

**UNIVERSITY OF THE WESTERN CAPE**

**DEPARTMENT OF ECONOMICS**

**THE FUNDAMENTAL DETERMINANTS OF LONG RUN  
GROWTH IN THE CAMEROONIAN ECONOMY**



UNIVERSITY of the  
WESTERN CAPE

**Mini-thesis submitted in partial fulfillment of the requirements for the award of the  
degree of Magister Commercii in Trade and Investment.**

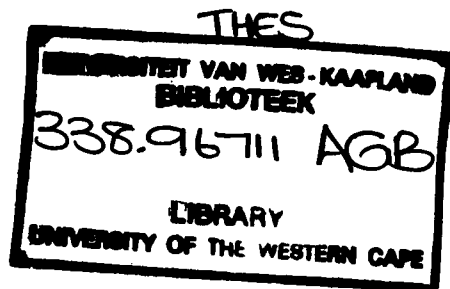


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## DECLARATION

I, the undersigned, hereby declare that “THE FUNDAMENTAL DETERMINANTS OF LONG RUN GROWTH IN THE CAMEROONIAN ECONOMY” is my own work, that it has not been previously submitted before for any degree or assessment in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

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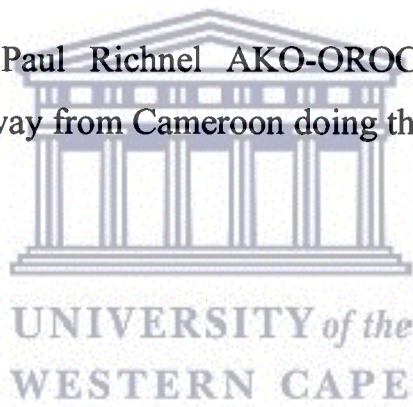
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To My Second Son, Paul Richnel AKO-OROCK AGBOR, who was delivered while I was away from Cameroon doing this degree



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“And most college graduates in physics know more than Isaac Newton: for as Newton himself said, a scientist sees further than his predecessors because he stands on the shoulders of earlier giants...(…). If I have seen further, it is by standing on the shoulders of giants”

**Paul Samuelson**

## **ABSTRACT**

Nearly half a century after independence, the Cameroon economy has experienced little or no growth in per capita incomes in spite of the enormous natural and human potentials of the country and in spite of the huge packages of aid and subsequent debt relief received from the international donor community, suggesting a more profound cause to the development problems facing the country. Under the current WTO rules-based system of multi-lateral trade management, Cameroon, like other poor countries, is left with limited scope for effective implementation of industrial and trade policies that could bail her out of her present predicament. Against this backdrop, this study seeks to explore the fundamental determinants of sustainable growth within the context of the Cameroonian economy. While acknowledging the role of openness to international markets in promoting growth, its effects could only be maximised with the attainment of certain *threshold* conditions such as the availability of basic skills, provision of vital infrastructure services and public goods, and good governance. In a nutshell, for development to happen, the country needs not only well functioning markets, but also good governments that do not steal the fruits of workers' labour. Drawing on the endogenous growth models, the study suggests that incentives for investment in knowledge capital, for infrastructure provision and for good governance could bail the country out of its low level traps, setting it on the path of sustainable growth in an evermore globalising world economy.

## KEYWORDS

Long run Growth

Endogenous Growth

Fundamental Determinants

Increasing Returns

Initial Conditions

Incentives

Knowledge Capital

Technology Transfer

Good Governance

Cameroon



## **ABBREVIATIONS**

**AGOA:** African Growth and Opportunity Act

**AES SONEL:** Affiliate of the American Electric Company, AES SOROPCO

**BCEAO:** Banques Centrale des Etats de l’Afrique de l’Ouest

**BEAC:** Banques des Etats de l’Afrique Centrale

**CAMAIR:** Cameroon Airlines Company

**CAMTEL:** Cameroon Telecommunications Company

**CFA FRANC ZONE:** Communauté Financière en Afrique, Zone Franc

**EPZ:** Export Processing Zone

**FF:** French Franc

**GDP:** Gross Domestic Product

**IBRD:** International Bank for Reconstruction and Development (World Bank)

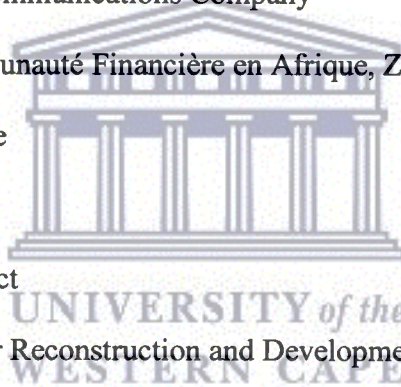
**IMF:** International Monetary Fund

**MFA:** Multi-Fiber Agreement

**SAP:** Structural Adjustment Programme

**SSA:** Sub-Saharan Africa

**WTO:** World Trade Organisation



# CHAPTER ONE

## INTRODUCTION

### 1.1 BACKGROUND TO THE STUDY

Over the past century, economists have battled with the question of how to make poor countries rich. Economic growth and development has long been credited as the primary means by which the lives of poor people could be improved. This is so because economy-wide GDP per capita growth is necessary to raise incomes for the poorest of the poor, thus lifting them out of poverty in a sustainable way.

Nearly half a century after independence, the Cameroon economy has experienced very little growth in per capita income in spite of the enormous natural resource and human potential of the country and in spite of the huge packages of aid and subsequent debt relief received from the international donor community, suggesting a more profound 'cause' to the development problems facing the country. Moreover, the new development wisdom based on short run macro-economic stabilisation, trade reform and private investment, tends to sideline long-run issues such as knowledge capital accumulation, and the quality of infrastructure. Furthermore, under the current WTO rules-based system of multi-lateral trade management, Cameroon, like other poor countries, is left with limited scope for effective implementation of industrial and trade policies that could bail her out of her present low level equilibrium trap.

This study seeks to explore the fundamental determinants of sustainable growth within the context of the Cameroonian economy.

## 1.2 RESEARCH PROBLEM

Conventional wisdom supports the view that Africa's lack of openness<sup>1</sup> to international markets largely explains her dismal economic performance over the past four decades. This consensus derives from the neoclassical hypothesis of conditional convergence<sup>2</sup> whereby trade liberalisation is assumed to be the primary medium of transfer of both ideas and technology from rich to poor countries. Since the model assumes that the same technological opportunities are available to all countries in the world, poor countries that follow an outward-oriented trade regime could leapfrog right up to the technological frontier existing in advanced countries and consequently catch up with them.

What this argument ignores<sup>3</sup> is that there is a *threshold* in terms of basic skills, physical and institutional infrastructure requirements for a country to be able to take advantage of technologies existing worldwide. In other words, the argument of leapfrogging takes for granted the role of such factors as entrepreneurship, institutions, values, social incentives and physical infrastructure in a country's growth process.

Against this backdrop, this study seeks to explore some of the prerequisites that would complement a liberal trade regime to generate sustainable growth in the context of the Cameroonian economy.

---

<sup>1</sup> Sachs & Warner (1997a) define an open economy as one with average tariff rates below 40%; average quota and licensing coverage of imports of less than 40%; a black market premium of less than 20%; no extreme controls (taxes, quotas, state monopolies) on exports; and having a non-socialist economic system.

<sup>2</sup> In the Solow-Swan model, the conditions for convergence of steady state levels of per capita output and capital are the saving rate, the growth rate of population and the level of technology; all assumed to be exogenously determined.

<sup>3</sup> See Romer (1994) for a discussion of the weaknesses of the neoclassical growth models and how endogenous growth models address them.

In particular, the study argues the case for the development of physical infrastructure (ports, roads, railroads, electric power, communications), for better institutional infrastructure (good governance), and for increasing educational attainments (knowledge capital accumulation) as the primary conditions for effective leapfrogging processes in Cameroon.

The motivation behind this premise is that, as a poor country, Cameroon should strive first at utilising ideas that already exist elsewhere in the world (via technology transfer), and then seek to produce and export new ideas to the rest of the world at a later stage of her development<sup>4</sup>. Yet some minimum level of skills, basic infrastructure and good quality governance is critical for a country to be able to take advantage of the stock of ideas existing in the world.

My secondary premise is that the key to achieving these prerequisites in the Cameroonian economy lies in incentive-based policies. Because the majority of the Cameroonian population is poor<sup>5</sup>, they often lack incentives to forgo present consumption in order to invest in knowledge accumulation. Furthermore, the few available skilled workers face low returns to skills and therefore greater incentives to leave the country for greener pastures elsewhere (brain drain) or remain home and use those skills in growth *diversion* rather than creation. The Cameroon government also faces perverse incentives that render it difficult for her to provide the necessary infrastructure, public goods and a general

---

<sup>4</sup> For obvious reasons: technologies are invented throughout the world and then gradually diffuse. To be sure, Mauritius for example, did not grow solely or even primarily, because of the inventions of its citizens (Romer, 1992). The case of Singapore is even more glaring (Hall & Jones, 1997:174).

growth-conducive environment that could attract foreign ideas and capital into the country. In a nutshell, given the right incentives, poor people would invest in knowledge capital accumulation; governments would provide vital infrastructure services and public goods, thereby, inadvertently, generating an environment that favours production over diversion. Productivity growth then raises long run per capita incomes.

### 1.3 SIGNIFICANCE OF THE STUDY

Cameroon's real GDP per capita<sup>6</sup>, grew between 1960 and 2000 at an average annual rate of 1.1%, that is, more than 2.5 times the growth rate of Sub-Saharan African (SSA) countries, but three times less than that registered by South-East Asian countries<sup>7</sup>. At that rate, Cameroonian incomes are expected to double every 63 years, whereas average South-East Asian incomes would double every 18 years<sup>8</sup>. In other words, a Cameroonian is expected on average, to be 1.6 times richer than his grandfather whereas a typical South-East Asian citizen would be approximately 8 times richer than his grandfather.

To quote Nobel Prize laureate Robert Lucas (1988): "is there some action the government of Cameroon could take that would lead the Cameroonian economy to grow like South-East Asian economies? If so, what exactly? If not, what is it about the nature of Cameroon that makes it so?"

---

<sup>5</sup> Poverty affected 54.8% of the Cameroonian population in 1996 with an incidence rate of 67.6% in the rural areas as against 45.1% in the urban areas (Njinkeu et al, 1997; Fambon et al, 2000; in Kobou et al, 2002:4).

<sup>6</sup> In constant 1985 US\$ (Kobou et al, 2002).

<sup>7</sup> The average annual growth rate of per capita GDP between 1960 and 1997 was 0.4% for all SSA countries and 3.86% for South-East Asian countries (O'Connell & Ndulu, 2000; in Kobou et al, 2002).

<sup>8</sup> Simply divide the growth rate into 69(the log of 2 times 100) to get the number of years it takes for incomes to double.

Being one of the largest economies in the CFA<sup>9</sup> Franc zone with a GDP of about US\$ 9 billion in 1996 (Ghura, 1997:4), economic activity in Cameroon has traditionally been viewed as one of the engines of growth and prosperity in the CFA franc zone and in other neighbouring countries. Also, Cameroon is one of the rare countries in Africa that shares a common border with six different countries (Chad, Congo, Equatorial Guinea, Nigeria, Gabon, and Central African Republic), yet privileged with access to the sea<sup>10</sup> (figure 1.1). Cameroon is often referred to as 'Africa in miniature', because of the country's rich geographic, socio-cultural and ethnic diversity<sup>11</sup>. Consequently, a study of the determinants of sustainable growth in Cameroon, could also contribute to a greater understanding of the factors that drive growth in many other SSA countries, particularly those of the CFA Franc zone.



#### **1.4 DELIMITATIONS OF THE STUDY**

This study draws on the endogenous growth models, which started with the seminal work of Paul Romer (1986), followed by Robert Lucas (1988) and William Easterly (2002). The latter contributed most, to my understanding and choice of this area of research.

In this study, I do not intend to investigate all the possible determinants of growth, lest I confirm my absolute ignorance. Rather, I will focus principally on three concepts viz knowledge capital, and physical and institutional infrastructure.

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<sup>9</sup> Made up of 14 SSA countries: six (Cameroon, Central African Republic, Chad, Congo, Equatorial Guinea and Gabon) belonging to the BEAC sub zone and eight (Benin, Burkina Faso, Cote D'Ivoire, Niger, Senegal, Togo, Mali and Guinea Bissau) belonging to the BCEAO sub zone.

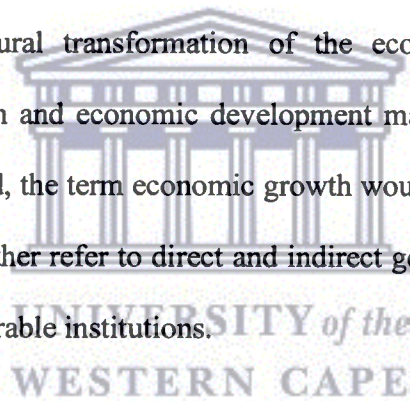
<sup>10</sup> Her major port in the economic capital, Douala, currently serves two landlocked neighbouring countries: Chad and The Central African Republic.

<sup>11</sup> In all, over 250 tribal groups exist in Cameroon and according to estimates by Sachs & Warner, (1997a: 367) the probability that two Cameroonians chosen at random will belong to two different ethno-linguistic groups is 89%.



## **1.5 DEFINITION OF TERMS AND CONCEPTS**

Throughout this work, the concept of knowledge capital would be understood to mean inputs in the production process (such as ideas) that are nonrival and partially non-excludable. Technology transfer would refer to all processes whereby this nonrival knowledge and other rival inputs are transferred from the rich to the poor countries. Institutional infrastructure or good governance would encompass political and economic institutions that provide the enabling environment for long-run growth. Long-run growth would refer to a sustained increase in real per capita incomes while economic development encompasses the three sub-concepts of economic growth, income distribution and the structural transformation of the economy. For simplicity, the concepts of long run growth and economic development may be used interchangeably. Also, unless otherwise stated, the term economic growth would be used to mean long-run growth. Incentives would either refer to direct and indirect government subsidies or such non-tangible things as favourable institutions.



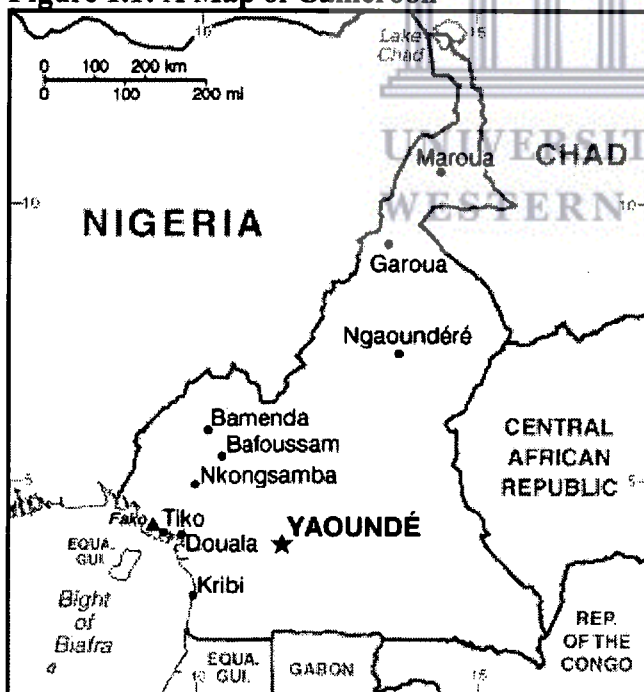
## **1.6 RESEARCH METHODOLOGY AND CHAPTER OUTLINE**

The research is of a descriptive analytical nature. It describes relevant phenomena as they are and identifies and obtains information on the nature of specific problems or issues. It is also analytical as it aims to understand phenomena by discovering causal relations between them. The methodology involves an overview of the existing literature and would consist of both quantitative and qualitative analysis. Data from secondary sources are presented, interpreted and supplemented by qualitative analysis. Secondary data sources include World Bank World Development Reports, World Bank African Development Indicators, Internet resources and existing publications in academic

journals and newspapers. The researcher also draws on his first-hand experience of some of the issues in Cameroon, having served in a senior capacity in the Cameroonian administration for four years (1999-2003).

The dissertation is structured as follows: Chapter Two reviews the literature on growth theory and develops the theoretical framework of the study while Chapter Three examines the characteristic features of the Cameroonian economy highlighting its development experience since independence in 1960. Chapter Four underscores those factors that I consider to be fundamental to long-run growth in the Cameroonian economy. Some policy implications of the study and directions for further research would be presented in Chapter Five.

**Figure 1.1: A Map of Cameroon**



Source: The World Factbook, 2003.

## CHAPTER TWO

### THEORY OF ECONOMIC GROWTH AND DEVELOPMENT

#### 2.1 INTRODUCTION

The overriding aim of this chapter is to develop an appropriate theoretical framework of analysis for the rest of the chapters. In so doing, I would strive to locate in the literature on growth and development, and particularly from an African perspective, the concepts of knowledge capital, infrastructural quality and technology transfer or diffusion.

#### 2.2 THE CLASSICAL GROWTH PARADIGM

The classical production function presented simply as  $Y = F(K, L, N)$ , where output  $Y$  depends on physical capital ( $K$ ), labour ( $L$ ), and fixed land ( $N$ )<sup>12</sup>, with the market allocating resources freely, did not allow for increases in output in the long run because it ignored the role of technological progress<sup>13</sup>. In spite of this pessimistic view on growth, the classical economists, notably, Adam Smith, would be credited for their insight on the role that trade<sup>14</sup> could play in promoting economic growth.

Following the First World War and the 1929 Great Depression, Lord John Maynard Keynes in 1936, sparked a revolution in the neoclassical thinking arguing that the capitalist system of free markets is inherently unstable and only government intervention could restore macroeconomic equilibrium. Though Keynes did not advocate for a growth

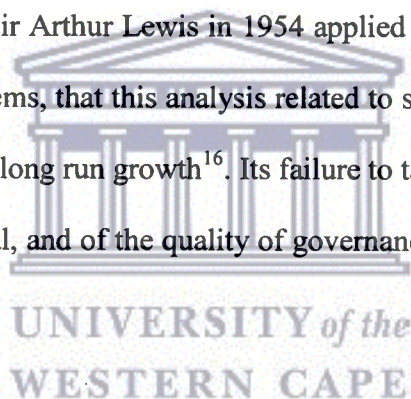
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<sup>12</sup> Continuous application of variable inputs unto a fixed quantity of land, lead to diminishing returns and therefore, falling output in the long run.

<sup>13</sup> In improving the quality and quantity of fixed factors such as land, in transforming physical labour into more productive human capital and in ensuring the mobility of factors of production away from areas where they were facing diminishing returns to those where the returns are higher.

theory, his followers, Roy Harrod in 1939 and Evsey Domar in 1946; attempted to integrate Keynesian analysis with elements of economic growth. They used production functions with little substitutability among the inputs to argue that growth is proportional to investment in physical capital in the short run (Barro & Sala-i-Martin, 1995:10).

Understandably, the Harrod-Domar model, like the Keynesian model, was inspired by the aftermath of the 1929 Great Depression, a period characterised by massive labour unemployment. Consequently, there were always people available to run any additional machines that were built. The constraint to growth was therefore on machines and not labour (Easterly, 2002:30). Sir Arthur Lewis in 1954 applied the model to poor countries with 'surplus labour'<sup>15</sup>. It seems, that this analysis related to short run or cyclical changes in business cycles and not to long run growth<sup>16</sup>. Its failure to take into account the roles of human and knowledge capital, and of the quality of governance may possibly account for this deficiency.



### **2.3 THE NEOCLASSICAL GROWTH PARADIGM**

It was not until 1956, when Nobel Prize Laureate Robert Solow in his seminal article challenged the conventional wisdom that investment in machinery is the source of long run growth; that prospects of long run growth revived. According to the standard Solow model, long-run growth is driven solely by technological progress (Easterly, 2002:47).

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<sup>14</sup> Trade today, does not only bring about the static gains of resource reallocation as the classical economists thought, but can be the source of dynamic gains, by serving as a vehicle for the transfer of knowledge and financial capital or more precisely, the means of diffusion of technologies around the world.

<sup>15</sup> The idea that, machines were the constraint on growth, meant that poor countries only needed to increase their stock of machines (through foreign aid) and the surplus unemployed labour in the rural areas would be absorbed into the modern industrial sector without harming agricultural production.

To see why increasing investment in machinery (or ‘capital fundamentalism’) cannot be the key to growth in the long run, we only need to invoke the principle of diminishing returns to physical capital: as more and more machines are available to a ‘fixed’ number of workers<sup>17</sup>, the marginal product of the machines decreases.

Solow’s insight was that technological progress, which he assumed came about as a result of non-economic (or exogenous) reasons such as basic science, would ‘economise’ on the factor in limited supply (i.e. labour), so much so that, increasing units of machines applied unto fixed labour does not yield diminishing returns to machines. Instead, the system works as though more machines were combining to ‘more’<sup>18</sup> labour to yield greater output per worker and ever increasing growth per worker (Easterly, 2002:53).

One of the greatest contributions to modern growth theory by Solow (1956 & 1957), Trevor Swan (1956) and the neoclassical growth models, is the prediction of conditional convergence: the lower the starting level of real per capita GDP, relative to the long run or steady state position, the faster is the growth rate (Barro & Sala-i-Martin, 1995:10). In other words, it pays to be late since the gap between what is and what can be offers a tremendous opportunity. Follower countries, as Alexander Gerschenkron argued in 1952, would profit from the experience and knowledge of their predecessors, avoiding their mistakes and by mobilizing and allocating resources appropriately, they would leapfrog

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<sup>16</sup> Because, in the absence of human capital development, physical labour would later become the constraint on growth. In the case of capital-scarce SSA countries, it manifested itself paradoxically in the form of labour unemployment and capital under-employment.

<sup>17</sup> For there to be growth in the long run, output per worker must be increasing over time. For this to happen, machines must be increasing faster than the number of workers (in other words, there must be a very high rate of saving). Here, I have simply assumed the extreme case where labour growth is fixed.

right up to the frontier of technology, thereby overtaking their forerunners (Landes, 1990:8). Unfortunately, this argument ignores the fact that there is a threshold of development for a country to be able to leapfrog technologically.

The conditional convergence property derives from three key assumptions: diminishing returns to capital, exogenous technological progress and the assumption that the *same* technological opportunities are available in all countries of the world. Accordingly, economies that have less capital per worker (relative to their long run capital per worker) tend to have higher rates of return to capital and therefore higher growth rates of output per worker. In other words, capital tends to have a higher return where it is scarce and a lower return where it is in abundance. This predicted that capital would have the tendency of moving away from capital-rich countries to capital-scarce countries. In the long run, growth of output per worker in all countries will be driven by the underlying rate of growth of technological progress in the world since technological knowledge diffuses (Hall & Jones, 1997:174; Barro & Sala-i-Martin, 1995).

According to this model, for poor African countries to catch-up with the levels of output and capital per capita in the advanced world, they must increase their saving rate; decrease the growth rate of their population (population control) and increase their level of technology. The level of technology was considered exogenous<sup>19</sup> since the model assumed that the same technological opportunities are available to all countries in the

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<sup>18</sup> Better technology enables each worker to become more and more efficient and productive, so it seems as if there were more workers. In other words, the *effective* number of workers keeps up with the increasing number of machines, and diminishing returns never sets in.

<sup>19</sup> This has been a major bone of contention for critics of the neoclassical growth models: they argue that the level of technology in a country can be raised endogenously through knowledge capital accumulation.

world. Therefore, as far as technology is concerned, all that the poor countries needed to do was to import the technology that already exists in the world<sup>20</sup>.

Then came the omniscient role of trade strategy. Which strategy offers the best chances of 'replicating' the experiences of rich countries: import-substitution industrialisation or export-promotion trade strategy? Basing their views on both the experiences of the Soviet Union through rapid State engineered industrialisation and on anti-colonialisation sentiments, most African countries opted for import-substitution trade strategy (Sachs & Warner, 1997a: 352). But that's not where the problem lies, because as already stated, trade is only a vehicle for the transfer of technology. No matter how good the vehicle (trade) could be, if the technology being transferred is too sophisticated or if the recipient country government is not well-coming, the vehicle would not be good enough.

Rodrik (1992:103) argues this point forcefully:

"If the pendulum swings too far back, unrealistic expectations will be created regarding what can be accomplished by the use of trade policy alone. A reasonable hypothesis is that trade policy plays a rather asymmetric role in development: an abysmal trade regime can perhaps drive a country into economic ruin; but good trade policy cannot make a poor country rich. At its best, trade policy provides an enabling environment for development. It does not guarantee that entrepreneurs will take advantage of this environment, or that private investment will be stimulated. As the recent literature on trade and growth underscores, it certainly does not guarantee adequate levels of economic growth in the longer run".

This probably explains why recent empirical growth studies (see for instance, Hall & Jones, 1997:175) have indicated the need to include additional sources of cross-country variation, especially differences in government policies and in initial stocks of human capital. This implies, therefore, that there are fundamental problems with the neoclassical

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<sup>20</sup> Again, mindless of whether skills in the host country permit the use of such technology.

growth hypothesis. These criticisms were at the origin of the ‘new’ growth theory proposed by Paul Romer (1986).

## **2.4 THE ENDOGENOUS GROWTH PARADIGM**

The endogenous growth theorists formulated their models on the basis of a number of criticisms of the neoclassical growth models.

Firstly, the neoclassical idea that late-comers can leapfrog right to the technological frontier of their forerunners, took for granted, the role of such factors as entrepreneurship, institutions, values, social incentives and a variety of other factors that define a society (Bruton, 1998:930).

Secondly, as Lucas (1988) argued, if the same level of technology is available to all countries and the returns to capital (including human capital) are higher where capital is scarce, why don't we see capital flowing from New York (US), for example, where it is so abundant, to Douala (Cameroon) where it is virtually unavailable?<sup>21</sup> Why would a Cameroonian engineer, for instance, earn several times more in the US than when working in his home country? He then suggested that the neoclassical assumption of identical technological opportunities in all countries is untenable and models allowing for differences in the levels of technology across countries could better explain the international patterns of capital migration.

Thirdly, technological progress (and its rate of growth or diffusion) cannot be as a result of non-economic reasons as the neoclassical models predicted. Having the steady state



growth rate depend entirely on exogenous technological progress implied that economic policies have *no* influence on steady state growth, although they do influence the level of output when the economy is between steady states (Ghura, 1997:4). Rather, technological progress comes from things that people do and its underlying rate of growth depends on incentives<sup>22</sup> (Romer, 1986, 1994). In the same manner, the rate of diffusion of technological discoveries depends on things that governments do (Barro & Sala-i-Martin, 1995; Hall & Jones, 1997:174). Endogenous growth models thus provide mechanisms through which changes in economic policies and accumulation of human and private physical capital stocks generate sustainable growth, even in the absence of exogenous technological progress (Ghura, 1997).

The early endogenous growth models constructed by Paul Romer (1986), allowed for an endogenous determination of the rate of technological progress<sup>23</sup> and for the fact that private investment raises the level of technology for the whole economy. The positive externality associated with private investment gives rise to a production function that exhibits increasing returns to scale: therefore, increases in private investment raise long run growth (Ghura, 1997:5). The long run growth rate could then be determined within the model, hence the appellation endogenous growth models. In these models, technological progress comes from purposive investment in research and development (R&D) by individuals and firms, and some form of ex-post monopoly power rewards this activity.

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<sup>21</sup> These were not the exact examples Lucas used. I'm simply paraphrasing him.

<sup>22</sup> Joseph Schumpeter (1934) in Barro & Sala-i-Martin (1995:9) had already argued for some form of temporary monopoly power as an incentive for technological innovation.

<sup>23</sup> Barro & Sala-i-Martin (1995:12) note that Romer built on the contributions of Arrow (1962), Sheshinski (1967), and Uzawa (1965).

In an endogenous growth model, output of an aggregate production function can be presented in the form  $Y = f(K, H, L; A)$  where  $K$ ,  $H$ , and  $L$  represent the stocks of rival<sup>24</sup> inputs: physical capital, human capital, and labour respectively, while  $A$  represents the stock of nonrival knowledge capital available to the country. Then, assuming a homogenous function in all the rival inputs, we can possibly obtain twice the output  $Y$ , by simply doubling all the three rival inputs,  $K$ ,  $H$  and  $L$ , with the stock of nonrival knowledge capital  $A$ <sup>25</sup> remaining unchanged.

The implication of this analysis is that if there is no tendency for the economy to run short of ideas (probably because of continuing investment in knowledge capital), then the growth rate could remain positive in the long run. In other words, growth may go on indefinitely because the returns to investment in a broad class of capital goods- that includes human capital- do not necessarily diminish as economies grow. Alternatively, there could be *increasing returns* to capital and divergence, instead of convergence of world economies as the neoclassical theories predict (Romer, 1986; 1994).

Another important characteristic of knowledge capital, which Romer (1987, 1990)<sup>26</sup> emphasised, is that of partial excludability. He argued that since people and firms have some control over the results of their discoveries, knowledge couldn't be treated as a pure public good. This insight, which resembles those of Schumpeter, (1934) and Arrow,

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<sup>24</sup> A rival input is one that cannot be used simultaneously by more than one agent whereas a nonrival input is capable of being used simultaneously by more than one agent.

<sup>25</sup> This is for the simple reason that an idea, unlike an object, is capable of being utilized simultaneously by an infinite number of persons.

<sup>26</sup> Significant contributions were also brought in by Aghion & Howitt (1992) and Grossman & Helpman (1991).

(1962) implies that the neoclassical framework of perfect competition, needed to be adjusted to allow inventors earn at least some monopoly rents (e.g. patents) on their discoveries<sup>27</sup> (Barro & Sala-i-Martin, 1995:12). Alternatively, public funding from tax revenue could serve as incentive for R&D (Karl Shell, 1966; in Romer, 1994:13). However, both approaches need not necessarily be mutually exclusive. For poor African countries that lack institutions for the protection of intellectual property rights, Shell's model would obviously seem more appealing although the usual concerns of rent seeking remain strong.

However, the rate of growth and the underlying amount of inventive activity tend not to be Pareto optimal because of distortions related to the creation of the new goods and methods of production. In these frameworks, the long run growth rate depends on governmental actions, such as taxation, maintenance of law and order, provision of infrastructure services, protection of intellectual property rights and regulations of international trade, financial markets, and other aspects of the economy. The government therefore has great potential for good or ill through its influence on the long run rate of growth (Barro & Sala-i-Martin, 1995:13).

The new research also includes models of the diffusion of technology. Previously, theories of discoveries related to the sustainability of the rate of technological progress in the 'leading-edge' economies but the study of diffusion pertains to the manner in which 'follower' economies share in these advances by imitation. Since it is cheaper to copy an

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<sup>27</sup> The reasoning is obvious: if the result of an individual's invention is of benefit to other individuals at no cost, no single individual would invest in such knowledge.

idea that has worked elsewhere than it is to invent a new one, the diffusion models predict a form of conditional convergence that resembles the predictions of the neoclassical growth model.

To conclude this discussion, one could summarise the differences between the neoclassical growth theorists and the endogenous growth theorists as follows: the former theories captured the notion of perfect competition, the notion that discoveries are nonrival, and the fact that aggregate output is homogenous of degree 1 in the rival inputs, but failed to recognise the following facts (which the latter theories did): - that technological levels vary across countries for economic reasons, that technological progress comes from purposive investment in R&D and the aggregate rate of discovery is endogenous and lastly, that individuals and firms earn profits from their discoveries.

Although some economists argue that the endogenous growth models simply strengthened the traditional microeconomic foundations of the neoclassical growth models,<sup>28</sup> amplifying the empirical implications thereof, notably the neoclassical growth model's prediction of conditional convergence<sup>29</sup>, the endogenous growth models must be credited for its inputs in the areas of increasing returns, R&D activity, human capital and the diffusion of technology.

At this stage, it seems expedient to propose a theoretical framework from which the analysis in the subsequent chapters would draw on.

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<sup>28</sup> See for instance, Ben Fine (2000:248).

## **2.5 THEORETICAL FRAMEWORK**

It would be appropriate to establish from the outset, a caveat through which knowledge capital accumulation and improved infrastructural quality generates growth in the long run. The obvious kick-starter to long run growth is human capital formation. For there to be accumulation of knowledge capital, there has to be adequate investment in human capital. Investments in human capital have spillover effects on all other inputs (physical, knowledge and other human capital) and also influence the quality of infrastructure, which in turn, facilitates the transfer of technology into a country<sup>30</sup>.

### **2.5.1 THE OMNISCIENT ROLE OF HUMAN CAPITAL**

Investments in human capital have positive externalities on physical, knowledge and other human capital, that give rise to sustained growth (Lucas, 1988). A country with a low level of human capital will tend to have a lower rate of physical and knowledge capital accumulation, since physical, knowledge and human capital tend to be complements in production (Sachs & Warner, 1997b: 185; Romer, 1992). It takes a trained person (i.e. human capital) to effectively make physical capital (e.g. a computer) more productive. It also takes a trained person to hypothesise, guess, experiment and eventually discover valuable new knowledge or ideas that could render production more efficient (for instance, a low cost method of production). Human capital is, thus, the most important input in the production of physical and knowledge capital that contribute to long run growth<sup>31</sup>.

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<sup>29</sup> Aghion & Howitt (1998) have also exposed the limitations of the new growth theory.

<sup>30</sup> Emphasis is not laid here, on the direction of causality, which could as well be both ways.

<sup>31</sup> Grossman & Helpman (1991) in Ghura (1997:5) provide a linkage between imported technology and economic growth via private investment: because in the absence of the latter, there's likely going to be a

Where the stock of human capital is low, the returns on knowledge investment would be low and consequently, there will be less accumulation of knowledge capital (Romer, 1992). Therefore, a high human capital stock should facilitate knowledge capital accumulation, which would in turn ameliorate the quality of infrastructure (both physical and institutional)<sup>32</sup>. Better institutional infrastructures are usually associated with higher physical infrastructure and public goods delivery (Collier & Gunning, 1999; Easterly, 2002; Hall & Jones, 1997). An environment with good physical and institutional infrastructure is an incentive for people to produce, invent, transact and accumulate skills that are critical for technology transfer and subsequent leapfrogging processes.

Also, human capital development has externality effects on other human capital either through learning by doing or through social networks<sup>33</sup>. Following Lucas's (1988) model, the growth rate of productivity of capital and labour in a given firm depends on the growth rate of productivity in the rest of the economy since some fractions of the latter growth, spill over free of charge to the firm<sup>34</sup>. However, there is an implicit assumption that channels of learning and or of social interactions exist in the economy. Yet, in the absence of physical infrastructure (e.g. roads and telephone network), and public goods (e.g. tennis courts, street lighting or public safety), people would not associate freely, and would consequently, not *learn* from one another (Fukuyama, 2001:18). Social capital

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labour market failure manifested in the lack of skills, which may hinder the use of foreign technology for growth.

<sup>32</sup> In the same way that a new idea of how to produce things at cheaper costs, contributes to economic efficiency; new ideas of how to design and implement institutional structures that guarantee checks and balances and the separation of powers, contributes to good governance.

<sup>33</sup> The benefits derived from being connected to other people, for example through the telephone system or the internet. The larger the proportion of the population connected to such a network, the greater the benefits to each of them.

therefore facilitates learning processes that have positive externalities on human capital and on the productivity of firms in an economy, but it takes good infrastructure and public goods delivery for it to happen.

### **2.5.2 KNOWLEDGE CAPITAL AS A DISTINCT INPUT IN PRODUCTION**

Though closely related as inputs and outputs, knowledge and human capital are distinct goods, having different fundamental attributes with different implications for economic theory (Romer, 1992). Knowledge or an idea is a nonrival and partially non-excludable input whereas human capital is a rival, excludable input in production.

Human capital could be perceived in terms of the different physical connections between neurons in the brain. These connections store the commands of a software manual instruction that has been read. The computer itself is a rival, excludable input, but the software manual (or idea) is nonrival and partially non-excludable. The user has full control over what he knows about the particular software programme and unless he teaches someone, there is no way anyone can make use of his ability at the same time. However, from the moment knowledge is made known to others<sup>35</sup>, the new idea reinforces the connections in their brains. In other words, the new idea increases the value of their human capital since they also have control over what they know and they could actually reap temporary profits from it. In this sense, human capital is an input (alongside physical capital) in the production of ideas, and ideas are in turn used to produce more

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<sup>34</sup> A worker with firm A, for instance, meets with a friend who is a worker with firm B, at a tennis or golf court, and learns a valuable new idea which ameliorates his output at work the next day thereby improving the overall performance of his firm.

<sup>35</sup> It is usually difficult to keep secret any new useful knowledge, such as how to produce things at low cost because such knowledge essentially leaks: employees would typically quit their employers to start doing what they have learnt

valuable human capital and the circle repeats itself, but human capital and ideas are conceptually distinct goods.

After one's knowledge is made known to others, they cannot all work on the same computer at the same time – computer faces diminishing returns, but it is possible for any number of people to use the software simultaneously. Because the new idea is capable of being utilised simultaneously by an infinite number of people, it seems as though the limited physical resources are being combined in evermore-valuable ways, yielding evermore-increasing output (Romer, 1992). Therefore, with increasing stock of computers made available to the economy *via* a deliberate process of technology transfer, there would be increasing instead of diminishing returns to inputs.

The upshot of this discussion is that ideas are the critical input in the production of more valuable human and nonhuman capital. But also, human capital is the most important input in the production of new ideas. Nonhuman capital (a computer, for instance) could be used in an ancillary way, but it takes a trained person (human capital) to hypothesise, guess, experiment, and eventually discover a valuable new idea that could be communicated to and used by others.

### **2.5.3 KNOWLEDGE CAPITAL, INCREASING RETURNS AND LONG RUN GROWTH**

As already mentioned, knowledge or an idea, unlike other inputs in production has the distinctive characteristics that it cannot be perfectly patented, it can be utilised by an infinite number of persons at the same time, its usage imposes no opportunity costs to others (because knowledge leaks), and its value is higher where it is abundant. The latter



characteristic of knowledge implies that an idea is worth more to a society the more the society already knows (Romer, 1986; Easterly, 2002:150). Therefore, knowledge (and other forms of capital, since knowledge has spillover effects on them) should have a higher return where it is abundant and a lower return where it is scarce – increasing returns, which sort of contradicts the neoclassical presumption that returns to capital are high when capital is scarce.

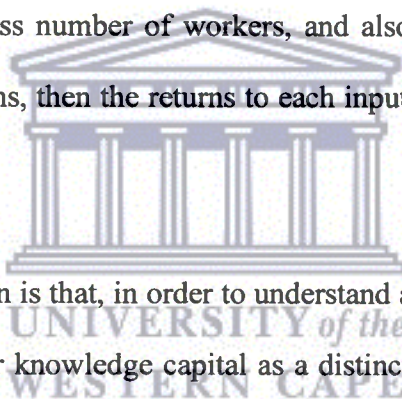
This analysis should explain why capital (financial and human) has the tendency of moving from capital-scarce poor countries to capital-abundant, rich countries. In particular, it justifies the ‘financial inflows’ apathy and brain drain currently facing poor African economies like Cameroon.

Because new knowledge is complementary to existing knowledge, the value of each new idea would depend on the size of the population utilising it<sup>36</sup> (Easterly, 2002). This implies, therefore, that the way towards increasing the value of knowledge (or better still, raising the return on knowledge investment) in small SSA economies like Cameroon remains solely in regional integration.

Suppose in a partial equilibrium analysis, output for any particular activity is represented as:  $y = f(k, h; a)$ , where  $k$  and  $h$  represent all the different combinations of rival physical capital and rival human capital inputs respectively, employed in production, and  $a$  the nonrival idea or knowledge that makes production possible. Assume a garment factory for instance. Without  $a$ , no shirts will be produced (because nobody knows how to sew

one) even though the sewing machines ( $k$ ) and factory workers ( $h$ ) may be readily available<sup>37</sup>.

If only one idea about how to sew a shirt is available to the factory, then for a fixed  $a$  (and for  $f$ , homogenous of degree 1), we can assume that doubling the amounts of  $k$  and  $h$  would result in twice the output  $y$ . But then we only have constant returns to scale each time we increase the amounts of inputs ( $k, h$ ), keeping  $a$  constant. On the other hand, if we hypothesise that there exist an infinite number of ways (or ideas) of how a shirt can be sewn and that these ideas are necessarily nonrival in the sense that they could be utilised simultaneously by a countless number of workers, and also that each new idea can be copied/imitated by other firms, then the returns to each input could be increasing<sup>38</sup> in the long run.



The upshot of this discussion is that, in order to understand and explain long run growth, we need to consider ideas or knowledge capital as a distinct input in production and no longer as an incorporation of human capital. In a world with physical limits, it is discoveries of big ideas (such as how to make high-temperature superconductors), together with the discovery of millions of small ideas (such as better ways of sewing a shirt) that make persistent economic growth possible (Romer, 1992: 64). Ideas, therefore, are the instructions that let us combine limited physical resources in arrangements that are ever more valuable.

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<sup>36</sup> For instance, Bill Gates would probably have been a millionaire instead of the billionaire he is, if he sold software only in the United States.

<sup>37</sup> This probably explains why despite the availability of technology, the ancient Roman Empire and later, the Chinese dynasties still failed to industrialise rapidly. The steam engine existed during the reign of the Roman Empire for instance, but it was only used for opening and closing the doors of a temple.

This abstract analysis of ideas has special relevance for poor SSA countries like Cameroon. There is a stock of ideas<sup>39</sup> in the advanced countries that could yield large increases in standards of living in poor countries if only they could be imported and put to use. Openness to trade would no doubt facilitate the use of those ideas in economic growth. Therefore, Cameroon, should strive first at utilising ideas that already exist in the world marketplace (via technology transfer) and then seek to produce and export new ideas to the rest of the world at a later stage of her development.

#### 2.5.4 LIMITATIONS TO THE USE OF IDEAS IN POOR AFRICAN COUNTRIES

Because knowledge leaks it creates a distinction between the private and the social returns to knowledge capital investment (Easterly, 2002). A single individual or firm may not fully reap the benefits of her initial investment because others imitate her actions. Leaks, thus lead to *social increasing returns* and *private diminishing returns*, meaning that free markets would not lead to the best possible outcomes. This implies that there is a minimum or critical rate of return (else where referred to as the discount rate) that investors (or individuals) require for investment in knowledge capital<sup>40</sup>. Even when the investment does take place and new knowledge is produced; we still need incentives for it to be shared with others (since inventors are usually not charitable organisations). The

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<sup>38</sup> Romer (1992) has a detailed account of how this worked in Mauritius and Taiwan (China), and Easterly (2002:148) also narrated the case of Bangladesh.

<sup>39</sup> For instance, ideas on how to effectively implement patents, copyrights, laws to protect trade secrets, subsidies for education, peer-reviewed research grants, and agricultural extension services. These interventions in the advanced countries, have been relatively free of political manipulation, and have generally paid off (Romer, 1992: 66). Eventhough the present institutional structures in SSA countries do not guarantee beneficial interventions, the economics of ideas gives us reason to believe that there are undiscovered institutional arrangements that could work.

<sup>40</sup> This rate could be thought of, as the incentive required by the investors in order to forgo some amount of present consumption and invest in knowledge acquisition.

crux of the matter is that some form of incentive is necessary for investment in knowledge accumulation and/or diffusion.

Since the rate of return to new knowledge depends on how much knowledge already exist, a country that starts out with little knowledge will have a low rate of return to knowledge. If this low rate of return falls below the discount rate, there will be no investment in new knowledge. If there is no investment in new knowledge today, there will still be low knowledge tomorrow, so there will still be a low rate of return tomorrow – and so, no investment tomorrow either (Easterly, 2002). Such a vicious circle could permanently trap the unlucky country in poverty and is suggestive of the fact that investment in knowledge capital requires incentives. The increasing returns story of poverty traps says that poverty is a failure of coordination (Easterly, 2002). Because left to itself, the market is unable to provide incentives for poor people to invest in skills acquisition that could raise their future incomes, thus lifting them out of poverty, the study preconises government intervention in correcting this market failure.

At the macroeconomic level it could also be shown that the market cannot be used to allocate resources between the different sectors of activities and at the same time used to remunerate knowledge capital investment. In the specification given above, where output is presented by the function  $y = f(k, h; a)$ , if the factors  $k$  and  $h$  are rewarded in a competitive market by their marginal products, Euler's theorem tells us that  $k$  and  $h$  will exhaust the total output  $y$ , and nothing will be left to pay  $a$  (Romer, 1992:75).

What is true for one activity is equally true for the economy as a whole. In a general equilibrium framework, aggregate output is represented by the function:  $Y = F(K, H; A)$ ,

$F$  being homogenous of degree 1 in the rival physical and human capital inputs,  $(K, H)$ . Therefore, following Euler's theorem, the market cannot be used to allocate the resources,  $K$  and  $H$  between the different sectors of activities and at the same time, used to remunerate  $A$ . In other words, output  $Y$  will exhaust and no resources will be available to provide incentives for the discovery of new ideas,  $A$ , without which, output ceases to increase. This establishes a case for government intervention at the macro level in providing incentives for ideas creation.

Economic theory tells us that this intervention can be accomplished either by adjusting the neoclassical framework to incorporate imperfect competition (i.e. inventors are given temporary patents over their discoveries) or by an approach whereby the nonrival ideas/knowledge investment is financed through government subsidy. Both approaches, however, need not be mutually exclusive. Since poor people are often poor because they lack sufficient resources, and also owing to the political economy concerns of rent-seeking, this study advocates a dual approach in SSA countries: a reinforcement of the institutional framework that would guarantee the protection of intellectual property rights and government subsidies.

### **2.5.5 EMPIRICAL EVIDENCE ON CAMEROON**

Empirical studies on the factors that have influenced economic growth in Cameroon during the period 1963-96 found evidence in support of the endogenous growth-type model for Cameroon (Ghura, 1997). The underlying aggregate production function for Cameroon exhibits increasing returns to scale. At the aggregate level, there are positive externalities stemming from physical and human capital accumulation, in line with the

assumptions made by the endogenous growth models discussed above. Human capital development was found to play an important role in output expansion. In addition, there is evidence that economic growth in Cameroon is influenced by infrastructure performance such as economic policies that foster external competitiveness and a prudent fiscal stance.

A more recent empirical study by Amin (2002), on the sources of economic growth in Cameroon since 1961, also confirms the results of the earlier study. But in particular, it shows that the contribution of the growth of factor inputs (particularly, capital inputs) in the overall growth has been greater than the contribution of total factor productivity (TFP). Yet evidence shows that growth in the advanced countries is driven more by growth in TFP than by growth in factor inputs. Hence, policies that would enhance the contribution of TFP in the Cameroonian economy (such as investment in human and knowledge capital development) would generate long-term growth in per capita incomes.

This study suggests that foreign direct investment is a viable channel for the use of ideas that exist in the world market in value-added activities that will raise productivity and per capita incomes in the Cameroon economy, thus lifting people out of poverty. However, in order for such investment to create linkages that will ensure sustainability in growth in the economy, there must be improvements in the capacity of the economy to learn. The next chapter presents the Cameroon economy highlighting its opportunities and constraints.

## **CHAPTER THREE**

### **CHARACTERISTIC FEATURES AND GROWTH EXPERIENCES OF THE CAMEROONIAN ECONOMY**

#### **3.1 INTRODUCTION**

The Republic of Cameroon is situated in Western Africa, bordering the bight of Biafra, between Equatorial Guinea and Nigeria. Its climate varies with terrain, from tropical along the coast to semi-arid and hot in the north. Cameroon has access to the sea. Her principal port situated in the economic capital, Douala, is one of the busiest in Africa and serves two land-locked neighbouring countries, Chad and the Central African Republic. Another port at Kribi is currently serving as exit point to the gigantic Chad-Cameroon oil pipeline project. Cameroon is a bilingual country (with English and French as official languages) with a population (2001 estimate) of about 15.2 million people and a density of 33 persons per square kilometer (World Development Report, 2003).

Cameroon is a budding democracy with over 180 political parties (mostly based on ethnic rather than ideological grounds) and a plethora of non-governmental organisations/lobby groups. It is a Republic with a coalition government of political parties. The Republic is administratively, sub-divided into 10 provinces, each headed by a governor appointed by the President of the Republic and responsible to him alone. By virtue of her bilingual nature, Cameroon follows both the French and the English legal systems. In the English speaking part of the country (made up of only two provinces), the common law system applies whereas, in the majority French speaking provinces, the 'burden' of proof lies with the accused.

Cameroon's growth history since independence in 1960, is characterised by four distinct sub periods:

- ❖ The period 1960-77<sup>41</sup>, or the pre-oil era, considered as the period of organisation of productive structures of the economy
- ❖ The period 1978-86 characterised by sustainable growth, predominantly driven by the oil sector
- ❖ The period 1987-93, during which the economy experienced a recession
- ❖ The period after 1994, or the post devaluation era characterised by the return to growth.

The characteristics of the Cameroonian economy will be discussed in the light of this distinctive growth framework<sup>42</sup>. The chapter is organised as follows: first an analysis of the country's growth history, followed by a summary of the evolution of major indicators of socio-economic development.

### 3.2 ANALYSIS OF CAMEROON'S GROWTH EXPERIENCE SINCE 1960

After her independence in 1960, Cameroon, like many other Sub-Saharan African (SSA) countries, embraced a development paradigm that gave the State a prominent role in the production and regulation of economic activity. At that time, import-substituting industrialisation (ISI) dominated economic thinking, at least among most developing countries. But it has been argued (see for example, Bruton, 1998:918; Sachs & Warner, 1997a: 352; Ndongko, 1993:119), that most of the smaller, newly independent African states did not *actively* pursue an import substitution (or any other) strategy while an array of import substitution measures did appear in some of the larger countries<sup>43</sup>. It has also been argued that the choice of state-led development (an important component of which

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<sup>41</sup> In effect, we would consider the period from 1963, when data became available.

<sup>42</sup> The characteristic features are elements that are useful in appraising the opportunities or constraints faced by the country in its growth process and cannot therefore be dissociated from the growth process.



was closure to international trade) in most SSA countries was essentially a reaction against the economic policies associated with colonialism.

As was to be expected, post-independence Cameroon governments opted for development policies that would ensure the country's 'economic independence' but often with emphasis on State intervention<sup>44</sup> (Kobou et al, 2002:10; Amin, 2002). Consequently, the first two decades of independence witnessed substantial public sector investment in manufacturing, often financed by foreign aid<sup>45</sup>. To qualify for aid, the Bretton woods institutions (The World Bank and IMF) advised poor countries to draw and implement formal development plans (Easterly, 2002).

### 3.2.1 THE PRE-OIL PERIOD: 1963-1977

During the first period of her growth history (1963-77), considered as the period of organisation of the productive structures of the economy, the Cameroon government implemented development plans, which aimed expressly at altering the structure of the economy away from agriculture-oriented activities (which were assumed to utilise few machinery) into industrial production<sup>46</sup>. The thinking went thus: foreign aid would

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<sup>43</sup> Bruton, however, argues that such measures seemed rather ad hoc and could not be associated with ISI per se. He also quotes Roger Riddell (1990, p. 38 ff) who argues that import substitution did not fail in Africa; rather it was never really tried.

<sup>44</sup> It must be emphasised that these choices were not disastrous per se. Rather, the particular context in which they were implemented (low human capital stock, weak institutional capacity, high ethnic polarisation, rent seeking etc.) created perverse incentives that mitigated their chances of success.

<sup>45</sup> The idea that foreign aid would help finance growth (the concept of the 'financing gap'), attributed to the 'Harrod-Domar' model, says that aid could help meet the financing needs of poor countries in the acquisition of physical capital (machines), which causes output to increase and consequently economic growth.

<sup>46</sup> Conceptually, the plans would ensure a reorientation of comparative advantage and the diversification of economic activity, hence reducing the vulnerability of the economy to external shocks (export pessimism arguments). In Cameroon they had as additional objective, the promotion of balanced development between the various regions of the country (Kobou et. al., 2002:8). The policy of regional balance appears to be an instrument of political domination used by successive regimes in Cameroon for the preservation and legitimization of the state. In a system where politics is conceived and lived as competition between the

provide the resources needed to import physical capital (with its built-in technology) and once capital was in place, learning would automatically occur and the surplus unemployed labour in the rural areas would be absorbed into the modern industrial economy without harming agricultural production<sup>47</sup>. The implication of this analysis is that it engineered a process of rural exodus (see section 3.3.2), which later had far reaching repercussions on government economic policy options.

Cameroon's first five-year development plan (1960-65), did little to alter the distribution of resources between the different regions and economic sectors. The country remained largely tied to agriculture, producing and exporting commodities that were widely produced elsewhere in Africa and the third world and which were poorly regulated in international markets (Ndongko, 1993:119). The second plan (1966-71), termed the 'peasant plan', aimed at diversifying agricultural export crop production from the traditional cocoa, coffee, bananas, lumber and cotton to include products such as tea, rubber and palm oil.

Under the second plan, Cameroon's GDP grew twice faster than under the first plan, with growth in the agricultural sector particularly rapid at an annual average rate of 11.1% (Ndongko, 1993). Until 1978, the economy witnessed modest but steady progress toward industrial expansion and diversification. The primary sector's relative contribution to GDP fell gradually, while those of the secondary and tertiary sectors rose slowly.

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various segments of society for the allocation of national resources, it becomes easier for policies to be oriented towards redistribution and social justice than towards growth creation.

<sup>47</sup> As Easterly (2002) argued, the 'aid-to-investment-to-growth' hypothesis made very tall assumptions that labour would readily utilise any new machines and that the aid received would not be embezzled or misused by governments.

### 3.2.2 THE PERIOD OF OIL BOOM: 1978-1986

The second period of her growth history began in 1978. The economy experienced a structural change, with oil becoming the main source of foreign exchange earnings accompanied by a boom in industrial sector (including mining, manufacturing, electricity, housing and public works) GDP growth<sup>48</sup> (Ghura, 1997:6). With booming economic conditions during 1978-86, the Cameroon government adopted a development strategy that centered on expanding the public sector in three ways.

- ❖ Firstly, it shifted its expenditure priorities by expanding the capital budget<sup>49</sup> from an average of 2% of GDP during 1965-77 to an average of 9% during 1978-86, while reducing current outlays from an average of 16% of GDP to 12% (Ghura, 1997). Thus, the total investment-GDP ratio increased significantly, but the private investment-GDP ratio remained broadly unchanged (see Table 3.1).
- ❖ Secondly, a large number of public agencies, marketing boards, and public enterprises were set up or expanded in all sectors of the economy, often supported by government subsidies (Ghura, 1997).
- ❖ Thirdly, the transport sector suffered from heavy government intervention and was dominated by public enterprises in railways, urban transport, domestic air travel, merchant shipping, port management, and road maintenance. Finally, a complex system of regulation of prices, including interest rates, was put in place. External trade was regulated through import licensing and marketing boards,

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<sup>48</sup> The industrial sector's share in GDP rose from 19% on average during 1965-77, to an average of 28% during 1978-86 and real GDP grew at about 8.8% annually during this latter period, reflecting in part the oil sector's rising output.

<sup>49</sup> Unfortunately, public investment tended to weigh more on physical capital than on human capital that would have raised the level of technology and therefore, total factor productivity (Amin, 2002:46).

while quantitative import restrictions were imposed on goods that competed with domestic goods (Ghura, 1997). In principle, the oil boom experienced by Cameroon during 1978-86 should have given rise to the “Dutch disease” problem, characterised by a rise in the relative price of nontraded to traded goods. However, the Dutch disease was largely averted, as the real exchange rate depreciated<sup>50</sup> by about 20% between 1979-85 (see Table 3.5 and Figure 3.5), reflecting the depreciation of the French franc<sup>51</sup> (Ghura, 1997:12).

### 3.2.3 THE PERIOD OF ECONOMIC RECESSION: 1987-1993

The third period of Cameroon’s growth history (1987-93) witnessed a severe economic recession that caused real per capita GDP to drop by 40% (see Table 3.1). Economic activity shrank in most areas, particularly in construction and public works, in cash crop production, retail trade and in the petroleum sector. Three main factors explain this deterioration in economic performance: the significant decline in the world market prices of its main export commodities (see terms of trade indicators in Table 3.7); the appreciation of its real effective exchange rate<sup>52</sup>; and the decline in oil output<sup>53</sup> (Ghura, 1997:12). The economic crisis manifested itself in several ways: fiscal deficits averaged 7% of GDP during 1987-93<sup>54</sup> (Table 3.1 and Figure 3.4), rising external debt to the tune

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<sup>50</sup> The depreciation of the CFA franc, following that of the French franc made Cameroonian imports from other countries much more expensive, thus preventing a spending spree of windfall revenue.

<sup>51</sup> In addition, Benjamin, Devarajan, and Weiner (1989) in Ghura (1997), note that the government saved a large portion of the windfall income from oil since it perceived the oil boom as temporary, thus avoiding a spending boom.

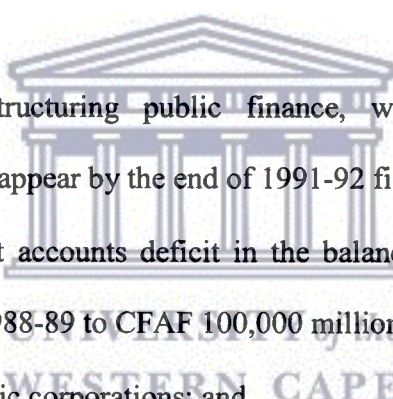
<sup>52</sup> The real effective exchange rate appreciated by some 40% on a cumulative basis between 1985-1992, owing to not only the appreciation of the French franc, but also to an increase in inflation triggered by expansionary fiscal policies (Ghura, 1997). See also Tables 3.1 and 3.7.

<sup>53</sup> Between 1986-1988, the international price of crude oil fell by two-thirds, while the prices of coffee and cocoa (Cameroon’s chief export crops) dropped by one-half and one-third, respectively (Ghura, 1997).

<sup>54</sup> The government financed the deficit from two main sources: external borrowings and the accumulation of domestic and external arrears.

of about 49% of GDP occurred during the period 1987-93 (Table 3.1), and repression of the financial system and widespread unemployment took place.

In the light of the magnitude of economic imbalance and the extensive resources required to restore equilibrium and boost recovery, the Cameroon government decided to seek assistance from the World Bank and the IMF. A Structural Adjustment Programme (SAP) was drawn up and implementation began with the 1988-89 fiscal year<sup>55</sup>. Along with reducing the annual inflation rate to 3 per cent and pursuing an annual GDP growth rate of 3 per cent, the SAP also had the following four principal aims (BERD, 1988 in Ndongko, 1993:122):

- 
- Stabilising and restructuring public finance, with the deficit to decline progressively and disappear by the end of 1991-92 fiscal year;
  - Reducing the current accounts deficit in the balance of payments from CFAF 125,000 million in 1988-89 to CFAF 100,000 million in 1991-92;
  - Restructuring of public corporations; and
  - Restructuring and stabilising the monetary and financial systems.

The pursuance of these objectives on the demand side meant a very crucial role both for fiscal and monetary policy.

As far as fiscal policy is concerned, attempts were made to reduce public expenditure and to increase the state budget revenue. Expenditure reductions focused on restructuring salaries and benefits to state personnel, freezing salaries of 'ghosts' state employees

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<sup>55</sup> However, the government based its actions solely on internal adjustment measures, postponing external measures such as the change in the fixed parity of CFA franc, which had become increasingly overvalued (Ghura, 1997).

(‘operation antelope’), limiting the financial impact of advancements in rank, reducing embassy staffs, freezing new recruitments elsewhere in the public sector, and reducing subsidies to state corporations (Ndongko, 1993:122; Ghura, 1997:14; and Amin, 2002:9). To increase state revenue, the tax base was expanded with the introduction of new taxes (e.g. real estate tax) and the revision of existing charges and duties notably the Value-Added Tax (VAT- previously, Turn-Over Tax), income tax and fiscal charges. Alongside fiscal policy, monetary policy measures were also implemented: restructuring of banks, including the possible liquidation and rehabilitation of some; reduction of the number of different rates; increase in the authorized banking margin; steps towards the abolition of interest rate subsidies; and the progressive replacement of direct monetary control measures with indirect ones (Ndongko, 1993).

On the supply side, trade liberalisation was an invaluable instrument in restoring competitiveness in the national economy. The following actions were pursued:

- Liberalisation of domestic product markets aimed at removing distortions, hence ensuring that farmers reap the full benefits of their labour<sup>56</sup>. The monopoly public marketing board (National Produce Marketing Board -NPMB) that stood between farmers and foreign buyers, buying from the former at well below the prices at which it sold to the latter, was liquidated.
- A gradual loosening of restrictions on imports, abolition of extreme exchange controls and the lessening of import licence requirements, to help lower the black

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<sup>56</sup> Indeed, the bias against agriculture turned out as a ‘boomerang’ for the emerging industrial sector since farmers constitute the bulk of the domestic purchasing power: any policy that depressed the purchasing power of agricultural producers, ultimately ‘crowds-out’ the domestic demand for home manufactured goods.

market exchange rate premium that penalised agricultural exporters<sup>57</sup>. Commercial policies were also revised and import procedures simplified to boost economic activities.

- Efforts were directed towards developing non-traditional export sectors with a view to conquering new markets. The industrial sector was restructured with a view to improving the quantitative performance of the economy, intensifying inter-industry relations, and minimising balance of trade deficits. In the agricultural sector, research and dissemination services were reinforced, cooperatives redynamised and the management of agro-industries reformed (Ndongko, 1993:123).

In spite of these measures, it became clear by the end of 1993 that strategies based exclusively on internal adjustment would not be sufficient to put the economy back on a sustainable economic recovery track (Ghura, 1997:14). The internal adjustment strategy alone was unable to restore external competitiveness, especially because some of the measures that were implemented had negative repercussions on growth.<sup>58</sup>

### **3.2.4 THE POST-DEVALUATION PERIOD: SINCE 1994**

Given the inability of internal adjustment strategies alone to revive economic activity, Cameroon, on January 12, 1994, in collaboration with other member countries of the CFA franc zone, devalued its currency by 50%. The CFA franc had been pegged at a

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<sup>57</sup> Farmers bought imported fertilizers and other farm inputs (not to mention their imported consumption needs) at a high black market exchange rate but were obliged to surrender their produce to the National Produce Marketing Board (NPMB) at a very low official exchange rate.

<sup>58</sup> For instance, fiscal adjustment policies consisting mainly of cuts in the investment budget and in outlays on nonwage maintenance and other essential services, proved detrimental to growth (Ghura, 1997).

fixed parity to the French FRANC since its inception in 1948<sup>59</sup> (Ghura, 1997). The devaluation changed the parity from CFAF 1= FF 0.02 to CFAF 1= FF 0.01.

Besides the exchange rate change, the government's programme contained further fiscal tightening, as well as the implementation of structural reforms related to the reorganisation and downsizing of the civil service, privatisation of public enterprises, bank restructuring, and the liberalisation of domestic prices and interest rates. Cameroon's external competitiveness has been largely restored since the devaluation in 1994, and most exports have recorded strong gains, including coffee, cocoa, cotton, timber, aluminum and manufacturing exports (see Table 3.7 for indicators of competitiveness). Overall, real GDP, which had been declining at an average rate of 4% during 1987-93, witnessed a positive average growth of about 2% during the period 1994-96 (Table 3.1).

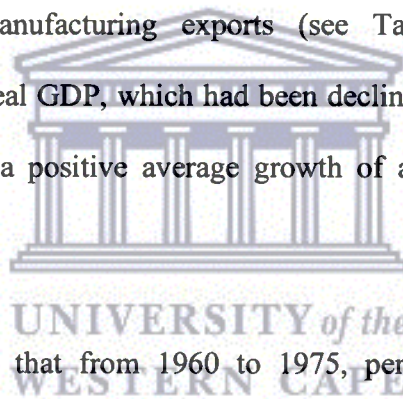


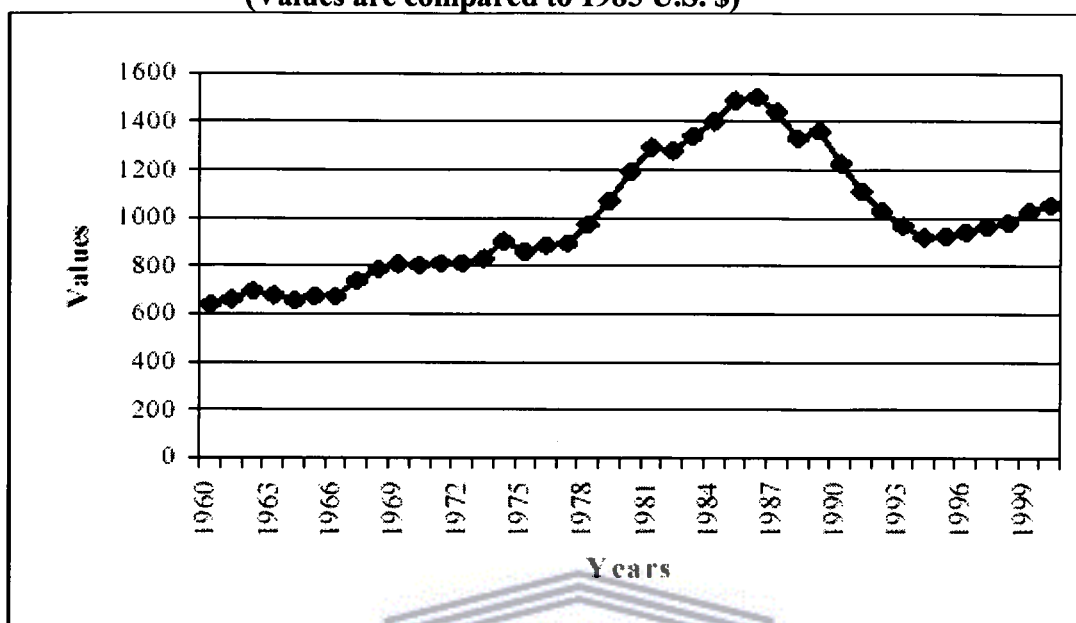
Figure 3.1 below indicates that from 1960 to 1975, per capita GDP in Cameroon increased at an annual rate of 1.2% (that is, at a rate similar to the one registered over the whole period), before being multiplied by five between 1975 and 1986 (during the period of oil boom). From 1986 up to 1994, GDP per capita has been declining at an average annual rate of 6.5%. Since 1994, there has been a positive trend in per capita GDP growth of about 1.8% annually, attributed largely to the restructuring of production that started in 1989 and the change in monetary parity of the CFA franc.

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<sup>59</sup> In effect, external adjustment measures began with the suspension of convertibility between the franc zone and France in August 1993, then later in September 1993, between the two Franc zones (Amin, 2002:9).



**Figure 3.1 GDP per capita in Cameroon, 1960-2000.**  
 (Values are compared to 1985 U.S. \$)



Source: Kobou et al (2002:6)

### 3.3 INDICATORS OF SOCIO-ECONOMIC DEVELOPMENT IN CAMEROON: 1963-96

#### 3.3.1 NATIONAL ACCOUNTS AND PRICES

Table 3.1 below summarises the discussion in the previous section of changes in some national account indicators in Cameroon during 1963-96.

**Table 3.1: Indicators of National Accounts and Prices in Cameroon, 1963-96.**  
(Period averages; in units indicated)

	1963-77	1978-86	1987-93	1994-96
Real GDP growth rate 1/	4.6	8.8	-4.0	1.9
Per capita real GDP				
Level (in thousands of 1980 CFA francs)	127.6	188.4	174.1	134.6
Growth 1/	1.2	5.6	-6.5	-1.1
Gross domestic investment/GDP (in percent)	17.9	24.9	18.2	15.2
Private investment/GDP (in percent)	15.9	16.2	11.4	13.4
Government investment/GDP (in percent)	2.0	8.7	6.8	1.8
Consumer price				
Level (index, 1980=100)	43.3	131.8	225.5	309.4
Inflation 1/	6.6	11.3	2.1	16.6
Overall budget balance/GDP (in percent)	-0.9	0.8	-7.3	-5.5
External debt/GDP (in percent)	-	31	49	-

Source: Ghura (1997:7).

1/ Annual average percentage change of the relevant variable expressed in level.

Essentially, it shows that per capita GDP, as well as gross domestic investment and government investment as a percentage of GDP have been declining (see also Figure 3.3) since 1986. Private investment has however, been relatively stable. On the other hand, the external debt, the budget deficit and the consumer price index have generally been increasing during 1963-96.

### 3.3.2 DEMOGRAPHIC INDICATORS

Cameroon has a relatively young population today composed of about 71% inhabitants of less than 30 years old (Kobou et. al., 2002:4). The segment of the population below 30 years has been increasing steadily from 5million inhabitants in 1963 to 7.6million in 1976, 10.5million in 1987 to 13million in 1995. By the year 2020, the young population would have reached 25.5million inhabitants (Kobou et. al., 2002). This phenomenon is compounded when one considers that the average annual growth rate of population in Cameroon is higher than the world average.<sup>60</sup>

A similar pattern has been observed between the urban and rural populations of Cameroon. In 1963, the Cameroonian population was essentially rural, since 84% of individuals resided in agglomerations of less than 5000 inhabitants, while only 16% of the population lived in urban areas (Kobou et. al., 2002). In 1976, the urban population grew to 29.6% and by 1987 it had reached 38.6%. It came close to 50% in the year 2000 and is expected to total 70% in the year 2020, if nothing is done<sup>61</sup>.

The increase in urban demography is accompanied by the spatial extension of towns as well as the emergence of new problems such as crime, HIV/AIDS, poverty, and unemployment. These factors have helped to fragilise the already weak public institutions<sup>62</sup>. In sum, Cameroon never witnessed a demographic transition, and that demographic component could become an impediment to growth (Kobou et. al., 2002:4).

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<sup>60</sup> Between 1976-1987, Cameroon's average annual population growth rate was 2.8% whereas, the world average stood at 1.7%.

<sup>61</sup> It would be recalled that the 'industrialisation paradigm' that was put in place after independence, favoured rural exodus.

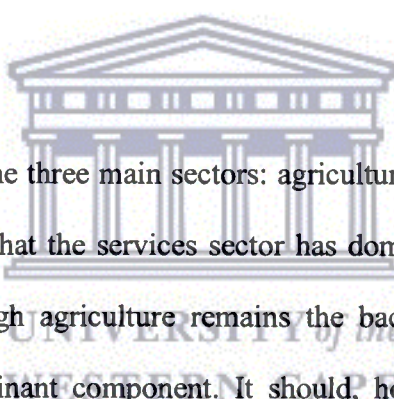
<sup>62</sup> It is also worth emphasising that the growing urban youth population may have had a negative repercussion on economic policy choices and could also explain the rise in political agitations.

### 3.3.3 SECTORAL STRUCTURE OF PRODUCTION

The objective here is to determine whether the economic structure of the country is moving towards one that would characterise a modern economy including:

- The reallocation of factors of production from low productivity sectors (the traditional sectors) to high productivity sectors (modern sectors). The stylised facts (Lewis, 1954; Chenery, 1976 in Kobou et. al., 2002) suggest a movement of labour from agriculture towards industry.

- Equalising marginal productivity of labor between the sectors. Lewis in 1954 suggested that during the development process, productivity would substantially differ between the sectors.



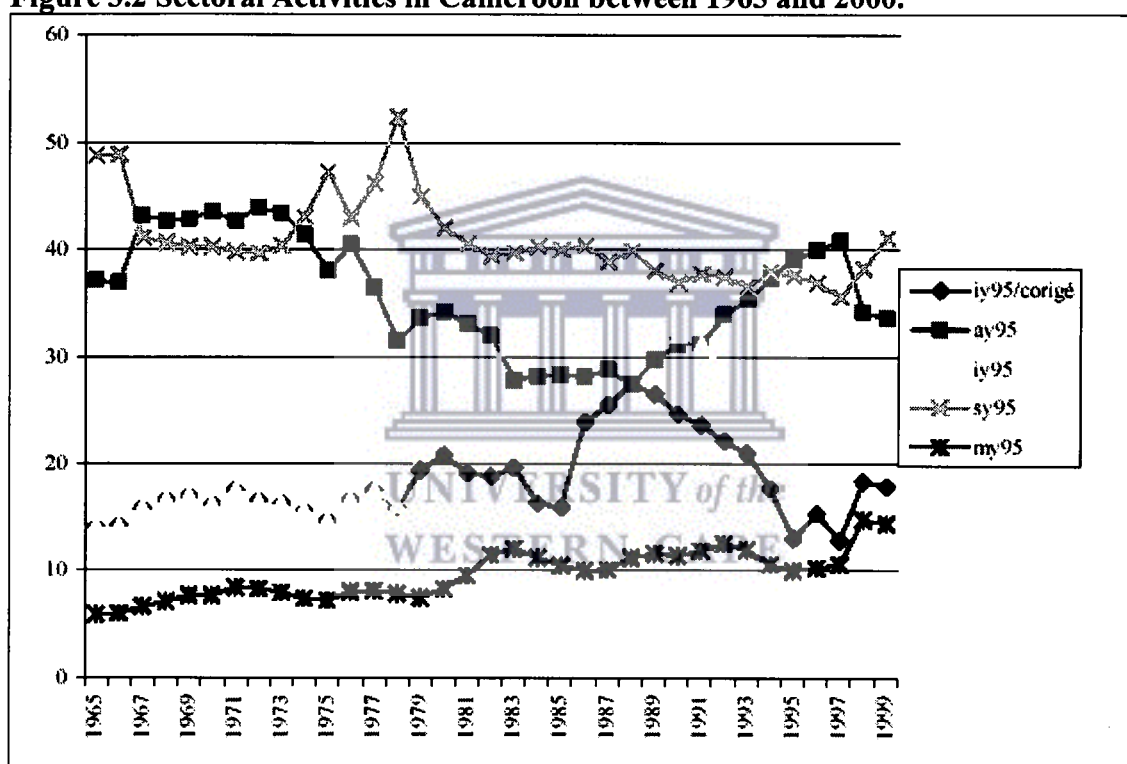
A summary comparison of the three main sectors: agriculture, industry and services (see figure 3.2 below), suggests that the services sector has dominated over the entire study period, 1965-2000. Although agriculture remains the backbone of the Cameroonian economy, it is not the dominant component. It should, however, be pointed out that services here are taken at their primary level, that is, services resulting from the propensity of the economy to add value on the spot, but are essentially products transformed elsewhere (Kobou et. al., 2002:22).

During the whole period under review the share of services in the GDP was 41.4 % that is, 1.8 times more than that of industry and about 1.2 times more than that of agriculture (Kobou et. al., 2002). This share, as well as that of agriculture, respectively dropped by an average annual rate of 0.65 and 0.44 % between 1960 and 2000, while the share of industry increased at an average annual rate of 2.1 %.

However, the pattern of change across sectors has not been uniform over the period of study:

- Agriculture was at a level comparable to that of services during the first period (1965-77)<sup>63</sup>, then lost about 12 points over time, starting at the end of the first period, through the second period, and continuing during the third period before beginning to rise during the last period<sup>64</sup>;

**Figure 3.2 Sectoral Activities in Cameroon between 1965 and 2000.**



Source: Kobou et al (2002:22).

Key: “ay95”=share of agricultural GDP in total GDP; “iy95”=share of industrial GDP in total GDP; “sy95”=share of services GDP in total GDP; “my95”=share of industrial sector GDP in total GDP; “iy95/corrigé”=adjusted share of industrial GDP in total GDP.

<sup>63</sup> 41.8% as against 42.3% for services, although the latter lost three points to the two other sectors (Kobou et al., 2002).

<sup>64</sup> As earlier mentioned, the devaluation of the CFA franc that occurred at the beginning of the last period, explains this return to growth in the agricultural sector.

- Services, as has already been observed, had remained relatively stationary. Its share in GDP increased particularly during the period of sustainable growth (1978-86). Thereafter, it witnessed a modest decline during the last two periods.
- The share of industry grew consistently but it was during the period of strong growth that it reached its highest level. The growth in the share of manufacturing industry in GDP remained weak; its average share over the whole period staying at around 10 %. The share of industry increased considerably between 1978 and 1982, probably reflecting “the oil petrol effect”<sup>65</sup> since oil production started in 1978 (Ghura, 1997:6). The scissors-like movement between 1982 and 1991 (see figure 3.2) seems to mark the transition from agriculture to industry, which lasted only for a short time. Its continuation would have triggered the most needed economic transformation (Kobou et. al., 2002). To better determine whether the change actually occurred, it might be interesting to exclude the contribution of oil from the industrial sector. It can then be observed that the ‘scissor-like’ is no longer perceptible between the evolution of the agricultural sector (ay95) and that of the adjusted industrial sector (iy95/adjusted), which sort of validates the view that a structural change did not take place.

The agricultural share has always dominated that of industry, despite deliberate policies aimed at downsizing the latter<sup>66</sup>. According to 2001 estimates (African Development Indicators, 2003), Cameroon’s agricultural share in GDP stood at 43%, while industry’s share was 24% and services 33%. Table 3.2 below shows that the agricultural sector has

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<sup>65</sup> Windfall oil revenue served in boosting the country’s industrialization programme.

been the major source of labour employment in Cameroon (employing over 70% of the labour force), followed by services (about 20%) and then industry (10%).

**Table 3.2: Sectoral Distribution of the Labour Force in Cameroon**

	1980	1990	2001
Total labour force (thousands)	3,649	4,671	6,205
% Total labour force that is female	36.8	37.0	38.1
% Labour force working in agriculture	73	70	...
% Labour force working in industry	8	9	...
% Labour force working in services	19	22	...

*Source: Author's construction from 2003 African Development Indicators.*

The failure of industry to generate employment in Cameroon could partly be blamed on the initial conditions to which the country was exposed to at independence. Labour had very low skills and could not effectively utilise the machines, whose acquisition entailed a whole lot of distorsionary policies, resulting in massive urban unemployment and capital under-employment in a capital-scarce economy. As Easterly (2002) notes, the essential thing is not to acquire capital at all cost, as Lewis and other first generation development economists thought, but rather, the incentive to use it. Because the incentive to utilise the available machines was lacking, the country could not alter its pattern of production from primary to industrial activities.

<sup>66</sup> The development plans put in place with the help of foreign aid, failed to shift economic activity away

### 3.3.4 PHYSICAL INFRASTRUCTURE

Road infrastructure development witnessed an increase during the period of oil boom but stagnated during the period of recession. The total road length grew from 40.0 thousands kilometers during 1965-77, to 61.0 thousands kilometers during 1978-86, but stagnated at 61.0 during 1987-93 because of austerity measures implemented by the government (Ghura, 1997:11). In 1980, the ratio of roads to population was 7200km per 1million persons but by 1995, this figure had declined to 2600km per 1million persons<sup>67</sup>. In 1992, the percentage of paved primary roads was 11.3% and in 1999, it was 12.5%. Of this, only 25% was in good condition (African Development Indicators, 2003).

Cameroon's civil aviation consists of five airports (two of which are international). Priority is given to the national airline company, CAMAIR on domestic and other African routes. Studies show that air transport is a major constraint on economic activity and on intra-regional trade (Tybout et. al., 1996).

As far as Cameroon's energy production and use is concerned, Table 3.3 below indicates that the figures have doubled during the period 1980-2000. However, energy consumption per capita has not changed significantly over the period although electric power transmission and distribution losses as a percentage of GDP, has risen from 7% in 1980 to 22% in 2000<sup>68</sup>.

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from agricultural to industrial activities.

<sup>67</sup> During the crisis period, the government substantially reduced expenditure both on new investment and on the maintenance of existing infrastructure.



**Table 3.3: Energy Production and Use in Cameroon.**

	1980	2000
Energy production (KT oil equivalent)	6 707	12 729
Commercial energy use (KT oil equivalent)	3 676	6 355
Electric power consumption per capita (KWH)	154.3	182.8
Electric power transmission and distribution losses (% of output)	7	22

*Source: Author's construction from 2003 African Development Indicators.*

Studies reveal that communications, especially telecommunications, are highly underdeveloped in Cameroon. The following statistics for communications services were recorded for the Cameroonian economy between 1995-2000 (African Development Indicators, 2003):

- TV sets: 34 per 1,000 persons.
- Radios: 163 per 1,000 persons.
- Mobile phones: 10 per 1,000 persons.
- Fixed telephones: 6 per 1,000 persons with 50,000 persons on the waiting list.
- Personal computers: 3.31 per 1,000 persons (estimate for the year 2000).
- Internet users: 40,000 persons (estimate for the year 2000).

Poor communications facilities could be a major constraint on long run growth as will be discussed in the next chapter.

### **3.3.5 HUMAN CAPITAL INDICATORS**

From Table 3.4 below, it can be inferred that at independence, Cameroon started out with a low stock of human capital: average school years of education per working person was

<sup>68</sup> The high percentage of power losses points to the energy crisis currently facing the Cameroon economy.

**Table 3.4: Selected Indicators of Human Capital Development, 1965-95**

(Period averages; in units indicated)

	1965-77	1978-86	1987-93	1994-95
<b>Education indicators</b>				
Primary school enrollment ratio				
Total (percent)	96.0	101.8	97.0	...
Female (percent)	83.2	92.3	94.0	...
Secondary school enrollment ratio				
Total (percent)	11.2	19.0	28.7	...
Female (percent)	7.0	13.5	22.0	...
Illiteracy rate				
Total <sup>1)</sup>	58.8	52.0	45.9	36.6
Female <sup>2)</sup>	...	64.4	57.4	47.9
Total education stock <sup>3)</sup>	1.3	2.5	3.0	2.9
<b>Health indicators</b>				
Life expectancy at birth (in years)	44.4	51.0	55.0	56.8
Infant mortality rate (per thousand)	123.9	90.8	66.1	55.7
Population per physician	23,408.0	14,003.0	11,988.0	...
Population per nurse	7,452.0	1,955.0	1,921.0	...

Source: Ghura (1997:11).

<sup>1)</sup> Percentage of total population of age 15 and above.<sup>2)</sup> Percentage of female population of age 15 and above.<sup>3)</sup> Mean school years of education per working person.

only 1.3 years and the average life expectancy at birth was 44 years. This implies, everything being equal, that knowledge accumulation for sustainable growth was also low.

As already discussed in the preceding section, the Cameroon government increased capital expenditure during the period 1978-86 (see figures 3.3 & 3.4) and this spending substantially improved the country's infrastructure base, reflected also in human capital indicators<sup>69</sup> (Table 3.5). Both total and female primary and secondary school enrollment ratios improved, and the overall literacy rate rose. The total education-related human capital stock rose almost twofold between 1965-77 and 1978-86, from 1.3 years of education per working person to 2.5 years. Health-related human capital indicators (life expectancy at birth and the infant mortality rate) also improved markedly, reflecting, inter alia, an increase in the number of physicians and nurses per capita (Ghura, 1997:12).

### 3.3.6 STRUCTURE OF EXTERNAL TRADE

Compared with other Sub-Saharan African countries, Cameroon has one of the most diversified production and resource bases, as it produces and exports a broad range of non-oil commodities including: cocoa, coffee, cotton, bananas, natural rubber, palm oil, timber, and aluminum (Ghura, 1997:4). Primary agricultural and forestry products (plus minimally processed forms) constituted 57% of 1980 exports, cocoa and coffee alone accounting for 41% (Ndongko, 1976:120). Cameroon is also a net oil exporter, although

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<sup>69</sup> Government investment on schools, hospitals and social services helped in reducing the illiteracy and infant mortality rates, while improving access to medical care.

oil production in the country has been declining steadily since 1986 and represented 8% of GDP in 1996 (Ghura, 1997).

While exporting predominantly primary commodities, most of Cameroon's imports are manufactured goods. As of 2000, Cameroon's major export markets were: Italy 24%, France 18%, and the Netherlands 10%. The major sources of imports were: France 29%, and Germany 7% (World Factbook, 2003).

**Table 3.5 Competitiveness of the Cameroon Economy: 1963-1996  
(Units in period averages)**

	1963-77	1978-86	1987-93	1994-96
Real Effective Exchange Rate (index, 1980=100)	...	93.6	123.6	83.2
Relative Price of Nontraded Goods (index, 1980=100) <sup>1)</sup>	77.7	82.3	121.0	96.7
Terms of Trade (index, 1980=100)	89.0	91.2	60.0	58.3
French Exchange Rate (F per U.S.\$)	4.9	6.3	5.8	5.5

Source: Ghura, (1997:7).

<sup>1)</sup> Following Edwards (1988), defined as  $CPI/(EI \cdot WPI^{US})$ , where *CPI* is the consumer price index, *EI* is an index of the nominal exchange rate (CFAF per U.S.\$), and *WPI<sup>US</sup>* is the U.S. wholesale price index, Ghura (1997).

During the crisis period, the real effective exchange rate rose to 123 points, reflecting in part the extremely high level of consumer prices (see Table 3.1 and Figure 3.5) and the appreciation of the French franc. As a consequence, the relative price of nontraded goods rose and the terms of trade deteriorated. As mentioned earlier, the monetary parity change observed in 1994, has reversed these indicators substantially, thus restoring competitiveness in Cameroon's exports (Tybout, 1996).

### 3.4 CONCLUSION

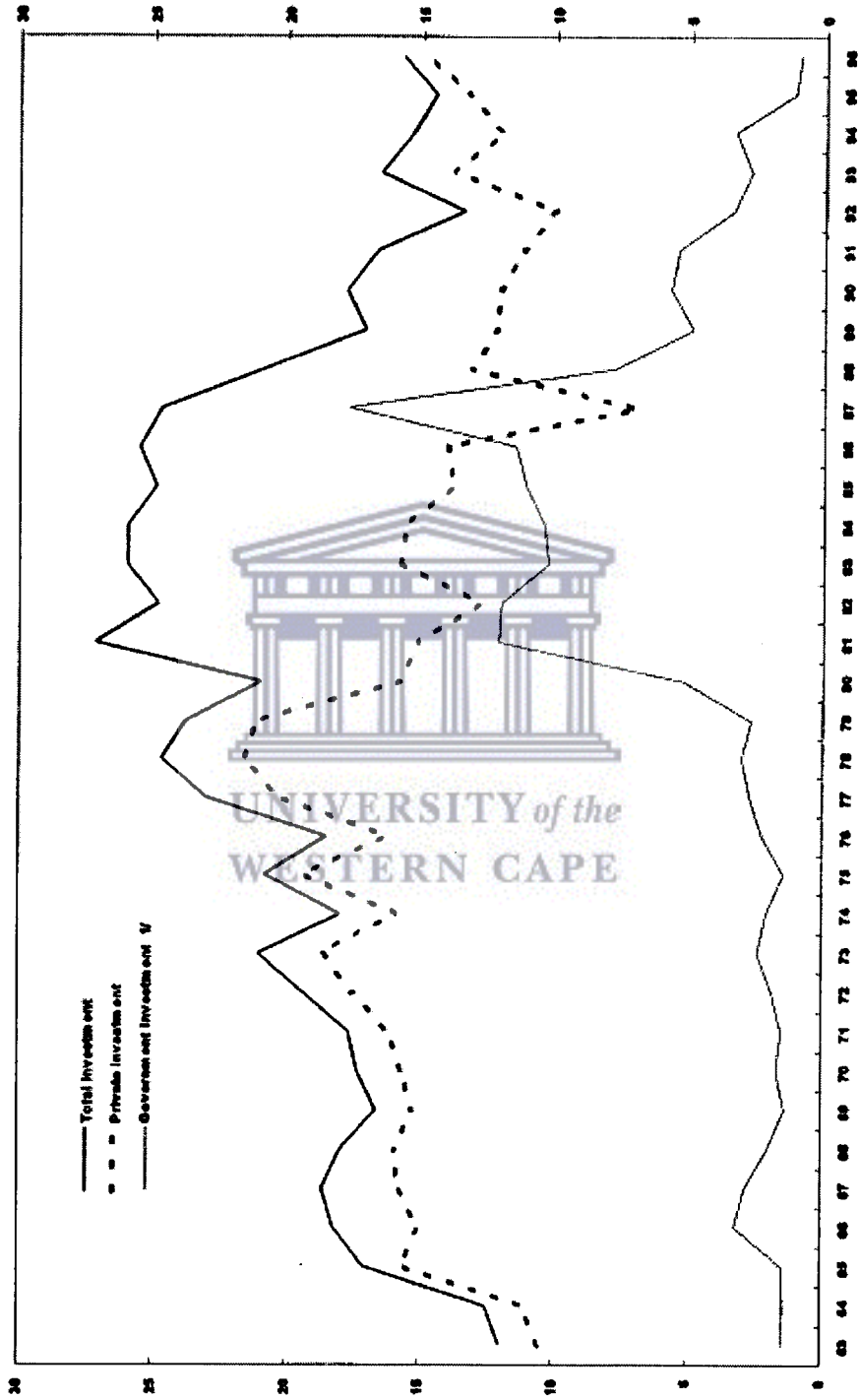
The characteristics of the Cameroon economy that have been presented are elements, which enable an appraisal of the opportunities or constraints faced by the country in its quest for sustainable growth. Over the past four decades, Cameroon, like other developing countries, has been exposed to the changing fashions of the development policy agenda. Import substitution, characterised by a significant public sector involvement and a difficult working environment for private capital, was the norm in the 1970s. The 1980s saw a focus on internal macroeconomic adjustment packages, centered on trade liberalisation as quantitative trade controls were either loosened or abandoned. The 1990s have seen a continuation of the trade reform process, notably, with an external adjustment of the exchange rate to a competitive level, the privatisation of public utilities and an increasing awareness of the importance of export markets.

The evidence, however, points to the fact that the contribution of total factor productivity in growth has been minimal as the economy continues to be dominated by the low productivity primary sector, often with little value-added. Though per capita GDP growth has since 1994 regained a positive trend, this trend is rather weak and it remains questionable whether it would be sustainable. The development wisdom based on macroeconomic stability, trade reform and private investment is yet to deliver on its promises. By virtue of the fact that Cameroon is a member of a monetary union, she does not have an independent monetary policy. Therefore, she relies more on fiscal and supply-side measures to improve the competitiveness of her economy. Because the country has a low knowledge capital stock, foreign investment could offer a channel through which ideas needed in value-added activities, are introduced into the economy.

The next chapter of this dissertation presents some threshold conditions that are critical for sustainable growth in Cameroon via the use of foreign ideas in value-added productions.

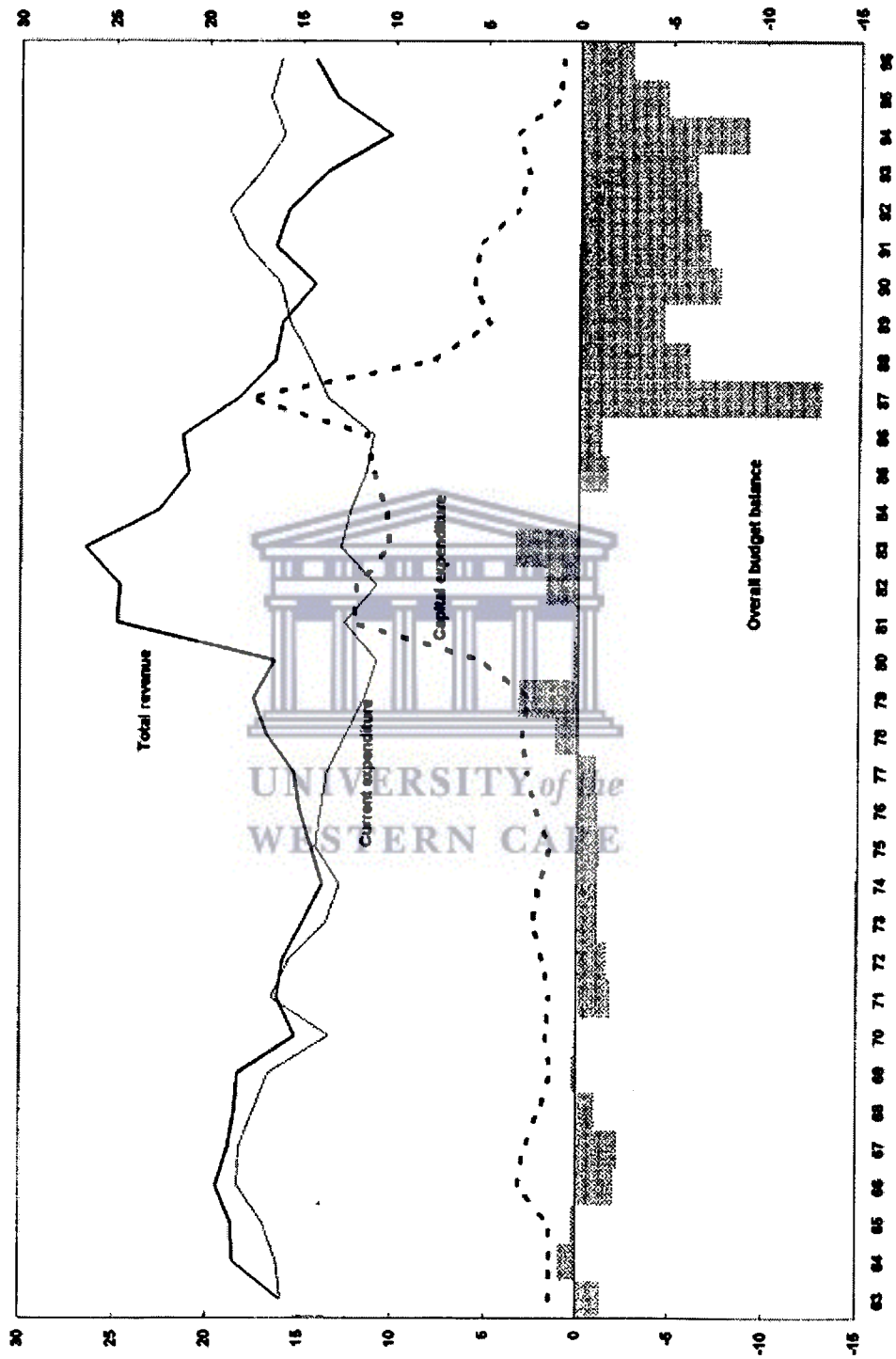


**Figure 3.3 Investment in Cameroon, 1963-96**  
(In percent of GDP)



Source: Ghura (1997:9)

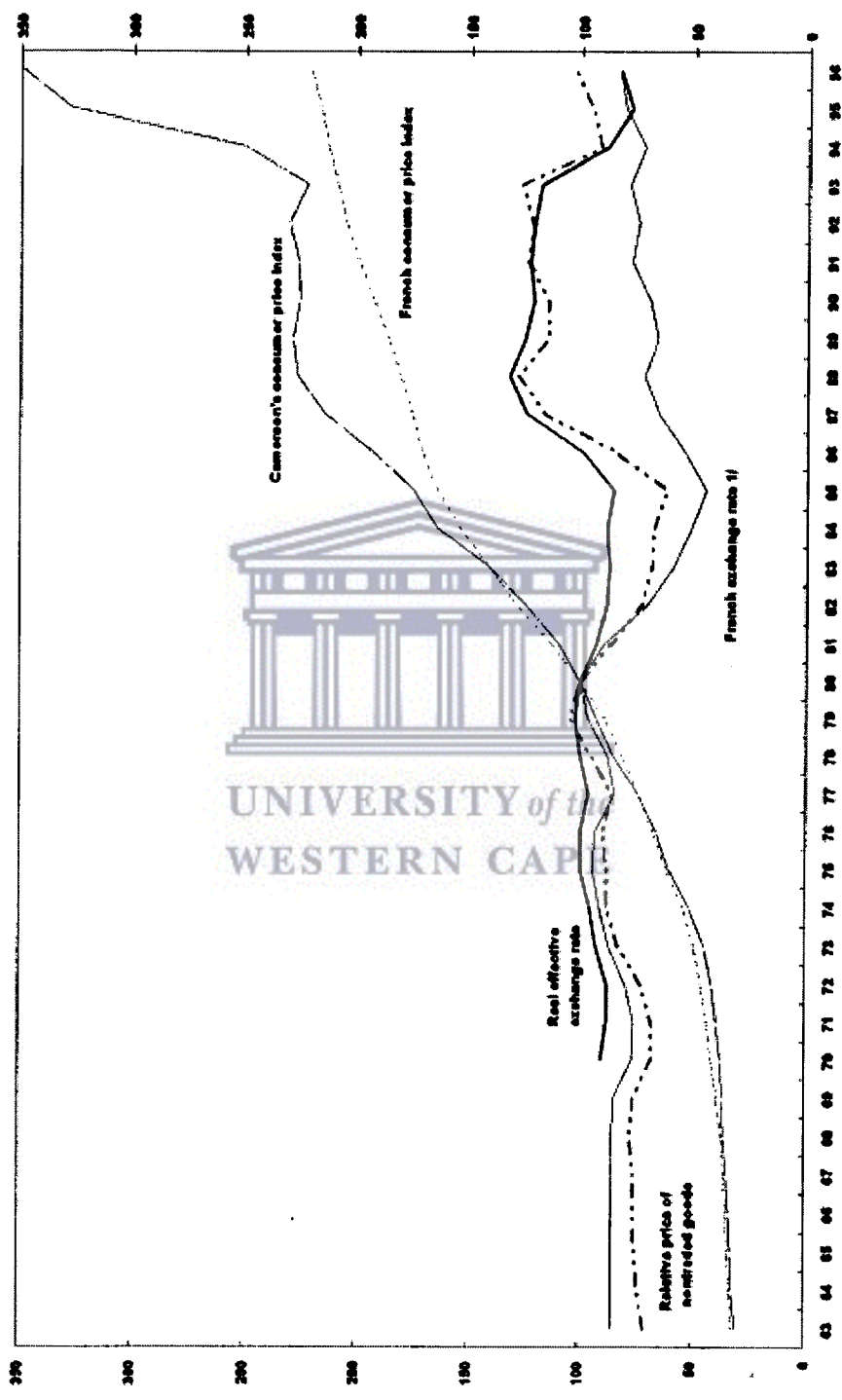
**Figure 3.4 Fiscal Developments in Cameroon, 1963-96**  
(In percent of GDP)



Source: Ghura (1997:10)



**Figure 3.5 Indicators of External Competitiveness of the Cameroonian Economy, 1963-96**  
 (Indices 1980=100)



Source: Ghura (1997:13)

## CHAPTER FOUR

### FUNDAMENTAL DETERMINANTS OF LONG RUN GROWTH IN THE CAMEROONIAN ECONOMY

#### 4.1 INTRODUCTION

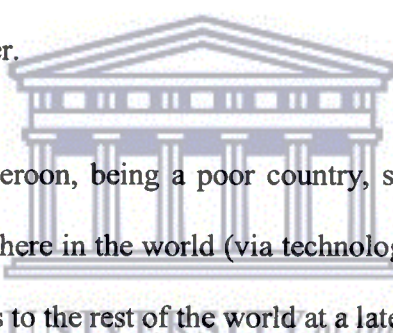
Having agreed that trade liberalisation is a necessary condition for economic growth, the 'new' growth economists have considered the extent to which it is sufficient. This new wisdom maintains that trade liberalisation alone cannot make a poor country grow rich. As Rodrik (1992:103) stressed, a successful trade policy at its best provides an enabling environment for development but it does not guarantee that entrepreneurs will take advantage of this environment; neither does it guarantee that private investment will be stimulated. In more concrete terms, trade is only a vehicle for the transfer of knowledge and financial capital from the rich to the poor countries, enabling poor countries to leapfrog ahead technologically thereby experiencing sustained GDP per capita growth.

However, there is a threshold level of knowledge/skills and infrastructure (both physical and institutional), that a country must attain in order to be able to take advantage of ideas existing in the world marketplace. Using Stiglitz's (1996)<sup>70</sup> metaphor, the process of leapfrogging by follower countries could be compared to an aircraft. For the latter to successfully take-off, its engine must turn fully, in other words, all the conditions must be fulfilled: whatever the speed at which the engine turns, there could be no take-off if all the conditions are not fulfilled.

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<sup>70</sup> In Kobou et al (2002:14).

The determinants of long run growth that are hypothesised here, viz knowledge capital, infrastructure development and good governance, are factors that are likely to change slowly over time, especially the quality of governance. Indeed, there is no clear demarcation between the zones of influences of each of these factors. For instance, the quality of infrastructure and governance could be improved as the stock of knowledge capital increases. When there is good quality governance, it ultimately ensures that vital infrastructure services and public goods are provided. The existence of infrastructure services and public goods could generate social capital, which in turn produces an environment whereby people produce, invent, transact and accumulate skills that are critical for technology transfer.



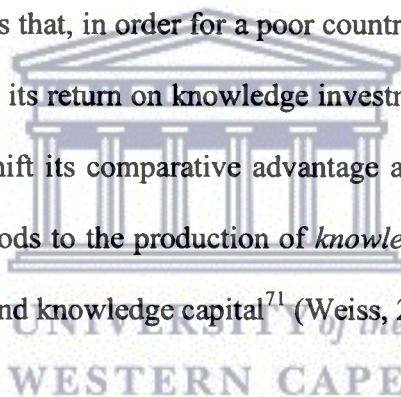
As already mentioned, Cameroon, being a poor country, should strive first at utilising ideas that already exist elsewhere in the world (via technology transfer), and then seek to produce and export new ideas to the rest of the world at a later stage of her development. Consequently, the following in-depth analysis of the role of each of the above-mentioned determinants of long run growth would focus basically on how they could facilitate the use of foreign ideas in the Cameroon economy. Concurrently, the role of incentives in achieving these determinants will also be explored.

#### **4.2 KNOWLEDGE CAPITAL AND LONG RUN GROWTH IN CAMEROON**

We observed in chapter Two that knowledge capital is a distinct production input from human capital. Viewed from that perspective, it becomes easier to understand long run growth via technology transfer, learning-by-doing and increasing returns. But knowledge capital is at the same time a by-product of human capital, and an input in the production

of more valuable human capital. The implication of this reasoning is that human and knowledge capital tends to be complementary to each other: where there is a high stock of human capital, there is a high accumulation of knowledge capital, and vice versa, all things being equal. And where there is a high stock of human capital, the returns to knowledge capital investment would be higher.

Where the returns to knowledge investment are high, there will be a high rate of investment. Higher rates of investment in knowledge capital raise the level of technology available to the economy, thus making it more attractive to foreign capital (both financial and knowledge). This implies that, in order for a poor country to attract foreign capital, it must seek, inter alia, to raise its return on knowledge investment. The corollary of this is that for a poor country to shift its comparative advantage away from the production of capital-extensive primary goods to the production of *knowledge-intensive* goods, it must increase its stock of human and knowledge capital<sup>71</sup> (Weiss, 2000).



#### **4.2.1 THE STATE OF KNOWLEDGE CAPITAL IN CAMEROON SINCE 1960**

Table 3.5 shows that the education-related dimension of human capital in Cameroon has improved significantly from an average school years of education per working person of 1.3 years during 1965-77 to 2.9 years during 1994-95. The illiteracy rate also dropped from 58.8% during 1965-77 to 36.6% during 1994-95. The health-related dimension of human capital in Cameroon also improved substantially. For instance, the average life expectancy at birth rose from 44.4 years during 1965-77 to 56.8 years during 1994-95.

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<sup>71</sup> This obviously contradicts the doctrine of the first generation development economists who thought that physical capital investment is what poor countries' needed in order to change their pattern of production from primary activities.

Considering the education and health dimensions, it can be inferred that though Cameroon started out at independence with a low stock of human capital, the situation has improved substantially over the last three decades.

Recent empirical growth studies on the impact of human capital development on the real per capita GDP growth rate in Cameroon by Kobou et al (2002), point to the fact that human capital investment in Cameroon, has positive effects on the per capita GDP growth rate (see Table 4.1 below).

**Table 4.1 Impact of Human Capital Developments on Per Capita GDP Growth Rate**

	1960-74	1975-84	1985-94	1995-99	1960-99
“Ogdp” <sup>1)</sup>	-0.08	-0.04	-0.14	-0.09	-0.08
“ty15” <sup>2)</sup>	-0.14	-0.09	-0.02	0.00	-0.08

Source: Kobou et al (2002:19)

“Ogdp” refers to the overall deviation of observed per capita GDP growth rate in Cameroon from the world mean (average growth rate of the sample of countries used).

“ty15” refers to the contribution of human capital to deviation of Cameroon’s per capita GDP growth rate from the world mean.

<sup>1)</sup> The world mean annual GDP growth rate per capita is considered for the period 1960-2000.

<sup>2)</sup> Human capital measured by the average number of schooling years by population aged 15 years and above.

From Table 4.1 it can be observed that Cameroon’s overall per capita GDP growth rate over the period 1960-2000, deviated from the world average GDP per capita growth rate by  $-0.08$  points<sup>72</sup>. In other words, per capita GDP growth rate in Cameroon was below the world standard by 0.08 points. Of course, it is clear that Cameroon’s growth rate of per capita GDP, only came closest to the world average during the period of oil boom

(1975-84): when the deviation was only -0.04; while the deviation was highest during the period of recession -0.14 (from 1985-94).

The table also informs that human capital (measured by the average number of schooling years by population aged 15 years and above) contributed globally over the entire period to reducing the per capita GDP growth rate by -0.08 points. But the impact of human capital has improved over time. From an average reduction of per capita GDP growth rate of 0.14 points during 1960-74, it is 0.09 in average during 1975-84, to settle around 0.00 during the period of return to growth<sup>73</sup>. The implication of this analysis is that increasing investments over time in human capital in Cameroon have had a positive impact on the growth rate of per capita GDP. Also, human capital investment could contribute towards convergence of Cameroon's per capita GDP growth rate with the world average.

However, one must be modest in the claims made about human capital because it is arguable whether the average number of years of school attendance by the population aged 15 years and above, is a pertinent indicator of the accumulation of knowledge capable of consolidating growth<sup>74</sup>. Notwithstanding, earlier empirical growth studies on Cameroon by Ghura (1997:26) have shown that increased human capital investment plays an important role in output expansion by increasing the volume of private

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<sup>72</sup> Infact, the deviation was negative throughout all the sub-periods under study.

<sup>73</sup> The interpretation to be made from these figures is that previously, deficiencies in human capital affected per capita growth negatively. But with increasing investment over the years, the contribution of human capital has become positive. It would be interesting to find out the subsequent trend in this contribution.

<sup>74</sup> Amin (2002:29) has argued that the human capital development that took place in Cameroon during the period of oil boom was not sustained thereafter, and neither is it being utilised efficiently.

investment, especially foreign direct investment<sup>75</sup>. Also, the study revealed that there is a significant causal linkage between private investment and economic growth in Cameroon; increases in the private investment ratio boost economic growth. This effect is found to be large, statistically significant, and robust. For instance, an increase in the private investment ratio by one percentage point raises economic growth by about 1.4 percentage points.

Table 3.1 shows that the ratio of private investment to GDP in Cameroon over the period 1994-96 averaged about 13½ percent, which is lower than the average for other developing economies (Ghura, 1997:27). This implies therefore that, in order to generate higher rates of per capita GDP growth in Cameroon, private investment must be stepped up. One way to achieve this is to raise investment levels in human and knowledge capital. Moreover, evidence from developed countries show that long run growth depends on increases in total factor productivity, which in turn, depends on investment in physical, human and knowledge capital.

This study contends that there is a large stock of ideas in the world marketplace that could lead to significant increases in per capita incomes in Cameroon if they were imported and put to use. Applying the theoretical model presented in chapter two, we could hypothesize a channel through which ideas can be brought into the Cameroonian

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<sup>75</sup> Because of labour market imperfections, investors tend to condition investment according to the skill characteristics of the labour force: a low skilled labour force often tends to attract investment that utilizes fewer skills and therefore little value-added and vice versa.

economy via foreign direct investment, thereby leading to increases in output and employment<sup>76</sup>.

Assume a sector such as garment manufacturing in Cameroon<sup>77</sup>. Output in this sector could be represented in the form:  $G(K, L; A)$ , where  $G$  stands for garments,  $K$  for sewing machines,  $L$  for workers and  $A$  for Knowledge.  $A$  either takes the value 0 or 1. Output of garments is zero if  $A = 0$  because no one knows how to run a garment operation. If an entrepreneur does know,  $A = 1$  and garments are a constant returns to scale function of sewing machines,  $K$  and labour,  $L$ .

When  $A = 0$ , wages are equal to the marginal product of labour in agriculture. For large  $L$ , wages can be very low. Sewing machines are freely available for sale at the price  $P_k$ , but none are imported because no one knows how to put them to use. Farm equipment is however imported, with funding from either domestic savings or foreign aid. Investment in garment production in Cameroon earns the same rate of return as in the rest of the world. Wages in the country are currently low not because of any restrictions on flows of financial capital or inadequacy of domestic capital investment but because the idea,  $A$ , needed for garment production is not yet in use in the economy.

Now suppose that a single foreign textile entrepreneur learns of the low wages in Cameroon, brings knowledge of  $A$ , and sets up a shop. Sewing machines will now be imported. Income and employment will increase. Because the success of this premier

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<sup>76</sup> Romer (1992) used the same reasoning to explain the success of Export Processing Zone in Mauritius.

<sup>77</sup> It's worth noting that Cameroon is a producer of cotton and other primary inputs required by garment manufacturing industries.



entrepreneur cannot go unnoticed (knowledge leaks), sooner or later, many more entrepreneurs would show up, bringing along many more new ideas<sup>78</sup>, causing output to expand and more machines to be imported. Even some Cameroonian employees of the premier foreign entrepreneur, who have undergone the process of 'learning-by-doing', would have a strong incentive to quit and start their own garment shops. Sooner or later, their knowledge also spills over to others who imitate their actions, setting thus, in motion a virtuous circle of investment and growth<sup>79</sup>. Garment output and employment would thus remain ever increasing, and so does per capita incomes. Hence, the story of increasing returns via the use of ideas existing in the world market place.

Having agreed on the primacy of the use of foreign ideas to stimulate private investment and growth in Cameroon, the question then becomes: what are the likely constraints to the use of foreign ideas in the Cameroonian economy?

#### 4.2.2 LIKELY CONSTRAINTS TO KNOWLEDGE TRANSFER IN CAMEROON

- ❖ Firstly, as discussed earlier, the returns to knowledge capital are higher where knowledge is in abundance. This implies that a country facing a low stock of knowledge capital would have low returns to knowledge investment. Therefore, even when foreign ideas are put to use in such an economy, there will be limited spillover effects or linkages in the home economy. In other words, total factor productivity would still be low, in spite of rising investment and growth rates. Singapore can be cited as an example (Dornbusch et. al., 1998). Despite attempts

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<sup>78</sup> These may range from ideas about better ways of sewing a shirt, to ideas about low cost machinery, ideas of how to manage a small factory, of how to manage relations with textile importers in the industrial countries, of how to successfully exploit loopholes in quota limits, and hundreds of other small ideas about running a modern garment factory.

made by the Cameroon government at increasing access to education, both the quality and quantity of educational attainment leave a lot to be desired (Amin, 2002). The educational system inherited from the colonial masters is not aimed at skill development and so, it is difficult to associate any rising educational attainment levels with increases in knowledge capital accumulation that could lead to higher value-added productive activities. Furthermore, there is evidence that the low wages being offered in Cameroon is causing most of the country's skilled manpower to migrate to other countries ('brain drain' phenomenon). This factor could also contribute to the observed limited expansion of the Cameroonian economy into high technology productive sectors of activity.

- ❖ Secondly, government intervention in the Cameroonian economy has had negative repercussions on the returns to skills. This is illustrated, for example, through access to employment in the public service, a process characterised by opacity of information and a logic of regional balance<sup>80</sup>, which ensures that positions are not always occupied by those with the appropriate profile (Kobou et al., 2002:9; Amin, 2002:29). Under such circumstances, skilled workers, facing low returns to skills, would have higher incentive to engage in diversive<sup>81</sup> or redistributive activities instead of investing in growth creation. In other words, the types of skills that Cameroonians accumulate are those that maximise their chances of securing a position in the government bureaucracy instead of skills that would increase the productive capacity of the economy.

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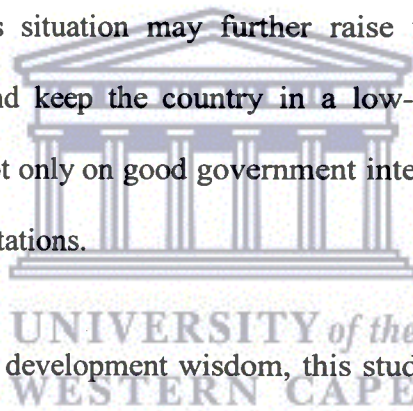
<sup>79</sup> Of course, an implicit assumption is made that the threshold level of human capital has been attained.

<sup>80</sup> This simply means that emphasis is always placed on representativity of all regions in national life.

<sup>81</sup> Diversion here encompasses a wide range of activities, including theft, corruption, litigation and expropriation.

- ❖ Thirdly, statistics show that in 1996 poverty affected about 54.8% of the Cameroonian population with a prevalence rate of 45.1% in the urban areas and 67.6% in the rural areas (Njinkeu et. al., 1997; Fambon et. al., 2000; in Kobou et. al., 2002). During the period 1984-2000, 33 per cent of the Cameroonian population lived on less than US\$ 1 a day (African Development Indicators, 2003). According to the same source, during the period 1991-1999, the percentage of household income spent on food was 55%<sup>82</sup>.

Because a significant portion of the population is poor, they lack the incentive to invest in knowledge acquisition. This situation may further raise the discount rate<sup>83</sup> for any investment in knowledge and keep the country in a low-level equilibrium trap from which escape may depend not only on good government intervention but perhaps also on good fortune and good expectations.



In contradiction with the old development wisdom, this study supports the view that the persistence of poverty traps in the Cameroonian economy could largely be the result of a failure of coordination. Because, if left to itself, the market is unable to provide incentives for poor people to invest in skills acquisition that could raise their future incomes, thus lifting them out of poverty. The study suggests that investment in knowledge capital requires incentives.

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<sup>82</sup> It is worth emphasizing that structural adjustment fiscal measures implemented in the 1990s, saw public sector salaries downsized by 60%. This situation caused severe hardship with the consequence that several families were forced to withdraw their children from school (Kobou et. al., 2002:21).

### **4.2.3 INCENTIVES FOR KNOWLEDGE INVESTMENT IN CAMEROON**

Three sources of incentives for knowledge investment in Cameroon could be identified, viz. government intervention, good fortune and good expectations.

#### **4.2.3.1 GOVERNMENT INTERVENTION AS INCENTIVE FOR INVESTMENT IN KNOWLEDGE CAPITAL IN CAMEROON**

The challenge facing economists is to formulate useful policy interventions, especially for governments that have not succeeded in anything besides maintaining themselves in power.

Getting a country out of a low equilibrium trap first of all entails knowledge of the cause of the trap. Usually, bad government policies that lower the rate of return on investment are to blame. In such instances, the first best solution is to remove the bad government policies. If that is not enough to raise the rate of return to the required level for private investment to take place, then can the government subsidise all forms of knowledge and capital accumulation. Generally, such subsidisation may take various forms, viz. tax exemptions on capital goods, massive public education, peer review research grants, public support for R&D activities, and technology-licensing payments.

As already mentioned, if there is a minimum required rate of return on investment in knowledge capital, low knowledge may make the rate of return too low for individuals to invest. Clearly, the cause of the trap in this case, is the low private rate of return to knowledge capital. Theoretically, the economy would benefit if the government subsidy for R&D were financed by a tax on consumption rather than by a punitive tax on private

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<sup>83</sup> As earlier stated, this rate could be thought of, as the incentive required by individuals in order to forgo some amount of present consumption and invest in knowledge acquisition.

investment. But the idea of taxing consumption in an economy already struck by poverty does not seem realistic. An alternative way of providing incentives for R&D could be by providing some form of monopoly power to inventors, allowing them to reap profits on their discoveries. This would necessarily entail the putting in place of institutions for the protection of intellectual property rights. As already observed, such institutions do exist in the advanced countries; as such it would cost little to copy from their experiences.

Also, since investment entails a sacrifice of present consumption, the existence of widespread poverty could establish a case for government intervention in knowledge acquisition by the poor. In this case, the government could subsidise investment in knowledge acquisition through welfare programs financed by foreign aid. However, welfare payments to the poor must be made in a manner that does not discourage anyone else's return to knowledge acquisition. An example could be to increase payments to poor individuals in the same proportion in which they increase their incomes. Then, they would have the incentive to upgrade their skill levels.

Finally, the government may also intervene to break a trap not necessarily through subsidies but by simply getting the right economic environment: infrastructure services, public goods and investment incentives (for example, tax holidays, guarantee of expatriation of profits etc.). The right economic environment itself can attract foreign investors into the economy hence enabling the attainment of the requisite level of investment.

#### **4.2.3.2 GOOD FORTUNE AS INCENTIVE FOR INVESTMENT IN KNOWLEDGE CAPITAL IN CAMEROON**

A study of the recent growth experience of Mauritius, an island with colonisation experience, initial conditions, political and economic characteristics similar to that of Cameroon, illustrates how good fortune or luck could contribute to knowledge transfer and long run growth<sup>84</sup>. The argument is that Mauritius's recent growth success, which has been attributed to the island's Export Processing Zone (EPZ) policy, also benefited from some amount of luck. The story is that the EPZ in Mauritius (concentrated almost exclusively in garment production) was developed almost entirely because of the participation of entrepreneurs from Hong Kong who were drawn to the island because of contacts with the small ethnic Chinese population on the island.

These entrepreneurs, facing quota constraints on textiles imposed under the Multi-Fiber Arrangement (MFA) by the United States and the European Union, were attracted to a country of origin that was not subjected to such constraints. Besides the positive externality arising from MFA quotas, another source of luck to the Mauritian economy came as a result of the threat of expropriation of the entrepreneurs by Mainland Chinese government. Furthermore, the low wages in Mauritius at the time, compared to Mainland China provided additional incentives. Of course, the story could only be complete if we integrate the conscious role of the Mauritian government in being able to take advantage of the luck through appropriate policies<sup>85</sup>.

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<sup>84</sup> Romer (1992) has a detailed account of this story.

<sup>85</sup> Even then, it could still be argued that it was luck that made the Mauritian government conscious of its role and bad luck probably made other governments in similar circumstances unconscious.

With the dismantling of the MFA<sup>86</sup> and the progressive replacement of quotas with tariff equivalences, analysts are of the opinion that other African countries like Cameroon, would not benefit from knowledge and financial capital inflows of the type that fostered growth in Mauritius.

However, as the prophetic saying goes ‘when one door closes, another opens’, Cameroon, like other SSA developing countries, stands to benefit from the opportunities offered by the “African Growth and Opportunity Act”, (AGOA). Since the AGOA agreement aims at securing preferential market access of products from the selected countries into the United States, it could indirectly favour foreign investment in these countries. Drawing from the experience of Mauritius, one could suggest that all it takes is a government that is conscious of its role in the economy, that is, in facilitating business activities.

#### **4.2.3.3 EXPECTATIONS AS INCENTIVE FOR INVESTMENT IN KNOWLEDGE CAPITAL IN CAMEROON**

Recent growth experiences in East Asia and previously in Latin America point to the fact that expectations have the potential for good or ill in an economy; a single shock to the system could change expectations overnight. Since the story of increasing returns assumes that skills complement each other and new knowledge complements existing knowledge, expectations could either lead to vicious or virtuous circles.

Great expectations, for example, are enough to get an economy out of a poverty trap because everyone else expects the economy to grow. These expectations would lead everyone to invest in skills, knowledge and machines and the economy would find itself

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<sup>86</sup> The phasing out of the MFA is expected to end by the end of 2004.

in a virtuous circle of prosperity. In the same light, a downward change in expectations about the future could take a country that was above the poverty trap threshold to a level that is below that threshold.

On the other hand, a developing country like Cameroon that starts out with low levels of knowledge, education and machines could be facing returns to investment that are too low to make investment worthwhile. An economy that operates below the poverty trap threshold is not likely to have incentives that will encourage the poor to upgrade their skills and knowledge. The country thus, remains stuck in a vicious circle of poverty, partly because of poor expectations<sup>87</sup>. As Easterly (2002) noted, the increasing returns story of poverty traps says that poverty is a failure of coordination. If only everyone could agree in advance that they would make investments until they reached a skill level above the poverty trap threshold, then they would collectively get out of the poverty trap. Unfortunately, the market by itself does not make this coordination, and so poverty persists.

The challenge, therefore, is for development policy makers to conceive policies that would raise expectations among the poor, otherwise some nations would remain poor simply because they started out poor or because everyone expects them to remain poor. To summarise, it is worth noting that it takes some combination of good fortune, high expectations and good government policies to sustain output per capita growth in the long run.

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<sup>87</sup> This is the same as saying that, poor people are poor simply because their leaks come from other poor people.



### 4.3 GOOD GOVERNANCE AND LONG RUN GROWTH IN CAMEROON

Bad governance could seriously jeopardize a poor country's chances of using ideas that exist in the world market place. The transfer of technology into the country is hampered, leaving the country in a poverty trap. Economists agree that the process of economic growth entails sacrifice in terms of present consumption. Individuals and firms generally require incentives in order to forgo present consumption and invest in the future. Anything that reduces the return on future investment would ultimately muck<sup>88</sup> incentives to sacrifice present consumption.

The prime suspect for mucking incentives is the government. Things like high inflation that steal the savings of the population, high black market premiums that reduce the profits of exporters, high budget deficits that render exports uncompetitive, high real negative interest rates that cause financial repression, unnecessary restrictions on free trade that misallocate resources, poor delivery of public goods that deplete social capital stock, and corrupt bureaucracies that raise transaction costs, create perverse incentives for growth.

Foreign investors, on their part, are more sensitive to the economic and institutional environment in which they intend to invest. The economic environment relates to the government policies described above, whereas, the institutional environment could be thought of, as the rule of law, the quality of bureaucracy, the level of corruption in

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<sup>88</sup> I confess a semantic debt to Easterly, 2002.

government, the freedom from expropriation and also the freedom from government repudiation of contracts.

As seen from the range of influences through which government actions affect incentives, it could be asserted without much risks of contradiction, that governments have the potential to promote or stifle growth. Indeed, the results of empirical growth studies conducted by Ghura (1997:27) support the thesis that economic growth in Cameroon is influenced by government policies. Another study by Bates & Devarajan referred to in Kobou et al (2002:8), shows that government behavior as highlighted by the way lobbies and interest groups influence public expenditure, the budgetary process, monetary, fiscal, trade and exchange rate policies, has a bearing on growth.

This section of the work will consider those aspects of the economic and institutional environment that significantly bear on the capacity of the Cameroonian economy to utilise foreign ideas for growth. An attempt will also be made in conclusion to suggest some incentives for good governance in Cameroon.

#### **4.3.1 THE ROLE OF THE ECONOMIC ENVIRONMENT**

Empirical studies conducted by Sachs and Warner (1995:367) confirm the fact that during 1965-1990 the Cameroon economy suffered from severe restrictions on international trade<sup>89</sup>. Interferences with trade distorted prices and shifted resources to inefficient home producers. As a consequence, the return on investment by foreign entrepreneurs declined, thus discouraging the use of foreign ideas in the country.

Table 3.1 shows that private investment in Cameroon, as a percentage of GDP during the entire period 1963-96 came to an annual average of about 14%, which was below the average for Sub-Saharan Africa.

Through excessive exchange controls and a deliberate policy that kept the official exchange rate fixed in the midst of high inflation (Tybout et. al., 1996:6); the Cameroon government created a high black market exchange rate premium, which had far reaching repercussions for the economy. Firstly, it created room for rent seeking, thereby diverting talents and skills away from productive to redistributive activities. As Easterly (2002), notes, anytime that the main profit opportunity in the economy is to get around government rules, not much good is going to happen in the real economy. Secondly, and even worse, the high black market premiums served as a punitive tax on exporters who had to import inputs at the high black market exchange rate but were compelled to surrender their hard earned foreign currency to the central bank at a low official exchange rate. Empirical growth studies by Kobou et al (2002:12) show that during 1960-2000, the combined influences of high black market exchange premiums, high inflation and unproductive government expenditure in Cameroon, contributed in reducing the growth rate by 0.16 percentage points. Easterly (2002) also found a strong negative association between black market premiums and growth.

Another area where government policy in Cameroon created poor incentives for growth was in the management of government budget deficits. In chapter three (Table 3.1 and Figure 3.4) it was shown that, the government budget deficit, as a percentage of GDP,

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<sup>89</sup> These usually comprised of high tariff and non-tariff barriers, extreme controls on exports, and high

rose to 8% during the crisis period 1987-93, having as corollary the massive accumulation of both internal and external arrears. At the same time, the real exchange rate appreciated to unprecedented levels, rendering Cameroonian exports highly uncompetitive in the world market. Because the situation persisted for close to a decade (1986-1994) before the decision to devalue the CFA franc finally came, it created room for a lot of speculation (exchange rate volatility), which encouraged massive capital flights. As the statistics show, the volatile nature of the exchange rate produced perverse incentives evident by the lowest recorded performance of private investment in the country during 1987-93<sup>90</sup>.

Also, the government of Cameroon did not do much good to the economy by maintaining nominal interest rates that were far lower than the inflation rates in the country as this resulted in negative real interest rates<sup>91</sup>. Negative real interest rates were another way of taxing those who kept their financial savings in banks; consequently, they withdrew their resources from the banks, causing the financial sector as a whole, to shrink. Suppose that banks provide valuable services to the economy when people save money with them, the economy is likely to suffer when banks have little credit to give. As economists Robert King and Ross Levine (Easterly, 2002: 229) noted:

‘Better financial systems improve the probability of successful innovation and thereby accelerate economic growth. Similarly, financial sector distortions reduce the rate of economic growth by reducing the rate of innovation’.

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black market exchange rate premiums.

<sup>90</sup> Generally, in such cases, individuals grow rich while enterprises incur huge losses. At the macro level, it raises the non-commercial risks facing investors thus discouraging new investment.

### 4.3.2 THE ROLE OF THE INSTITUTIONAL ENVIRONMENT

It would be too simplistic to assume that changing economic policies will be sufficient to improve the performance of highly fragile economies like Cameroon. And besides, there is no reason in theory to expect that the response to a given set of policy changes will be the same everywhere. Experience shows that there is more to it, especially from the supply-side<sup>92</sup> – the role of infrastructure, both physical and institutional. In this subsection, we consider the role of institutions, reserving that of physical infrastructure for the next section. For purely academic expediency, we divide the institutional infrastructure into two major categories, viz the rule of law and corruption in government. It would be recalled that during 1965-90, Cameroon scored below average on the institutional quality index (Sachs & Warner, 1997a).

#### 4.3.2.1 THE RULE OF LAW

The 'rule of law' reflects the degree to which the citizens of a country are willing to accept the established institutions to make and implement laws and to adjudicate disputes (Sachs & Warner, 1997a). But it also indirectly measures the strength of existing agencies of restraint<sup>93</sup>.

Many factors have contributed to weak restraints in the Cameroonian economy, ranging from ethnic rivalry within the administration to the absence of a nationalistic culture (Kobou et. al., 2002:9). The weakness of agencies of restraints at the macro level means that the risks of policy reversals are higher. This in turn, raises the incidence of non-

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<sup>91</sup> From 1974 to 1988, interest rates were only modified once, evolving from 4% to 4.5% between these two dates (Kobou et. al., 2002:58) while the inflation rate averaged 8% during the same period.

<sup>92</sup> Small wonder that the WTO emphasizes the shift of government intervention to the supply side.

<sup>93</sup> Collier (1995:550) defines the function of an agency of restraint as one that enables an agent (public or private) to bind himself to a particular course of action.

commercial risks, which in turn, lowers the return on future investment, thereby indirectly keeping foreign entrepreneurs and new ideas away from the economy. Evidence from the 'Asian tigers' and from Mauritius suggests that a government can raise the return on future investments by deliberate policies that eliminate the non-commercial risks facing investors.

A major effect of the rule of law is the enforceability of contracts. As it is well known, businesses exist on promises to produce and promises to pay. Without recourse to the law when a contract is breached, contracts will not be entered into, goods will not be manufactured, and services will not be provided and society would be worse-off than otherwise. In the United States, for instance, a huge body of law determines what happens to you if you break a formal promise made in good faith (Karl & Fair, 2002). The unreliability of Cameroonian courts (legal system) in contract enforcement is well documented<sup>94</sup>. As a result of this, there has been a lot of business opportunism in the country with very high rates of defaults in contracts. Firms typically default on their contracts both for avoidable (business opportunism) and unavoidable grounds (e.g. transport unreliability). The unreliability of supply thus ripples through the system; let down by one supplier, a firm in turn lets down its own customers. The implication for genuine business enterprises is that they must keep larger inventories.<sup>95</sup>

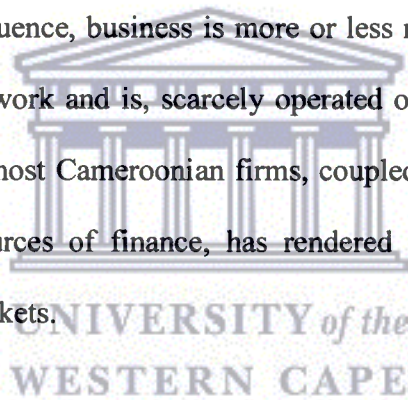
Another consequence of the high rate of default in contracts is that excuses tend to be more credible unless victims invest in further information to distinguish between them.

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<sup>94</sup> See for instance, Transparency International Corruption Perception indexes, 1998 & 1999.

The lack of credit-rating agencies means that firms have to spend their own resources to gather the information needed in order to distinguish between avoidable and opportunistic defaults. This necessarily raises transaction costs, which in turn lowers the expected returns from investment, ensuring that businesses operate on smaller scales<sup>96</sup>.

Even when the evidence of prejudice is established there is still no guarantee that damages would be repaired (Kobou et. al., 2002:24). As a result, firms in Cameroon are very reluctant to resolve disputes through the courts, and have tended instead to use the social network approach<sup>97</sup>, which unfortunately is too small as effective channel for social learning. As a consequence, business is more or less restricted to the small group of firms<sup>98</sup> known to the network and is, scarcely operated on a large scale. The lack of foreign social networks by most Cameroonian firms, coupled with insufficient scale and firms' limited domestic sources of finance, has rendered them uncompetitive, if not disadvantaged, in export markets.



Whether the consequence is policy uncertainty, or high non-commercial risks, or high transaction costs, or high inventory levels, the message is the same - the fragility of the rule of law in Cameroon discourages the importation of foreign ideas into the economy, thereby possibly justifying the persistence of poverty traps.

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<sup>95</sup> Guinness Cameroon, for example, keeps 40 days inventory in the factory (Economist, 12/21/2002) as compared to East Asian firms using 'just in time' production methods that have reduced inventories of inputs to only 20 minutes of production (Collier, 2000).

<sup>96</sup> The small sizes of firms have forced most of them to operate in the informal sector where family relationships and friendship ties predominate over all other considerations (Kobou et. al., 2002:24).

<sup>97</sup> Understood simply as the propensity of economic agents to use social relationships as a means of protecting themselves against a certain number of risks in their environment.

<sup>98</sup> Typically of the Bamileke tribe of the Western province of Cameroon.

#### 4.3.2.2 CORRUPTION IN GOVERNMENT

The corruption in government<sup>99</sup> discussed here relates to whether illegal payments are generally expected throughout government in the form of bribes connected with import and export licences, exchange controls, tax assessments, police protection, or loans. Such illegal payments represent additional taxes on production, thereby, lowering the return on investment with the potential of not rendering them worthwhile.

Two kinds of corruption with different repercussions on growth can be distinguished, viz centralised and decentralised corruption. Any casual visitor in a corrupt developing country quickly comes in contact with the ugly face of corruption through the numerous security roadblocks. Under centralised corruption (such as practiced in Indonesia<sup>100</sup>), a strong central government leader organises all corruption activity in the economy and determines the shares of each official in the ill-gotten proceeds. Such a dictator would typically set the bribe 'tax rate' at all the roadblocks at lower levels and monitors the size of the rake-off at each level because he is solicitous of his victim's prosperity and of the need not to seriously harm growth. Accordingly, any official who attempts to rake in more than the prescribed amount is punished. That way, the level of corruption is low although the total take is high and growth still occurs (Easterly, 2002).

But under a decentralised system of corruption, there are many bribe takers who often act independently of one another. This lack of coordination quickly results in competition among the different 'predators', as each strives very hard to maximise his own graft at the expense of all others. Using the roadblock example to illustrate the point: each soldier at

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<sup>99</sup> This definition is from Sachs & Warner (1997a).



a roadblock in this case, is an independent predator, without taking into account the effects of his actions on other predators. The bribes demanded would be higher as each bribe taker tries to get as much money as possible from the helpless travelers before other predators get it. Evidently, in such cases the sum total of bribes required to transact may be greater than the expected gains from doing business, and so investors shy away. It, therefore becomes easy to understand why some corrupt countries are poor while others are rich.

Cameroon has twice and successively in her history (1998 and 1999), been classified by the German-based international non-governmental organisation, Transparency International, as the most corrupt country in the world,<sup>101</sup> suggesting the importance of the pandemic in the country's slow growth.

*The Economist* of December 21, 2002 describes the daily scene on Cameroonian roads of multiple forms of police, gendarme and army patrols mounting roadblocks almost every 10 kilometers (that is, approximately after every 10 minutes drive), all in the name of road safety. These police/military 'thieves' usually operate on the instructions of their bosses with whom they share the rake-off, which explains why they go unpunished in spite of abuses.

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<sup>100</sup> See Easterly (2002), for an account of corruption in Indonesia.

<sup>101</sup> 1999 Corruption Perception Index (CPI) score relates to perceptions of the degree of corruption as seen by business people, risk analysts and the general public, and ranges between 10 (highly clean) and 0 (highly corrupt). Source: <http://www.transparency.org/cpi/1999/cpi1999.html>

The roadblocks usually consist of a pile of tyres or a couple of oil drums in the middle of the road plus a plank with upturned nails sticking out. The plank is pulled aside allowing passage once the police or military men on duty are satisfied that the motorist has not broken any laws. As the story goes, the security officers at roadblocks face strong incentives to rob travelers, because they are aware that their bosses would demand a portion of the rake-off collected, in the absence of which, a punitive transfer could be the outcome. Thus, they typically would inspect all vehicle parts and documentation, including passengers' identification papers minutely, until they find some fault that would necessitate a ransom. The same source cites the case where a police officer, having decided that a truck driver did not have enough permits, offered to sell him another for twice the usual price. When the driver asked for a receipt he and his passengers were delayed for three and a half hours. A gaggle of policemen joined the argument, which grew heated. The total number of man-hours wasted, assuming an average of seven policemen involved plus three people in the truck, was 35, equivalent to one French working week, all because of a requested bribe of 8,000 CFA Francs (R80).

The pithiest explanation of why Cameroonians have to put up with all this, as The Economist narrates, came from the scene at another roadblock. A gendarme officer, having invented a new law about carrying passengers in trucks, found the truck driver guilty of breaking it, and confiscated his driving licence. When it was put to him that the law he was citing did not, in fact, exist, he patted his holster and replied: "Do you have a gun? No. I have a gun, so I know the rules".

Another area where corruption impedes growth is in the quality of bureaucracy. Cameroon has a bureaucratic system characterised by excessive red tape that slows business to a crawl. According to a survey carried out by Noumba (Kobou et. al., 2002:54), it takes an average duration of about nine months to obtain say a permit or licence to do business in Cameroon and sometimes, the process can involve as many as ten different ministries<sup>102</sup>. Another study by Tybout et al (1996:11) put the proportion of enterprises that claim to pay bribes to civil servants in order to reduce their obligations or to accelerate administrative procedures at 65%.

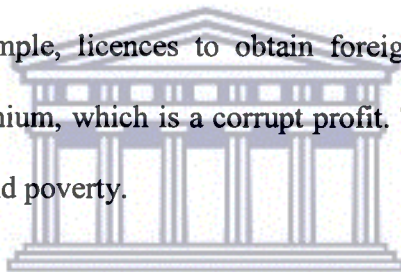
Evidently, a corrupt bureaucracy that insist on bribes in order to deliver public services, acts as additional taxes on the productive activities of the economy thereby raising production costs: investors must spend some of their time and resources bribing public officials in order to obtain permits and licences necessary for the conduct of business. If the government is organised in a way that a number of bureaucrats have ‘hold-up’ power over an investment project, the result may be to cut investment dramatically. The officials may be unable to coordinate so that the sum total of bribes required to conduct business is greater than the private gains from setting up the business in the first place<sup>103</sup>. The major implication of this analysis is that foreign investors will be highly unlikely to want to invest in the country and consequently, the country fails to take advantage of their ideas.

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<sup>102</sup> Enterprises involved in external trade can solicit up to ten ministries being: Finance, Labour, Territorial Administration, Transport, Agriculture, Trade and Industry, Livestock and Animal Husbandry, Mines and Power, Posts and Telecommunications (Kobou et. al., 2002).

<sup>103</sup> In another way, this kind of diversion of resources can have important dynamic consequences for the allocation of talents as individuals who might otherwise become entrepreneurs, instead divert their skills and resources to rent-seeking activities (Hall & Jones, 1997).

There is also evidence of a high expected rate of government repudiation of contracts in Cameroon (Kobou et. al., 2002:54). Because of the contradictory nature of some texts<sup>104</sup>, which create uncertainty about future government actions, businessmen tend to respond by bribing officials. The amount of these bribes would typically be included in the contract, so that the government winds up overpaying simply because it threatened not to pay. The implication for policy is that government budget deficits would likely be higher and the ensuing inflation may result in negative real interest rates. In a situation of highly negative real interest rates, there would be an incentive for massive capital flight. To prevent the balance of payments from deteriorating, the government may resort to exchange controls (for example, licences to obtain foreign exchange), inadvertently, creating a black market premium, which is a corrupt profit. The result is a vicious circle of corruption, bad policies and poverty.



The message behind these anecdotes is that a decentralised corrupt system inevitably generates vicious circles of competitive corruption, often associated with low levels of investments and growth. Empirical evidence shows that corruption and growth are inversely related (Easterly, 2002). Similarly, corruption and the investment ratio to GDP are inversely related. Nobody wants to invest in a corrupt economy since the returns on investment would likely be lower due to high production costs.

What has transpired so far is that the incentives for corruption are stronger in a weak coalition government with multiple ethnic groups and vested political interests. These are typical characteristics of the Cameroonian economy. The kind of corruption that exists in

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<sup>104</sup> In particular, texts relating to the commercial and investment codes and government procurement.

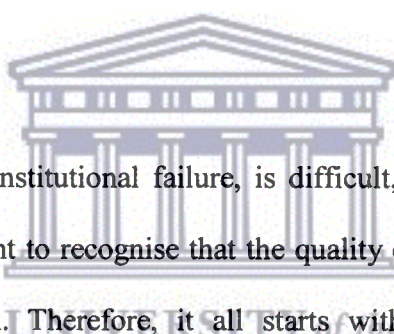
such cases is decentralised and competitive, with a very high theft rate (since the probability of being punished if caught, is nearly zero).

Studies done by Mauro (1995) and Svensson (2000) in Easterly (2002) show that corruption is higher with more ethnic diversity. Svensson found that corruption increases with more foreign aid in an ethnically divided society though not in an ethnically homogenous one. He also found that countries that are both commodity (like cocoa or oil) producers and ethnically divided are likely to be more corrupt. The reason is that multiple ethnic groups strive very hard to swindle any piles of money that become available through commodity windfalls or foreign aid – the ‘common pool’ resource problem.

Another cause of corruption in Cameroon is bad policies that create opportunities for graft. This is most obvious for a policy like the black market premium, where any government official with a licence to purchase foreign exchange at the official rate can make a corrupt profit by reselling at the black market rate. No small wonder, then, that corruption and the black market premium are associated (Easterly, 2002).

Yet, another cause could result from restrictions on free trade. If there is a high tariff on an imported good, an incentive exists to bribe customs officials to import the good at a lower tariff. And, if a licence is needed to import the good and the good is in great demand, the licence seeker will have an incentive to pay a bribe. Ades and Di Tella (Easterly, 2002) have found that countries that restrict the freedom of international trade are indeed more corrupt.

Finally, the quality of institutions (rule of law, bureaucratic quality, freedom from expropriation and freedom from government repudiation of contracts) as we have observed earlier, also affects incentives for corruption. Perverse institutions favour diversion in all its forms (examples are outright theft, corruption, litigation, and expropriation) while discouraging production in ways that are detrimental to long run growth. The evidence shows that in countries with institutions that favour diversion over production; investment in physical, human and knowledge capital, is reduced by the threat of diversion. Moreover, some of the investment that does take place is devoted to increasing the effectiveness of diversion instead of the effectiveness of production (Hall & Jones, 1997).



Corruption, as evidence of institutional failure, is difficult, although not impossible to control. Firstly, it is important to recognise that the quality of institutions matter a lot in the fight against corruption. Therefore, it all starts with the government itself. A government that obeys the laws of the Republic, rather than putting itself above the law will certainly create a poor ecosystem for corruption.

Secondly, a high-quality civil service organised on meritocratic rather than patrimonial logic will provide some checks for corruption. Fukuyama (2001:18) identifies education as the one area where governments could directly generate social capital and fight corruption<sup>105</sup>. Therefore, one of the greatest safeguards against corruption is to give senior bureaucrats high quality, professional training and to encourage an '*esprit de corps*' (in other words, a feeling of obligation towards one another) amongst them.

Promotion of social capital also entails the efficient provision of public goods particularly intellectual property rights and public safety<sup>106</sup>. With a stable and safe environment for public interaction and property rights, it is more likely that trust will arise spontaneously as a result of iterated interactions of rational individuals (Fukuyama, 2001). Thirdly, the government must eliminate red tape<sup>107</sup> and establish rules that government honours contracts and do not expropriate the private sector. These safeguards will create checks and balances on bureaucrats instead of opportunities for graft. Lastly, the government can eliminate some of the policies that create incentives for corruption. For instance, a high black market premium or a high negative real interest rate, or excessive restrictions on free trade, are clearly opportunities for graft. Besides, eliminating these three diseases is not only good for the fight against corruption, but good for growth as well.

#### **4. 4 PHYSICAL INFRASTRUCTURE AND LONG RUN GROWTH IN CAMEROON**

Available evidence points to the fact that some of the major impediments to long run growth in the Cameroon economy come from supply-side constraints such as deficient roads, irrigation systems, railways, airways, ports, power supply, and telecommunications systems, Tybout et al (1996:11). Economists are yet to understand fully why most African governments implemented with zeal, policies that depressed agricultural

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<sup>105</sup> According to Fukuyama, corruption is evidence of the lack of social capital; therefore policies that increase the stock of social capital could likely reduce the incidence of corruption.

<sup>106</sup> For example, people cannot associate, volunteer, vote or take care of one another if they fear for their lives when walking down the street.

<sup>107</sup> In South Africa for instance, with a very high quality bureaucracy, the number of intervening departments is very limited, and a receipt is generally issued to public users stating the standards of service to which the user is entitled to, accompanied by a toll-free number that he may call in event of any dissatisfaction.

production yet conspicuously failed to provide basic infrastructure needed for industrial expansion<sup>108</sup>.

Manufacturing activities (that add value to primary production) are transactions-intensive compared to agriculture, mining or services (Collier, 2000:16). Accordingly, Africa's high transactions costs because of deficient physical infrastructure services can be blamed for her failure to attract the foreign investment that could enable her to seize the technological opportunities that exist in the world market place. In other words, the ability of an economy to seize technological opportunities depends on the quality of existing infrastructure since this has a direct bearing on production cost, affecting incentives for all types of capital investment (physical, human and knowledge). Deficient infrastructure also affects productivity in the primary sector, thereby making it difficult for poor people to lift themselves out of poverty.

#### **4.4.1 HOW POOR PHYSICAL INFRASTRUCTURE AFFECTS GROWTH IN CAMEROON**

##### **4.4.1.1 Road Networks**

In its December 21, 2002 edition, "The Economist" carried an article entitled 'The road to hell is unpaved', in which the reporter rode on a Cameroonian beer truck and got a lesson in development economics. This discussion draws on that article.

Guinness, the Irish multinational brewing company, has its fifth biggest market by volume in Cameroon. Guinness Cameroon's factory is located in Douala, Cameroon's economic capital where brewing takes place. Because of unreliable transport, 'just-in-time' delivery is impossible. Whereas its factories in Europe can turn some raw materials

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<sup>108</sup> Collier and Gunning (1999) have referred to the failure by governments to provide infrastructure as the



into beer within hours of delivery, Guinness Cameroon has to keep 40 days of inventory in the factory. Wholesalers in the rural areas of Cameroon have to carry as much as five months' stock at the start of the rainy season, when roads are at their swampiest. According to Brian Johnson, the managing director of Guinness Cameroon, bad infrastructure, in all, adds about 15% to costs. By every indication, the disastrous state of Cameroonian roads are a major cause of concern for Guinness Cameroon and other firms operating in the country.

For instance, the transportation of crates of Guinness and others drinks from the factory in Douala to Bertoua, a small town in Cameroon's south-eastern rainforest, a distance of about 500 kilometers (313 miles), takes about four days during the rainy season and even when the truck does arrive, it is usually left with only two-thirds of its original load. On that particular segment of the road, the truck has to face a total of 47 roadblocks mounted indiscriminately by 'predator' police, gendarme and army officers.

Large firms like Guinness Cameroon have found ways of coping with the roads and highway controls, but the rural people in Cameroon are the big losers from poor infrastructure. The simplest way to measure the harm caused by poor infrastructure to the poor, is to look at how prices change as you move away from big cities. A bottle of Coca-Cola, for example, costs 300CFA francs in Yaounde, where it is bottled. A mere 125km down the road, in the small town of Ayos, it is sold at 315CFA, and at a smaller village 100km further on, it is 350CFA. Once one leaves the main road, prices rise sharply. A Guinness that costs 350CFA in Douala will set you back 450CFA in an eastern village that can be reached only on foot.

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'sins of omission' and the choice of bad policies as 'sins of commission'.

What is true of bottled drinks is also true of more or less any other manufactured good. Soap, axe-heads and kerosene are all more expensive in remote hamlets than in the big cities. Even lighter goods, which do not cost so much to transport, such as matches and malaria pills, are significantly dearer. At the same time, the good that the poor have to sell – yams, plantains, cassava, and mangoes - fetch less in the villages than they do in the towns. Yet, thanks to bad roads, it is hard and costly to get such perishable, heavy items to the market. So bad roads doubly squeeze peasant farmers; they pay more for what they buy (usually necessities), and receive less for what they sell. Small wonder, therefore, that rural poverty has a very high prevalence rate (about 67.6% as opposed to 45.1% for urban poverty) in Cameroon. The United Nation's International Fund for Agricultural Development estimates that African villages with better physical infrastructure produce one-third more crops per hectare than those with poor infrastructure, enjoy wages 12 % higher, and pay 14% less for fertilizer. No country with good roads has ever suffered famine (The Economist, 2002).

Where roads improve, incomes tend to rise in parallel. In Cameroon, where the soil is very fertile, farmers start growing cash crops as soon as access roads are repaired. Big commercial farmers benefit too. Along the highway to Douala there are large plantations of sugar cane, and banana trees, mostly run by multinational firms. In conclusion, where roads improve<sup>109</sup>, it enables rural people to ride on lorries, thereby facilitating access to health institutions and markets, with the potential of improving living standards.

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<sup>109</sup> We also note that better transport, and communications facilities could help reduce information asymmetry in the labour market, thereby reducing urban unemployment and poverty.

#### 4.4.1.2 Electricity, Telecommunications and Air Transport

Other types of infrastructure, such as power supply, ports, telecommunications, and air transport, are marred either by monopoly, corruption or simply state abuse. For instance, Cameroon's sole electric power authority, AES-SONEL, has been unable during the past few years to ensure constant power supply. Since 2002, electricity is rationed in Cameroon's major cities on a daily basis during the dry season (typically from December to June) with outages that last for several hours while the semi-urban areas sometimes go for days without electricity<sup>110</sup>.

The unreliability of electric power supply implies that firms must devote additional resources to standby generators, thereby raising their production cost. Because of this situation, it is very common for an invitation letter to bear the mention 'Provision made for a standby generator' for it to be taken seriously. The direct implication of this is that social interaction and channels for learning are greatly reduced.

The public authority running Cameroon's fixed-line telephone network, CAMTEL, has been unable to adapt itself to new technology, resulting in low density, low telephone quality and high charges. Telephone charges, especially for international calls remain very high thus raising the cost of foreign interactions through trade. In general, statistics show that access to a telephone is 6 per 1,000 persons and 40 per 1,000 persons for internet access (see Chapter Three). This hinders social interaction thereby reducing the stock of social capital, which in turn, raises transaction costs.

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<sup>110</sup> La Nouvelle Expression, page 4, No. 803 of 2<sup>nd</sup> December 2002.

Also, the privileges given to Cameroon's public air transport company, CAMAIR, as per, domestic and African routes have reduced reliability and raised prices. Like in other African countries, the abuse of national airlines by politicians is now legendary. Often, the national airline has no plane because the head of state is away from the country on holidays. Non-national airlines then take advantage of the situation to over-price their African routes (Okeahalam, 1996). This is a constraint on intra-African trade, rendering investment on the sub-continent highly unprofitable.

The sum total of all these arguments is to point out that unreliable physical infrastructure causes transactions costs, thus lowering the return on investment and deterring foreign entrepreneurs from introducing their ideas in the national economy. The World Bank estimates that at least US\$18 billion needs to be pumped each year into African infrastructure if the continent is to attain the sort of growth that might lift large numbers of people out of poverty. Investment currently runs at less than a third of this. In the current economic downturn, private companies in the West are in no mood to rush into risky investment, least of all in Africa (The Economist, 2002). In short, governments of poor countries ought to pay more attention to infrastructure provision, especially roads.

#### **4.4.2 REASONS FOR POOR INFRASTRUCTURE PROVISION IN CAMEROON**

The following arguments can be advanced to explain the poor infrastructure provision:

*Firstly*, the first generation of development economists were too generous in their perception of the role of government in an economy. The perception of government leaders as benevolent 'philosopher-kings' of Plato is yet to be vindicated. Recent analysis shows that governments must be seen as having their own agendas, seeking to maximise

their own welfare, and unable and unwilling to take a disinterested and informed stand on economic matters (Bruton, 1998:923). Easterly (2002) takes the argument further by referring to the government as a coalition of politicians representing different factions and interest groups. This multiplicity of polarised interest groups in government makes it difficult for a consensus on good policies to be arrived at. In Cameroon, for instance, with a high plurality of ethnic interests, consensus as to where a road should pass may be difficult to arrive at, consequently, leading the government to postpone an else while beneficial venture.

*Secondly*, some economists (see for instance, Wood & Berge, 1997) have probed deep into natural resource issues to raise the potential for underdevelopment in economies with abundant endowment. According to this reasoning, countries with natural resource endowments are more prone to rent-seeking activities that induce poor policies. The poor policies in turn explain why useful projects such as infrastructure provision and maintenance are not delivered. Putting Cameroon in context, the rich natural resources of the country, coupled with a high degree of ethnic polarisation and a low human and knowledge capital stock should partly explain why infrastructure delivery is not happening.

## CHAPTER FIVE

### CONCLUSIONS AND POLICY IMPLICATIONS

#### 5.1 CONCLUSIONS

The analysis in this study point to the fact that it takes both well-functioning markets and a good government in order for development to happen in a poor economy like Cameroon. It does reveal that poverty traps may be the result of a failure of coordination by the market, which justifies government intervention in:

- Providing incentives for the poor to invest in knowledge and skills that will raise their future incomes.
- Providing public goods and necessary infrastructure that will increase the stock of social capital and raise the returns to private investment, thereby attracting foreign investors to introduce their ideas into the economy.

But we observed that the Cameroonian economy, like most other sub-Saharan African economies, is a victim of some lucky or unlucky circumstances, namely:

- A low human and knowledge capital stock at independence, which seems to persist;
- A weak institutional framework that raises transaction costs;
- An inheritance of high ethnic diversity that makes consensus in the provision of public goods and the adoption of growth-enhancing policies difficult;
- An inheritance of abundant natural resources that create room for rent-seeking activities and

- An inheritance of a polarised society made up of an English-speaking minority and French-speaking majority population, with essentially different cultures and values.<sup>111</sup>

The analysis speculated that these predestined facts have jeopardized long run growth in a number of different ways. However, drawing from the experiences of other countries, for example, the United States of America, we deduce that problems of ethnicity and interest group polarisation could effectively be surmounted through better institutional arrangements. For instance, a constitution that guarantees minority rights and which cannot be modified by any government of the day without the overwhelming consent of the populace is important.

In summary, the study strongly upholds the potential benefits of an outward oriented trade strategy in facilitating the transfer of technology from the leading-edge economies to follower-poor economies like Cameroon. However, such potential could only be realised in the presence of some minimum capital (human and knowledge) stock, and basic infrastructure (physical and institutional) confirming Bruton's (1998) view that, there are no quick and easy fixes to development problems. More often than not, there is no leapfrogging. Rather, it is a hard slog process entailing a lot of learning by all and sundry - individuals, firms, governments and even donors. This is the message from Japan and the East Asian tigers. Further research may probe into the best kinds of institutional arrangements that would enable a poor economy like Cameroon to take

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<sup>111</sup> It's worth noting in passing that recently, there has been a lot of agitation from the minority English-speaking Cameroonians about their rights to self-determination.

advantage of ideas that already exist in the world marketplace and also into policies that are likely to raise expectations among the poor.

Drawing on the foregone analysis, we deduce the following implications for policy.

## 5.2 POLICY IMPLICATIONS

The following policy implications are relevant:

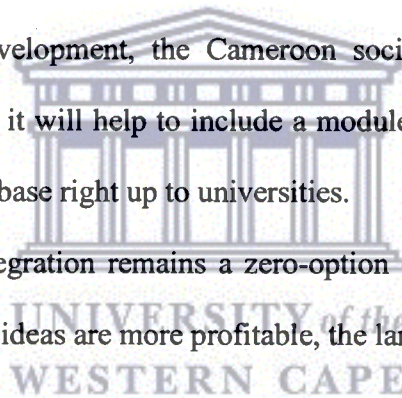
- ❖ Long run growth is sensitive to things that governments must do, and also to others that it must not do. Principally, government's intervention should shift more to the supply-side; provision of infrastructure and public goods, and less on the demand-side. When the government starts undertaking activities that could be better performed by private individuals and firms (e.g. profit-making activities), the activity with the highest return to skills could easily become lobbying the government for favours (skills diversion). Given that Cameroon is a member of a currency union with a fixed exchange rate arrangement, the burden of improving the external competitiveness of the economy lies heavily on fiscal policy, but perhaps more importantly, on supply-side structural reforms that would reduce unit cost of production.
- ❖ As we observed, controlling the government budget deficit could help eliminate other bad policies such as black market premiums and negative real interest rates that stifle growth. However, the way to achieve budget balance is not by reducing investments in human and knowledge capital or in infrastructure services, but rather by improving resource mobilisation.
- ❖ Demographic indicators show that the Cameroonian population is predominantly youthful. Hence, in order to raise total factor productivity, emphasis must be on



human capital development which would raise labour productivity and long run per capita GDP growth rates.

- ❖ To resolve the ‘common pool’ problem that is typical of economies with a high degree of ethnic/interest group polarisation, it will be advantageous to have a strong executive finance minister who could place discipline on spending ministries in respect of the budget deficit. Alternatively, the procedure for budget setting could be arranged so that the executive first fixes the total budget and then have the legislative (the representatives of interests groups) concern itself with the distribution.
- ❖ Poor countries struggling with high corruption, smuggling and poor fiscal revenue collection, must perceive trade liberalisation to be non-negotiable. Cameroon, for instance, that shares a very long and porous border with a major producer economy like Nigeria, will gain from reduced smuggling activities, reduced corruption by custom officials and increased revenue from trade if trade liberalization is extended.
- ❖ It does serve to have a judiciary that is independent of the executive power of the State, as it will ensure the rule of law. This independence can be achieved by having magistrates and judges appointed for life. Therefore, even though appointed by the executive power, that same power could no longer remove them from office. This will guarantee their independence. Besides a strong independent judiciary, institutions that protect intellectual property rights will guarantee an environment that favours production over diversion in the long run.

- ❖ In order to mitigate the adverse effects of brain drain on the economy, the Cameroon government has an interest in lobbying some of the country's skilled manpower currently found in the industrialised world to return home and fill the knowledge gap.
- ❖ Publicly subsidised education is one of the effective means of generating a large middle class society in countries with high ethnic polarisation and income inequalities. A middle class consensus will provide incentives for growth-promoting policies, political stability and the rule of law.
- ❖ Development is also about commitment to a common cause or destiny. At her present stage of development, the Cameroon society still lacks the spirit of nationhood. As such it will help to include a module on patriotism in the school curriculum from the base right up to universities.
- ❖ Finally, regional integration remains a zero-option for typical small economies like Cameroon since ideas are more profitable, the larger the market size.



## BIBLIOGRAPHY

- AFRICAN DEVELOPMENT INDICATORS, 2003. Washington, D.C. *The World Bank*.
- AGHION, P., and HOWITT, P., 1992. "A Model of Growth through Creative Destruction". *Econometrica*, Vol. 60(2): 323-351.
- AGHION, P., and HOWITT, P., 1998. "Endogenous Growth Theory". Cambridge, *MIT Press*.
- AMIN, A. A., 2002. "An Examination of the Sources of Economic Growth in Cameroon". Nairobi, *AERC Research paper*, No.116 (March).
- ARROW, Kenneth, J., 1962. "The Economic Implications of Learning by Doing". *Review of Economic Studies*, Vol.29: 155-173.
- BARRO, R.J. and Sala-i-Martin, 1995. "Economic Growth". New York: *McGraw-Hill*.
- BALWIN, R.E., 1992. "Are Economists' Traditional Trade Policy Views Still Valid?" *Journal of Economic Literature*, Vol.30: 804-829.
- BEN, Fine, 2000. "Endogenous Growth Theory: A Critical Assessment". *Cambridge Journal of Economics*, Vol. 24: 245-265.
- BORA, B., LLOYD, P.J., & PANGESTU, M., 2000. "Industrial Policy and the WTO". New York & Geneva: *United Nations, UNCTAD*.
- BRUTON, H.J., 1998. "A Reconsideration of Import Substitution". *Journal of Economic Literature*, Vol.36: 903-936.
- COLLIER, P., 1995. "The Marginalization of Africa". *International Labour Review*, Vol. 134: 4-5.

- COLLIER, P., 2000. "Africa's Comparative Advantage." In HOSSEIN, J., TRIBE, M., and WEISS, J. (eds) *Industrial Development and Policy in Africa*, Cheltenham: *Edward Elgar Publishing Limited*.
- COLLIER, P. and GUNNING, J.W., 1999. "Explaining African Economic Performance". *Journal of Economic Literature*, 64-111(march).
- DORNBUSCH, R., 1992. "The Case for Trade Liberalization in Developing Countries". *Journal of Economic Perspectives*, Vol.6 (1): 69-85.
- DORNBUSCH, R., FISCHER, S., & STARTZ, R., 1998. "Macroeconomics". 7<sup>th</sup> Edition. Boston: *Irwin McGraw-Hill*.
- EASTERLY, W. and LEVINE, R., 1997. "Africa's Growth tragedy: Policies and Ethnic Divisions". *Quarterly Journal of Economics*, Vol.112(4): 1203-50.
- EASTERLY, W., 2002. "The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics". Cambridge, MA: *The MIT Press*.
- EDWARDS, S., 1993. "Openness, Trade Liberalization, and Growth in Developing Countries". *Journal of Economic Literature*, Vol.31 (3): 1358-1393.
- EDWARDS, S., 2002. "Information Technology and Economic Growth in Developing Countries". *Challenge*, Vol.45 (3): 19-43.
- FRANKEL, J. and ROMER, D., 1999. "Does Trade Cause Growth?" *The American Economic Review*, Vol.89 (3): 379-399.
- FUKUYAMA, F., 2001. "Social Capital, Civil Society and Development". *Third World Quarterly*, Vol.22(1).
- GHURA, D., 1997. "Private Investment and Endogenous Growth: Evidence from Cameroon". Washington D.C., *IMF Working paper*, WP/97/165.

- GROSSMAN, G. M. and HELPMAN, E., 1991. "Innovation and Growth in the Global Economy". Cambridge MA: *MIT Press*.
- HALL, R. E. and JONES, C.I., 1997. "Levels of Economic Activity Across Countries" In 'What Have We Learned From Recent Empirical Growth Research?' *American Economic Review*, Vol.87 (2).
- HESTON, A. and SUMMERS, R., 1991, "The Penn World Table (Mark5): An Expanded Set of International Comparisons, 1950-1988." *Quarterly Journal of Economics*, Vol.106 (May): 327-68.
- ITO, T. and KRUEGER, Anne O., 1995, "Growth Theories in the Light of East Asian Experience". Chicago, *University of Chicago Press*.
- KANDIERO, T. and WADHAWAN, S., 2003. "Institutional Quality, Openness and Investment in Africa". *South African Journal of Economics and Management Sciences*, Vol.6 (2): 346-368.
- KARL, E. and FAIR, C., 2002. "Principles of Macroeconomics". 6<sup>th</sup> edition. NJ, *Prentice Hall*.
- KOBOU, G., FOU DA, S.M. and NJINKEU, D., 2002. "Explaining African Economic Growth Performances: Cameroon Case Study (1960-2000)". Available at:
- KRUEGER, Anne O., 1974. "The Political Economy of the Rent-Seeking Society". *The American Economic Review*, Vol.63 (3): 291-303.
- KRUEGER, Anne O., 1978, "Foreign Trade regimes and Economic Development: Liberalization attempts and consequences". Lexington, MA: *Ballinger Press*.

- KRUEGER, Anne O., 1995, "Trade Policies and Developing Nations", Washington, DC: *Brookings Institution*.
- KRUEGER, Anne O., 1997, "Trade Policy and Economic Development: How we learn". *The American Economic Review*, Vol.87 (1): 1-22.
- LALL, S. and WANGWE, S., 1998. "Industrial Policy and Industrialisation in Sub-Saharan Africa". *Journal of African Economies*, Vol.7 (1).
- LANDES, David S., 1990. "Why Are We So Rich and They So Poor"? *American Economic Review*, Vol.80 (2): 1-13.
- LA NOUVELLE EXPRESSION Newspaper, No. 803 of 2/12/ 2002, page 4.
- LEVINE, R. and RENELT, D., 1992. "A Sensitivity Analysis of Cross-Country Growth Regressions". *American Economic Review*, Vol.82 (4): 942-63.
- LUCAS, Robert E. Jr., 1988. "On the Mechanics of Economic Development". *Journal of Monetary Economics*, Vol.22 (1): 3-42.
- MAURO, P., 1995. "Corruption and Growth". *Quarterly Journal of Economics*, Vol.110 (3):681-712.
- McCARTHY, Colin, 1999. "Regional Integration in Sub-Saharan Africa: Past, Present and Future". In Ademola, O., Benno, N. & David, G. (eds.) *Regional Integration and Trade Liberalization in Sub-Saharan Africa*. Vol.4, Houndmills, Basingstoke, *Macmillan Press*.
- NDONGKO, W.A., 1993. "Cameroon" In ADERANTI, A. (eds.) *The Impact of Structural Adjustment on the Population of Africa*. London. UNFPA, Heinemann & Currey.

- OKEAHALAM, C.C., 1996. "An Analysis of Costs and Pricing of Airline Services to Africa". Mimeo, University of Botswana.
- RODRIK, Dani, 1992. "The Limits of Trade Policy Reform in Developing Countries". *Journal of Economic Perspectives*, Vol.6 (1): 87-105.
- RODRIK, Dani, 1995. "Growth Policy- Getting Interventions Right: How South Korea and Taiwan Grew Rich". *Economic Policy*, 55-104.
- ROMER, Paul, 1986. "Increasing Returns and Long run Growth". *Journal of Political Economy*, Vol. 94 (5): 1002-1037.
- ROMER, Paul, 1987. "Growth Based on Increasing Returns Due to Specialization". *American Economic Review*, Vol.77 (2): 56-62.
- ROMER, Paul, 1990. "Endogenous Technological Change". *Journal of Political Economy*, Vol. 98 (5), part II, S71-S102.
- ROMER, Paul, 1992. "Two Strategies for Economic Development: Using Ideas and Producing Ideas". *Proceedings of the World Bank Annual Conference on Development Economics*, Washington D.C. The World Bank.
- ROMER, Paul, 1994. "The Origins of Endogenous Growth". *Journal of Economic Perspectives*, Vol.8 (1): 3-22.
- SACHS, J.D. and WARNER, A., 1995. "Economic Reform and the Process of Global Integration". *Brooking Papers on Economic Activity*, Vol.1 (August): 1-118.
- SACHS, J.D. and WARNER, A., 1997a. "Sources of Slow Growth in African Economies". *Journal of African Economies*, Vol.6: 335-373.

- SACHS, J.D. and WARNER, A., 1997b. "Fundamental Sources of Long Run Growth". *American Economic Review*, Vol.87 (May): 184-88.
- SCHUMPETER, J.A., 1934. "The Theory of Economic Development". Cambridge MA: *Harvard University Press*.
- SHELL, Karl, 1967. "A Model of Inventive Activity and Capital Accumulation". In Karl Shell (eds.) *Essays on the Theory of Optimal Economic Growth*, Cambridge MA: *MIT Press*, 67-85.
- SHESHINSKI, E., 1967. "Optimal Accumulation with Learning by Doing". In Karl Shell (eds.) *Essays on the Theory of Optimal Economic Growth*, Cambridge MA: *MIT Press*, 31-52.
- SÖDERSTEN, Bo and REED, G., 1994. "International Economics". 3<sup>rd</sup> edition. London: *The Macmillan Press LTD*.
- SOLOW, Robert M., 1956. "A Contribution to the Theory of Economic Growth". *Quarterly Journal of Economics*, Vol. 70 (1): 65-94.
- SOLOW, Robert M., 1957. "Technical Change and the Aggregate Production Function". *Review of Economics and Statistics*, Vol. 39 (August): 312-320.
- SVENSSON, J., 2000. "Foreign Aid and Rent-Seeking". *Journal of International Economics*, Vol.51 (2): 437-461.
- SWAN, Trevor W., 1956. "Economic Growth and Capital Accumulation". *Economic Record*, Vol. 32 (November): 334-361.



THE ECONOMIST, Vol. 365, Issue 8304, p37 of December 21, 2002. Available at:

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TYBOUT, J., GAUTHIER, B., NAVARETTI, G.B., and JAIME DE MELO, 1996.

“Firm-Level Responses to the CFA Devaluation in Cameroon”. *Journal of African Economies*, Vol.6 (1): 3-34.

UZAWA, H., 1965. “Optimal Technical Change in an Aggregative Model of Economic Growth”. *International Economic Review*, Vol. 6 (January): 18-31.

WEISS, John, 2000. “Introduction: Africa and Industrial Development”. In HOSSEIN, J., TRIBE, M., and WEISS, J. (eds.) *Industrial Development and Policy in Africa*, Cheltenham: *Edward Elgar Publishing Limited*.

WOOD, A. and BERGE, K., 1997. “Exporting Manufactures: Human Resources, Natural Resources and Trade Policy”. *Journal of Development Studies*, Vol.34 (1).

WORLD ALMANAC and BOOK of FACTS, 2003. Page 768, ½p. Website:

WORLD DEVELOPMENT REPORT, 1983. The World Bank and Oxford University Press.

WORLD DEVELOPMENT REPORT, 2003. Sustainable Development in a Dynamic World. The World Bank and Oxford University Press.