are significant at the 0.01 level. The conclusion that emerges is obvious; a ¢1 budget deficit would increase the Ghanaian money supply by ¢1.47.

Having established a significant relationship between the money supply and the government's fiscal operations, we now turn to the inflationary processes in Ghana. We postulate that the demand for nominal money balances is a function of the level of real income and the opportunity cost of holding assets in the form of money. In Ghana where a broad range of financial assets do not exist for money holders the relevant opportunity cost may be taken as the rate of return on physical assets or goods — namely the domestic price level.[8] Thus,

$$\ln M^d = b \ln y + \ln P$$

where,

y = real income,

P = domestic price level.

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[7]The equation was also estimated in a log-linear form giving the results, $\ln M^s = 1.5 + 0.83 \ln BD + 0.36 Dummy + e$ (2.38) (5.77) (1.55)
$R^2 = 0.8010$ and D.W. = 1.83 (zero auto-correlation; first-order rho = 0.04).

[8]Alternatively, we could have used the rate of inflation or the expected rate of inflation as the relevant opportunity cost of holding money (Aghevli and Khan; 1978). This however would have resulted in a non-linear model. One could linearize about the sample means using Wymer's (1976) technique but the procedure would have complicated the analysis excessively.

In view of the absence of alternative financial instruments and the considerable degree of currency hoarding we have not postulated any stock adjustment process for the demand for money.[9] Since the demand for money is intimately bound up with saving decisions, currency hoarding introduces the possibility of rapid adjustment of the desired stock of money balances to the actual stock. The meaning of this can be clarified using the following stock adjustment process whereby the current demand for money balances is assumed to adjust proportionately to the logarithmic difference between the desired and the actual stock, i.e.,

$$\ln M^d = \lambda(\ln M^* - \ln M_{t-1})$$

where,

M^* = Desired stock of money balances,

M_{t-1} = Actual stock,

λ = Co-efficient of adjustment.

In the Ghanaian case of extensive currency hoarding, λ would be close to unity, indicating a fairly rapid adjustment. Using the equilibrium condition, $M^d = M^s$, and that $\lambda \approx 1$, solving for P we would have,

$$P = M^s_{t-1} - by_{t-1} + u_t \qquad \text{.....Equation 5.2.}$$

All variables are in natural logarithms.

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[9] As Ahmad (1970) states,

"A cocoa farmer, for example, might hoard part of his receipts as a safeguard against failure of the next crop. A farm worker might decide to keep his savings in the form of idle cash either because of the absence of banking facilities in the rural areas or because of the cumbersome procedure for opening and operating a savings account or simply due to his mistrust of financial institutions. In the urban areas, on the other hand, savings of factory workers and low-grade civil servants may not always find their way to the banking system because of the fear that relatives, tribal 'brothers' and friends might easily come to know about these funds and ask for financial assistance. In the case of petty traders, tax evasion might be the main motive for holding savings in the form of notes and coins" (p.69)

Equation 5.2 states that the domestic price level is determined by the actual level of real income and the actual stock of money. We estimated this relation and our results were,

$$\ln P = 3.69 + 0.98 \ln M_{t-1} - 0.54 \ln y_{t-1} + e$$
$$(1.13) \quad (4.63) \quad (-0.92)$$

$R^2 = 0.94$

D.W. = 1.82 — zero auto-correlation (first-order rho = 0.031)

Number of Observations = 15

Degrees of Freedom = 12, t-values in parentheses.

The M_{t-1} co-efficient is significant at the 0.005 level. The y_{t-1} co-efficient however is significant at only the 15% level of confidence. This comes as no surprise as real income in Ghana has been stagnant over much of the 1957-74 period. Nevertheless, the significance of the M_{t-1} co-efficient (elasticity of P with respect to M_{t-1}) is that a 10% increase in the actual stock of money would increase the domestic price level by 9.8%, or 10% which is an astonishing quantity theory of money result! Evidently, inflation in Ghana is not of the "imported" variety but rather caused by excess liquidity (M_{t-1})

In fact, we can say more than this. Recall that in equation 5.1 we related the stock of money to the budget deficit (BD) and we estimated the elasticity of the stock of money with respect to the budget deficit as 0.83 (footnote 28). Therefore, the elasticity of P with respect to BD equals 0.98(0.83) = 0.81. Hence, a 10% increase in the budget deficit would raise domestic prices by 8.1%. What are the developmental or growth consequences of persistent budget deficits?

C. DEFICITS, MONEY AND GROWTH

In the previous section we established that government deficits (and borrowing from the Central Bank to finance them) increase the money supply and raise prices. In the previous chapter we established a link between domestic inflation, effective savings, investment and economic growth. To investigate the growth consequences of persistent budget deficits therefore we need to bring these two together, i.e., integrate the commodity and the money markets as we did in chapter 3, section B.8 (the complete theoretical model). It may also be recalled from that section that when such an integration is attempted unstable and explosive circles of budget deficits, inflation, export and real income stagnation become possible. Here we investigate the possibilities of such vicious circles in Ghana.

1. The Complete Model: money-prices-effective savings-growth link

The equations estimated so far, in chapters 4 and 5 are the following,

$$\text{(1a)}\quad \text{Real GDP} = 65.63 + 0.99\,\text{Real GDP}_{t-1} + 0.098\,I_{t-1} - 68.58\,\text{Dummy}$$
$$R^2 = 0.95 \qquad (0.65)\quad (18.51) \qquad (0.33) \qquad (-1.69)$$

$$\text{(1b)}\quad \ln \text{COCOA} = -11.50 + 2.26 \ln \text{Real GDP}_{t-1} + 0.79 \ln \text{PPG} - 0.65 \ln \text{PPIC} - 0.12\,\text{Dummy}$$
$$R^2 = 0.98 \qquad (-5.94)\quad (9.31) \qquad (4.48) \qquad (-3.64) \qquad (-2.02)$$

$$\text{(1c)}\quad \ln \text{EFFESAV} = -52.91 + 7.92 \ln \text{Real GDP}_{t-1} - 0.21 \ln \text{CPI}_{t-1} + 0.39\,\text{Dummy}$$
$$R^2 = 0.89 \qquad (-6.77)\quad (7.05) \qquad (-1.44) \qquad (1.66)$$

$$\text{(1d)}\quad M^s = 74.15 + 1.47\,\text{BD} + 49.60\,\text{Dummy}$$
$$R^2 = 0.82 \qquad (2.70) \qquad (8.37) \qquad (2.70)$$

$$\text{(1e)}\quad \ln \text{CPI} = 3.69 + 0.98 \ln M^s_{t-1} - 0.54 \ln \text{Real GDP}_{t-1}$$
$$R^2 = 0.94 \qquad (1.13) \qquad (4.63) \qquad (-0.92)$$

A major theme of this thesis is that excess liquidity, caused by mounting budget deficits, fuels domestic inflation which impairs the country's capacity to earn foreign exchange (effective savings). This in turn constricts the country's ability to invest and the real rate of growth suffers. From the previous section the elasticity of the domestic price level (P or CPI) with respect to budget deficits (BD) was found to be 0.81. From equation (1c) on the previous page, the elasticity of effective savings (EFFESAV) with respect to CPI is -0.21. Therefore, ceteris paribus, the elasticity of EFFESAV with respect to BD is -0.17, suggesting that a 10% increase in the budget deficit would reduce EFFESAV by 1.7%. However, this is a "partial" and unsatisfactory way of testing the validity of the theme using the above questions estimated by ordinary least squares (OLS).

To do this satisfactorily, it is necessary to modify some of the equations and cast them in a system of simultaneous equations in view of the inter-dependence that exists among many of the endogenous variables. From chapter 3, section B (equation 8a), we had the following system of differential equations,

$$
\begin{aligned}
& Dy = -\rho y + \rho\beta(X - \gamma M) \\
(1f)\quad & DX = \mu(PP - P) - \mu X \\
& P = m\sigma TPS - by
\end{aligned}
$$

The first two equations of the system represent the commodity market and correspond to equations 1a to 1c (on the previous page) with two exceptions. First, 1a has I_{t-1} instead EFFESAV as an explanatory variable in the real GDP equation. As we shall argue shortly it makes little difference whether I_{t-1} is substituted for EFFESAV or vice versa. Second, equation 1c does not appear in the system 1f. This is because if we treat imported consumer goods as exogenously determined equations 1b and 1c cannot be regarded as independent of one another (see chapter 4, section D).

That is, cocoa, the bulk of Ghana's exports is already subsumed under 1c. Furthermore, in chapter 4, section C, we found that the explanatory variables in the EFFESAV function were almost identical to those in the cocoa function. Thus, either the first two equations in 1f or the first equation in 1f plus 1c may be used as representative of the commodity market.

The final equation 1f corresponds to the money market which is represented by our estimated equations 1d and 1e. Equation 1d can be substituted into 1e and the resultant equation would express CPI (or P) as a function of budget deficits (BD) and real GDP_{t-1}. This resultant equation is the same as the last equation in system 1f. In the previous section we argued that the money supply can either be related to budget deficits or net Central Bank claims on the total public sector (TPS) since increases in TPS can be taken to reflect deficit finance (footnote 5).

On the basis of the arguments above several multi-equation systems are possible. One such possibility is the following,

(1g) $\ln \text{real GDP} = \ln \text{real GDP}_{t-1} + \ln \text{EFFESAV} + \text{Dummy}'$

(1h) $\ln \text{EFFESAV} = \ln \text{real GDP}_{t-1} + \ln \text{CPI}_{t-1} + \text{Dummy}$

(1i) $\ln \text{CPI} = \ln M^{s}_{t-1} - \ln \text{real GDP}_{t-1} + \text{Dummy}$

Equation 1g corresponds to the first equation in 1f. Either 1b or 1c can be used for the second equation (1h). 1c was chosen because EFFESAV appears explicitly in 1g. For the third equation, CPI may be expressed in terms of real GDP_{t-1} and M^{s} (1e) or BD (substituting 1d into 1e) or TPS (last equation in 1f). We retained 1e for simplicity.

The large number of lagged endogenous variables makes this system over-identified and therefore permits the use of Three Stage Least Squares (3-L) to minimize the simultaneity bias embedded in the system. Note also the lagged dependent variables make the system inherently dynamic.

Our estimation results were,

$$(g') \quad \ln \text{Real GDP} = \underset{(4.64)}{0.93 \ln \text{Real GDP}_{t-1}} + \underset{(0.10)}{0.003 \ln \text{EFFESAV}} - \underset{(-0.62)}{0.02 \text{Dummy}}$$

$$(h') \quad \ln \text{EFFESAV} = \underset{(6.93)}{7.79 \ln \text{Real GDP}_{t-1}} - \underset{(-1.51)}{0.24 \ln \text{CPI}_{t-1}} + \underset{(1.09)}{0.40 \text{Dummy}}$$

$$(i') \quad \ln \text{CPI} = \underset{(4.77)}{0.92 M^{s}_{t-1}} \underset{(-0.92)}{-0.47 \ln \text{Real GDP}_{t-1}} + \underset{(1.02)}{0.07 \text{Dummy}}$$

System $R^2 = 0.9897$

Number of Iterations = 10, Convergence Tolerance set at 0.01.

Number of Observations = 16,

Degrees of Freedom = 9.

These results may be compared with those estimated using OLS above. In the first equation (GDP), the 3-L co-efficients and t-values are consistently lower than the single equation estimates although the differences are not large. The 3-L estimates are also lower for the third equation (i). However they are higher for the second equation. In general, the differences are slight.

The formal meaning of goodness-of-fit statistics is not very clear when using 3-L methods.[10] In any case, the t-values given the 3-L are not radically different from those by the single equation techniques except for the EFFESAV co-efficient in equation (g'). The t-value of 0.10) is extremely low even by single equation standards. This was expected in view of the fact that EFFESAV was substituted for I_{t-1} in

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[10] Tests of significance should be based on an asymptotic normal distribution rather than the commonly-used t-distribution. Furthermore, tests for auto-correlation have no significance in simultaneous models (see Aghevli and Khan, 1978; pp 395n and 396n). At any rate, the Durbin-Watson test statistics in the individual equations did not indicate an auto-correlation problem.

the original equation. Actually it is not really esential for our study whether I_{t-1} is retained or effective savings (investment finance) is substituted since the substitution makes no difference. One reason is that the I_{t-1} co-efficient itself was originally found to be non-significant if it may be recalled from chapter 4, section A.2. The other is that Ghana throughout this period invested more than its effective savings through extensive use of suppliers' credit of questionable nature and in the process heavily mortgaged its future income. Thus, in view of Ghanaian propensity to invest in un-productive "prestigious" projects, one can hardly expect EFFESAV or I_{t-1} to be significant under these circumstances. This however does not imply that effective savings or investment are irrelevant for real income growth. Much as we stressed the adequacy of effective savings, we have also emphasized the efficient use of investment finance in the development process (see chapter 6). It is instructive to quote Friedman (1957) at this juncture.

> "Perhaps the crucial role that has been assigned to the savings ratio in economic development should be assigned instead to the factors determinimg the <u>form</u> in which wealth is accumulated; to the investment rather than the savings process as it were" (p.236). (Emphasis ours).

On technical grounds, however, the substitution of EFFESAV for I_{t-1} could lead to a specification error. A peculiarity of the 3-L method is that a specification error in any one equation is carried over into the estimation of all other equations in the system. Consequently, the estimated co-efficients in such a system would turn out to be biased and inconsistent (Huang, 1970;p.240). A comparison between our 3-L and OLS estimates reveals no such bias or inconsistency. Thus no mis-specification appears to be involved with the EFFESAV substitution. This serves to strengthen our position that it is not only the level but also the <u>use</u>

to which effective savings is put that seems to be important.

Nevertheless, the link from the money supply to effective savings seems complete and satisfactory. We may now investigate the effect of say an increase of ¢1 million in the budget deficit or the money supply on the endogenous variables in the system. To do this we need to modify the system again for two reasons. First, the lagged endogenous variables make the system dynamic and since we are not at present interested in its dynamic behavior or time paths we drop all t-1 subscripts (similar to steady state analysis). This will make the money supply the only exogenous variable together with the dummies which may be dropped for convenience. Second, the estimated equations in the system have not been expressed in a reduced form, i.e., dependent variables expressed explicitly in terms of the exogenous variables. To derive the reduced form, we write the system of equations in matrix form,

$$\begin{bmatrix} \text{Real GDP} \\ \text{EFFESAV} \\ \text{CPI} \end{bmatrix} = \begin{bmatrix} 0.93 & 0.003 & 0.0 \\ 7.79 & 0.0 & -0.24 \\ -0.47 & 0.0 & 0.0 \end{bmatrix} \begin{bmatrix} \text{Real GDP} \\ \text{EFFESAV} \\ \text{CPI} \end{bmatrix} + \begin{bmatrix} 0.02 & 0.0 & 0.0 \\ 0.0 & 0.4 & 0.0 \\ 0.07 & 0.0 & 0.9 \end{bmatrix} \begin{bmatrix} \text{Dummy} \\ \text{Dummy} \\ M^S \end{bmatrix}$$

This matrix system can be written compactly as,

$$Y = \tilde{\beta}Y + \tilde{\Gamma}X$$

where,

Y = Vector of endogenous variables,

X = Vector of exogenous variables.

The tildre denotes estimated co-efficients.

The reduced form expresses the Y-vector in terms of the X-vector. Transposing we have,

$$I - \tilde{\beta}Y = \tilde{\Gamma}X$$

where I is an identity matrix of order 3x3.

Hence the reduced form,

$$Y = \left[I - \tilde{\beta}\right]^{-1} \tilde{\Gamma} X$$

$$\left[I - \tilde{\beta}\right]^{-1} = \begin{bmatrix} 0.93 & 0.003 & 0.0 \\ -374.54 & 0.0 & 5.26 \\ 0.0 & 4.13 & 6.85 \end{bmatrix}$$

$$\left[I - \tilde{\beta}\right]^{-1} \tilde{\Gamma} = \begin{bmatrix} 0.14 & 0.0 & 1.96 \\ -6.37 & 0.0 & 4.84 \\ 0.45 & 1.65 & 6.30 \end{bmatrix}$$

Therefore the reduced form is,

$$Y = \begin{bmatrix} 0.14 & 0.0 & 1.96 \\ -6.37 & 0.0 & 4.84 \\ 0.45 & 1.65 & 6.30 \end{bmatrix} \begin{bmatrix} \text{Dummy} \\ \text{Dummy} \\ \text{Money Supply} \end{bmatrix}$$

Now the entries in $\left[I - \tilde{\beta}\right]^{-1} \tilde{\Gamma}$ give one-shot effects of the exogenous variables on the endogenous <u>after</u> the inter-dependency in the system is taken into account. For example, the effect of say a ¢1 million increase in the money supply may be investigated by setting the dummies equal to zero and $M^S = 1$ and post-multiplying as,

$$Y = \begin{bmatrix} 0.14 & 0.0 & 1.96 \\ -6.37 & 0.0 & 4.84 \\ 0.45 & 1.65 & 6.30 \end{bmatrix} \begin{bmatrix} 0.0 \\ 0.0 \\ 1.0 \end{bmatrix} = \begin{bmatrix} 1.96 \\ 4.84 \\ 6.30 \end{bmatrix}$$

According to this system, an increase of ¢1 million in M^S would raise the domestic price by 6.3%, reduce effective savings by ¢4.8 million and real income by about ¢2.0 million. Thus we arrive at an un-orthodox conclusion that increases in the money supply may cause declines in real income (a non-neutrality of money doctrine). A similar conclusion was reached by Franco (1979) and we describe his analysis below.

Franco's (1979) system contained the following 4 linear equations with 4 endogenous variables and 5 pre-determined variables, 2 of which are lagged endogenous variables.

$$(1j) \qquad Y = vM_s$$

$$(1k) \qquad M_s \equiv D + F$$

$$(1l) \qquad F \equiv F_{-1} + (X - M) + K$$

$$(1m) \qquad M = u_o + u_1 Y + u_2(F_{-1} - F_{-2})$$

where,

Y = Gross domestic product,
M_s = Money supply,
D = Domestic credit,
F = Net foreign assets,
F_{-1} = F lagged one year
F_{-2} = F_{-1} lagged one year,
X = Exports,
M = Imports,
K = Net capital inflows,
v = Velocity of money,
u_1 = Marginal propensity to import,
u_2 = Impact coefficient of changes in net foreign assets lagged on imports.

v, u_o, u_1, and u_2 are all parameters assumed constant. The endogenous variables are Y, M_s, F and M and the pre-determined variables are D, F_{-1}, F_{-2}, X and K.

By substitution, net foreign assets, F, is derived as,

$$F = \frac{-u_o + (1 - u_2)F_{-1} + u_2 F_{-2} + X + K - u_1 vD}{1 + u_1 v}$$

Differentiating F with respect to D yields $\frac{-u_1 v}{1 + u_1 v}$ which Franco calls the "domestic credit multiplier on the balance of payments".

His estimated values of u_1 and v are 0.15 and 3.93 respectively. Substitution of these values into his credit multiplier yields,

$$\frac{\delta F}{\delta D} = \frac{-u_1 v}{1 + u_1 v} = -\frac{0.59}{1.59} = -0.37$$

"which implies that a ¢1 million increase in domestic credit will lower reserves by ¢370,000 (ceteris paribus)" (Franco, 1979; p.211).

As a comparison, a ¢1 million increase in the money supply reduces EFFESAV by ¢4.8 million in our model.[11] The reduction in EFFESAV is greater because its narrow definition (export earnings minus imported consumer goods or $X - \gamma M$) excludes external reserves and capital inflow whereas these items are included in Franco's definition of F (equation 11). Positive levels of external reserves and capital inflow would cushion considerably the ¢4.8 million reduction in EFFESAV.

In any case, an increase in the money supply reduces the availability of foreign exchange needed for investment. Surprising as it may seem on the surface, this conclusion is really inevitable in view of the fragile

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[11] The ultimate effect of a ¢1 million increase in domestic credit on the money supply would depend upon the liquidity position of the commercial banks and the source of that credit. If the commercial banks are fully loaned-up then increased credit would have no effect on the money supply as it would entail a corresponding decrease in credit to some other sector. For example, if the credit is extended to the government sector then the credit to the private sector would be reduced. Secondly, if the increase in credit is granted by the Central Bank it would increase high-powered money (or the money base) and thus have an additional multiple expansion on commercial banks' credit. Thirdly, if the source of the credit is the commercial banks and they are carrying excess cash reserves then an increase in credit to the government would not only increase the money supply but also increase liquidity to the extent that government securities are fully re-discountable at the Central Bank for cash or primary reserves (see chapter 2, section C).

For purposes of comparison however, these caveats may be ignored and a ¢1 million increase in domestic credit may be assumed equal to a ¢1 million increase in the money supply.

structure of the Ghanaian economy, the nature of banking system and economic policies in Ghana. Due to the absence of financial instruments, an excess supply of money generates an excess demand for commodities, not an excess demand for bonds, driving up bond prices and hence lowering interest rates as assumed in conventional macro-economic theory. On account of domestic supply rigidities and import controls, an excess demand for commodities drives up prices in the short-run. The resulting inflation, with producer prices of export cash crops lagging behind, encourages export producers to engage in activities detrimental to the state of the economy, i.e., curtail sales and/or smuggle out the produce.

The chain of causation as we have implicitly postulated runs as follows: budget deficit → money supply increase → inflation → effective savings crises → real income decline (four links in the transmission mechanism). It is quite possible to tamper with the links in such a way as to ameliorate the negative effects of monetary expansion on real income. We examine these possibilities.

The first link may be broken or partially blocked if the government resorts less to borrowing from the banking system to finance its deficits. This naturally suggests borrowing from the public as a non-inflationary alternative. But the scope for this alternative is quite limited in view of the rudimentary nature of the market for government securities. If borrowing from the public is not feasible then the only other alternative left is to reduce the budget deficit or government expenditures. But this prospect would be anathemous to Ghanaian governments dedicated to socialist programs and objectives. The following table is a helpful illustration.

TABLE 5.5

CENTRAL GOVERNMENT EXPENDITURE[(a)] CLASSIFIED BY FUNCTION. ¢ MILLIONS.
(Percentage Increases in Parentheses).

	1969	1970	1971	1972	1973	1974
General Services	125.8	130.4(+ 3.7)	141.9(+ 8.8)	143.5(+ 1.1)	160.8(+12.1)	245.6(+52.7)
Community Services	29.8	35.6(+19.5)	45.8(+28.7)	46.0(+ 0.1)	45.9(0.0)	74.4(+62.1)
Social Services	131.4	150.6(+14.6)	165.0(+ 9.6)	189.3(+14.7)	242.0(+27.8)	356.9(+47.5)
Economic Services	52.2	76.7(+46.9)	68.5(-10.7)	68.9(+ 0.1)	61.2(-11.2)	88.4(+44.4)
Other Expenditure	31.1	41.4(+33.1)	39.6(- 4.3)	57.3(+44.7)	43.1(-24.8)	77.6(+80.0)
TOTAL EXPENDITURE	370.3	434.7	460.8	505.0	553.0	843.0

Notes: (a) Aggregate of current and capital expenditures.

Source: Economic Survey, 1972-74; p.23, Table 2.3.

TABLE 5.6

PERCENTAGE DISTRIBUTION OF GOVERNMENT EXPENDITURE.

	1969	1970	1971	1972	1973	1974
General Services	33.9	30.0	30.8	28.4	29.1	29.1
Community Services	8.0	8.1	9.9	9.1	8.3	8.8
Education	21.7	21.5	22.8	21.7	21.3	21.2
Other Social Services	14.0	13.3	13.0	15.8	22.5	21.2
Economic Services	14.0	17.6	14.9	13.6	11.0	10.5
Other Expenditure	8.4	9.5	8.6	11.4	7.8	9.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Source: Economic Survey, 1972-72; p. 24, Table 2.4.

As can be seen from Table 5.5 expenditures on general, community and social services have increased the most. Notice that expenditure on economic services (agriculture, non-mineral resources, fuel, power, transportation, storage, communications etc.) actually fell after 1970, lending support to our contention that agriculture and other directly-productive activities have fallen into neglect over much of this period.

Table 5.6 shows that expenditures on General Services (civil service defence, justice and police) and Social Services (education, health, social security, special welfare services and other social services) account for the bulk of government expenditures. It can also be seen from that table that the single item that takes the largest chunk (1/5) of government expenditures is education.

Now, returning to the prospect of curtailing general government expenditures. When Busia attempted to cut general services by reducing the civil service by 568 ("Apollo 568") and cutting defence expenditure, he was thrown out of office by Acheampong. Political dangers preclude curtailing expenditures on general services. Reducing expenditure on economic service would adversely affect the pace of development, leaving us with only community and social services.

Besides being anathemous to the spirit of elitism, educational cuts may provoke student riots. The curtailment of community and social services may run contrary to the government socialist ideology. It has been argued elsewhere that socialism is inapplicable to Black Africa and its timing is pre-mature (Fallers, 1963; Andreski, 1969 and Lofchie, 1971). It has also been argued that the doctrine is incongrous with socio-political realities (Lofchie, 1971).

The second link (money supply increase ⟶ inflation) may be pre-empted if the supply of commodities increase fast enough to absorb the excess money supply. The supply of goods may be increased through imports but we rule out this foreign possibility because, ceteris paribus, more imports of consumer goods would mean less imports of investment goods. Thus, we are left with the domestic possibilities of increasing the supply of goods by the country's import-substituting (I-S) industries and by the agricultural sector. Agriculture features prominently in this analysis because as the following tables show run-away inflation in local food prices has been the main driving force behind price increases in Ghana.

TABLE 5.7

WEIGHTS OF ITEMS IN THE CONSUMER PRICE INDEX FOR 1974.

	NATIONAL WEIGHTS	URBAN WEIGHTS	RURAL WEIGHTS
Local Food	52.1	50.52	52.55
Imported Food	3.0	4.43	2.49
Drink & Tobacco	5.3	4.56	5.57
Fuel & Light	8.0	4.88	8.94
Clothing	13.8	11.69	14.51
Health & Hygiene	4.4	3.81	4.52
Transport/Communications	3.5	4.68	3.10
Durable Goods	1.5	1.54	1.53
Rent	2.2	7.09	0.73
Miscellanous	6.2	6.80	6.06
TOTAL	100.0	100.0	100.0

Source: Economic Survey, 1972-74;p.130, Table 9.2.

Table 5.7 shows that local food accounts for more than all the other items aggregated by weight in the computation of the price indices. The next table shows that in 6 years (1960-66) the national index for local food alone had doubled.

TABLE 5.8

NATIONAL INDICES OF RETAIL PRICES, SELECTED ITEMS AND YEARS, 1960-74. (1960 = 100)
(Rural Indices in parentheses)

	1960	1966	1970	1972	1974
1. Local Food	100	199.0 (204.1)	210.0 (216.3)	259.4 (263.0)	362.7 (358.7)
2. Imported Food	100	130.3 (127.0)	150.1 (146.5)	184.4 (174.8)	271.9 (259.4)
3. Drink & Tobacco	100	137.9 (138.7)	145.7 (145.0)	169.0 (166.2)	218.5 (221.3)
4. Fuel & Light	100	154.1 (154.7)	169.7 (172.0)	194.3 (195.6)	285.3 (285.3)
5. Clothing	100	148.1 (147.9)	186.8 (186.1)	206.5 (207.9)	386.3 (286.4)
6. Health & Hygiene	100	142.5 (142.7)	170.9 (170.1)	212.4 (217.7)	295.8 (318.4)
7. Durable Goods	100	154.2 (154.7)	189.6 (191.2)	236.6 (236.5)	350.9 (355.5)
TOTAL	100	171.4 (174.7)	188.5 (192.4)	226.7 (228.9)	315.3 (316.1)

SOURCE: Economic Surveys, various issues.

Table 5.8 merits careful examination. First, not only was the local food price index consistently higher than the indices of all items by 1972, but also the rural local food price index has been higher than the national for all years except 1974. Second, the rural price index for imported food — the so-called "essential" commodities — has been consistently lower than the national index for all years since 1960. This would tend to support our claim that the "essential" commodities are really essential to the elites of the urban areas. Third, that the total consumer price index for the rural areas has been consistently higher than the national index for all years since 1960 has certain implications for models of rural-urban migration. The table clearly demonstrates that it has been generally more expensive to live in the rural areas and would suggest that the rural-urban migrants, at least in Ghana, have been responding to adverse economic conditions. Fourth and finally, notice that nothing changed much after 1966 (i.e. after Nkrumah) as far as the local food price index was concerned.

The bulk of local food-stuffs is produced by the peasant agricultural sector. But as we shall see in the next chapter, this was the sector consistently neglected by Ghanaian governments. We shall also see in that chapter that wringing more output from Ghana's I-S industries is like flogging a dead horse. The failure of I-S industries and the neglect of the agricultural sector meant that the country was left with little to absorb the excess supplies of money.

The third link (inflation $\longrightarrow$ effective saving crises) may be averted if producer prices of export cash crops are increased in step with inflation. Recall that in the development model sketched in chapter 3, section B.8, the system was neutral with respect to equi-

proportionate changes in the producer price of cash crops and the absolute price level. In addition to raising producer prices there is also a need for adequate non-price incentives by way of government assistance and encouragement to export producers. Again as we shall see in the next chapter, not only were Ghanaian governments reluctant to raise producer prices but also their policies were vasillatory and frustrating to producers.

Finally, the fourth link (effective saving crises $\Longrightarrow$ real income decline) may be pre-empted by attracting foreign investment and borrowing from abroad. These possibilities of raising effective savings however lie outside the scope of this thesis.

In concluding this section, we see that the Ghanaian polico-economic situation is such that unrestrained budget deficits operate through a transmission mechanism to precipitate export as well as real income stagnation. This is not to suggest that there are inherent flaws with budget deficits and monetary expansion as the basis of economic policy. Rather the safeguards needed to permit their efficacious use are lacking in Ghana.

2. The Deficit-Inflation-Stagnation Nexus

So far in our analysis we have treated the budget deficit as exogenous or autonomous and that the deficit $\Longrightarrow$ money supply $\Longrightarrow$ inflation $\Longrightarrow$ stagnation causation process as uni-directional. Quite recently however a number of studies have indicated that it is more appropriate to view causation as running both ways between money and prices.[12]

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[12] The following are a sample of the growing literature on this two-causality; Olivera (1967), Dutton (1971), Sargent and Wallace (1973), Frenkel (1977), Jacobs (1977) and Aghevli and Khan (1978).

The argument is that the budget deficit itself may be endogenous, influenced by the level of domestic prices. As inflation proceeds, the government may need to spend more either to maintain the level of its real consumption or to extract, or attempt to extract, more resources at a faster rate than was sustainable at the previous rate of inflation. Since tax proceeds (or revenue generally) notoriously lag behind increases in incomes (income inelastic), such an attempt may result in larger deficits providing added fuel for the next round of inflation.

A second argument advanced by Mansfield (1980) is that "in some developing countries, tax systems are generally not progressive, nor is collection efficient, so real tax revenue tend to decline under inflationary conditions" (p.31). We take a closer look at Mansfield's work because he applied it to Ghana with interesting results.

His argument rests on the fact that,

> "Many developing economies are 'controlled' in the sense that certain key prices - which also tend to be important in determining certain tax bases - are often set by the authorities and may rise much more slowly than the general price level. Certain sectors of these economies, moreover, typically bear a heavy burden of taxation. Taxes on foreign trade, for example, and sales and excise taxes are important sources of revenue - with the bulk of excise revenue often coming from a few products, such as beverages, tobacco, and fuel" (p.32).

Under inflationary circumstances, these "key" prices or sectors do not maintain their value with the result that, first, inflation, when accompanied by an over-valued exchange rate (as is often the case) leads to a decline in the foreign trade tax base. Second, inflation, when accompanied by domestic (price) controls (again, as is often the case) leads to a decline in the sales and excise tax base,

Over-valuation of the exchange rate encourages imports and discourages exports which would tend to expand the foreign trade tax base since imports are generally more heavily taxed than exports. However, licensing restricts

imports so that as inflation accelerates the combination of import controls and an over-valued exchange rate leads to a decline in the foreign trade tax base.

The erosion of sales and excise tax base may occur when the prices of certain necessities are controlled - generally in order to control the consumer price index, and thereby to control wages. As inflation accelerates, price controls are extended to a wide variety of domestic goods. "Since excise and sales taxes are typically based on "official" rather than "market" prices, and since the prices of controlled items by definition rise at a lower rate than general inflation, it may be expected that excise and sales tax revenue will also become smaller as a share of GDP" (Mansfield, 1980;p.32).

Applying this analysis to Ghana, Mansfield observed that between 1969 and 1978 total government tax revenue as a share of GDP fluctuated but showed a definite downward trend. "Revenue reached a high of 20.5% of GDP in the fiscal year 1970/71, fell to 15.5% in 1974/75, and dropped more sharply in the period of accelerating inflation after 1974/75" (Mansfield, 1980;p.32). He attributed this falling tax ratio to slower rate of growth of tax bases tied to controlled prices on domestic goods and import prices set at a fixed official exchange rate. Furthermore, he noted that particularly after the 1974/75 fiscal year both the foreign trade and excise tax bases failed to keep pace with inflation.

Another argument, which may be relevant to Ghana, is when the government embarrassed by the dismal performance of the economy (or real income stagnation) attempts to spend more to resuscitate the economy in a mistaken "Keynesian" belief. With tax revenues lagging, the resultant deficit of a larger magnitude may produce more inflation, effective savings crises

and further stagnation which may be seized as justification for further expansionary government expenditures.

Recognition of these possible price feed-backs on budget deficits or the money supply would quite easily introduce unstable and self-perpetuating circles into the analysis. Although these circles are interesting enough to warrant further investigation they lie outside the scope of this thesis.

To summarize the contents of this chapter, we have established a link between budget deficits, excess liquidity, domestic inflation, effective saving crises and real income stagnation. The significance of this link is that it demonstrates that many of the intractable problems of development are internally generated and that these problems originate from the government sector by way of persistent budget deficits.

On closer examination, Ghanaian budget deficits reveal many interesting features. One important cause of budget deficits in Ghana has been the "capital expenditure" item which represents expenditure on development projects and other direct investment. For example, in the 1977/78 Budget Proposal, the balance on the "current account" (total revenue minus recurrent expenditure) was -¢118.5 million. The balance on the capital account was -¢434.5 million, taking the overall balance to a deficit of ¢523 million.[13] Therefore, 79% of the overall deficit was accounted for

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[13]The 1974/75 Budget Proposal estimated non-debt (current account) expenditure at ¢554.01 million and the size of the Development Budget at ¢246 million. Interestingly enough the Proposal contained no revenue estimates. In 1975/76 fiscal year, the current and capital account deficits were -¢143.4 million and -¢322 million respectively (the latter deficit was 69% of the overall).

by capital or development expenditure. Ironically then, we have a situation in which the government overspends in the name of development but in the process creates excess liquidity, inflation and effective savings crises that hamper further development.

On the current account, a deficit is also inevitable as we saw earlier in our discussions of Tables 5.5 and 5.6. The socialistic posture of Ghanaian governments, the clamor of the elites and masses for education, expensive social amenities as well as the narrow tax base have all conspired to make over-spending on the current account inevitable. Here again, we see how socio-political factors creep into development analysis.

In any case, if budget deficits are inevitable and their adverse effects on effective savings un-intended, in what other ways have Ghanaian governments sought, through economic policies, to enhance the country's effective capacity to save? We look at these in the next chapter.

CHAPTER 6: GOVERNMENT POLICIES AND EFFECTIVE SAVINGS

The critical determinants of effective savings are exports and imported consumer goods. Chapters 4 and 5 represented an attempt to underpin the economic variables that influence effective savings. Since imported consumer goods are subject to import controls, we focussed on the export sector and saw that cocoa producer price differentials (in the Ghanaian and Ivorian prices) and inflation (caused by the excess liquidity generated by budget deficits) have contributed to the demise of this sector. However, it would be parochial and naive to suggest that balancing the budget to bring inflation under control and eliminating the cocoa producer price discrepancies are all that is required to achieve a rejuvenation of the export sector and hence real income growth. There two reasons for this caveat. First of all, the growth of the export sector depends also upon non-economic factors such as government incentives and assistance to that sector. Second, the poor results obtained for investment and effective savings in chapter 4 require a closer look at the productivity of investment and use of effective savings. In this chapter, we examine the influence of government policies on the volume and use of effective savings.

A. INADEQUATE INCENTIVES TO THE EXPORT SECTOR

The British colonial administrators showed a lot of interest in cocoa; they established a research institute (West African Cocoa Research Institute) at Tafo and provided extension services to cocoa farmers. In fact, the British paid more attention to cocoa than non-cocoa agriculture. After independence, agriculture including cocoa fell into total neglect. The low priority accorded the cocoa industry is revealed in the following

political power (Fitch and Oppenheimer, 1966;p.50).

After Nkrumah, government policies showed little drastic change. To be fair, there was some shift of emphasis towards the agricultural sector but the pre-occupation was with the diversification of exports and the promotion of non-traditional crops — not with the cocoa industry per se. The 1974/75 Budget proposal, for example, stated that:

> "The Government recognises that the long-run solution of Ghana's balance of payment problems lie in the expansion and promotion of export trade particularly in the non-traditional sectors..... The long-run objective is the restructuring of the economy towards exports and the identification and creation of additional commodities for export" (p.26)

However, only lip service has been paid to the expansion of exports generally. In practice, everything was done to frustrate local export procucers. Killick (1978) summarizes the predicament of a would-be exporter well:

> "In 1967 he was offered a new exchange rate seeming to offer a better deal, but discovered that it still discouraged exports and that it was rather quickly eroded by domestic inflation. Then the 1969 budget promised him an export bonus, which failed to materialize. Eighteen months later a scheme was finally put into effect, but within the year it had been abolished because of the December 1971 devaluation.... Six weeks later the currency was revalued and not long after that a new export bonus scheme was introduced" (p.352).

Considering the frequent vacillations in policy, could our exporter be blamed for being chary about these inducements?

B. FAILURE OF IMPORT LICENSING AND REASONS FOR FAILURE

The main purpose of import controls has been to curtail imports of consumer goods in order to free foreign exchange for investment or in our terminology, to increase effective savings. But the exercise failed miserably as we saw in chapter 4, section B. Why, one may ask, did the authorities fail to bring imports under control?

table,

TABLE 6.1

GOVERNMENT AND THE COCOA INDUSTRY

Index of Real Value of Budgeted Gov't Expenditure on Cocoa	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
	100	70	16	20	18	30	39	26	31	44	41

Source: Killick (1978), Table 5.6, p.119.

Besides this fall in real government expenditures on cocoa, resources were also diverted from the industry to other uses. The Cocoa Division of the Ministry of Agriculture was dissolved in 1962 and its assets taken over by the United Ghana Farmers' Council. The swollen shoot disease control program was abandoned in 1963. Supply of subsidized insecticides was discontinued in 1965/66 and Gammalin "20" imports ceased in 1965. Under the subsidized scheme, Gammalin sold to farmers amounted to 364,000 gallons in 1960; by 1966 this had fallen to 28,000 gallons (Kotey, 1974; p.269). The 1963/64 Seven Year Plan devoted only two paragraphs to the cocoa industry and the 1965 foreign exchange budget allocated only $2 million to the whole of agriculture (compare with $114 million and $312 million allocated to manufacturing and imports respectively — Kotey, 1974;p.213). This trend was even maintained in the latest Development Plan (5-Year, 1975/76-1979/80); only 8.7% of the total planned investment is to be allocated to the cocoa industry.

The neglect of the peasant cocoa and food farmers after independence was underlined by ideological and political factors. To Nkrumah and his

colleagues, the cocoa farmers represented a wealthy class to be milked for industrialization, as in the Soviet example, and assistance to peasant farmers did not really fit into his political scheme of things. Seeing great "surpluses" in the cocoa industry to be tapped, Nkrumah and his party (CPP) took control of the cocoa purchasing company (CPC) which was founded in 1952 as a subsidiary of the Ghana Cocoa Marketing Board (CMB). The objectives of the CPC were to purchase, store, sell or deal in cocoa and to make advances or loans to facilitate cocoa purchase but it (the CPC) was quickly turned into a huge patronage machine. Without membership in the CPP-sponsored United Ghana Farmers Council (UGFC), farmers were not entitled to sell their cocoa to the CPC or receive loans from that body. This, perhaps more than anything else, served to alienate the cocoa farmers (Fitch and Oppenheimer, 1966;p.47).[1] A commission of inquiry set after Nkrumah's overthrow found the CPC and UGFC riddled with corruption.

Nkrumah interpreted assistance to cocoa farmers as encouraging the growth of the bourgeoisie and he was highly suspicious of such a class in the midst of the socialist state he was erecting for Ghana. He was quite explicit about this:

> "We would be hampering our advance of socialism if we were to encourage the growth of Ghanaian private capitalism in our midst"[2]

Besides ideological, there were also political reasons why Nkrumah provided little assistance to cocoa and peasant farmers generally. He felt the rise of such a bourgeois class would threaten the basis of his

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[1] Also alienated were African cocoa brokers and rich capitalist farmers who were the major source of agricultural credit.

[2] National Assembly Debates, March 11, 1964. Unofficial comments indicate that Nkrumah referred to cocoa farming as "a poor nigger's business" (cf. Marx's reference to the 'idiocy of rural life') — Killick, 1978;p.63, footnote 97.

Reasons For Failure

1. Administrative

The import control program was doomed to failure right at its inception because the essential ingredients for successful implementation were lacking. Needed were enormous volumes of up-to-date information, commodity by commotity on anticipated demand for the coming year, on inventory levels, on input requirements of local producers and on the financial and managerial capabilities of the importers to utilize their allocations. Moreover the civil service would have to be able to analyse these data promptly and intelligently. The Abrahams Report (1965) recognized this:

> "(Import controls) calls however for the most careful and alert administrative procedures if they are not to defeat their aims.... However, it calls for an accurate estimate of the volume of imports of specific commodities and their pattern of consumption in various parts of this country. Not even the Central Bureau of Statistics was able to offer us such records " (p.29, para. 99).

That these procedures were not adopted is reflected in the ad hoc basis on which licences were allocated in the early stages. In 1965, there were four government bodies charged with the issue of import licences and there was little co-ordination among them. The Abrahams Report (1965) scornfully remarked that,

> "The inefficiency of the former Ministry of Trade is further highlighted in its failure sometimes to inform even the Bank of Ghana and the Ministry of Finance in advance of commitments which it was bringing about by the issue of specific import licences, so that due provision could be made" (p.33. para. 127).

What resulted was an administrative jungle,

> "Administrative bottlenecks have bedevilled the issue of import licences to the injury not only of commercial houses but also of the consuming public. These bottlenecks have arisen from a number of causes, which, in our opinion, include the sheer volume of documentation, demanded by the former Ministry of Trade, an unwieldy method of validation severally involving the consent and counter-signature of the Minister of Trade, the Minister of Finance and the Governor of the Bank of Ghana — a virtual odyssey.

> Unfortunately we cannot exclude laziness, irresponsibility and corruption of officials of the former Ministry of Trade as contributory factors" (Abrahams Report, 1965;p.29, para. 162).

In addition to these administrative problems was the multiplicity of conflicting objectives the import control program was intended to serve. As Killick (1978) puts it,

> "Had the programmers been able to concentrate, for example, on controlling the total value of imports they might have done well, but to do this while at the same time shifting importers to bilateral pact suppliers, changing the composition of imports in favor of industrial investment, giving preference to public sector imports, protecting local industry and doing all these things in a smoothly functioning manner, would have taxed the best informed, most efficient planning agency in the world" (p.279).

Consequently, administrative blunders came naturally to no one's surprise. In 1965 large quantities of bottles were imported from Czechoslovakia and China just before a new glass factory was commissioned and the factory for a time was unable to sell its bottles. In the middle of the 1967 harvest season large quantities of fish were imported causing local catches to be left rotting on the beach. In the second half of 1963 shortages of sugar and salt developed but at the same time there were plentiful supplies of unnecessary luxury items. The 1964 Economic Survey remarked that,

> "It has not been possible yet to draw up a priority list of imported items with the complete elimination, for the time being, of luxurious commodities. The result is that at times when very essential commodities are in short supply, the counters of certain shops have on them unessential items like canned potatoes, etc., from trade and payments agreement countries" (para.112).[3]

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[3]Other unessential items included Russian caviar and Chinese tinned pineapples.

The Abrahams Report (1965) also noted that,

> "Some of these licences were for luxury commodities and quite a few were for commodities neither needed nor particularly wanted. The Ghana National Trading Corporation (government-owned), for example, imports Schimmeipenninck cigars in appreciable quantities" (para. 119; p.32).

The administrative problems inevitably caused delays in the issue of licences which meant that projects were unnecessarily delayed with cost over-runs. The following excerpts from the Abraham's Report (1965) are illustrative:

> "In the case of the State Paints Corporation, it applied for import licences for raw materials in September of last year, and the licences were issued in May of this year. It had to abandon operations altogether between May and July. At the same time licences were issued for the importation of paint at an expenditure of foreign currency running at an average pro rata rate four times that of raw materials. The Corporation has furthermore been prevented by an inadequacy of raw materials from following up export enquiries from other African countries. On account of its stoppage, private retailers have been selling the corporation's paint at ¢8 per gallon when it could have been sold without loss at ¢2.25" (p.16).
>
> ....."This slap-dash attitude has also led to such undesirable situations as the importation of machines ahead of the readiness of civil engineering structures; and Messrs. A. Lang Limited, involuntarily prolonged the construction of the Sugar Factory at Komenda because the former Ministry of Trade would not issue licences to import paint to protect steel structures" (p.33, para. 128).

Delays in issuing import licences and establishing letters of credit for goods already ordered also meant payment of storage fees abroad in foreign currency and in the cases of some perishable consumer goods, putrefied when they arrived in Ghana. "For example, a whole consigment of corned beef, obtained under bilateral trade agreement, had to be condemned by Port Health Authorities at Tema in 1964".[4] The Abrahams

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[4] Abrahams Report, 1965;p.18, para. 34. The report went on to say that, "Another brand supposed to be corned beef surely suffers from a misnomer. It appears to have been fobbed of on the people of this country as 'corned beef' when in fact it is pork luncheon meat with a minute dash of corned beef in the middle of most tins" (p.18, para.34).

Report (1965) again furnishes an example of payment of storage fees abroad:

> "The machinery on which rental has been due on account of storage outside Ghana seems to have been mainly of Czech origin, eg., the machinery for the leather shoe factory which lay in Hamburg, and the sugar factory plant which lay in Czechoslovakia and for which latter the suppliers have demanded ¢500 a month in convertible currency since 1962" (p.19, para. 39).[5]

That President Nkrumah was aware of the administrative difficulties and slackness was revealed in his 1965 Easter message:

> "The source of our current trade difficulties is our machinery of economic administration. The State agencies connected with the importation and distribution of these goods have not functioned as efficiently as desired".[6]

2. Ineffective Import-Substituting Strategy

Although one of the aims of import controls was to protect local import-substituting (I-S) industries, it was hoped that these industries would help alleviate the supply situation of consumer goods, the imports of which were being restricted. In many cases, the I-S industries failed to deliver and to take advantages of the opportunities created for them. Their distinctive characteristic has been excess capacity with its attendant high production costs. Many of them have been "ineffecient conservers of foreign exchange" as we shall see when we discuss in detail the problems facing these industries in section C.1. below.

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[5]The machinery was in storage for three years!

[6]Qouted in the Abrahams Report, 1965;p.29, para. 96.

Nonetheless, as far as the import control program was concerned, the I-S industries contributed to its demise by their inability to improve the domestic supply situation of importables and thereby deflate the pressure to import. Interestingly enough, the problems faced by the I-S industries were in some cases related to the very import control program they were expected to help in the achievement of its objectives. Some of these problems were low licence allocations, delays in issues of licences and difficulties in establishing letters of credit.[7] Thus some I-S industries could not operate efficiently because of import licence problems and the import licence program could achieve its objectives partly because of the inefficiency of some I-S industries —— a kind of vicious circle we may call a "low level efficiency trap".

3. Mass Pressure for Imported Consumer Goods

The biggest headache for the authorities was the control of imported consumer goods (both durable and non-durable) and producers' materials (industrial raw materials). That these were the import categories the authorities found most difficult to battle with is revealed in the following table,

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[7]For example, in October 1964, the import requirements of all State and joint private-state enterprises were estimated at ¢33.6 million but licences to the value of only ¢7.6 million were issued (Abrahams Report, 1965;para. 105). Between April 1964 and April 1965, the State Match Corporation achieved an aggregate production of 183,998 instead of 360,000 i.e. 51% of capacity. However in July 1964, not one match stick was produced (Abrahams Report, 1965;p.27, para. 90).

TABLE 6.2

DEVIATION OF ACTUAL IMPORTS FROM TARGETS, 1968-70
SHORTFALL (-) OR EXCESS (+) OF ACTUAL IMPORTS WITH THE OPERATIONAL IMPORT PROGRAM (OIP)

Percentages	1968	1969	Jan-June 1970
1. Non-Durable Consumer Goods	+14%	+56%	+82%
2. Durable Consumer Goods	+13	+50	+53
3. Fuel and Lubricants	+ 1	+11	+ 5
4. Non-Durable Producers' Materials	- 6	-25	-11
5. Durable Producers' Materials	+ 6	+139	+63
6. Producers' Equipment	+11	-12	- 3
7. Total All Imports	+ 4	+11	+14

Source: Bhatia, 1973; p.23.

Except for non-durable producers' materials and producers' equipment, actual imports under all end-use categories exceeded OIP estimates. The excess was increasingly marked for consumer goods than for capital goods. Excesses for consumer goods were not recent phenomena. Back in 1965, the Abrahams Commission had lamented that "even by the 7th of May 1965, import licences for consumer goods had been issued to a value greater than the whole of last year and almost the same as that for the whole of 1963" (1965;p.17).

The pressure for imported consumer goods emanated from two sources, economic and socio-economic . Economically, the excessive demand for imported consumer goods originated as a spill-over from excess aggregate demand coupled with both high average and marginal propensities to import (0.25 and 0.28 respectively). Excess aggregate demand in turn was bouyed up by persistently large budget deficits. Two other economic factors have also operated to reinforce the demand for imported consumer goods. The

first was the over-valued exchange rate, on account of the high rates of domestic inflation, and this has progressively made imports cheaper. The second was the failure of domestic food supply to keep up with demand (or the failure of Ghanaian governments' agricultural policies generally). This failure has necessitated food imports to supplement domestic supplies.

Socio-economically, there was pressure from the elites to have more imports of automobiles, televisions and other consumer durables. There was also pressure from the non-elites to have more imports of the so-called 'essential commodities' which have become identified with good nutrition.[8]

Scientifically, it is difficult to say whether the excessive demand for imported consumer goods derives more from economic or socio-economic forces. Nonetheless, there is extensive evidence to suggest that the licensing authorities, more often than not, yielded to this pressure and granted more licences for consumer goods. As examples, in March 1964 when it was decided to cut imports, the reduction on essential goods was 25% and non-essential goods 50%.[9] In September 1965, the Finance Minister produced data to show that actual imports licensed

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[8] 'Essential' goods in Ghana refer to non-durable food items like rice, sugar, tinned milk, tinned corned beef, sardines and tinned mackerel. The adjective "essential" is a misnomer; there is hardly anything essential about these items considering that local substitutes exist!

[9] See the Ollennu Report (1967), p.9 for this and other examples.

were weighted much more heavily towards consumer goods than was intended in the foreign exchange budget for that year (Killick, 1978;p.274). At the Ollennu Commission, Kwesi Armah, former Minister of Trade, testified that,

> "Further allocations of licences were necessary to some areas hit seriously by shortages of essential goods and threatened with collapse into chaos. To meet the problems I foresaw, I made representation to the Cabinet for a small supplementary vote (in October 1963)" (Ollennu Report, 1967;p.75).[10]

Then in March of 1970, the Committee responsible for the import program noted in a memo that for "essential" good items, the licensing authorities were always under pressure to issue licences whenever it felt that stocks were low (Killick, 1978;p.280).

4. Corruption

This factor, perhaps more than anything else, explains the failure of the import control program. The four Commissions of Enquiry all substantiated allegations of corrupt practices in the issue of import licences.[11] In his report, Justice N. A. Ollennu stated that,

> "In fact, the evidence satisfied me conclusively that the grant of import licence during the relevant period (1963-66) were made after the following procedures:
> (1) Government institutions, Corporations and Enterprises in which the government had a special interest, had licences granted to them in the normal way.
> (2) In all other cases licences were granted,
> (a) upon contacts made with the Minister (of Trade) or
> (b) upon payment of bribes.
> (3) Those who had no contacts got nothing; those who had

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[10] Notice how shortages of "essential" goods could potentially spell social chaos. This would tend to under-score the socio-economic rather than the economic as forces behind the demand for imported consumer goods.

[11] The Commissions of Enquiries in chronological order were the Akainyah (October 1963), Abrahams (April 1965), Ollennu (1966) and the Gaisie (September 1975) Commissions.

contacts and who had contacts made for them but would not or could pay the commission (the bribe) had nothing.

According to the evidence the fixed commission is 10% of the value of the licence, but was reduced in special cases to 5%" (Ollennu Report, 1967;p.22, para. 150-151).

From October 1963 to April 1965, A. Y. K. Djin was the appointed Minister of Trade.

"He assumed direct responsibility for the issue of import licences and no such licences could be issued without his express direction....licences were issued solely at his discretion, capriciously exercised with the consequent development of a crisis in the import trade and attendant malpractices.... (He) also embarked on irregularities in the issue of licences and fraudulently exploited the situation created by himself for his own benefit, to the advantage of his family and personal friends, to satisfy the whim and caprice of some friends and worse of all for the persecution of other persons and groups of persons and to the detriment of the economy of the country" (Ollennu Report, 1967;p.11).

Djin's successor, Kwesi Armah, was no better,

"Mr. Kwesi Armah departed from the regular procedures for the administration of import licence and did so with the intent that he should be enabled to practice the policy of 'selectivity' for the benefit of a group of importers, to the detriment of others particularly to the detriment of the economy and financial intent of the Republic.... I find the Kwesi Armah corruptly granted the ¢400,000 licence to George Stores upon payment to him of some commission of 10%" (Ollennu Report, 1967;p.19).

The following quotes from the Ollennu Report (1967) are also illustrative:

"Mrs. Akainyah corruptly demanded a commission of 10% on ¢900,000 licence issued to Blackwood Hodge and did so as an agent for Kwesi Armah. Mr Akainyah corruptly collected from Sahlani a cheque for ¢9,000 issued by Mensah again with intent to prevent the course of justice" (p.137).[12]

"Kwesi Armah ordered that ¢200,000 licence be granted when he was aware that only ¢148,000 was asked for..... Asafu-Adjaye in conspiracy with Kwesi Armah received ¢8,800 in cash and ¢1,000 in cheque as bribe on the ¢200,000 licence" (p.248).

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[12]You may recall that Mr. Akainyah was the chairman of a Commission of Enquiry into the issue of import licences in 1963.

"Exercise of discretion is prima facie corrupt..... The chief characteristic of this period is confused administration of import licence directed from the very top and intensified by economic harrassment..... and also irregularities" (p.12).

There were dramatic revelations at the Abrahams and Ollennu Commissions of Enquiry.

From the Abrahams Report (1965),

"Messrs. J. L. Morrison, Son and Jones (Ghana) Ltd. were in 1964 able to have their import licence issued in only 3 days. We are surprised at the large number of licences issued to them but not carrying even a date of application. Indeed, of the 30 import licences issued in favor of this company only 7 bore a date of application" (p.30, para. 107).

"Dramatic, however, are applications for import licences made by Roquah Stores. Some of them were issued in less than 24 hours after application... T & H Akill have had to wait for two and half months for an import licence; in other cases nine months" (p.30, para. 107).

"In 1964 Roquah Stores were issued with import licence to a total vauue of ₤312,979 15s (¢625,959.50) for rice, flour, etc. One of the licences, No. E-01488 dated 18th January, 1964, for ¢80,000 worth of rice represented an allocation by the Ministry of Trade (i.e. it was not applied for) of 15th January 1964. Applications tor ten import licences covering a total of ¢506,000 could not be traced on the relevant files of Roquah Stores. This kind of untidiness could easily lead to speculation of dishonesty" (p.31, para. 109).

"Amazingly, however, despite the difficulties described above, some importers managed to be issued with licences in excess of their entitlement and in excess of the reasonable. Some of the licences were over-issued by as much as 1,400 per cent. For the whole year of 1964, certain importers whose list we attach as Appendix VII were over-issued in the aggregate sum of ¢7,040,674" (p.32, para. 118).

"For example, Freedom Chemical Industries were in 1964 entitled to a maximum value of ¢20,000 but were issued licences worth ¢336,000 in that trading year" (p.34, para. 129).

From the Ollennu Report (1967),

"One of the private firms to which licences were granted during that period is Mr. Accad's City Auto Parts. This gentleman testified that he did not even apply for a licence during that period; he sat down and it was offered to him" (p.19, para. 130).

> "While some importers had such a raw deal, others, in some cases small business enterprises were being upgraded and even being given licences of higher value than the maximum fixed for the grade to which they were attached. A typical example of this is Ghana Trading Enterprises which was up-graded to 'B', with a maximum of ¢1 million, yet was granted licence of ¢1.444,453.5" (p.21. para. 141).

These revelations, of course, were merely the tip of the iceberg. The really "big" and mutually satisfactory corrupt practices escaped the notice of the various commissions because the witnessess tended to be individuals with some grievance such as having paid a higher bribe than a competitor. In any case, if individuals could with the payment of bribes not only succeed in securing import licences but also of higher values than they were entitled to the full knowledge of the authorities why then did the authorities bother with the whole exercise?

To complicate the situation further, a large proportion of the licences for any particular year is allocated to the government and para-statal institutions. In 1977 for example this proportion was 84% (Graphic, October 16, 1978).[13]

In concluding this section we observe that government policies have done little to enhance the country's capacity to earn or save foreign exchange. On exports, frequent policy reversions and inadequate incentives operated more to frustrate export producers. On imports of consumer goods, the administration of import controls was hopelessly inefficient and riddled with corruption. One credit that could be extended to the licensing authorities is that they, perhaps, succeeded in shifting the geographical origin of Ghana's external trade in favor of the Socialist countries during the Nkrumah era. In addition, they succeeded in

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[13] See also the Economic Survey (1965; para. 282) for confirmation that the licensing program discriminated in their favor.

transferring the use of foreign exchange from private to the public sector ("socialization of imports").[14] However, it is doubtful whether the achievement of these objectives benefited the country. Some obsolete but expensive pieces of equipment were imported from the Socialist countries. Furthermore, with a corrupt-ridden government insidious propensity to waste, it cannot be said that a transfer of use of foreign exchange to the government was economically optimal. A final possible concession that could conceivably be made was the likelihood that actual imports would have been much higher and the balance of payment situation much worse had controls not been imposed.[15] But even then, this concession would be vacuous. If one takes the view that import controls were really necessitated by the government's own investment profligacy, then controls, in essence, served as a substitute check on the pattern and level of government expenditures - recall that a greater proportion of the licences were issued to the government and para-statal institutions. Why, one may ask, would such a circuitous rather than direct check be employed? Furthermore, in the light of the serious distortions introduced into the economy, the speculative demand engendered and the distraction from the need (and disincentive) to produce more for exports, it is doubtful whether import controls prevented or even postponed balance of payment crises.

If persistent budget deficits have impaired the country's ability to earn foreign exchange and Ghanaian governments did little by way of policies to enhance the country's effective capacity to save then what use did they make of the effective savings available to the country? We explore this question against the background of government development strategies.

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[14] For a discussion of these objectives, see Killick, 1978; p.273.

[15] The 5-Year Development Plan estimated that "the average propensity to import was about 25% over the 1966-72 period. We estimate that the marginal propensity to import for Ghana is at least 28%" (p.15).

C. GOVERNMENT DEVELOPMENT STRATEGIES

1. Under Nkrumah, 1957-1966

The adopted socialist philosophy was understood by Nkrumah as increasing participation of the State in the productive and distributive systems and was central to his economic strategy. State participation as a domestic policy was to be pursued towards the "complete ownership of the economy by the State". State participation was also seen as a means to achieve several objectives, one of which was rapid industrialization.[16]

Nkrumah was skeptical about basing Ghana's industrialization on an indigenious enterpreneurial class, which at any rate hardly existed. Various attempts had been made to promote and assist Ghanaian enterpreneurs in the late 1950s but Nkrumah became disillusioned in these attempts and the capability of nascent Ghanaian enterpreneurs in industrializing the country at the speed he wanted. Even if the possibility had existed it is doubtful whether Nkrumah would have wanted to create such a class for reasons of ideology and political power.

Quite a wide variety of instruments were employed to assure state participation and the regulation of the economy. Numerous public enterprises were set up. The technique of planning was adjudged superior to the 19th century doctrine of laisser faire. A paraphenalia of legislative controls were instituted. There were controls on imports, capital transfers, on industry, on minimum wages, on the rights and powers of trade unions, on prices, on rents and on interest rates. The state,

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[16] Killick (1978) suggests that "state participation could be seen as a means of reconciling Nkrumah's desire to modernize and develop the economy on one hand and to increase the degree of economic independence on the other" (p.215).

then, emerged under this scheme of things as the major economic and socio-economic force. To discuss the full economic ramifications of this force would not only be tedious but also unduly lengthen this treatise. Hence we restrict our discussions to the roles of the state as the primary source of capital formation and as the primary enterpreneurial force (or initiator of development). These are more directly relevant to our concept of effective savings.

The State as the Primary Source of Capital Formation

Besides ideology, the rationale for this was stated by one of Nkrumah's Ministers:

> "(a) Private enterprise, with its profit motive, feels willing to enter fields with high and quick returns only,
> (b) Private enterprises do not want to plough back their profits but prefer to reduce our hard-won foreign currency by transferring a proportion of their profits abroad,
> (c) Savings for investment could be most quickly and effectively generated only on a communal basis through creating surpluses in annual government budgets".[17]

Thus there was a massive transfer of real investible resources (effective savings) to the state for investment in those fields with "low and slow" returns. The rapid growth of the state as a major force in capital formation can be gleaned from the following table,

TABLE 6.3

CAPITAL FORMATION BY SECTORS 1958-1965
(TWO-YEAR TOTALS) ¢ MILLIONS

	1958-59	1960-61	1962-63	1964-65
Gross Fixed Investment	280.0	394.0	398.0	471.0
(a) Government Sector	69.2	180.2	220.8	308.4
(b) Non-Government Sector	211.1	213.8	177.2	162.6
% of Government to Total	25.0	46.7	56.5	66.0

Source: Ahmad, 1970;p.104, Table 15.

[17] Krobo Edusei, quoted in Killick, 1978;p.215.

Much of Ghana's effective savings was directed towards building and construction as the following table indicates.

TABLE 6.4

PERCENTAGE DISTRIUBTION OF GROSS DOMESTIC FIXED CAPITAL FORMATION BY TYPE, 1958-65. (Two-Year Averages)

	1958-59	1960-61	1962-63	1964-65
Building and Construction	71	65	72	68
Transport equipment	12	18	11	13
Machinery and Equipment	17	17	17	19
Gross Domestic Fixed Capital Formation	100	100	100	100

Source: Ahmad, 1970;p.113, Table 16.

New factories, roads, schools, bridges et. cetera were built at an incredible speed. The beneficiary of the government's investment thrust was the industrial sector to the almost total neglect of peasant agriculture.

The State as the Enterpreneurial Force

There was a sharp rise in the number of manufacturing enterprises owned wholly or partly by the state as the following table shows. The share of gross manufacturing output from enterprises rose sharply between 1962 and 1966.

TABLE 6.5

VALUE OF GROSS MANUFACTURING OUTPUT BY TYPE OF OWNERSHIP 1962-70 (PERCENTAGE OF GROSS OUTPUT)

TYPE OF OWNERSHIP	1962	1965	1966	1967	1968	1969	1970
State	11.8	21.3	22.1	26.2	25.5	24.5	23.1
Joint (State/Private)	11.9	7.0	9.0	12.3	13.9	14.8	13.8
Co-operative	.1	.2	.1	.1	.1	0.0	0.0
Private	76.2	71.5	68.8	61.4	60.5	60.7	63.1

Source: Central Bureau of Statistics, Statistical Handbook 1970, Table 30 p. 44.

By 1967, State manufacturing enterprises were accounting for a little over 25% of total manufacturing output from an insignificant percentage of 11.8 in 1962. Notice that this state of affairs was continued after 1966, i.e. the state enterprises set up by Nkrumah were largely retained. Also note-worthy is the declining importance of the private sector and increasing importance of joint state/private enterprises in manufacturing output after 1966.

Ghana's effective savings then were channelled into the industrial sector. Why, one may ask, was such a massive investment thrust on industry rather than say agriculture? Nkrumah identified development with industrialization and tended to view peasant agriculture as an inferior form of economic activity:

> "Industry rather than agriculture is the means by which rapid improvement in Africa's living standards is possible. There are however, imperial specialists and apologists who urge the less developed countries to concentrate on agriculture and leave industrialization for some later time when their populations shall be well fed. The world's economic development, however, shows that it is only with advanced industrialization that it has been possible to raise the nutritional level of the people by raising their levels of income" (Nkrumah, 1957; p.7).

This quotation betrays an abiding faith in what has been called the "religion of development" (Uphoff and Ilchman, 1972) - a tendency to equate industrialization with development, to emphasize industry over agriculture, to be obsessed with 'modernism' and a inclination to castigate traditionalism or African way of life.

That Nkrumah was afflicted with this "religion of development" comes across distinctly in his public speeches and writings. On March 4, 1959, in his address to the National Assembly, he remarked that:

> "In every field of Government and business activity remarkable development has taken place. Honorable Members have all seen the many changes in our capital and the many fine new buildings which have been built. There has been changes, too, in other large towns throughout the country. New and better roads, not only give us vastly improved means of communication, but also everyone can see the very large numbers of schools and hospitals and other facilities which we have provided during this period. Visitors to Ghana remark again and again about our fine system of roads. This is something of which we can justifiably be proud" (Cited in Birmingham et. al., 1966; p.445).

Then in 1963, he demanded a by-law from the Accra-Tema City Council requiring all advertisements in Accra to be illuminated by neon lighting so that the main streets of the city would resemble Picadilly Circus. The City Council approved the by-law despite insistence of the Ghana Chamber of Commerce that they were impractical in a country where most businesses had few employees and limited capital (Werlin, 1973; p.261).

In exile after 1966 and responding to charges of economic mismanagement he asked:

> "How can the obvious evidence of modernization and industrialization of Ghana, such as new roads, factories, schools and hospitals, the harbor and town of Tema, the Volta and Tefle bridges and the Volta Dam be reconciled with the charge of wasted expenditure...
>
> You only have to look around you to see what we achieved. We built more roads, bridges and other forms of national communication than any other independent African State. We built more schools, clinics and hospitals. We provided more clean piped water. We trained more teachers, doctors and nurses. We established more industries" (Nkrumah, 1973;pp.394-417).

Only the quantity mattered, not the quality or efficiency. This is the tragedy of the Ghanaian situation. Consequently, factories were imported wholesale, embodying technologies adapted to the technologies of the industrial countries in which they were developed but ill-suited to Ghana. Hence "modernisation" consisted of introducing islands of advanced technology emphasizing the already existing dualistic nature of the economy Nkrumah condemned as "colonial structure". As Killick (1978) puts it:

> Virtually all today's rich countries are industrial, ergo development is industrialization. Industrialization equals development was the base of Nkrumah's economic strategy....which may be charaterised as one which demanded large inputs of Ghana's scarcest resources; foreign exchange, capital, modern knowledge and skills, efficient political decision-making capabilities and effectual public administration and good information flows" (pp. 102 and 185).

In industry, there has been a rather consistent tendency for the government to opt for "modern" capital-intensive techniques and projects that emphasize grandeur rather than economy. There are several examples of these:

(i) Uphoff (1970) cites a pharmaceutical factory, where a relative very modest design was turned down in favor of another which eventually cost nearly ten times as much and which included 'eleven bungalows for managers, a handsomely fitted administration block, a large cafeteria with one of the biggest and most modern kitchen in Ghana, and housing for experimental animals better than in which most Ghanaians lived' (p.562).

(ii) The footwear factory similarly had nineteen bungalows, a four-storey administration block, six blocks of 'cloak-rooms', a kitchen and a canteen (Killick, 1978; p.229).

(iii) In the case of the Glass factory, the Minister of Industries, was faced with a clear choice between two designs, one providing for the production of both bottle and sheet glass and another which argued against installing a sheet glass capacity

at that stage of Ghana's development. The Minister recommended the former alternative on grounds that it was "the most complete 'turn-key' proposal for a really up-to-date and first class glass factory' with the consequence that the sheet glass plant with a capacity of nearly three times the size of the local market was never brought into operation and has since been converted for bottle-making at an extra cost of about ¢2.5 million (Killick, 1978;p.229).

(iv) An early report on the construction of a steel-works utilising scrap recommended the installation of blast furnaces rather than electric ones on the grounds that the former were more economical in the production of low-grade type of steel products needed in the local market. High-cost electric furnaces were installed nonetheless (Killick, 1978; p.230).

(v) The State Footwear Corporation was installed with conveyors to move shoes in process although conveyors were little used elsewhere, even in the US (Killick, 1978; p.229). Killick also cites a study which showed that it would have been feasible to build a commercially more promising shoe factory with a per worker investment of only about one-sixth of the actually installed investment.

(vi) A report on the State Fishing Corporation made a comparison between the value of per-worker investment in vessels by the Corporation with a small fishing port in the US and showed investment per-worker about 8 times as great in Ghana as in the American example (Killick, 1978; p.229).

Many of these enterprises were hastily set up as "showpieces" with little prior planning or feasibility studies. It may be noted that in almost all the cases cited the industries involved used imported inputs and hence there were little "backward linkages" with the rest of the Ghanaian economy. A case in point was the State Fishing Corporation with its heavy investment in trawlers at a time when the traditional Ghanaian

fishing industry was using simple dug-out or paddle canoes. This reflects a general tendency to ignore traditional practices in investment decisions ("religion of development").

What was even worse was that many of these enterprises were financed by suppliers' credit. The terms under which Ghana obtained much of this credit were questionable and deplorable. Prices were inflated, equipment purchased was often obsolete or of dubious quality and above all there was evidence that some Ghanaian authorities were bribed to expedite the contracts. We describe in detail below how a "prototype" was arranged.

The Arrangement

Under a supplier credit arrangement, the fast-talking equipment pedlar would sell an equipment and the buying country would contract to repay the price over a period of time, generally 4 to 6 years. The pedlar then would obtain credit from private banks and have it guaranteed by his own coutry's governmental export credit insurance organization.[18] After this arrangement any future dealings that the LDC government have would not be with the equipment peddler but with the exporting country's credit insurance organization. A "protype" would have an interest rate of 5.5% but this was at a flat rate ie. payable not on the diminishing balance but on the original loan. This in effect would raise the actual interest charges to almost 9% (Grayson, 1973; p.488)

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[18] By the middle of 1950, business in most industrialized countries had excess capacities in machinery and equipment production. Exports provided an outlet for fuller capacity utilization and to assist in this drive (also to improve balance of payments) their gov'ts established export insurance schemes such as UK's Export Credits Guarantee Department, Banque francaise du Commerce exterieur and Credit National of France, Ausfuhrkredit and Kreitanstalt für Wiederanfbau of Germany, Institue nazionale della assicurazioni of Italy and the Export-Import Banks of Japan and US.

Under suppliers' credit arrangements, Ghana bought in many cases obsolete equipment at inflated prices and contracted a huge foreign debt between 1961 and 1966. In 1959 and 1960 only 6 investment projects were financed through suppliers credit of which 3 were to be paid in less than 7 years. The number of supplier credit projects rose to 19 in 1961, 25 in 1962 and 55 in 1963 - 2/3 of the latter was to be paid in 5 years or less. By the end of 1965, supplier credit contracts signed amounted to 210 and 137 (65%) of them were payable within 5 years or less, only 23 (11%) in 10 years or more. The total value of signed contracts reached $858 million coming due at the rate of $100 million a year (1/3 of value of the country's exports) in 1965-69 and 83% of the payments in foreign exchange (Steel. 1972; p.218). In 1964-65, 100% of Ghana's total debt repayments were virtually on suppliers' credits.

Large chunks of supplier's credit went to the government as the following table shows.

TABLE 6.6

EXTERNAL DEBT OF GHANA 1961-68

$ Millions	1961	1962	1963	1964	1965	1966	1967	1968
1. Gov't Foreign Liabilities (year end)	16	26	38	347	378	395	484	494
2. Suppliers credit %age of Gov't Foreign Liabilities	77.7%	82.7%	76.0	82.5	79.5	71.7	70.5	65.7

Source: Grayson, 1973; p.480, Table 2.

When the debts were rescheduled on December 1966, October 1968 and June 1970, some relief was obtained but not very much as the following table indicates.

TABLE 6.7

(DSR) DEBT SERVICE RATIO (AFTER 1966, 1968 AND 1970 RESCHEDULINGS)							
	1969	1970	1971	1972	1973	1974	1975
DSR	19%	20.8%	19.8%	18.5%	17.0%	17.0%	17.7%

DSR = Ratio of total debt payments to total foreign exchange earnings on current account.

Source: Grayson, 1973; p.480.

Dominant Position of Supplier

Grayson (1973) noted that:

> "The characteristic feature of the arrangement was that it was a completely closed deal. The equipment peddler prepared the feasibility study — in those cases where the studies were prepared at all. He chose the technology, determined the size of the plant and, of course, the source and nature of the equipment, and arranged for the financing. If technical advice was needed, he found that too. After the project was completed, he provided the managing agent to operate the plant" (p.479).

There was hardly any input by the buying country. The tragic thing was that it was a foreign supplier who knew so much about the Ghanaian economy, the type of technology and factories Ghana needed, that the government bought his ideas <u>in toto</u>.

Quality of Investment

The supplier credit arrangements seriously called into question the quality of the investment since primary concern was not whether a particular equipment, or industry was suitable for Ghana or not. For example, the USSR sold Ghana 3 repainted old but expensive Illyushin jets at a time when most of Ghana Airways international flights had absurdly low load factors. The British firm Parkinson-Howard sold Ghana a huge dry dock which since it was commissioned in 1969 has been lying idle. The German "equipment-monger," Stahlunion, built a sheet glass plant with a capacity of nearly 3 times the size of the local market. The plant was never brought into operation and later had to be converted at an extra cost of ¢2.5 million for bottle making. A parliamentary report, alleged that the plant supplied for vegetable oil mills "was of pre-war manufacture and had been lying idle for more than 30 years" before being supplied to Ghana. A Yugoslav company built a mango canning plant with a capacity exceeding the world's trade in mangoes.[19] On December 18, 1962, the government entered into a contract with the Russians to build a pre-fabricated factory at a cost of ¢7.5 million financed by supplier's credit. It took 4 years to build but after the 1966 coup the project was abandoned. In 1972 a committee was set up to reappraise the project and a team of Soviet experts were invited to assist in the exercise. Most of the mounted equipment had been lost and the factory has not produced a single pre-fab home. Yet 500 Ghanaian workers and 13 Soviet experts draw salaries every month (Daily Graphic, December 6, 1978; p.5).

[19] For these and other examples see Killick, 1978; pp. 229-230.

Potential for Graft

The potential for graft was phenomenal. A Ghana Government investigation reported that the British firm, Parkinson-Howard, which built the Accra-Tema motorway, Tema harbor extension, the dry docks and steelworks paid between 1958 and 1963 a total of $680,000 in three installments to certain ministers.[20] In most cases the kick-backs were 5 to 10% of the value of the contract. These bribes were reflected in high price adjustments. The same Report noted that,

> "Cases were reported to the Commission (of Inquiry) involving price adjustments exceeding 100% of the world market prices. These presumably are rare but smaller adjustments are understood to be common" (p. 25)

Hidden Economic Costs

Most of the enterprises which were financed with suppliers' credit were import-substituting industries and were expected to save the country foreign exchange. Since most of the investment projects financed by suppliers' credit were ill-conceived, hastily drawn-up with no feasibility studies, they turned out to be inefficient conservers of foreign exchange. In fact, a large number of them were net foreign exchange users or in a more technical language, had negative Domestic Resource Costs (DRCs)(Steel, 1972).[21] Negative DRCs imply that the products of some import-competing industries were more expensive than the imports they were supposed to replace. These, then, were the real hidden costs of indiscriminate and uncontrolled use of suppliers' credit. Did private industry fill the vacuum left by the State enterprises? What were Nkrumah's policies towards them?

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[20] White Paper, Government of Ghana (The Apaloo Report) Accra, 1967.

[21] We discuss this concept in greater detail in chapter 7, section C.

Despite his socialistic prouncements, Nkrumah did not embark upon any large scale nationalization of private industry; private enterprise was not encouraged either. In a broadcast on October 9, 1960, he repeated the government policy statement on private enterprise of September 2, 1960:

> "I have stated that the economic structure is divided into four different sectors. First, the state-owned sector; second, the joint state-private enterprise sector; third, the co-operative sector and fourth, the purely private sector. I also stated that the Government intends to place far greater emphasis on the development of Ghanaian co-operatives rather than encourage Ghanaians to start private business enterprises.
>
> In the past the Government has given considerable assistance to Ghanaian private enterprise but the result has been negligible and disappointing. So disappointing in fact that, the Government feels that its assistance must be channelled in a more productive manner".[22]

Later in exile, he distinguished between two types of Ghanaian private enterprise and was more explicit:

> "The first was the type, which it was the government's intention to encourage — that of the small businessman who employed his capital in an industry or trade with which he was familiar, and which fulfilled a public need. The second consisted of that class of Ghanaian businesses which were modelled on the old colonial pattern of exploitation. In this category were those who used their capital, not in productive endeavor, but to purchase and resell, at high prices, commodities such as salt, fish and other items of food and consumer goods which were in demand by the people. This type of business served no social purpose, and steps would be taken to see that the nation's banking resources were not used to provide credit for them.
>
> Even more harmful to the economy was another type of enterprise in which some Ghanaians had been participating. This was the setting up of bogus agencies for foreign companies which were in fact nothing more than organizations for distributing bribes and for exerting improper pressures on behalf of foreign companies. The government intended to carry out a thorough investigation into the activities of these agencies and to suppress them".[23]

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[22] Quoted in Garlick, 1971; p.120.

[23] Nkrumah, 1973; p.404. Despite these pronouncements, Nkrumah himself was operating a company, NADECO, whose function was the systematic collection of bribes (see chapter 7, section A.2).

In spite of public statements that private enterprise would not be encouraged but "tolerated", government actions in practice hardly matched them. Private enterprise (of all types) was indeed suppressed.[24] When in May 1961 Mr. W. A. Wiafe, a leading businessman in Parliament, criticised that the government policies had created confusion in the commercial life of the country to the detriment of African businessmen, he was promptly imprisoned without trial under the Preventive Detention Act of that year (Garlick, 1971; p.121). Also Mr. C. C. K. Baah, a businessman and government back-bencher, had to flee the country ostensibly for health reasons, when he criticised the government's attitude towards private enterprise.

In 1963 the Capital Investment Board and the Ghana National Investmant Bank were both established by the government to administer the Capital Investment Act, the purpose of which was "to attract capital and to protect the integrity and sovereignty of Ghana". The Act provided for loans to private enterprise. But in his 1965 Budget statement the Minister of Finance noted that:

> "The sector distribution of the (Investment) Bank's loans in the past year has.... revealed a strong bias in favor of the private sector. However, the Bank will be expected in the current year to lend more to the state and the co-operative sectors in line with the declared economic policy of the Government".[25]

More dramatic was the testimony of Mr. Ayeh-Kumi before the Ollennu Commission. He tendered in evidence a document or cabinet memorandum prepared by Mr. Amoako-Atta (former Minister of Finance) and Mr. Djin

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[24] Mr. Ayeh-Kumi, Nkrumah's Special Consultant on Economic Affairs, said at a press conference just after the 1966 coup that Nkrumah told him that he did not want to see the growth of a class of prosperous Ghanaian businessmen, who, if there were enough of them, would constitute a danger to the power of his party — Garlick (1971) p.126n.

[25] K. Amoako-Atta Budget Statement, 1965, January 21, 1965, para. 50.

(former Minister of Trade) upon directions of Nkrumah embodying government policy as regards big European business houses and Ghanaian traders. He testified that:

> "It has been the system to gradually stifle the big businessmen and the small Ghanaian businessmen in this country to be replaced by State Corporations, and there has been a move towards this in putting all sorts of inconveniences in the way of merchants and traders in the country.... The steps to be taken against them were by income tax, various types of taxation, (import) licence restrictions; African businessmen must not be given licences and if they persisted they should be given such licences as would make them incapable of doing business" (Ollennu Report, 1967; p.10, para.59).

Thus, under the Nkrumah regime, the state was the sole enterpreneurial force that allocated effective savings, particularly to the state manufacturing sector to the detriment of private enterprise. Effective savings allocation was not by the market mechanism and every effort was made to withhold allocation to the private sector. This is important for the efficiency aspect of the use of effective savings; for one could say in general that, abstracting from income distribution, allocating effective savings to the state sector would be economically optimal if that sector is more efficient. But can it be said that the state sector was more efficient than the private in Ghana? Or did the government efficiently use the effective savings it allocated to itself? How did the state enterprises perform after massive investment expenditures on them? We examine these questions next.

State Manufacturing Enterprises: An Evaluation

The State enterprises established by Nkrumah were intended to produce consumer goods currently imported by using imported raw materials in the hope that foreign exchange might be saved and employment created.[26]

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[26] A summary done by the Bank of Ghana in 1968 showed imported inputs into the manufacturing sector to comprise a weighted average of 74% of total inputs in 1968 (cited by Killick, 1978; p.201).

As we saw earlier, these enterprises accounted for 26% of total manufacturing output in 1967. This figure is deceptive; what it does not reveal is the level of inefficiency.

Despite excessively high effective rates of protection State enterprises were saddled with chronic excess capacity and attendant high production costs.[27] In many cases the final product was more expensive than its imported substitute.[28] We provide below extensive evidence of underutilization of capacity in the sixties;

(i) The government estimated that at the end of 1966 actual manufacturing output was only one-fifth of the single-shift capacity of installed plant.[29] Steel (1972) found that none of the firms in his 40-firm sample utilized more than 50% of its capacity.

(ii) The 1965 Annual Plan presented data on state industrial enterprises showing that their actual production in 1963-64 was only 29% of capacity (Appendix 3).

(iii) The mines controlled by the State Gold Mining Corporation achieved in 1969 a level of output only 59% of the output achieved in 1961 while the labor force decreased by only 11% (Killick, 1978; p.172).

(iv) In 1968 Ghana Railways handled about 20% less cargo than in the early sixties even though it had a larger labor force at the end of the period (Killick, 1978; p.172).

(v) Trawlers purchased for the State Fishing Corporation were underutilized; some were not even used at all (Two-Year Plan, section VI, p.4).

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[27] Leith (1974) estimated the effective rate of protection as just over 100% on groundnut oil and coffee hulling, over 300% on records, over 400% on radio and TV assembly, over 700% on apparel and over 1,000% on shoes and cosmetics (p.74).

[28] Leith (1974) also found evidence of this in industries producing cocoa butter, distillery products, hand-bags, luggage and paints (p.74).

[29] N.L.C. Ghana's Economy and Aid Requirements.

(vi) In March 1966 as many as 13 of the corporation's 17 fishing vessels had been tied up at home and abroad for want of repairs or attention. Six of them were at Japanese ports incurring daily mooring charges of $50 (Daily Graphic, November 17, 1978; p.6)

(vii) Of the 20 state manufacturing enterprises which were in operation in 1964, only 10 were working to half or more than half of their optimum capacity. In three cases the actual production was even less than 10% of the full capacity. In one case (the Paper Bag Division of the Paper Conversion Corporation at Takoradi) the rate of utilization was as low as 3.5%. On average the 20 state manufacturing enterprises were using only 42% of their productive capacity (Ahmad, 1970; p.116).

On specific examples:

(i) In 1967-68 the State Footwear factory achieved production levels averaging only 24% of rated capacity — 480,000 pairs of shoes annually as against a capacity of two million (Killick, 1978; p.225).

(ii) In 1967 the State Sugar factory at Komenda achieved an output of 21% of capacity; another factory at Asutsuare managed a mere 3% (Killick, 1978; p.224).

(iii) The fiber-bag factory is said to have operated at 25-30% of one-shift capacity between 1964 and 1970 (Killick, 1978; p.225).

With such under-utilization of capacity it hardly comes as any surprise that state enterprises were "inefficient savers of foreign exchange", an objective they were initially set up to achieve. Steel (1972) concluded from his study that:

> "Existing structure and utilization of manufacturing capacity represents a very costly and inefficient method of gaining foreign exchange and raising national income. Even worse, 24% of output was produced at a net loss in foreign exchange, taking into account all foreign exchange costs of capital and domestically produced inputs" (p.226).

On other tests of efficiency, Killick (1978) showed, using available fragmentary evidence, that the state enterprises, which tended to be more capital intensive, had lower labor productivities than their private counterparts as the following table indicates.

TABLE 6.8

COMPARATIVE LABOR PRODUCTIVITIES AND COSTS IN MANUFACTURING ENTERPRISES BY TYPE OF OWNERSHIP, SELECTED PERIODS. (Means of two-year periods).

VALUE-ADDED PER PERSON ENGAGED[a] (¢ MILLIONS)	1962-63	1965-66	1969-70
1. Private Enterprises	1,635	1,775	1,424
2. Joint State/Private	4,503	4,415	2,871
3. State Enterprises	748	690	784
4. State as % of Private	45.7%	38.9%	55.1%
5. State as % of Joint Enterprises	16.6%	15.6%	27.3%
Total Wages and Salaries as Percentage of Total Value-Added.[b] (PERCENTAGES)			
6. Private Enterprises	23.4	23.4	23.9
7. Joint State/Private	14.0	13.5	17.4
8. State Enterprises	51.0	46.1	30.6

Notes: (a) Calculated in constant 1962 prices.
(b) Calculated in current prices.

Source: Killick, 1978; p.223, Table 9.2.

Evidently Nkrumah's investment strategy in I-S industries was a failure. The massive investments in state enterprises turned out to be white elephants. Killick (1978) summed up the situation more succintly:

> "State enterprises were unprofitable — absolutely by comparison with public enterprises in other developing countries and by comparison with private enterprise in Ghana — and they were unprofitable despite considerable monopoly powers (and excessive

> effective rates of protection).... State enterprise, then, failed to fill the enterpreneurial gap, to propel the economy forward and to generate the surpluses which Nkrumah demanded of them" (p.227).

In sum, then, state enterprises represented "mis-directed" and inefficient use of effective savings to the detriment of the economy. Because the state enterprises proved less efficient than private enterprise, the transfer of effective savings (or investible resources) to the state industrial sector could be said to have retarded economic growth.

To be fair to Nkrumah, some attempt was made to invest in agriculture, the means of livelihood of the majority of Ghanaians. But this attempt also took a socialist direction and substantial investments were made in State Farms and here too the results were not commensurate with the size of the investment.[30] Did successive Ghanaian governments learn from Nkrumah's mistakes? To what extent did they correct his mistakes or

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[30]Detailed evaluations of the State Farms can be found in Killick (1978), especially p. 193, Ahmad (1970), Wheetham and Curie (1967). The failure of the State Farms was even recognized in official circles. The Abrahams Report (1965) noted that "the State Farms have not produced foodstuffs in sufficient quantities to justify their capital and current investment" (p.23, para. 63).

Also the conclusion of the World Bank mission which stayed in Ghana towards the end of 1965 was that neither the State Farms not the Workers' Brigade "had had success in achieving either its aim of significantly improving agricultural production or of attaining financial self-sufficiency. Indications are that workers of both agencies produce little more, if as much, as they and their families consume and that if engaged in traditional agriculture they would produce significantly greater quantities at a much lower cost" (see Killick, 1978; p.194). We may call this "mechanized subsistence agriculture".

avoiding making them?

2. After Nkrumah, 1967-74

The situation after Nkrumah did not change radically. Successive governments did not appreciably dismantle the state interventionist machinery and they inherited with it its inherent problems and inadequacies. Sporadic attempts were made to sell off non-viable enterprises but they buckled under public opposition, and this later proved to be a decisive mistake. Successive governments were right in blaming Nkrumah for the burden they inherited but they had the choice of setting things right and in fact the opportunity to do so. So pre-occupied were they in condemning Nkrumah that they failed to take advantage of the opportunity and precious time slipped by.

The NLC that took power after Nkrumah set itself the task of government house-cleaning, bringing order into government finances and adopted a more pragmatic approach to the country's economic problems. It was not interested in socialism or indeed any other ideology. It set out to restore efficiency to the economy. The junta's leader, Lt. General Joseph Ankrah, stated that:

> "It is the determination of the NLC to establish as a matter of priority a strong and progressive welfare state in which no one will have any anxiety over the basic needs of life. This calls for a drastic re-appraisal of our economic policies, the foundations of which has already been laid by the Economic Committee of the NLC" (Howell, 1972; p. 84).

To bring about some order and efficiency, the NLC aimed at,

> "(a) the correction of the present imbalance in the country's foreign payments position,
> (b) the arrest of the inflationary pressures to which the economy has been subjected during the few years,
> (c) the provision of more job openings for the rising population of the country and,
> (d) the restoration of balance to the government budget".
> (NLC, Rebuilding Ghana's Economy, March, 1966).

To this end, the NLC adopted an austerity budget in 1967. Although it implied a deficit, it was the smallest in five years (see Table 4.5). The Council drastically cut what it considered to be wasteful expenditures.[31] Some state enterprises (laundry, furniture and bakery) were successfully sold off to the private sector but the sale of 17 others ran into controversy.[32]

Busia also made some attempt to sell off some non-viable state enterprises. But in May 1970, when the government sold 10 Soviet trawlers to an English businessmen, Mr. Victor Passer, for $120,000 (claimed to be one-tenth their original value) the transaction was publicly challenged and a Parliamentary Commission of Enquiry into the Sale of Soviet-Built Trawlers (1970) was set.

In 1972, Busia was thrown out of office and Colonel Acheampong assumed power. The overthrow of Busia was significant in terms of development strategy. He was more of a "free thinker", believing more in the efficacy of market forces. Acheampong on the other hand was an Nkrumah in army uniform and returned the country to the centrally-controlled

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[31] On June 18, 1966, 7 projects planned by Nkrumah were halted, saving the country $26.6 million. Works on the $53.2 million Bui Dam was abandoned. Four Soviet Ilyushin planes were returned. Purchases of a VC-10 plane, 2 ships for the Fishing Corporation and a frigate for Ghana Navy were cancelled and diplomatic representation abroad was reduced by 40% (Howell, 1972; p. 146).

[32] The sale of the State Pharmaceutical Factory in particular raised public furor. On June 24, 1967, the NLC negotiated an agreement with an American company, Abbott Laboratories of Chicago, to operate jointly an abandoned Hungarian-built pharmaceutical plant in Kwabenya valued by Abbott at ₵500,000 ($1.2-1.4 million). Under the terms of the arrangement Ghana would own 55% of the joint enterprise which was named Abbott (Ghana) Ltd. Abbott agreed to put ₵225,000 ($540,000-640,000) into the venture immediately and to pay another ₵225,000 at 6% interest over 10 years for Abbott's share of the plant (Howell, 1972; p. 153). It was publicly alleged that the government had sold the plant too cheaply.

economy so characteristic of the Nkrumah era; the circle was now complete.

Under Acheampong expansion of state participation in the economy was resumed, comprehensive import controls were restored and a return was made to comprehensive planning that began with Nkrumah's 7-Year Development Plan. However, more important to our analysis was Acheampong's attempt to re-activate various state enterprises left uncompleted or abandoned after Nkrumah - the State Tannery and Pre-Fabricated factories for example.

This attempt, to put it mildly, was mis-guided. Many of the state enterprises, as we saw earlier, were hastily acquired, financed by suppliers' credit of questionable nature and above all inefficient and unprofitable. In many cases installed machinery had either been stolen or badly rusted. Re-activation therefore meant further foreign exchange (effective savings) expenditures.

In sum, then, Ghanaian governments that took office after independence in 1957, were all chatacterized by an "interventionist" economic philosophy; the state was to champion and direct economic development. Inherent in their development strategies was an abiding faith in the efficacy of the state as an economic agent and in the superiority of state intervention vis-a-vis private enterprise as a vehicle for rapid economic transformation.

Very little was done to improve the country's ability to earn and save foreign exchange. Yet the effective savings that were available were allocated more to grandiose state import-substituting industries to the neglect of private enterprise and the demise of peasant agriculture. Thus, not only were effective savings channelled into the "wrong" sectors but even worse they were also inefficiently utilized.

It is true that some attempts were made to sell off non-viable state enterprises but the endeavors were abandoned when they ran into political storm. It is also true that some attempts were made by the NLC and Busia to re-orient the economy somewhat towards private enterprise but as Killick (1978) argues,

> "The view of the NLC and Busia government as replacing Nkrumah's command economy by the re-instatement of the market is essentially a mis-leading one and that continuity rather than change was the outstanding characteristics of policies from 1966 onwards" (p.300).

CHAPTER 7: SOCIO-POLITICAL FACTORS AND EFFECTIVE SAVINGS

So far we have examined the economic influences on effective savings and how Ghanaian governments' policies have undermined the country's ability to earn or save foreign exchange. In this chapter, we consider non-economic influences on the volume and the use made of effective savings. Because of the broadness of this topic we restrict ourselves to corruption and smuggling only. The aim here is not to attempt a quantitative analysis of how these mal-practices adversely affect effective savings. Rather the aim is to extend Robinson's (1971) work by demonstrating that such practices as corruption and smuggling can have serious effects on development via their effects on effective savings.

A. THE CULTURE OF POLITICAL CORRUPTION

> "This whole society is corrupt; corruption for us is a way of life. Everyone from the big man down to the small is out to get his, and a people who have had little in the past, will take advantage of opportunities with a feeling of 'why shouldn't we as long as no one gets directly hurt'" (An unidentified Lecturer quoted in LeVine, 1975; p.14).

> "We Ghanaians are so accustomed to bribing our officials, and they to stealing our rate-moneys, that it would be considered odd if we didn't bribe and they didn't steal" (A former Ghanaian Official quoted in LeVine, 1975; p.12).

1. The Development of the Culture of Political Corruption

Corruption is certainly not a social vice unique only to Ghana. It prevails in one form or another in practically all countries, Western and Communist countries alike. In the US for example, corrupt and even violent practices have been used by disadvantaged American ethnic groups to achieve rapid social mobility. Since corruption certainly did not impede American economic development in the Reconstruction era, there

has been, understandably, a natural tendency for some Western scholars to minimize its extent or its deleterious effects in developing countries.

The American experience however should not lull one into overlooking the seriousness of the venality problem and its grave consequences for a developing country such as Ghana. There are several reasons for this; first, corruption has detrimental consequences on development — this is where our interests really lie. We would not have devoted this chapter to corruption had we not been convinced if its role in undermining the efficiency of the civil service and its ability to formulate and implement government development policies; of its role in undermining the quality of and direction of investment; and of its role in robbing the country of vast sums of foreign exchange (effective savings) needed for investment. Second, the seriousness of corruption is relative; the US can "afford" an embezzlement of $100 million, but such an amount representing about 30% of Ghana's export earnings would spell an economic disaster. Third, it is relatively easy for corruption to get out of control and become self-reinforcing because the administrative, political and constitutional set-up of a developing country may possess little inherent checks to deal effectively with the problem. Witness the African political system whereby a President can confer upon himself such titles as "President for Life" (and even "Conqueror of the Planet of Apes") as well as manipulate the constitution and stash millions of dollars away in Swiss Bank accounts and get away with it. Fourth, the predominant role of the state in economic activity makes political corruption a serious threat to economic development. A government that is corrupt loses its legitimacy and respect of its subjects. It finds itself incapable of eliciting the sacrifices, initiatives and enterprise

necessary for development because when,

> "Half-starved people are being daily admonished to tighten their belts, members of the new Ghanaian aristocracy and their hangers on, who tell them to do this, are fast developing pot bellies and paunches and their wives and sweet-hearts double their chin in direct proportion to the rate at which people tighten their belts".[1]

Ghanaian experience shows that a corrupt government is incapable of efficient economic management. Many of the cases of inefficiency in state enterprises we cited in the previous chapter are underlined partly by corruption. Through corrupt practices, firms and individuals manage not only to secure import licences several times greater than they are entitled to but also succeed in transferring foreign exchange out of the country. It would be great dis-service to minimize the seriousness of the corruption problem in Ghana or indeed in any other LDC. It would also be economically irresponsible to advocate that Ghana needs more external assistance when clearly a real possibility exists that such an assistance may be "corrupted" out of its efficacy. So insidiously endemic is corruption in Ghana that we were, in fact, tempted to rename our concept of effective savings as the "corrupted" economic constraint facing Ghana.

In the next two sections we deal topically and generally with the causes and consequences of corruption. We may add that our discussion is intended to be suggestive and exploratory without pretending to cover the issue in its entirety.

Causal Factors (Cultural, Colonial and Situational)

Apter (1972), among other Western scholars, attribute corruption in Ghana to the persistence of traditional values which conflicts with

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[1]The statement was made by Victor Owusu, Opposition MP in 1961 (Nkrumah era) and later Foreign Minister in the Busia Government. This was quoted by LeVine (1975), p.v (preface).

the requirements for a secular way of life. He argued that,

> "Nepotism, for example, is considered a grave offence in Western bureaucratic practice, yet in African practice, providing jobs for the members of one's own family is socially compulsory" (p.6).

According to him, within the African cultural system, the welfare of the clan is more important than the welfare of the individual and emphasis is on achievement through clan co-operation rather than self-help. Therefore neglecting one's family (immediate and extended) is most reprehensible. Generosity, on the other hand, is the most appreciated human quality. To avoid accusations of ingratitude politicians and civil servants surround themselves with fellow tribesmen as well as immediate relatives.[2] Werlin (1972) even suggests that "when a politician has been generous, even at public expense, all his other faults are forgiven" (p. (p.253).

There is some truth in this thesis; even Nkrumah admitted that;

> "I could not have chosen my government without some regard to tribal origins, and even within the Party (Convention People's Party) itself, there was at times a tendency to condemn or recommend some individual on the basis of his tribal or family origin" (Nkrumah, 1968; p.66).

However, it is difficult to establish whether public officials surround themselves with kinsmen solely for cultural reasons. They may do so for reasons of expediency. Although English is the official language of Ghana, many senior officials and supervisors communicate often in the vernacular with subordinates who barely have elementary education. In issuing verbal orders or directives in the vernacular, the seniors run less risk of being mis-interpreted or mis-understood.

The second cause of corruption may be found in colonialism. The

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[2] See also Werlin (1972), pp. 253-254 and LeVine (1975), p.82.

colonial government (British) was generally regarded by the educated as alien, illegitimate and the administrators as infidels. Every attempt was made by the subjects to sabotage the operations of the colonial machinery. Disrespecting its laws and regulations, stealing from the "infidels" and wrecking any piece of government machinery or property were all considered patriotic acts and won social acclaim. William Ofori-Atta, the Foreign Minister in the Busia Government, summed it up well:

> "There was a time when we regarded the government as a foreign government and therefore some people, in their own circles, even regarded it as a patriotic duty if they were able to steal from the government" (LeVine, 1975; p.149).

The schizophrenic or ambivalent attitude of civil servants to the very government they are indended to serve suggests that the lingering notion of the government as "foreign" has tended to persist. The state machinery and its involution still represent something alien against which an ingrained subversive force assails. Of course, now, these acts have lost their patriotic essence and have taken a new meaning.[3]

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[3] Hagen (1962), in fact, believes that this ingrained animosity may be responsible for the administrative inefficiency so characteristic of ex-colonies:

> "They (the ritualistic elites) seek to identify themselves with the European externals, but when they try to function in these positions, their hatred of the underlining European values and the perpetual conflict within them prevent them from functioning successfully.... It is plausible to believe that unconsciously they deliberately sabotage the European-style operation. They make mistakes, misunderstand instruction, fail to anticipate needed actions. They do so, I suggest, because they need to protect their identity by demonstrating to themselves that they would not whole-heartedly function as aliens. Or they impose on the operation the traditional inter-personal relationships which one aspect of their values and need structure demands and the operation fails to function well" (p.426)

The third cause of corruption may be traced to the elites who are susceptible to peculation for a number of reasons. First of all, the typical African official has been educated at the expense of a large number of his kinsmen who were patently making collections to pay for his education in the hope that he will provide for them when he reaches a high position. If he put his duty to the state before this debt of gratitude, they would denounce him, ostracize him or perhaps demand immediate full re-payment. In repaying this debt he is expected to make monthly remittances to his clan, provide jobs for his clansmen (nepotism), give decent presents to a vast array of relatives as well as clan elders when he visits his village, to make contributions befitting his post, to provide in his house food and lodging for kinsmen who come to the town seeking jobs and not finding them for months or years; to help pay for the education of his poorer relatives and, last but not the least, to provide feasts and to defer the costs of the funerals of relatives (including his own!) besides making donations to the church (Andreski, 1969; p.102).

As he cannot meet such extensive obligations out of his salary, he is compelled to squeeze bribes, embezzle public funds and take rake-offs. He feels no compunction about doing this because everybody else who can does the same and nobody feels there is anything wrong with it.

Secondly, apart from stultifying clannish obligation, the life-styles of the elites far exceed their pecuniary ability to attain them. Andreski (1969) believes this factor alone explains much of the corruption in Liberia and Sierra Leone where the elites tend to be markedly detribalized and rootless owing to their descendence from emancipated slaves sent to Africa and hence tend to be ruthless in seizing every

opportunity to make illegal personal gains (p. 103). He calls this type of corruption "egoistic graft". In any case, those with professional qualifications or foreign training are especially desirous of securing the same standard of living as their Western counterparts; "consequently they feel it necessary to acquire a big car, a television set, a stereo and a 'bevy of fawning women'. We need all of them but our pay is not enough".[4]

Thirdly, the ethnocentrism of the colonial administrators and the concomittant pejoration of African traditional values eroded the self-esteem of the emerging elites as well as the masses. A psychological experiment by Aronson and Mettee (1968) has shown that, if a person is tempted to perform dishonest behavior — cheating, stealing, etc. — it will be easier for him to yield to this temptation if his self-esteem is low than if it is high.

Fourthly, in the case of Ghana, there is a rather mundane factor that may arouse venal proclivities in the elites. The Mensah Report (1969) remarked that 88% of the total employed labor in Ghana could not afford a balanced diet even if they spent their entire income on food alone (p.63). Although the total employed labor includes sub or non-elites like messengers and refuse collectors the remark may be taken to apply to the elites as well.

The fourth cause of corruption may be found in the growth of administrative jungle during the Nkrumah era. In his efforts to regulate every aspect of the Ghanaian economy for his socialist state, Nkrumah had by 1965 created 31 ministries. Statutory corporations were scattered all

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[4]This remark made by I. K. Gyasi is quoted in Werlin (1973), p.55.

over the place. Key operating ministries were cut up periodically, their functions divided and then shuttled back and forth.[5] Agriculture was the best example; between the old ministry, the State Farm Corporation, the United Ghana Farmers' Council, agricultural wing of the Workers Brigade and 25 other agancies, lines of authority were hopelessly tangled, co-ordination non-existent. Legislation was enacted and projects began in a haphazard manner. "The results of this administrative fragmentation were uncontrolled expenditures, free-wheeling state enterprises and an enterpreneurial ethic that permitted wholesale trade in public resources" (LeVine, 1975; p.96).

To find one's way through this administrative jungle an outsider needed to "buy" his way. This was no easy task since more often than not he had to deal with several senior officials who exercised their discretion independently under no administrative controls. Werlin (1972) believes that:

> "More than anything else, what encouraged corruption was the inadequacy of controls. Where proper controls existed as in the Volta Dam, corruption was insignificant" (p.285).[6]

But even where controls existed, their exercise proved ineffective because in the words of Attu Kwamina, "you cannot use one set of corrupt men to check another set of corrupt men".[7]

The fifth cause, besides the inadequacies of administrative controls, has been the absence or ineffectiveness of constitutional checks. Nkrumah monopolized the communication media, stripped the legislature

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[5] See Elliott Berg in Zolberg (1971), p. 211.

[6] The Volta Dam was co-financed by the World Bank. Recall how Nkrumah chastised the Bank as "neo-colonial agent" and given to "forcing would-be borrowers to submit to various offensive conditions".

[7] Quoted in Werlin (1973), p.259.

and the judiciary of their independence and effective power, placed the unions under his thumb and met little or no resistance from private interest groups. Lord Acton once remarked that, "Power tends to corrupt and absolute power tends to corrupt absolutely". Werlin (1973) however contends that "corruption really emerges from the absence of power. It was the weakness of the Nkrumah regime — its inability to control what went on rather than its totalitarian façade — which facilitated corruption" (p.260).

The final cause of corruption is really not an independent one but rather a product of the prevailing culture of corruption — survival. To survive in a corrupt environment, one may also have to adopt dishonest and corruptive practices. Attu Kwamina puts it succintly:

> "If it is known that a contractor who offers a bribe will forever be black-listed and never awarded a contract, only the most reckless of contractors would offer bribes. But when it is only the dishonest and corrupt contractors who get contracts by offering bribes, even honest contractors will follow suit, not because they are themselves corrupt, but because they want to remain in business" (Quoted in Werlin, 1973; p.262).

2. The Consequences

According to LeVine (1975) by the end of the 1960's, corruption had become so pervasive that a culture of political corruption had come to exist in Ghana. He defines a culture of political corruption as a situation where "politically corrupt transactions become so pervasive in a political system that they are the expected norm in transaction involving government officials" (p.8). At that time in Ghana,

> "Bribery, graft, nepotism, favoritism and the like had become commonplace at all levels of officialdom; and what is more much of the public had come to expect officials to conduct their business in a spirit of subterfuge, dishonesty and mendacity on all sides" (LeVine, 1975; p.13).

The government of course was aware of the corruption problem and it was constantly brought up in the National Assembly. B. E. Kusi, commenting in the National Assembly on some ¢300,000 for which the Ghana Educational Trust could not account for, remarked:

> "If no exemplary action is taken now in respect to those who have misused the sum of ¢300,000 it is likely that anybody who will be trusted with money in the future to carry out government's educational policy will put that money in his pocket...Many children go about in the streets because they cannot get accomodation in secondary schools, while those who have charge of the money send their children to international schools and to Universities. Most of them ride in Mercedes Benz (220s) and yet call themselves socialists. This is very bad.
>
> If we want to build a socialist country, then we must let the President know that we are serious about the use of public funds and that we do not pay mere lip-service to socialism" (Quoted in LeVine, 1975; p.12).

Also M. Archer (P.P. for Wawa East) addressed the National Assembly thus:

> "Anytime I stand and say that people are corrupt, Members in this house think I am joking. I am not joking at all. I say that with all seriousness. What we saw and what we listened to during the deliberations of the Public Accounts Committee is evidence of the fact that people in this country — in fact many of them — are corrupt.... One thing that I should like to say is that many people in this country think that it is only politicians who are corrupt... But those who are corrupt are civil servants and people in the public corporations.... Only Heaven knows how much we are losing in this country through the practice of corruption" (Quoted in LeVine, 1975; p.50).

To assess the consequences of corruption, various writers have distinguished between different types of corruption according as to whether its consequences are favorable or not. Sharpston (1970) distinguishes between "efficient" and "inefficient" types; van Roy (1970) between "functional" and "dysfunctional" types; and Heidenheimer (1970) between "tonic" and "toxic" types.

The Beneficial Effects of Corruption (Efficient, Functional and Tonic Types)

According to Sharpston (1970),

> "If corruption is efficient, the official being bribed demands a fee which represents a sizable fraction of the tax or duty to be avoided, or the value of the concession to be obtained. If corruption is inefficient, then it is possible to buy the official off for an amount which is insignificant in relation to the benefit obtained. With efficient corruption, a high rate of duty on luxuries will not yield much government revenue, but it may be successful in limiting the amount of foreign exchange spent on importing the luxuries concerned since the effective charge a potential importer will actually have to pay will be quite high. With inefficient corruption, large scale expenditures of foreign exchange on luxuries will continue" (p.945).

The efficient form of corruption may, through tax evasion, enable enterpreneurs to keep back sufficient funds from their profits for reinvestment — funds which would be difficult to obtain from outside on account of inadequate capital markets and also funds which if ceded to the government would have been spent on unproductive "prestige" projects. Second, corruption may enable enterpreneurs to circumvent restrictive government controls which would otherwise hinder economic development. For example, a vital spare part may be paid for in black market foreign exchange and brought into the country with a bottle of Scotch for the customs officer to excuse the lack of documentation — whereas otherwise the factory would have ground to a halt before official foreign exchange and import permits could have been obtained. To some extent also, corruption may increase rewards for the enterprising — by lowering effective marginal rates of taxation, for example especially for the self-employed businessman (Sharpston, 1970; p.946).

The functional aspects of corruption may stem from prevailing conditions in emerging nations. First, existing legislation is often poorly and haphazardly formulated and irrelevant to the needs of the society.

Statutes may be nothing more than the impulsive whims of a dictator. The administrators responsible for drafting the legislation tend to be inept or inadequately assisted and their work is seldom properly supervised and corrected by Cabinet Ministers, legislators or judges. Corruption under these circumstances can reduce the impact of policy mistakes.[8] Second, since the administration tends to be slow, costly and inflexible corruption may be regarded as a "solvent" or "lubricant" to overcome excessive bureaucratic inflexibility, sluggishness and bungling.[9]

The tonic effects of corruption, as Heidenheimer (1970) puts it, resides in the fact that "a smattering of corruption may help keep the masses politically satisfied" and thus aid development efforts (p.484).

Nye (1967) in his cost/benefit of corruption, argues that in order for a regime to maintain legitimacy, it must be able to cope in three major spheres; it must foster economic development, push national integration and increase governmental capacity to cope with social change. Corruption may serve these ends and thus benefit a society when the public and key groups such as the army have a generally tolerant attitude towards corruption, when the political elite feel secure enough to invest their capital at home rather than send it to Swiss Banks, and when restraints on corruption exist in the form of an independent press, opposition parties, trade unions or fair elections. Positing these conditions, Nye concludes that corruption may,

(a) enhance economic development by stimulating capital formation, bureaucratic efficiency and the creation of enterpreneurs and

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[8]See Leff's "Economic Development through Bureaucratic Corruption" in Heidenheimer (1970), p.516.

[9]In Ghana the act of paying a bribe is sometimes referred to as "greasing the palm" of an official.

and enterpreneurial incentive,

(b) speed national integration by fostering inter-elite co-ordination and supportive, participatory attitudes among rural non-elites and

(c) increase governmental capacity through the development of greater effectiveness and legitimacy.

Before we discuss the adverse effects of corruption let us examine the applicability of the beneficial conditions to Ghana. First, the case of "efficient" corruption is idealistic as its author conceded. Sharpston (1970) himself admitted that:

> "In Ghana, corruption has been inefficient; from the Ollennu Report, it is clear that bribes of 5% or so of its face value secured an import licence, at a time when the scarcity value of import licences was 30% or more.... The effect of this 'inefficient' corruption is that luxury imports come in great quantities. Accra is full of shiny Mercedes Benzes, often the more luxurious models. All of them have been imported 'second-hand' with a declared value of perhaps of $1,000" (p.945).

Second, in real life it is difficult to prove that funds withheld from the tax-man are actually re-invested and not spent on luxury automobiles or deposited in Swiss Bank accounts. Ghanaian evidence suggests the contrary. Third, lowering effective marginal rates of taxation on businessmen is a regressive form of taxation that can only succeed in exacerbating prevailing inequitable income distribution.

The argument by the "funcionalists" is a <u>non sequitur</u>. That corruption may lessen the impact of administrative mistakes and speed up bureaucratic processes is a confusion between cause and effect. It can also be argued that civil servants deliberately drag their feet in anticipation of gratuities and hence corruption itself may induce public servants to be inept.

Heidenheimer's conclusion that a "smattering of corruption" may be functional rests on the assumption that, first, it is somehow possible to determine how much corruption is beneficial and second that the government

will be able to limit the scale before it becomes dysfunctional. Neither assumption is justified in the Ghanaian case and more importantly, we have earlier argued that a currupt government loses its legitimacy and finds itself incapable of rallying up support and enthusiasm for development.

Finally, Nye's conditions for corruption to be beneficial — tolerant attitude and existence of restraints in the form of independent press, opposition parties, trade unions or fair elections — are inapplicable to the case of Ghana. The first condition of tolerance may seemingly appear satisfied in the Ghanaian case as the culture of political corruption may predispose most Ghanaians to expect or tolerate a certain amount of corruption, but the "tolerance" may stem more from resignation rather than acquiescence (LeVine, 1975; p.99). More importantly, the fact that Ghana has carried out more than 60 commissions of enquiry and published far more studies of corruption than any other Third World country would seem to indicate that Ghanaians are not tolerant of corruption.

Deleterious Effects of Corruption (Dysfunctional, Inefficient, and Toxic Types)

These may be economic and non-economic. Taking the non-economic effects first, Nye argues that by destroying the legitimacy of political structures corruption may contribute to political instability and possibly lead to national disintegration. This may be applicable to Ghana as it has experienced five changes of government with predecessors always being accused of corruption. Second, corruption may reduce the government's capacity to cope with the challenges it confronts in meeting popular expectations and providing prompt solutions to social problems. This may also be true of the Ghanaian situation where governments find it difficult to resist pressures for more import licence allocation for

consumer goods as we have already seen and also to resist demand for salary and wage increases resulting in excessive budget deficits that characterized the Acheampong regime.

Economically, corruption may have several detrimental effects. Corruption may,

(a) Divert scarce resource, practical and intelligent into "fixing" and corrupt enrichment rather than productive enterprise. By rewarding individuals according to their "connections" and not their efforts, corruption may hinder enterpreneurial and innovational growth and pose a serious obstacle to development.
(b) Cause capital outflow (to Swiss Banks) resulting in a net loss of scarce foreign exchange which is needed for investment.
(c) Lower the standard of efficiency in the public service and indeed all government operations including policy-making and planning.
(d) Discourage foreign aid from donors reluctant to see their aid misused.

It would rather be impossible to give an estimate of the economic costs of corruption to Ghana. Although we provided extensive evidence of venality in chapter 2, section A, we did not make any pretensions in that direction. Our purpose there was to provide the reader some "feel" of the incalculable waste of foreign exchange and other scarce resources. Nevertheless, Ghanaian Heads of State have raped the country and turned this once prosperous country into a mature debtor that cannot even feed itself. Acheampong's alleged fortune of ₺45 million alone can supply Ghana's industries with their imported raw materials for 3 months (total raw materials imports were ¢378 million in 1974), supply Ghana Airways with two new planes to increase its present one-plane fleet for its trans-continental flights and above all finance 34% of Ghana's total fixed capital formation (this was ¢268 million in 1974). This is where part of Ghana' economic difficulties lie.

Currently there are more than 10 Commissions of Enquiry under way in Ghana. A compendium of these commissions is supplied in the Appendix at the end of this chapter. None of them has completed its deliberations and submitted a report at the time of writing this thesis,

It is quite conceivable that many of the earlier Commissions of Enquiry were set to discredit ousted governments in view of the fact that most commissions were often set soon after changes in governments occured. If so then it may be presumed that succeeding governments recognized corruption as a serious problem. What steps, if any, did they take to eradicate or deal with the problem? Indications were that successive Ghanaian governments made little effective effort.

First, the governments' own treatment of corrupt officials has clearly demonstrated to all that stealing government property or from the public purse is not a criminal offence. Corrupt officials only forfeit part of their booty or refund unlawfully acquired money. The point is that they are not punished or prosecuted as criminals. So why should they have any feelings of remorse or repentance? The following quotes indicate that many are not repentant.

> "The _____ Commission of Enquiry found that I had exceeded my income by ₤_____ , and I had to pay that. But I am not sorry; I used the money wisely".
>
> "When Busia is gone, I will be back in service. And unless the soldiers stand by my desk, I will do what I did before, because no one can stay in office unless he prefers those who serve him well".
>
> "Do you want me to feel guilty for what happened? Guilt is for pastors and priests. If I give drink gift to the chief, a gift to a big man is also the Ghana way". (Quotes are in LeVine, 1975; p.45).

Second, the government's own attitude towards corruption can best be described as schizophrenic; it condemns it on one hand and appears to condone it on the other. The government took no steps to protect witnesses threatened with victimization and actually victimized (Ollennu Report, 1967;p.21). Neither could such witnesses seek protection from or redress through the court system.

Third, the government has shown little preparedness to implement at least some of the recommendations of the various commissions of enquiry. The single administrative short-coming uncovered by all these commissions was the absence of accounting procedures and accountability. It takes only the broad implementation of one report in all government establishments to deal effectively with the problem. Does the government need the reports of 2,000 commissions if there are 2,000 government bodies before tackling the accountability problem? Since more than 60 commissions of enquiry have been set, it appears the government is myopically treating each institution as an isolated case; it is like a truncated centipede that attempts to crawl forward by moving each of its legs independently rather than in unison or co-ordination with the others. Or does the government at a later stage intend to set a Commission of Enquiry into "Why the Reports of Earlier Commissions of Enquiry were not broadly implemented? A witness, Dr. Daniels, at the Ollennu commission came very close to the truth:

> "If we cast our minds back to the period beginning from 1963 to the present time, we cannot fail to be struck by a picture with sordid details of corruption in regard to the granting of import licences. Thousands of letters written by importers to the Ministry of Trade either got lost in the post or were unanswered. An importer of high grade could suddenly be down-graded or blacklisted and no more licences would be issued to him; and no reasons would be given to such an importer. When such an importer was refused a licence without any reasons being given, he had no remedy in our

> Courts. He could not go to the Courts and ask for an Order of Mandamus compelling the Minister to issue an import licence to him. If even he succeeded in an action in court, some more technical reasons would be found to drive him out of his business if he was a Ghanaian, or he could be deported if he were non-Ghanaian. Woe betides such an importer who would report to the police of allegations of bribery and corruption in high places. The only course left to such an importer was to contact someone who knew someone who also knew the Minister, or simply to bribe his way through to get an import licence.
>
> Under the old regime, some allegations of bribery and corruption in connection with the granting of import licences were made. Two Commissions were set up to investigate these matters. We only have to look at paragraphs 108 to 110 of the Report of the Abrahams Commission. What became of these findings of the Commission. We heard that some witnesses of truth were victims of deportation or were blacklisted" (Ollennu Report, 1967; p.21, para. 147).[10]

This is the tragedy or the hopelessness of the Ghanaian case of corruption.

B. SMUGGLING AND QUASI-SMUGGLING PHENOMENA

Ghana, and Black Africa generally, is replete with numerous clandestine strategems designed to obtain or transfer foreign exchange illegally. From Uganda to Gambia smugglers do a brisk business in coffee, tea, diamonds, gold, cocoa and peanuts. Apart from smuggling, many other illicit means exist to obtain foreign exchange - outright bribery of Central Bank officials or swindles, over and under-invoicing of legal trade transactions. We look at some of these below with special reference to Ghana but we must add that due to the illicit nature of these activities the evidence presented can at best be taken as scanty and parochial.

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[10] Why set up another commission of enquiry when implementing earlier reports could just have been effective? Paragraphs 108 to 110 of the Abrahams Report dealt with the case of Roquah Stores which managed to obtain its licences in less than twenty-four hours, whose files could not be traced and who succeeded in obtaining licences several times greater than it was entitled to — we have already cited this case.

1. Smuggling

In chapter 4 we demonstrated that a 10% differential between the relative rates on inflation in Ghana and Ivory Coast was sufficient to curtail cocoa sales to the CMB by about 47,120 metric tons. By implication, this amount was smuggled across to neighboring countries. We also saw in that chapter our 47,120 metric tons estimate was not significantly different from Paterson, Simons and Ewart's estimate of 40 - 60,000 metric tons Ghana lost through smuggling in the 1977/78 crop year. Paterson Simons and Ewart estimated that for the previous crop year (1976/77) 15,000 tonnes were smuggled out of the country (West Africa, August 8, 1977; p.1639). Even if we use the smaller figure of 15,000 tonnes and the world price of ₤3,300 per tonne that prevailed in July 1977, the loss in foreign exchange is considerable; upwards of ₤49 million which is far greater than what Ghana received in foreign aid from all sources.

So far in our study we have tacitly assumed that the incentive to smuggle derives its impetus from adverse economic conditions such as low real producer price vis-a-vis those obtaining in neighboring countries and possibly an over-valued official exchange rate. However, this assumption may not be entirely valid. It appears that other non-economic factors also trigger smuggling. For example, Callaway and Card (in Lofchie; 1971) contend that in 1965,

> "Cocoa smuggling was a reaction to the disillusionment with party personnel at this level. In 1965 fully 1/5 of Ghana's cocoa crop was smuggled out of the country. Officials at all levels were corrupt. Party funds were used to pay personal debts and officers who earned ₤180 per year owned Mercedes Benzes, Peugots, transport trucks and several wives" (p.86n).

There is no denying of the fact that smuggling constitutes a more formidable problem in Ghana than economists and government authorities are willing to concede. Furthermore, and more importantly, it robs Ghanaian governments of the foreign exchange much needed for capital formation. In the next chapter we investigate how Ghana could reduce the foreign exchange losses from smuggling.

2. Illegal Foreign Exchange Transfers, Over-Invoicing and Under-Invoicing of Legal Trade

> "Vashi Chataram Khubchandani, wanted in Ghana in connection with an alleged illegal transfer out of the country of ₤20 million sterling was arrested in Liberia on July 18, 1978" (Ghanaian Times, August 4, 1978; p.1).

Over-invoicing on imports and under-invoicing of exports are yet another devious subterfuge devised to circumvent controls on foreign transfers. The Gaisie Report (1975) documents extensive cases of these malpractices in Ghana. In 1976, for example, a "Briscoe Scandal" broke when the government announced it was taking over the Ghanaian assets of the R.T. Briscoe company (owned by the Danish East Asiatic Company) after findings against it in the Appiah Committee's report of enquiry which claimed that Ghana was losing over ¢60 million a year through "over-invoicing and other practices" (African Contemporary Record, 1976-77; p. B575). Some top military officers were implicated in the scandal; the People's Evening News claimed that General L. Okai, Chief of Military Intelligence and Major-General C. Beausoleil, Chief of Defence Staff, had evaded ¢65,000 on Mercedes and Volkwagen cars imported on their behalf by Briscoe (African Contemporary Record, 1976-77; p. B576)

Sometimes a different illegal method may be used to transfer foreign exchange out of the country. Foreign subsidiary companies in Ghana "over-bill" their parent companies for materials imported from the

parent. Besides consituting an illegal means of repartriating profits or foreign exchange such inter-affiliate (or transfer) pricing reduce the profits tax liabilities of the subsidiaries (Parry, 1973 and Lal, 1973).[11]

In summing up the contents of this chapter, we see that we have in Ghana a peculiar type of attitudes, motivations and idiosyncracies that militate against the accumulation of effective savings and their efficient usage; in short, an environment that is inimical to rapid economic development. The Head of State, corrupt senior public officials, smugglers and private citizens each illegally exacts a toll from every dollar of foreign exchange earned by the country. After spending a part to import foreign consumer goods, the remainder, if any at all, is then devoted to capital formation. To make matters worse, what is set aside for capital formation is not even allocated efficiently. How then does the country develop? Note again, at the cost of repetition, that many of these problems of capital formation originate from domestic sources. If we simply sum up Acheampong's fortune of ₤45 million (¢180 million), foreign exchange loss due to smuggling (¢98 million), pilferage of foreign exchange by Khubchandani (¢80 million) and the loss due to over and under-invoicing (¢60 million) we get a staggering ¢418 million! This is more than the ¢268 million in capital formation the whole country undertook in 1973 (Table 4.4).

The ¢418 million foreign exchange loss may also be compared to the amount of foreign aid Ghana receives, given the following table (next page).

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[11] Could these illegalities possibly play a role in the secular deterioration of commodity terms of trade for Ghana or developing countries?

TABLE 7.1

TOTAL RECORDED NET FLOW OF RESOURCES TO GHANA, 1970-74. TOTAL FLOW FROM ALL D.A.C.(a) COUNTRIES AND MULTILATERAL AGENCIES.					
	1970	1971	1972	1973	1974
Total Amount of Aid to Ghana					
(1) In $ Millions	28.56	51.01	52.08	36.82	32.16
(2) In ¢ Millions(b)	78.54	140.53	143.22	101.26	88.44

Notes: (a) D.A.C. means Development Assistance Committee.
(b) Rate of conversion used was $1 = ¢2.75.

Source: OECD Review of Development Co-Operation, 1975.

It is shamefully evident that the amount of foreign aid Ghana received in 1974 does not even come close to half of Acheampong's fortune of ¢180 million, as if the charity of friendly foreign countries to suffering Ghanaians simply went to one individual.[12] Rather than go begging for foreign aid it is painfully obvious that Ghana can obtain more foreign exchange (or effective savings) by rectifying some of the defects in its socio-political environment.

[12] Perhaps there is some truth in the popular saying that foreign aid means "robbing the poor in the rich countries to pay the rich in the poor countries" in an effort to achieve 'equitable' distribution of global income.

APPENDIX A

A Compendium of Commissions of Enquiry Currently in Session

1. The Archer Committee on operations of Ghana Cocoa Marketing Board (CMB). Chairman: Justice P. E. N. K. Archer

2. The Amable Committee on Affairs of Ghana Timber Marketing Board (TIMBOD). Chairman: Colonel A. K. Amable

3. The Taylor Commission of Enquiry into Assets of Ministers in the Busia Regime. Chairman: Justice J. N. K. Taylor

4. The Agyeman Committee on operations of Black Star Line (National Shipping Line). Chairman: M. J. K. Agyeman.

5. The Sowah Assets Investigation Commission into Assets of persons who held office in the NLC and NRC regimes. Chairman: Justice E. N. P. Sowah. (Adjourned on January 23, 1979 until further notice).

6. The Boison Committee on affairs of Ghana Cooperative Marketing Association. Chairman: Justice Samuel Mensah-Boison

7. The Akrasi Committee on affairs of the Western Regional Development Corporation. Chairman: Mr. E. K. K. Akrasi

8. The Twumasi Committee on affairs of the State Housing Corporation (SHC). Chairman. Lt.-Colonel Twumasi

9. There are other committees probing the operations of the following state corporations,
   (a) State Fishing Corporation
   (b) Airtours, a subsidiary of Ghana Airways
   (c) Diamond Marketing Board
   (d) State Construction Corporation

CHAPTER 8: SUMMARY AND CONCLUSIONS

A. OVER-ALL SUMMARY

We began this disquisition with a critical review of contemporary development theory which, according to Yotopoulos and Nugent (1976), is characterized by "fundamentalist dogmas" pertaining to capital, import-substitution, industrial sector and planning. These "dogmas" reflect a tendency to view development from a rich nation's view-point and to prescribe solutions to development problems from this perspective. As such, not only is the "medicine" of the "wrong" type in terms of relevance but also has been prescribed as if there is but one road to development; that traversed by the DCs.

The process of capital formation was one such important concept "debauched" by contemporary development theory. Viewed from a DC's perspective, strictures on rapid capital formation initially amounted to increasing both material and human capital, which in turn implied increasing domestic savings and investment in education. With the birth of the gap-models, it was realized that an expansion in material capital may run into a domestic savings bottleneck or a foreign exchange constraint if some investment goods have to be imported. In either case, foreign aid could play a vital role in relieving the bottleneck.

According to Chenery (1966), the originator of the gap models, the foreign exchange gap is the operative constraint in a majority of the LDCs. This constraint, it was argued, originate principally from the inability of the LDCs to increase their export earnings, owing to restrictive and protectionist practices of the DCs as well as unpropitious income and price elasticities for the primary produce of the developing countries. Thus, many LDCs find themselves in a capital formation trap unless they

can receive substantial amounts of foreign assistance.

We pronounced this theoretical state of affairs as unsatisfactory. It advanced the view that an LDC's rate of capital accumulation is determined by external forces beyond the country's control. Or that aid alone can solve the problems of capital formation and without aid an LDC is helpless. To use a medical analogy, it is often recognized by doctors that the effectiveness of an externally administered drug (foreign aid in our case) depends upon "other" factors such as the psychological make-up and life-style of the patient. If a patient with a heart condition or hypertension does not take steps to remove him/herself from stressful situations or change his/her life-style and diet no amount of drugs would cure his/her ailment.

In the LDCs, the process of channelling savings into investment is not automatic, owing to the absence of a well-developed financial market and a capital-producing sector. Consequently, capital formation entails the use of foreign exchange to import the investment goods the country cannot produce. Obviously, what is important for investment is not how much of its GNP an LDC manages to save but rather in what form these savings are - foreign exchange. Now, what the country can import in investment goods is determined not only by how much foreign exchange its exports can earn but also by how much of this foreign exchange the country can save from wastes, conspicuous consumption and mal-practices. We called this foreign exchange saved "effective savings" which we defined narrowly as the difference between export earnings and imports of consumer goods. It is these savings that form the crux of the capital formation issue. From this angle then, the basic problem of accelerating development boils down to expanding the country's capacity to earn foreign

exchange and/or curtailing its imports of foreign consumer goods.

The difference between our thesis and the gap analysis is our assertion that an LDC's capacity to earn and save foreign exchange can be conscricted by domestic factors, both economic and non-economic. Although aid can be an effective external drug, its effectiveness can be eclipsed by powerful domestic forces. For example, domestic economic policies and prevailing socio-political practices can induce an LDC's economic ailment and predispose the country towards a perpetual dependence on foreign aid.

In chapter 3, we attempted to demonstrate theoretically the importance of these domestic factors in capital formation. In that chapter, we suggested that the volume of primary produce, for example cocoa, Ghana's main export crop, sold to Marketing Boards is influenced by real producer prices. Often, the export sector of an LDC is plagued by inflation-related problems of declining real incentives, smuggling, under-invoicing and other mal-practices.

On the curtailment of imported consumer goods, most LDCs operate some kind of an import licensing system. Invariably, administrative inefficiency, corruption and elite megalomania play havoc with this objective.

These then suggest clearly that an LDC's ability to earn and save foreign exchange (or effective savings) can be impaired by domestic factors. Consequently, there are internal constraints to the capital formation process in the developing countries.

Turning to Ghana, we saw in chapter 4 that its economic ailments were associated with effective savings/balance of payment crises. From 1957 to 1960, the country managed to finance its imports of investment goods from its substantial stock of external reserves. With the depletion of these reserves the country resorted to the use of short-term suppliers'

credit on an increasing scale. When credit conditions became tight in 1965 and repayments fell due at an alarming rate a balance of payment crisis emerged that has plagued the country ever since.

There is no doubt additional foreign exchange at that time would have eased the crisis somewhat but not necessarily have resulted in increased capital formation or better economic performance. Because in regressing GNP on investment we discovered that investment has not had any significant impact on GNP. This finding was hardly surprising in view of the substantial evidence of general unproductivity and waste of the investment undertaken by Ghana during this period (Ahmad, 1970; Grayson, 1973; Killick, 1978).

Although appearing to refute our thesis about effective savings, the non-significance of investment in the GNP equation rather lends support to our contention that a mere increase in physical capital is not enough. The use and productivity of the capital, which are influenced by domestic conditions, are also important.

However, in attempting to ascertain statistically the determinants of effective savings our results were not as good as we had hoped for. Many difficulties were encountered in the effective savings regression and these pertain to definition, data problems and simultaneity bias.[1] Strictly speaking, effective savings should have been broadly defined as foreign income from all sources minus imports of consumer goods. But severe problems with the capital account of the balance of payments for Ghana hampered efforts to determine the country's foreign income. Specifically, IMF's SDR allocations to Ghana, foreign aid, short and long

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[1] In chapter 5, we attempted to redress this simultaneity bias by estimating effective savings in a system of simultaneous equations, using 3 Stage Least Squares. The result was some improvement, though not very much, in the estimated co-efficients.

private credit to Ghana less IMF obligations and loan repayments would constitute a partial source of foreign exchange. But Ghana's default on loans as well as repudiation of an unspecified number of foreign debts forced us to adopt the narrow definition of effective savings. Even so the use of the narrow concept did not resolve all the difficulties.

We took imported consumer goods as exogenous since they were subject to import controls. But the controls did not work as we saw in chapter 4, thanks to corruption, mal-administration and elite megalomania. Furthermore, the practice of over-invoicing imports and under-invoicing exports was prevalent during this period (Gaisie Report, 1973). All these presented serious problems in estimating the true volume of effective savings even using the narrow definition.

The weak regression results obtained for the effective saving equation were therefore, in part, a reflection of these difficulties - a possible mis-specification of imported consumer goods and possible measurement errors. Nevertheless, in spite of these weaknesses, there was some evidence that domestic inflation has been one of the contributory causes of effective saving crises. It is important to stress that this conclusion is not at variance with work done elsewhere. Our cocoa regression results, work by Leith (1974) and Richardson (cited in Killick, 1978; p.120) all testified that declining real producer prices and price-deflated effective exchange rate have contributed to the stagnation of Ghana's export sector. Therefore, even if our effective saving regression results did not provide the strong evidence hoped for, the conclusion is clear: that Ghana's capacity to earn foreign exchange (or effective savings) has been impaired by its excessive rate of domestic inflation.

In chapter 5, we attempted some analysis of the inflationary process

in Ghana to determine its causal factors. We showed that Ghanaian inflation is of the "monetarist" variety, i.e., caused by excessive increases in the money supply. Furthermore, we showed that the main source of instability in the money supply has been net credit to the total public sector (TPS) to finance ever-growing budget deficits. The deficits could have been produced indirectly by the balance of payment crises when export stagnation resulted in lower export tax revenues, creating a possibility of unstable, vicious circles as we saw in section C of chapter 5.

Using a simultaneous equation model we were able to show that a ¢1 million increase in the money supply would reduce effective savings by ¢4.8 million. This was a very important result. A similar conclusion had been reached by Franco (1979), who showed that a ¢1 million increase in domestic credit would reduce foreign exchange reserves by ¢370,000 ceteris paribus. It should be emphasized perhaps that what is important is not the exact reduction in effective savings or reserves but rather the negative impact of excessive domestic liquidity on foreign exchange availability.

Thus, the main conclusions of chapters 4 and 5 are that the difficulties facing Ghana's export sector are inadequate real price incentives, smuggling (itself a response to inadequate export incentives) and inflation which can be attributed to persistent budget deficits. From these come the observation that Ghana's capacity to earn foreign exchange (or effective savings), and hence capital formation, has been constricted by domestic factors.

In chapter 1 we chided the gap-models for analysing the capital formation process outside of the socio-political environment in which it occurs. We argued that the generation of additional foreign exchange is only a necessary but not sufficient condition for rapid capital accumulation

and that the socio-political environment also determines how much of its foreign exchange the country saves from conspicuous consumption and conditions the use of these foreign exchange savings. In chapter 6 we showed how Ghanaian governments, systematically and politically persecuted export producers. Economic policies to the export sector vascillated with not clear direction. Chronic problems of the export sector such as transportation difficulties and cocoa diseases were never seriously addressed. In fact, real government expenditures on cocoa fell from 1960 (Table 6.1), resources were diverted from the cocoa sector, the swollen shoot disease control program was abandoned in 1963 and the imports of the insecticide Gammalin "20" ceased in 1965. Therefore, even if the rate of inflation had been zero over the period under study, the relentless strangulation of the peasant cocoa industry would have, sooner or later, precipitated a stagnation of the export sector. Why the strangulation? Because assistance to the peasant farmers did not fit into Nkrumah's political scheme of things. He was suspicious of creating a bourgeiosie class which would undermine his political authority and destroy the socialist state he was building for Ghana. Clearly then, non-economic factors have had considerable influence on Ghana's ability to earn foreign exchange.

On Ghana's ability to save foreign exchange, we saw in chapter 6 that the import licensing system was a hopeless fiasco. On numerous occasions the system collapsed under excessive corruptive influences, gross inefficiency and elite pressure. More often than not, imports of consumer goods went out of control. Again, non-economic factors (malpractices) prevented Ghana from saving the foreign exchange needed for investment.

Even worse, on top of these difficulties of earning and saving foreign

exchange, what foreign exchange was available was not invested productively. As an abiding "convert" of the "religion of development", Ghana poured millions of foreign exchange into "prestigious" projects and inefficient state enterprises.

Last but not the least, if the available foreign excahnge was not properly invested, part of it was embezzled by the Heads of State and Ministers. In chapter 7, we attempted to present some evidence, albeit scanty, of the millions of foreign exchange Ghana loses through embezzlement, swindles, smuggling as well as over and under-invoicing of legal trade - the "mal-practice factor".

In an over-all summary, there are many obstacles that stand in the way of Ghana's efforts to earn and save foreign exchange for its capital formation drive. On the earning of foreign exchange, these are problems of inflation, inadequate government incentives and defective policies towards the export sector as well as socio-political harassment of peasant export producers. Even if these problems were resolved there is yet another set on the "saving" side. Foreign exchange earned has to be saved from the hands of smugglers, corrupt officials, the elites and above all the Head of State. Evidently, Ghana's difficulties in accelerating capital formation are rooted in domestic causes which revolve around the government and the environment it creates.

It is quite true, however, that fluctuations in foreign exchange earnings (the so-called export instability) can be engendered by price oscillations on the world commodity markets (external forces) over which Ghana exercises little control. This indeed was the case in 1965 when a bumper cocoa crop so reduced the world price that Ghana earned less from its exports than in the preceeding year (Table 4.4). Nonetheless, recent

indications are that the problem with cocoa does not have so much to do with world price instability. If anything, the world price has been steadily advancing upwards in a long-term trend but Ghana has failed to capitalize on the higher prices because of defective cocoa policies that play into the hands of smugglers. Ghana once produced 1/3 of the world's cocoa output but this supremacy is being lost to the Ivory Coast, thanks largely to the activities of smugglers. The underlying cause of export stagnation in Ghana then has more to do with inadequate volume rather than world price instability. Even if we attach some credence to the instability argument, in chapter 3 we showed that the export instability itself may also be engendered from domestic causes. Specifically, we showed that smuggling alone is sufficient to introduce fluctuations in foreign exchange earnings. In chapter 4 we saw how sensitive cocoa sales to the CMB are to the producer price in the Ivory Coast. Infrequent revisions in the Ghanaian producer price are enough to set off waves of smuggling activity with consequent fluctuations in cocoa earnings abroad.

In all then, Ghana's economic problems owe their origins to domestic causes as well and not solely to "economic forces moving in on us from overseas" as Busia might claim, or to "imperialist forces" as Nkrumah would allege or by "the weather" á la Acheampong.

What then can be offered by way of solutions if we view Ghana's economic problems in this light?

B. WAYS OUT OF GHANA'S ECONOMIC DIFFICULTIES

In the course of this thesis we have touched on many social and political issues that have some negative bearing on the process of capital accumulation. This was inevitable in view of the complexity of the development process and the high inter-relationship among the economic problems

facing Ghana. We harped upon corruption, bribery, over-invoicing, thefts of foreign exchange and elite megalomania throughout the thesis. To prescribe effective solutions to deal with these problems would entail detailed sociological analyses which, although clearly beyond the scope of this thesis, warrants future research. The purpose of presenting these problems, even though possible solutions could not be suggested, was to demonstrate that the socio-political environment and its attendant malpractices are also factors worth taking seriously in the capital formation equation.

On the economic difficulties we shall limit ourselves to effective crises and their related problems. In chapter 5 we argued that real income stagnation in Ghana may be attributed to effective saving crises and unproductive investment. The crises can be linked to inflation and excess liquidity and in turn to budget deficits. To afford greater insight into these problems and their inter-relationships we examine their solutions with reference to the causation links we established in chapter 5, namely, Budget Deficits ⟹ Money Supply Increases ⟹ Inflation ⟹ Effective Saving Crises ⟹ Real Income Stagnation or Decline. Evidently, the difficulties begin with the government.

1. Eliminating the Budget Deficits

With regards to the severance of the first link (deficit ⟹ money supply increases) several possibilities suggest themselves;

- eliminate or reduce budget deficits by either raising revenue, reducing expenditures or both,
- if a budget deficit is inevitable, resort more to borrowing from the public (non-inflationary) than to borrowing from the banking system.

The second prospect can be dealt with rather quickly. Borrowing

from the public to finance budget deficit is either infeasible or severely limited in scope at present, owing to the absence of a well-developed market in government securities. Even if this possibility exists, given the Ghanaian climate of political instability, repudiation of debts and sequestration of property, it is unlikely the public would take this risk.

The first prospect of raising revenue to reduce budget deficits in Ghana, or in many LDCs, holds little hope or promise. Tax bases are small and revenue is notoriously income-inelastic. Under these circumstances, raising more revenue may mean increasing indirect taxes which, although in itself potentially inflationary, may provoke widespread discontent. One possible solution is to raise tax revenue by removing controls on the exchange rate and prices of domestically-produced goods since the foreign trade and excise tax bases are eroded during inflation (Mansfield, 1980).

On curtailing expenditures, we saw in chapter 5, section C, that this prospect is also fraught with practical and political dangers as well as ideological difficulties. Curtailment of educational expenditures may provoke student riots. Defence cuts may provoke coups and the curtailment of community and social cervices may run contrary to socialist ideology.

In any case, socialist orientation is merely one of the reasons for persistently large budget deficits. It is highly unlikely that the abandonment of socialism alone would eliminate budget deficits substantially. We are not decrying budget deficits <u>per se</u> as an inherently bankrupt economic strategy. But given the Ghanaian situation where governments are reckless with expenditures, have shown little foresight in anticipating the effects of their persistent over-spending and the consequences of excessive borrowing from the banking system, would it not be dangerous to "entrust" them with the deficit as a fiscal measure?

Perhaps a way of breaking the deficit ⟶ money supply increase nexus would be to establish an independent monetary authority to ensure the separation between fiscal and monetary policies. If necessary, the independence of the monetary authority should be guaranteed by the constitution. It is entrenched in the 1963 Banking Act that the Central Bank advances to the government should not exceed 10% of estimated revenue and if such advances are unpaid within 3 months of the end of the financial year further advances should be refused (p.18). An independent monetary authority would enforce these stipulations. This proposal however is not without some drawbacks since the government can enact itself out of difficult situations as happened in February 1967. The Banking Act of 1963 permitted a fiduciary issue of only 40% of currency in circulation which at the discretion of the Minister of Finance could be raised to a maximum of 60%. But from June 1965 the fiduciary issue was 72% (Ahmad, 1970;p.62n) and in February 1967 the Banking Act was amended through a decree by the NLC, permitting the Bank of Ghana, retroactively from July 1, 1965, to issue a fiduciary element up to a maximum of 75% of currency in circulation. The same decree empowered the NLC Member in charge of Finance to suspend this ceiling altogether.

Another possibility is to outlaw budget deficits altogether by the constitution if safe-guards in the Banking Act do not work. Yet another solution might be a monetary union (or the adoption of a common currency) between Ghana and its neighboring countries.[2] Such an arrangement would enforce financial discipline in much the same way as the "Sterling Exchange Standard" during the colonial era. If Ghana inflated its economy, it would lose reserves to its neighbors.

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[2]We are grateful to Prof. C. Leith for making this suggestion privately.

2. Increasing the Domestic Supply of Commodities

Perhaps we might be more successful with the second (money supply → inflation) link. If budget deficits and increases in the money supply are inevitable, then perhaps the inflationary effects of monetary expansion may be mitigated by increasing the supply of commodities to absorb the excess money. But which commodities? In chapter 5, section C, we argued that the critical commodities in short supply are local food-stuffs, the bulk of which is produced by the peasant agricultural sector.

In chapter 6, section C, we showed that Nkrumah was afflicted with a "religion of development" that predisposed him to emphasize industry over agriculture. Scarce foreign exchange resources were poured into import-substituting industries, many of which were hastily set up, inefficiently operated (or saddled with excess capacity) and above all riddled with corruption.

Sadly enough, this was also the strategy adopted by successive governments after 1966; in the process peasant agriculture fell into neglect. Consequently agricultural production stagnated and even declined. Furthermore with the import-substituting industries failing to alleviate the supply of consumer goods, the economy had no extra supplies of commodities and food-stuffs to mop up the excess supplies of money.

A simple solution to this problem suggests itself — increase agricultural production. To accomplish this much of the attitudes of the ruling elites towards the peasant sector would have to change. If only they would discard their "westernized" outlook, at least temporarily, they would be able to discover that many of the ingredients for successful agricultural revolution, or economic development for that matter, already exist latently among the native population. The natives are

not "backward", risk averters, un-innovative, un-responsive to economic incentives and so on as mythologists would have one believe. Without the aid of modern navigational instruments, Ewe seine fishermen, in search of richer fishing grounds, travel thousands of miles along the West African coast and always manage to return and land their catch. Wharton (1966) is even more emphatic

> "Peasant and subsistence farmers are indeed 'economic men' who respond positively and negatively as quickly as the most commercialized farmers in the modern world. The evidence is quite clear that the subsistence man is fully as responsive to the opportunity for a larger income (higher gain beyond costs and effort spent) as the next man. Such responsiveness takes a variety of forms ranging from the introduction of new crops to the adoption of new practices even those at odds with existing cultural methods" (p.264).

Evidently, what is needed is a system of incentives and opportunities to release this latent enterpreneurial force. Evidence from Pakistan supports this incentive argument. In explaining Pakistan's rapid growth, Papanek (1962) wrote that:

> "The only obvious major change that took place in 1947 was in economic opportunity..... It is difficult to interpret what happened in Pakistan in terms of slow, fundamental change in motivation or ideology, or in customs which then caused alterations in economic behavior. Instead, changed economic incentives were effective in altering economic behavior, given specified favorable non-economic circumstances" (p.55-56).

By incentives, we mean adequate and effective incentives. It makes no sense to set up rural bank branches or a Rural Agricultural Credit Scheme on one hand and persecute peasant farmers on the other just because they are illiterates. Or, to demand such cumbersome procedures in opening savings accounts that farmers are forced to keep their savings in mattresses.[3] Neither does it make any sense to set up a huge Ministry

[3] To open a chequing account into which his salary was going to be paid in 1972, the author was asked to supply an appointment letter from the University of Ghana, a letter of introduction from the Departmental Head (Economics) and the names of 3 persons with savings accounts at the bank as referees.

of Agriculture in resplendent architecture in the capital city with the so-called agricultural experts stretching out in plush arm-chairs in air-conditioned offices when the farmers who are supposed to be assisted by the Ministry live in the rural area.

3. Improving the Effective Capacity to Save

We now examine how the third link (inflation $\longrightarrow$ effective savings crises) may be pre-empted. As we have already seen elsewhere in this thesis, the volume of effective savings is influenced by economic and non-economic factors. We shall restrict ourselves to the economic factors and make some economic proposals.

To increase its effective savings the country either has to increase export earnings and/or reduce its imports of consumer goods. In this section we focus only on export expansion possibilities since consumer goods are subject to import controls, considered to be non-economic and exogenous.

In chapter 4 we saw the adverse effects of domestic inflation on export earnings. A long term solution readily suggests itself; keeping inflation under tight control. This in turn would require the elimination of budget deficits and increasing domestic supply of commodities, possibilities we considered above as veritable odysseys.

In the short run, however, there are interim measures that the authorities can take to increase Ghana's foreign exchange earnings. On this issue we focus on cocoa. Since Ghana loses substantial amounts of foreign exchange from smuggling, crop wastage due to transportation difficultues, cocoa diseases, poor maintenance of cocoa farms and loss of farm labor migrating to urban areas, it becomes immediately apparent that foreign exchange earnings can be boosted in the short-run by

curtailing these losses.

Let us take smuggling for example. In chapter 4 we estimated that a 12% difference in the Ghanaian and Ivorian rates of inflation (actual Ghanaian rate 12.5% higher) would reduce cocoa sales to the CMB by 53,222 metric tons, which by implication would be tantamount to smuggling. (Recall that Paterson, Simons and Ewart - 1978- estimated that between 40,000 - 60,000 tonnes of Ghana's cocoa were smuggled out). Multiplying our figure by the world price of ₤3,300 (July 1977) we get a staggering ₤175.6 million in lost foreign exchange earnings. Can this loss be recovered by raising the Ghanaian producer price sufficiently to discourage smuggling?

Recall also that our cocoa sales function was,

$$\ln COCOA = -11.50 + 2.26 \ln \text{Real GDP}_{t-1} + 0.79 \ln PPG - 0.65 \ln PPIC$$

where,

COCOA = Cocoa sales to the CMB in tonnes.

PPG = The producer price in Ghana.

PPIC = The producer price in Ivory Coast.

Totally differentiating this function and assuming that real income is constant, we have,

$$d\ln COCOA = 0.79\, d\ln PPG - 0.65\, d\ln PPIC$$

If there is to be no change in sales to the CMB, i.e. $d\ln COCOA = 0$, then we must have,

$$0.79 \frac{dPPG}{PPG} = 0.65 \frac{dPPIC}{PPIC}$$

Hence,

$$\frac{0.79}{0.65} \frac{dPPG}{PPG} = \frac{dPPIC}{PPIC} \quad \ldots\ldots\ldots\ldots 8.1$$

Or,

$$\frac{dPPG}{PPG} = \frac{0.65}{0.79} \frac{dPPIC}{PPIC} \quad \ldots\ldots\ldots 8.2$$

$\frac{dPPG}{PPG}$ and $\frac{dPPIC}{PPIC}$ are the percentage increases in the Ghanaian and Ivorian

producer prices respectively.

Equation 8.1 suggests that an Ivorian price increase of 122% of a Ghanaian price increase would have no effect on sales to the CMB. That is a price increase in the Ivory Coast has to be more than 22% greater than the increase in Ghana for sales to the CMB to be adversely affected. Or, alternatively, Ghana only has to match 82.3% ($\frac{0.65}{0.79}$ in equation 8.2) of an Ivorian price increase to retain the same volume of sales to the CMB. To verify with facts, in the 1972/73 cocoa season when smuggling began to pick up, the Ivory Coast boosted its price from ¢11.60 to ¢15 per 30 kilos (Aforo-Addo, 1978), an increase of 29.3%. From our analysis Ghana needed only to have raised its price by 82.3% of 29.3% (= 24.1%). The actual Ghanaian price increase was from ¢10 to ¢12, a 20% increase which was insufficient (Aforo-Addo, 1978; p.11, Appendix B).

Since the PPG co-efficient is greater that the PPIC co-efficient in our estimated equation, it is not even necessary for Ghana to pay the same producer price for cocoa as the Ivory Coast. This observation is predicated on practical considerations. Smuggling entails considerable costs as the produce has to be transported over bush or jungle roads to avoid detection as well as considerable risks in the event of apprehension by law enforcers, which may necessitate payment of bribes. Thus, so long as the smugglers explicit and implicit costs are positive, the Ghanaian price can "affordably" be slightly lower than the Ivorian to dissipate the incentive to smuggle.[4] If our analysis is correct and Ghana

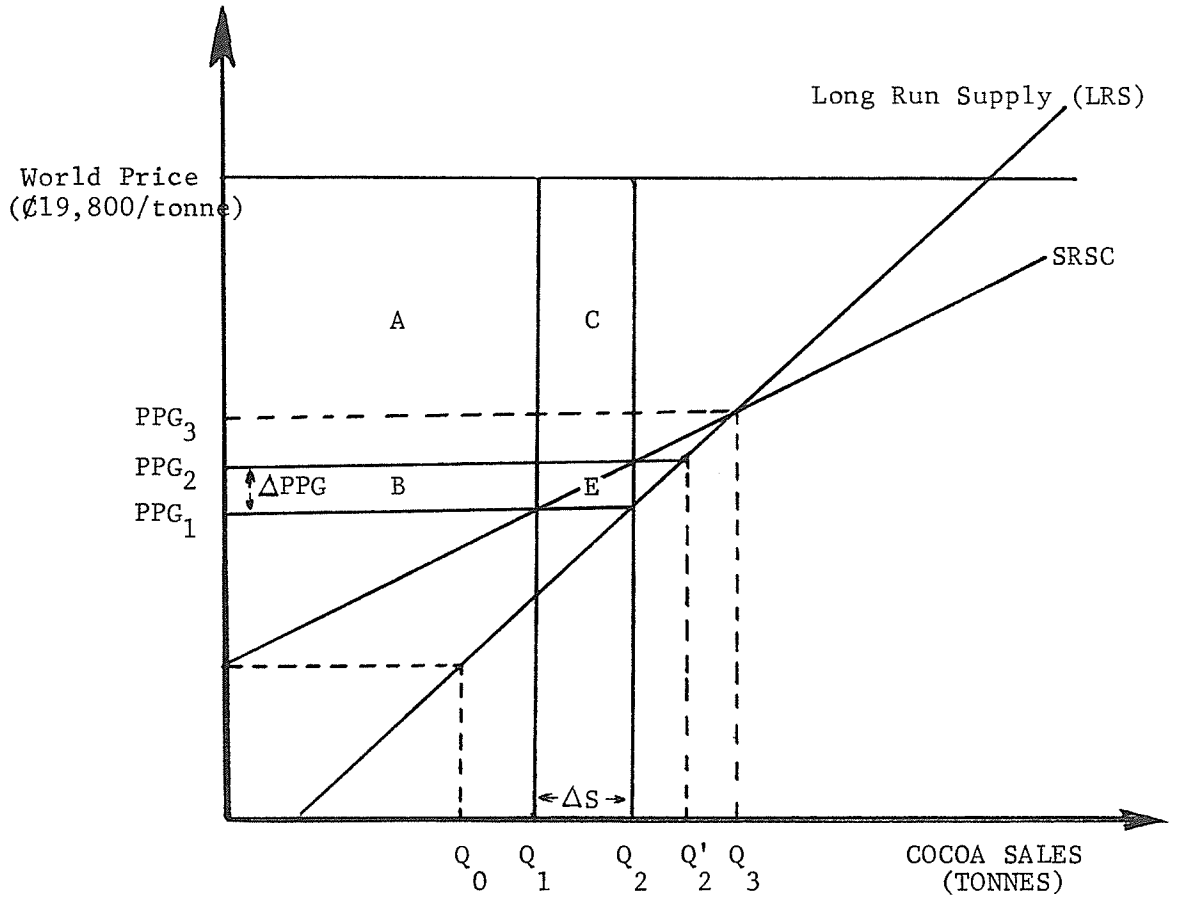
[4] It is quite possible that not all smuggling activities would be eliminated completely with a higher relative Ghanaian price. Some smuggling activity may be induced by the over-valuation of the official exchange rate, or by the desire to acquire foreign commodities scarce in Ghana due to import controls or to transfer funds illegally. We shall abstract from such possibilities.

does not have to pay the same producer price as the Ivory Coast, then it follows that Ghana does not have to raise its price by the same percentage as in the Ivory Coast to check smuggling.

However, in view of the considerable "unknown" factors in smuggling and perhaps to allay the apprehensions of critics, let us assume that a sufficiently large increase, say a doubling of the Ghanaian price from the current ¢40 to ¢80 per 30 kilos, would eliminate smuggling. Given the output of 308,000 , the ¢40 increase would cost the CMB an extra ¢411 million. Using the official exchange rate of ¢2.75 = $1 this extra cost translates into $149.45 million in foreign exchange. Deducting this from the ₤175.6 million (or $351.2 million) lost to the smugglers leaves a clear $201.75 million in profits! For a country in dire need of foreign exchange which is easier to do, doubling a producer price or go begging for some paltry sum in foreign aid? Recall that the amount of foreign aid Ghana received in 1974 was $32.16 million (or ¢88.44 million) - see Table 7.1. Evidently, the amount of official development assistance from all DAC countries is <u>less</u> than 20% of the foreign exchange lost to smugglers, let alone to Acheampong!

We can in fact generalize the proposition made above and demonstrate that the CMB will always earn more foreign exchange through increased sales by cocoa farmers by raising the Ghanaian producer up to a certain limit. We use the following diagrammatic illustration.

FIGURE 8.1: SHORT-RUN ANALYSIS OF PRODUCER PRICE INCREASE



where,

PPG_0 = Short-run "reserve" price

PPG_1 = Current producer price of ¢1,333.39/tonne

PPG_2 = Proposed new price of ¢2,666.78/tonne ($2 \times PPG_1$)

SRSC = Short-run supply to CMB net of smuggling

ΔS = Our estimate of smuggling of 53,222 tonnes.

The long-run supply of cocoa (LRS) is inelastic for well-known reasons — perennial nature of the tree crop et. cetera — and accordingly we have drawn the supply curve with a horizontal intercept. (A supply curve with a horizontal intercept is inelastic). The short-run supply of cocoa to the CMB (SRSC) is however elastic, drawn with a

positive vertical intercept (PPG_0). From our logarithmic function the relative price elasticity of cocoa sales to the CMB is the sum of 0.58 and 0.44 (= 1.44 > 1). That cocoa producers may have a reserve price (PPG_0) á la Bateman (1974) further supports an elastic SRSC, i.e., a positive vertical intercept. At this reserve price, there are no cocoa sales to the CMB and Ghana's entire crop of Q_0 is smuggled out.

As can be seen from the diagram, the horizontal difference between LRS and SRSC represents smuggling. It is possible to conceive of a Ghanaian price, PPG_3, that would eliminate smuggling in the long run. Above this price (PPG_3) smuggling becomes negative, i.e., Ghana becomes a net receiver of cocoa smuggled from the neighboring countries as happened in the 1950s when the Ghanaian producer price was much higher than in the neighboring countries.

At the current producer price of ¢1,333.39 (PPG_1) the long run output amounts to 308,000 tonnes (Q_1) — Paterson, Simons and Ewart; 1978. But the short run sales to the CMB equals 254,778 and the difference of 53,222 represent smuggling estimated by us. Doubling the producer price to ¢2,666.78 (PPG_2) has no effect on Ghana's output, Q_1, in the immediate short-run. But it diverts cocoa that would otherwise have been smuggled to the CMB making it possible for the CMB to purchase Ghana's entire supply. However, the new price, PPG_2, is insufficient to eliminate smuggling completely in the long run since this price would induce the long run supply of Q_2' and the amount smuggled would now be $Q_2' - Q_2$. Thus PPG_2 eliminates smuggling in the short-run but only curtails its incidence in the long run.

Now if the CMB receives the world price of ¢19,800/tonne and pays producers ¢40/30 kilos (¢1,333.39/tonne) the amount withheld by the CMB

is represented by the area A + B (ignore the broken lines). Assume that doubling the producer price increases sales to the CMB by eliminating all smuggling. In this event, the CMB appropriates net revenue represented by the area A + C. If C> B then it makes economic sense to double the price. Our calculations above showed that this indeed is the case; area C exceeded B by $201.75 million. But would an increase in the producer price always yield higher net revenue for the CMB? So long as the sum of the old Ghanaian price (PPG_1) and the new price (PPG_2) is less than the world price (WP) this indeed would be the case.[5]

[5] PROOF:

$$\text{Area B} = \Delta PPG \times Q_1$$

$$\text{Area C} = \Delta S \times (WP - PPG_2)$$

We wish to determine whether $B \gtrless C$, i.e.,

$$\Delta PPG \times Q_1 \gtrless \Delta S(WP - PPG_2)$$

Dividing both sides of the inequality by $\Delta PPG \times Q_1$, we have,

$$1 \gtrless \frac{\Delta S}{\Delta PPG} \frac{(WP - PPG_2)}{Q_1}$$

Multiplying the right hand side of the inequality by PPG_1 and dividing by the same,

$$1 \gtrless \frac{\Delta S}{\Delta PPG} \times \frac{PPG_1}{Q_1} \frac{(WP - PPG_2)}{PPG_1}$$

Hence,

$$1 \gtrless e_s \frac{(WP - PPG_2)}{PPG_1}$$

Since the short-run supply is elastic ($e_s > 1$) the strict less-then inequality would hold if the expression in the brackets is at least equal to or greater than unity, i.e., $1 \leq \frac{WP - PPG_2}{PPG_1}$

Hence, $PPG_1 + PPG_2 \leq WP$

Thus if $WP \geq PPG + PPG$ then $C > B$.

Verifying with current data the sum of PPG_1 and PPG_2 amounts to ¢4,000.17 which is less than the world price of ¢19,800 by far. This then suggests that, in the short-run, an interim measure of increasing Ghana's foreign exchange earnings from cocoa is at least to raise or double the producer price.

Note that we have not considered the long term effects of the increase in the producer price on Ghana's cocoa output. Haessel and Bloomqvist (1972) seem to argue that since the long-run world demand elasticity facing Ghana's cocoa is less than unity, cocoa output expansion in the long run would not be in Ghana's interest. Recall however that the elasticity study was based upon an assumed market share of 30% for Ghana, a part of which share Ghana has been losing to the Ivory Coast, thanks to smugglers. Furthermore, the argument fails to realize that smuggling makes it almost impossible for Ghana to pursue a long-run cocoa policy independent of policies in the Ivory Coast and Togoland. Suppose Ivory Coast raises its producer price and Ghana did not, perhaps in the mistaken belief that such an increase in producer price would increase Ghanaian output and depress world price. The Ivorian price increase would not only induce smuggling but also increase Ghanaian production in areas close to the Ivory Coast border. Eventually, part of the Ghanaian crops would end up on the world market via Ivory Coast, depressing the world market price Ghana was fearful of instigating. Our short-run policy recommendation can be seen as designed to maintain Ghana's share of the market.

We also believe that our interim policy recommendation is equally applicable to other Ghanaian exports like timber, diamonds, gold and even

kola nuts which have also been plagued by inadequate price incentives and smuggling. Here too, increases in producer prices would help bring about desired increases in sales.

4. Reducing the Import-Content of Investment

With regards to the final link (effective saving crises → real income stagnation), borrowing abroad and foreign investment could break this nexus. Although these foreign possibilities lie outside of our domain their viability is limited in view of Ghana's past experience with suppliers' credit and repudiation of debts. However, a more technical possibility exists in the form of reducing the import-content of investment. If capital formation was not heavily dependent upon imports of investment goods then the transmission effects of balance of payment crises on real income growth would be mitigated.

Lowering the import-content of investment would require an investment strategy that maximizes the use of local resources rather than imported inputs as is the case with import-substituting industries. For example, for years Ghanaian fishermen have been using dug-out canoes which afford very little protection against the elements and rough seas. Furthermore, such canoes are severely limited in the size of catch they can safely land. Ghana has an abundant supplies of tropical wood. But it has hardly occurred to Ghanaian officials to use local supplies of lumber to build simple but wider boats. Instead the authorities would rather establish a Ghana Boatyard Corporation at Sekondi to manufacture pleasure boats and trawlers made of aluminium!

In concluding, then, to combat the chain of deficits → money supply increase → inflation → effective savings crises → real income decline that has plagued Ghana, we recommended that:

(i) Either the budget deficits be eliminated or resort to deficit

finance (borrowing from the banking system) be curtailed.

(ii) The domestic supply of food-stuffs be increased to mop up the excess money supply.

(iii) Increase the producer prices of export cash crops and

(iv) Devise an investment strategy that maximizes the use of local resources.

Considering the simplicity of these proposals why have they not struck Ghanaian officials?

Some Western observers, perhaps careful not to offend, would offer "lack of administrative skills" as an explanation. Others would argue that a different set of criteria is needed to assess the actions and policies of politicians, for what may be politically expedient need not make economic sense. These, however, are dangerous positions to advocate.

First, the psychological impact of "lack of administratve skills" is profound. It may lead public officials in a quest for these "skills" outside their countries to solve simple and elementary problems for which hardly any expertise is warranted. It may also be used to excuse cases of gross incompetence, an excuse which in turn may encourage the same officials to be inept.

Second, the political argument is vacuous. The political system as it has existed in Ghana can hardly be termed democratic with accountability to the electorate or parliament. Despite the semblance of democracy in civilian elections, arbitary arrests and incarceration of political opponents, intolerance of dissenting opinions and press censorship have been the order of the day. Therefore, it is a contradiction in terms to argue that a government which is accountable to no one would pursue policies that make political sense.

However, there is a possible explanation as to why Ghanaian authorities have not considered simple proposals as we have above. Looking carefully at our proposals, we find that the second (increasing domestic supplies of food-stuffs) would involve giving incentives to peasant farmers. The third proposal similarly would involve giving incentives to peasant export crop producers. The final proposal would entail maximum use of local resources. Thus, apart from the first proposal of eliminating budget deficits, the rest are oriented toward the local or traditional sector. But this is precisely the sector which has been castigated as "backward" and neglected because incentives to this sector fly in the face of the "religion of development" of the elites.

Perhaps the constraints on development are not so much scarcities of economic resources or effective savings. And perhaps this disquisition is not about effective savings as an alternate approach to development but a discourse on the human factor crisis (or tragedy) in economic development.

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BIBLIOGRAPHY.

GOVERNMENT OF GHANA PUBLICATIONS.

Auditor-General. Reports on the Accounts of Ghana. Accra: Government Printer, periodic issues.

Bank of Ghana. Annual Reports. Accra: Government Printer, annually.

Bank of Ghana. Quarterly Economic Bulletin. Accra: Government Printer, quarterly.

Census Office. 1970 Population Census of Ghana. Accra: Central Bureau of Statistics, 1972.

Central Bureau of Statistics. Economic Survey. Accra: Government Printer, annual series.

Central Bureau of Statistics. External Trade Statistics. Accra: Government Printer, monthly.

Central Bureau of Statistics. Statistical Handbook. Accra: Government Printer, 1970.

Government of Ghana. 7-Year Development Plan, 1963/64-1969/70. Accra: Government Printer, 1964.

Government of Ghana. Annual Plan. Accra: Government Printer, 1965.

Government of Ghana. Second Year Plan. Accra: Government Printer, 1969.

Government of Ghana. Rebuilding Ghana's Economy. Accra: Government Printer, March 1966.

Government of Ghana. Budget Proposals. Accra: Government Printer, annual series.

Report of the Commission of Enquiry into the Affairs of the Cocoa Purchasing Company Limited. Accra: Government Printer, 1956 (Jibowu Report).

Report of the Commission of Enquiry into Alleged Irregularities and Malpractices in Connection with the Issue of Import Licences. Accra: Government Printer, 1964 (Akainyah Report).

Report of the Commission of Enquiry into Trade Malpractices in Ghana. Accra: Government Printer, 1965 (Abrahams Report).

Report of the Commission of Enquiry into the Affairs of NADECO Limited. Accra: Government Printer, 1966 (Azu Crabbe Report).

Report of the Commission to Enquiry into Kwame Nkrumah Properties. Accra: Government Printer, 1967 (Apaloo Report).

Report of the Commission on Review of Salaries and Pensions in the Public Service in Ghana. Accra: Government Printer, 1969 (Mensah Report).

Government Policies Towards the State Gold Mining Corporation. Accra: Government Printer, May 1971 (Amamoo Report).

Interim Report of the Commission of Inquiry into Bribery and Corruption. Accra: Government Printer, 1972.

Report of the Committee of Enquiry into Trade Malpractices (By the Aschkar Group of Companies). Accra: Government Printer, 1973 (Gaisie Report).

OTHER SOURCES.

Abbey, J.L.S., and Clark, Scott C. "An Econometric Model of the Ghanaian Economy, 1956-1969." Unpublished research paper, Department of Economics, University of Western Ontario, February 1973.

Adelman, I. Society, Politics and Economic Development: A Quantitative Approach. Baltimore: John Hopkins University Press, 1967.

Adekunle, J. and Ezekeil, H. "The Secular Behavior of Income Velocity of Money in Developing Countries". IMF Staff Papers (July 1969).

Ady, P. "Trends in Cocoa Production." Oxford University Institute of Statistics II, no. 12 (1949).

Africa Contemporary Record: Annual Survey and Documents. New York: Africa Publishing Company, annual series.

Aforo-Addo, E. "Cocoa Smuggling in Ghana." Unpublished research paper, Research Department, Ghana Cocoa Marketing Board, March 1978.

Aghevli, Bijan B., and Khan, Mohsin S. "Government Deficits and the Inflationary Process in Developing Countries." IMF Staff Papers (September 1978):383.

Ahmad, Naseem. Deficit Financing, Inflation and Capital Formation: The Ghanaian Experience, 1960-65. Munchen:Weltforum-Verlag GmbH, 1970.

Ainsworth, Leonard, and Ainsworth, Mary D. "Acculturation in East Africa: Political Awareness and Attitude Towards Authority." Journal of Social Psychology 57 (1962).

Allen, R.G.D. Macro-Economic Theory: A Mathematical Treatment. London: MacMillan, 1973.

Andreski, Stanislav. The African Predicament: A Study in the Pathology of Modernization. New York: Atherton Press, 1969.

Apter, David. The Politics of Modernization. Chicago University Press, 1965.

_____ Ghana in Transition. Princeton University Press, 1972.

Aronson, Elliott, and Mettee, David. "Dishonest Behavior as a Function of Differential Levels of Induced Self-Esteem". Journal of Personality and Social Psychology (1968).

Balassa, B. "The Problem of Growth in Less Developed Countries and Its Significance for OECD Policy." In Special Report III: Trade Prospects for Developing Countries. OECD, 1963.

_____, and Schydlowsky, D.M. "Effective Tariffs, the Domestic Cost of Foreign Exchange and the Equilibrium Exchange Rate." Journal of Political Economy (May 1968): 348-60.

Baran, P. A. "The Political Economy of Backwardness." Manchester School of Economics (January 1952).

Barker, Jonathan S. "The Paradox of Development: Reflections on a Study of Local-Central Political Relations in Senegal." In The State of the Nations; Constraints on Development in Independent Africa edited by M. Lofchie. Berkeley: University of California Press, 1971.

Bateman, Merrill J. "An Econometric Analysis of Ghanaian Cocoa Supply." In The Economics of Cocoa Production and Marketing edited by R. A. Kotey et al. Legon: ISSER, 1974.

Bator, F. M. "Anatomy of Market Failure." Quarterly Journal of Economics (1958).

Bauer, P.T. West African Trade. New York: Kelley, 1967.

Berg, E.J. "Socialism and Economic Development in Africa" Quarterly Journal of Economics (1964).

Bhagwati, Jagdish N. ed. Illegal Transactions in International Trade. New York: North-Holland, 1974.

Bhatia, R.J. "Import Programming in Ghana, 1966-69". Finance & Development (March 1973).

Bing, Geoffrey. Reap the Whirlwind. London: MacGibbon and Kee, 1968.

Birmingham, Walter; Neustadt, I.; and Omaboe, E.N. A Study of Contemporary Ghana, vol. 1. Evanston: Northwestern University Press, 1966.

Brehm, J. and Cohen, A. R. Explorations in Cognitive Dissonance. New York: Wiley, 1962.

Brown, Merrit T. "Macro-Economic Data of Ghana, Parts I and II." Economic Bulletin of Ghana, nos. 1 and 2 (1972).

Brown, W.A., and Opie, R. American Foreign Assistance. Washington D.C.: Brookin Institution, 1953.

Brunner, K. ed. Targets and Indicators of Monetary Policy. San Fransisco: Chandler, 1969.

_____ and Meltzer, Allan. "The Meaning of Monetary Indicators." In Monetary Process and Policy: A Symposium edited by George Horwich. Homewood, Illinois: Richard D. Irwin, 1967.

Bruno, M. "The Optimal Selection of Export-Promoting and Import-Substituting Projects in Planning the External Sector; Techniques Problems and Policies. New York: United Nations, 1967.

Bruton, Henry J. "The Two-Gap Approach to Aid and Development: A Comment." American Economic Review (June 1969).

Burawoy, M. Consciousness and Contradictions: A Study of Student Protests in Zambia." British Journal of Sociology (1976):78.

Cairncross, A.K. The Place of Capital in Economic Progress. In Economic Progress, Papers and Proceedings in a Round Table Conference edited by L.H. Dupriez. Louvain: International Economic Association, 1955.

Callaway, Barbara, and Card, Emily. "Political Constraints on Economic Development in Ghana." In The State of the Nations: Constraints on Development in Independent Africa edited by Michael F. Lofchie. Berkeley: University of California Press, 1971.

Chenery, H.B. "Patterns of Industrial Growth." American Economic Review (September 1960).

_____ and Bruno, M. "Development Alternatives in an Open Economy." Economic Journal (1962).

_____ and MacEwan, A. "Optimal Patterns of Growth and Aid; The Case of Pakistan." In The Theory and Design of Economic Development edited by I. Adelman. Baltimore: John Hopkins Univ. Press, 1966.

_____ and Strout, A.M. "Foreign Assistance and Economic Development." American Economic Review (September 1966): 679-733.

Cumper, G.E. "Lewis' Two-Sector Model of Development and the Theory of Wages." Social and Economic Studies (March 1963).

Damachi, V.G. Leadership Ideology in Africa: Attitudes Towards Socio-Economic Development. New York: Praeger, 1976.

de Graft-Johnson, K.E. "The Evolution of Elites in Ghana." In The New Elites of Tropical Africa edited by P.C. Lloyd. Oxford University Press, 1964.

Doob, L.W. On Becoming More Civilized. New Haven: Yale University Press, 1960.

Dumont, René. False Start in Africa. London: Andre Deutsch Limited, 1966.

Dutton, Dean S. "A Model of Self-Generating Inflation: The Argentine Case." Journal of Money Credit and Banking 3 (May 1971):245-62.

Eisenstadt, S.N. "The Need for Achievement." Economic Development and Cultural Change (1963).

Fallers, L. Equality, Modernity and Democracy in New States: The Quest for Modernity in Asia and Africa. New York: Free Press of Glencoe, 1963.

Fama, E., and MacBeth, J. "Risk, Return and Equilibrium." Journal of Political Economy 81 (1973):607-36.

Findlay, R. "The Foreign Exchange Gap and Growth in Developing Countries." In Trade, Balance of Payments and Growth edited by J. Bhagwati et al. New York: North-Holland, 1971.

Fitch, Bob, and Oppenheimer, Mary. Ghana: End of an Illusion. New York: Monthly Review Press, 1966.

Franco, G. Robert. "Domestic Credit and the Balance of Payment in Ghana". Journal of Development Studies 15 (January 1979): 202-215.

Frenkel, Jacob A. "The Forward Exchange Rate, Expectations and the Demand for Money: The German Hyperinflation." American Economic Review 67 (1977): 653-70.

Friedman, Milton. A Theory of the Consumption Function. Princeton: Princeton University Press, 1957.

Garlick, Peter. African Traders and Economic Development. Oxford: Clarendon, 1971.

Grayson, Leslie E. "The Role of Suppliers' Credit in the Industrialization of Ghana." Economic Development and Cultural Change (April 1973).

Gurley, John G. "The Radcliffe Report and Evidence." In Monetary Theory and Policy edited by Richard Thorn. New York: Random House, 1969.

Haessel, Walter, and Bloomqvist, A.G. "The Price Elasticity of Demand for Ghana's Cocoa." Economic Bulletin of Ghana 2, no. 3 (1972).

Hagen, E.E. On the Theory of Social Change. Homewood, Illinois: Dorsey Press, 1962.

Harbison, F.H. "Human Resource Development, Planning in Modernising Economies." International Labor Review (May 1962).

Hawkins, E.K. "The Growth of a Money Economy in Nigeria and Ghana." Oxford Economic Papers 10, no. 3 (1958):354.

Heidenheimer, Arnold J. ed. Political Corruption. New York: Rinehart and Winston, 1970.

Higgins, Benjamin. Economic Development. London: Constable, 1959.

Hill, Polly. "The Pledging of Cocoa Farms" Unpublished research paper, Achimota, Ghana, 1958.

_____ Rural Capitalism in West Africa. Cambridge (England): Cambridge University Press, 1970.

Hirshman, Albert O. The Strategy of Development. New Haven: Yale University Press, 1958.

_____ "Obstacles to Development. A Classification and a Quasi-Vanishing Act." Economic Development and Cultural Change (July 1965): 385.

Hoffman, P.G. One Hundred Countries, One and One Quarter Billion People. Washington D.C.: Brookins Institution, 1960.

Horvate, B. "The Optimal Rate of Investment." Economic Journal (December 1958).

Howell, T.A. Ghana and Nkrumah. New York: Facts on File Inc., 1972.

Huang, David S. Regression and Econometric Methods. New York: John Wiley, 1970.

Huntington, Ellesworth. Mainsprings of Civilization. New York: John Wiley & Sons Inc., 1945.

International Monetary Fund. Surveys of African Economies. Washington DC., 1975.

Intriligator, Michael. Mathematical Optimization and Economic Analysis. Englewood Cliff, New Jersey: Princeton-Hall, 1971.

Jacobs, Rodney L. "Hyper-Inflation and the Money Supply". Journal of Money, Credit and Banking 9 (1977): 287-303.

Jorgenson, D. "Surplus Agricultural Labor and Development of a Dual Economy". Oxford Economic Papers (November 1967).

Kaufman, George G. Money, The Financial System and the Economy. Chicago: Rand McNally, 1973.

Kelly, G.M. "The Ghanaian Intelligentsia". Unpublished Ph.D. dissertation, University of Chicago, 1959.

Killick, Tony. Development Economics in Action: A Study of Economic Poli Policies in Ghana. London: Heinemann, 1978.

Kotey, R.A.; Okali, C.; and Rourke, B.E. eds. The Economics of Cocoa Production and Marketing. Legon (Ghana): ISSER, 1974.

Kuznets, S. Six Lectures on Economic Growth. Glencoe, Illinois: Free Press, 1956.

_____ "Present Under-Developed Countries and Past Growth Patterns." In Economic Growth edited by Eastin Nelson. Austin, 1960.

Lal, D. "The Foreign Exchange Bottleneck Revisited." Economic Development and Cultural Change (July 1972).

Lall, A. "Transfer-Pricing by Multinational Manufacturing Firms." Oxford Bulletin of Economic & Statistics (1973).

Lee, H.K. Climate and Economic Development in the Tropics. New York: Harper & Row, 1957.

Leibenstein, Harvey. Economic Backwardness and Economic Growth. New York: Harper, 1957.

Leith, Clark J. Foreign Trade Regimes and Economic Development: Ghana. New York: Columbia University Press, 1974.

_____ "The Role of Supplementary External Finance in Macro-Economic Stabilization: Ghana." Mimeo., Department of Economics, University of Western Ontario, 1977.

Levin, J.V. The Export Economies. Cambridge: Harvard University Press, 1960.

LeVine, R.A. Dreams and Deeds; Achievement Motivation in Nigeria. Chicago: Chicago University Press, 1966.

LeVine, Victor T. Political Corruption; The Ghana Case. Stanford: Hoover Institution Press, 1975.

Lewis, W. A."Economic Development with Unlimited Supplies of Labor." Manchester School of Economics (May 1954).

_____ Economic Problems of Development in Restless Nations: A Study of World Tensions and Development. London: Allen & Unwin, 1962.

Lloyd, P.C. ed. The New Elites of Tropical Africa. London: Oxford University Press, 1964.

Lofchie, M.F. ed. The State of the Nations: Constraints on Development in Independent Africa. Berkeley: University of California Press, 1971.

Mansfield, Charles. "Tax Base-Erosion and Inflation: The Case of Ghana". Finance and Development 17 (September 1980): 31-34.

Manu, J.E.A. "Cocoa in the Ghana Economy". In The Economics of Cocoa Production and Marketing edited by R. A. Kotey et. al. Legon: ISSER, 1974.

Matthews, Ronald. The African Powder-Keg. London: Bodley Head, 1966.

McClelland, D.C. The Achievement Motive. New York: Appleton-Century-Crofts, 1953.

McKinnon, Ronald. "Foreign Exchange Constraint in Economic Development and Efficient Aid Allocation." Economic Journal 74 (1964).

_____ Money and Capital in Economic Development. Washington DC: Brookin Institution, 1973.

Meier, Gerald. ed. Leading Issues in Economic Development. New York: Oxford University Press, 1976.

Merton, R. Social Theory and Social Structure. Glencoe Ill: Free Press, 1957.

Mill, J.S. Utilitarianism, Liberty and Representative Government. London: Dent, 1951.

Millikan, R., and Rostow, W.W. A Proposal; Key to an Effective Foreign Policy. New York: Harper, 1956.

Mitchell, J.C. "Aspects of Occupational Prestige in a Plural Society." In The New Elites of Tropical Africa edited by P.C. Lloyd. London: Oxford University Press, 1964.

Musgrave, R. "Notes on Educational Investment in Development." In The Economics of Education by OECD Study Group. Paris: OECD, 1966.

Myint, H. "Interpretation of Economic Backwardness." Oxford Economic Papers (June 1954).

_____ "Social Flexibility, Social Discipline and Economic Growth." International Journal of Social Science (1964).

Myrdal, G. An International Economy. New York: Harper & Brothers, 1956.

_____ Asian Drama. New York: Pantheon Books, 1971.

Newlyn, W.T., and Rowan, D.C. Money and Banking in British Colonial Africa. Oxford: Claredon Press, 1954.

Nkrumah, Kwame. Ghana: An Autobiography. London: Nelson, 1957.

_____ Africa Must Unite. New York: International Publishers, 1963.

_____ Dark Days in Ghana. London: Panaf Publications, 1968.

_____ Revolutionary Path. New York: International Publishers, 1973.

Nurkse, R. Problems of Capital Formation in Under-Developed Countries. New York: Oxford University Press, 1953.

Nye, Joseph S. "Corruption and Political Development: A Cost-Benefit Analylis." American Political Science Review 61, no. 2 (June 1967):417-27.

O'Connell, J. "The Inevitability of Instability." Journal of Modern African Studies 2 (1967).

O.E.C.D. Review of Development Assistance. Paris: OECD, 1971.

_____ Review of Development Co-operation. Paris: OECD, 1974 and 1975.

Ohlin, G. Foreign Aid Policies Reconsidered. Paris: Development Center for OECD, 1966.

Olivera, Julio H.G. "Money, Prices and Fiscal Lags: A Note on the Dynamics of Inflation." Banca Nazionale del Lavoro Quarterly Review 20 (1967):258-67.

Oshima, H. "Unemployment in Backward Economies — An Empirical Comment." Journal of Political Economy (June 1958).

Paglin, M. "Surplus Agricultural Labor and Development: Facts and Theories." American Economic Review (September 1965).

Papanek, G.S. "The Development of Enterpreneurship." American Economic Review (1962):46.

Parry, T.G. "The International Firm and National Economic Policy: A Survey of Some Issues." Economic Journal (December 1973).

Patinkin, Don. Money, Interest and Prices. New York: Harper & Row, 1965.

Paterson, Simons & Ewart. Cocoa Report No. 1/78. London: Paterson, Simons & Ewart, 1978.

Pincus, John. "How much Aid for the Under-Developed Countries?" In Economic Development, Readings in Theory and Practice edited by T. Morgan and G. Betz. Belmont, California: Wadsworth, 1970.

Pinkney, Robert. Ghana Under Military Rule 1966-1969. London: Methuen, 1972.

Prebisch, Raul. Economic Development of Latin America and Its Principal Problems. New York: United Nations, 1950.

_____ "Commercial Policies in the Under-Developed Countries." American Economic Review Papers and Proceedings (May 1959).

Quirk, James, and Saposnik, Rubin. Introduction to General Equilibrium Theory and Welfare Economics. New York: McGraw-Hill, 1968.

Ranis, G., and Fei, J.C.H. Development of Labor Surplus Economy: Theory and Policy. Homewood, Illinois: Irwin, 1964.

Ridker, R. "Discontent and Economic Growth." Economic Development and Cultural Change (October 1967):1-5.

Rimmer, D. "The Crisis in the Ghana Economy." Modern African Studies (May 1966).

_____ Macromancy. London: Institute of Economic Affairs, 1973.

Robinson, Ronald. ed. Developing the Third World: The Experience of the 1960s. Cambridge (England): Cambridge University Press, 1971.

Rosenstein-Rodan, Paul W. "International Aid for Under-Developed Countries." The Review of Economics and Statistics (1961).

Rostow, W.W. The Stages of Economic Growth. Cambridge (England) University Press, 1960.

Rourke, B.E. "Profitability of Cocoa and Alternative Crops in Eastern Region." In The Economics of Cocoa Production and Marketing edited by R.A. Kotey et. al. Legon: ISSER, 1974.

Samuelson, Paul A. Foundations of Economic Analysis. Cambridge: Harvard University Press, 1947.

Sargent, Thomas J., and Wallace, Neil. "Rational Expectations and the Dynamics of Hyperinflation." International Economic Review 14 (1973): 328-50.

Saving, Thomas. "Monetary Policy Targets and Indicators." Journal of Political Economy (1967):446-58.

Schatz, S.P. "The Capital Shortage Illusion: Government Lending in Nigeria." Oxford Economic Papers 17, no. 2 (1965):309-416.

Schultz, T.W. "Investment in Human Capital in Poor Countries." In Foreign Trade and Human Capital edited by P.D. Zook. Dallas: Southern Methodist University Press, 1962.

_____ "The Doctrine of Agricultural Labor of Zero Value." In Transforming Traditional Agriculture. New Haven : Yale University Press, 1964.

Sengupta, A. "Foreign Capital Requirements for Economic Development." Oxford Economic Papers (March 1968).

Sharpston, M.J. "The Economics of Corruption." New Society (November 1970).

Sideri, S. "Prospectives for the Third World." Internationale Spectator (March 8, 1971).

Singer, H.W. "The Distribution of Gains between Investing and Borrowing Countries." American Economic Review, Proceedings (May 1950).

Srinivasan, T.N. "The State of Development Economics." Mimeo. Cited in Pan A. Yotopoulos and Jeffrey B. Nugent. Economics of Development. New York: Harper & Row, 1976:p.3.

Steel, W.F. "Import-Substitution and Excess Capacity in Ghana." Oxford Economic Papers (July 1972).

Tinbergen, Jan. La Communauté Européenne et Les Pays Sous-Developpés. Paris: EEC, 1959.

_____ "A Didactical Note on the Two-Gap Theory." In Induction Growth and Trade edited by W.A. Eltis, M.FG. Scott and J.N. Wolfe. London: Clarendon, 1970.

Tobin, James. "Commercial Banks as Creators of Money." In Banking and Monetary Studies edited by Dean Carson. Homewood, Illinois: Irwin, 1963.

United Nations. Measures for the Economic Development of Under-Developed Countries. New York, 1949.

_____ (ECAFE) Programming Techniques for Economic Development. Report of the First Group of Experts on Programming Techniques. Bangkok, 1960.

_____ World Economic Survey, 1962 Part I. New York, 1962.

_____ (ECA) Economic Survey of Africa. Addis Ababa, 1966.

Uphoff, Norman T. Ghana's Experience in Using External Aid for Development. Berkeley: University of California Press, 1970.

Uphoff, Norman T., and Ilchman, W.F. eds. The Political Economy of Change. Berkeley: University of California Press, 1972.

Vanek, J. Estimating Foreign Resource Needs for Economic Development. New York: McGraw-Hill, 1967.

van Roy, Edward. "On the Theory of Corruption." Economic Development and Cultural Change (October 1970):87.

Viner, Jacob. Some Reflections on the Concept of Disguised Unemployment." In Contri buicoes à Anàlise do Desenvolvimento Econômico. Rio de Janeiro, 1957.

Voivadas, C.S. "Exports, Foreign Capital Inflow and Economic Growth". Journal of International Economics 3 (1973): 337-349.

Wallerstein, Immanuel. "The Range of Choice: Constraints on the Policies of Governments in Contemporary African States." In The State of the Nations: Constraints on Development in Independent Africa edited by M.F. Lofchie. Berkeley: University of California Press, 1971.

Waterston, Albert. Development Planning: Lessons of Experience. Baltimore: John Hopkins Press, 1965.

Weber, Max. The Protestant Ethic and the Spirit of Capitalism. New York: Scribner, 1930.

Wellisz, S. "Dual Economies, Disguised Unemployment and the Unlimited Supply of Labor." Economica (February 1968).

Werlin, Herbert. "The Roots of Corruption — The Ghanaian Enquiry." Journal of Modern African Studies (1972):247-66.

_____ "The Consequences of Corruption: The Ghanaian Experience." Political Science Quarterly 88 (March 1973):71-85.

Wharton, W.C. "Modernizing Subsistence Agriculture." In Modernization: The Dynamics of Growth edited by M. Weiner. New York: Basic Books, 1966.

Whetham, Edith, and Curie, Jean. eds. Readings in the Applied Economics of Africa. Cambridge University Press, 1967. Vol. 1: Micro-Economics.

Wills, J.B. Agriculture and Land Use in Ghana. London: Oxford University Press, 1962.

Woronoff, Jon. West African Wager. Metuchen, New Jersey: Scarecrow Press, 1972.

Wymer, Clifford R. "Computer Programs: Supplement No.15." Unpublished research paper, London School of Economics, 1976.

Yotopoulos, Pan A., and Nugent, Jeffrey B. Economics of Development. New York: Harper & Row, 1976.

Zeylstra, W.G. Aid or Development: The Relevance of Development Aid to Problems of Developing Countries. Leyden, Netherlands: A.W. Sijthoff, 1975.

Zolberg, A.R., and Forster, Philip. eds. Ghana and the Ivory Coast: Perspectives on Modernization. Chicago: Chicago University Press, 1971.