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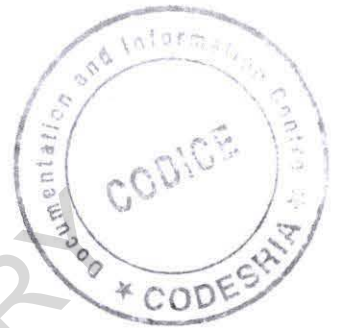
FOREIGN DIRECT INVESTMENTS IN NIGERIA: DETERMINANTS AND IMPACT

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FOREIGN DIRECT INVESTMENTS IN NIGERIA: DETERMINANTS AND IMPACT

BY



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A THESIS SUBMITTED TO THE
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IN BANKING AND FINANCE

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FEBRUARY 2001

DEDICATION

To all my children

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ACKNOWLEDGEMENTS

It is right that in a project of this magnitude, individuals who have contributed in one way or the other in realising the project should be identified and acknowledged.

Although it is not possible to effectively acknowledge all contributors, it is necessary to recognise my principal supervisor Professor C. C. Ntamere as the prime moulder of this work. My principal supervisor indicated that he wants me to succeed in completing this thesis by providing me with vital directions and materials needed for my work.

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CERTIFICATION

FOREIGN DIRECT INVESTMENT IN NIGERIA: DETERMINANTS AND IMPACT

BY

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It is hereby certified that this thesis is acceptable in partial fulfilment of the requirement for the award of a Ph.D. degree of the Federal University of Technology Owerri.

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ABSTRACT

This study investigates the determinants and impact of foreign direct investments (FDI), in Nigeria. It has become necessary to carry out a study of this nature because there are two major obstacles to higher economic growth faced by Nigeria in the 21st Century. These two obstacles are low investments and shortages of foreign exchange.

The need for this study was predicated on the fact that macro-economic reforms initiated by the government together with attractive investments incentives have not yielded appreciable levels of foreign direct investment inflows.

The study addressed the following research questions:

Why has the inflow of foreign direct investments not increased despite improvement in our macro economic structure?

What factors do foreign investors consider important in making their investment decision in a country such as Nigeria?

Is the economy "open" and investor friendly?

Does socio-political instability negatively affect FDI?

Has foreign direct investments contributed in technology transfer?

What are the linkages or relationships between foreign direct investments and the low economy?

In addition to the above objectives the study predicted three hypotheses bordering on socio-political instability, investment incentives and economic growth.

Two broad analytical techniques were adopted in the investigation of the determinants and impact of foreign direct investments. The first technique involved the survey of 302 foreign affiliate managers. The second approach involved the application of regression analysis on selected explanatory variables.

The findings can be summarised as follows:

As confirmed by the foreign affiliate managers and the regression results, socio-political instability is a major deterrent of foreign investment inflows. In analysing the second hypothesis and research question, it was found that although incentives were statistically significant as a major promoter of FDI inflows, foreign investors do not rate investments singularly high. The study further confirmed that FDI in Nigeria has contributed to technology transfer through the training of the local work force by expatriates. It was confirmed by the study that FDI has some linkages to the Nigerian economy especially in the form of local raw material purchase by foreign firms. Overall, FDI has contributed marginally to economic growth in Nigeria.

TABLE OF CONTENTS

	PAGE
DEDICATION - - - - -	iii
ACKNOWLEDGEMENTS - - - - -	iv
CERTIFICATION - - - - -	v
ABSTRACT - - - - -	vii
TABLE OF CONTENTS - - - - -	x
 CHAPTER 1: INTRODUCTION	
1.1 Background - - - - -	1
1.2 Statement of the Problem - - - - -	8
1.3 Objectives of the Study - - - - -	22
1.4.1 Framework and Hypothesis - - - - -	23
1.4.2 Methodological Highlights - - - - -	24
1.5 Need for the Study - - - - -	24
1.6 Significance of the Study - - - - -	26
1.7.0 Scope and Limitation - - - - -	26
1.7.1 Study Period - - - - -	26
1.7.2 Definitions of Foreign Direct Investment - - - - -	27
1.7.3 Typology of Foreign Direct Investment - - - - -	27
1.7.4 Components of Foreign Direct Investment in Nigeria - - - - -	28
1.7.5 Limitations - - - - -	29
1.8 Definition of Terms - - - - -	30
1.9 Acronyms and Abbreviations - - - - -	31

CHAPTER 2: REVIEW OF THEORETICAL FRAMEWORK

2.2	Resurgence of interest on Foreign Direct Investment	-	-	33
2.3	The Evolution of International Business Enterprise	-	-	36
2.4	Early Forms of FDI - Globe-	-	-	38
2.4.1	Free Standing Companies	-	-	39
2.5	Theories of Foreign Direct Investment	-	-	43
2.6	General Questions on the Literature of Foreign Direct Investment	-	-	45
2.7	Hymer's Critique	-	-	45
2.8	Transaction Costs Internalization and the MNE	-	-	46
2.8.1	Macroeconomic Approaches	-	-	54
2.9	The Product Life Cycle and Technology Transfer	-	-	55
2.10	Alibers Theories	-	-	57
2.11	Stagnationist views	-	-	58
2.12	Market Structure, Power and Conflicts	-	-	59
2.13	American Perspectives on Oligopolistic Structures	-	-	60
2.14	Power and Conflict: European Perspectives	-	-	65
2.15	The Eclectic Approach	-	-	67
2.16	Review of Selected Independent Variables	-	-	72
2.16.1	Sociopolitical instability	-	-	72
2.17	Corruption and Investment	-	-	78
2.18	Transparency	-	-	87
2.18.1	Open and Friendly Environment	-	-	89
2.19	Technology Transfer	-	-	94
2.19.1	Development and Transfer of Technological Capabilities in Nigeria: The Cadbury Example	-	-	100

2.19.2	Implications of the Uruguay Round Agreements							
	in the Acquisition of Technology for Development -	-	-					107
2.20	Foreign Direct Investment and Balance							
	of Payment Impact -	-	-	-	-	-	-	118
2.20.1	FDI, Income flows and Balance of Payments impacts	-	-					119
2.21	Impact of Foreign Direct Investment on							
	Economic Growth -	-	-	-	-	-	-	120
2.22	The Linkage Issue -	-	-	-	-	-	-	

CHAPTER 3: METHODOLOGY

3.2	Restatement of Hypotheses	-	-	-	-	-	-	129
3.3	Research Design -	-	-	-	-	-	-	130
3.3.1	Data Collection Schedule on the Determinants of							
	Foreign Direct Investment -	-	-	-	-	-	-	130
3.3.1.1	Primary data -	-	-	-	-	-	-	130
3.3.1.2	Point Value and Important Scale -	-	-	-	-	-	-	131
3.3.1.3	Secondary data							
3.3.1.4	Sampling Procedure -	-	-	-	-	-	-	132
3.3.1.5	Sampling Design -	-	-	-	-	-	-	134
3.4	Analytical techniques -	-	-	-	-	-	-	136
3.4.1	Survey analysis on the determinants of Foreign							
	Direct Investment -	-	-	-	-	-	-	136
3.4.2	Statistical Analysis of the Determinants of							
	Foreign Direct Investment -	-	-	-	-	-	-	136
3.4.2	Mean, Standard Deviation and Coefficient of Variation							
	of the Determinants of FDI -	-	-	-	-	-	-	136

3.4.2.2.1	Framework for Modelling the Determinants of Foreign Direct Investment	-	-	-	-	-	-	137
3.4.2.2.2	The Model	-	-	-	-	-	-	140
3.4.4.3	Impact of Foreign Direct Investment on Economic Growth	-	-	-	-	-	-	144

CHAPTER 4: PRESENTATION AND ANALYSIS OF DATA

4.1	Introduction	-	-	-	-	-	-	145
4.2	Organization of the Chapter	-	-	-	-	-	-	145
4.3	Number of Businesses and Country of Origin	-	-	-	-	-	-	145
4.4	Sectoral and Industrial Distribution of Participating Companies and Agencies	-	-	-	-	-	-	145
4.5	Empirical analysis of the Determinants of Foreign Direct Investment Flows: Survey Evidence	-	-	-	-	-	-	148
4.5.1	Survey Opinions on Explanatory Variables	-	-	-	-	-	-	150
4.6	Analysis of other Data	-	-	-	-	-	-	156
4.7	Empirical Analysis of the Determinants of Foreign Direct Investment: Statistical Evidence	-	-	-	-	-	-	162
4.7.2	Bases for Selection of Variables for Regression Analysis	-	-	-	-	-	-	170
4.8	Regression Results and Test of Hypotheses	-	-	-	-	-	-	164
4.9	Test of Hypotheses on the Impact of Foreign Direct Investment	-	-	-	-	-	-	170
4.9.1	Technology Transfer	-	-	-	-	-	-	173
4.9.2	The Linkage Issue	-	-	-	-	-	-	175

CHAPTER FIVE: SUMMARY, CONCLUSION AND POLICY IMPLICATION

5.1	Overview of the Foreign Direct Investment Situation	-	-	-	-	-	-	177
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5.2	The Impact of Foreign Direct Investment on the								
	Local Economy	-	-	-	-	-	-	-	180
5.2.1	Investment and Growth	-	-	-	-	-	-	-	181
5.2.2	Transfer of Technology	-	-	-	-	-	-	-	182
5.3	Methodology of the Study and Highlights of Findings	-	-						183
5.3.1	Findings based on the survey	-	-	-	-	-	-	-	184
5.3.2	Findings based on the use of Statistical Techniques	-	-						186
5.3.3	Impact of Foreign Direct Investment	-	-	-	-	-	-	-	187
5.4	Conclusions and Policy Implications	-	-	-	-	-	-	-	188
5.5	Suggestion for Further Research	-	-	-	-	-	-	-	190
BIBLIOGRAPHY									
		-	-	-	-	-	-	-	191
APPENDICES									
		-	-	-	-	-	-	-	199

LIST OF TABLES

TABLES	PAGE
1.1 Chronology of Economic Nationalism in Nigeria - -	2
1.2 International Equity flows to Developed and Emerging Markets - - - - -	6
1.3 Nigeria Major Economic, Financial and Banking Indicators: External Sector Indicators - - - -	9
1.4 Real Sector Indicators - - - - -	10
1.5 Long term Financial flows to Developing Countries - -	12
1.6 Foreign Capital Inflow into Nigeria Through Newly Established Enterprises - - - - -	14
1.7 Sectoral Distribution of Foreign Capital Inflow into Nigeria Through Newly Established Enterprises - - - -	15
1.8 Foreign Investment Flows Through Existing Enterprises -	15
1.9 Components of Net Capital Flows- - - - -	15
1.10 Proportion of External Debt Service Payments and Capital Outflow Through Existing Enterprises to Total Foreign Exchange Outflow - - - - -	16
1.11 Direct Equity Flows to Emerging Markets by Service - -	25
2.1 The World's Largest Industrial Companies - - -	34
2.2A Inward Stocks of World Foreign Direct Investment 1985-96 -	35
2.2B Outward Stocks of Foreign Direct Investment 1985-96- -	36
2.3 Oligopolistic Structure and FDI American Perspectives -	
2.4 Corruption Ratings for Selected Countries - - -	86
2.5 Comparative R & D Effort in Different Countries - -	98
2.6 Ingredients Source and Origin (Cadbury) - - -	101

2.7	Ingredient Source and Origin (Cadbury)	-	-	-	-	103
2.8	Management Staff Composition (Cadbury)-	-	-	-	-	104
2.9	Graduate Staff Discipline Analysis (Cadbury)	-	-	-	-	105
4.1	Number of Businesses and Country of Origin	-	-	-	-	146
4.2	Sectoral/Industrial Distribution of Participating Foreign Affiliate Companies	-	-	-	-	147
4.3	Descriptive Ranking on the Determinants of Foreign Direct Investment inflows in Nigeria	-	-	-	-	149
4.4	Presence of Foreign Directors and Foreign Equity	-	-	-	-	158
4.5	Arrival Time Size of Equity	-	-	-	-	159
4.6	Employment Structure	-	-	-	-	160
4.7A	Analysis of Responses by Commercial Attaches					
4.7B	Rating of Investment Climate					
4.8	Means, Standard Deviations Coefficient of Variation for Foreign Direct Investment Variables	-	-	-	-	163
4.9	Regression Results on the Determinants of Foreign Direct Investments into Nigeria	-	-	-	-	165
4.10A	Investment and GDP Growth Rate	-	-	-	-	172
4.10B	Investment and Export Growth Rate	-	-	-	-	173
	Appendix 2A: Variables for Regression Analysis	-	-	-	-	200
	Appendix 2B: Variables for Regression Analysis	-	-	-	-	205

LIST OF FIGURES

4.1	Mean, Standard Deviation and Coefficient of Variation	-	163b
4.2	Existence of Policy, Training and acquisition of new equipment	-	174
4.3	Local Purchase of Raw Materials	-	176

CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

The world economy is becoming increasingly integrated through the interaction amongst different countries. No country in the world can claim to be able to sustain growth without interacting with other economies.

Countries like Nigeria had practised economic nationalism but it was only for a limited period. A chronology of economic nationalism in Nigeria is shown in Table 1.1. Aware of this scenario countries in the developing world especially in the east Asian countries are now emerging as attractive spots for foreign direct investments.

As pointed out by Glen (1995) with Jun and Glaessner (1995), interest in Emerging Markets as a source of high returns and diversification has increased in recent years. Table 1.2 highlights the pattern of flows to Emerging Markets. One fundamental factor leading the wave of Emerging Markets investment is an increasing volume of research on the markets, once these markets were discovered "Wall Street" investment analysts and investment banking firms have devoted significant amount of resources to provide investors with ever more detailed reports and forecasts on where to invest. Hardly a day passes now without reference by one of the major financial publications to some emerging market development, something unheard of just a few years ago.

The observation by Glen is not different from what is happening on the spot here in Nigeria. Most major financial publications carry news of moves by the government to attract foreign investment. There have been conferences and symposia on ways to attract foreign investment. Investment promotion liason offices have

Table 1.1

Chronology of Economic Nationalism in Nigeria

- 1946: Nigerian Local Development Boards set up
- 1948: Lagos Chamber of Commerce modifies charter to admit African
- 1951: Aid to Pioneer Industry Ordinance (provides incentives for foreign Companies employing Nigerians)
- 1952: Statement of immigration policy (to increase indigenous participation in distributive trade).
- 1956: Industrial Estates established
Reiteration of 1952 immigration policy
- 1958: Mbadiwe sets up commission to examine problems of indigenous businessmen
Tax Relief Act (requires limited Nigerianization of personnel and management in foreign firms seeking favorable tax treatment)
- 1959: Report of Advisory Commission on Aids to African Businessmen submitted to federal government
- 1961: Waziri Ibrahim's statement in parliament calling for the distributive trade and road transport to be reserved for Nigerians.
- 1962: Nationalization debate in parliament
- 1963: Immigration Act (stipulates that no alien can practice a profession without Ministry of Internal Affairs approval and establishes a quota system for expatriate employees of newly established MNCs)
- 1964: Government statement on industrial policy (announces preferences to firms with 10% indigenous participation and 45% local content).
NIDB established
- 1965: National Commission on the Nigerianization of Business Enterprises set up (August)

- 1966: Expatriate Quota Allocation Board created
- 1968: Companies Decree
- 1969: Banking legislation introduced (banks are required to incorporate in Nigeria and publish audited statements of account)
- Petroleum Decree (requires oil companies to Nigerianize not fewer than 60% of jobs at all levels and not fewer than 75% of management positions within ten years of receiving a lease; applies to new concessions only) National Insurance Company of Nigeria (NICON), established
- 1970: Second National Development Plan (provides guidelines for training and personnel indigenization and introduces a rationale for equity indigenization.
- 1971: Government acquires 40% of three largest commercial banks (April).
- Nigeria joins OPEC (July)
- Nigerian National Oil Company (NNOC) established and government acquires majority (and some minority) participation in petroleum companies
- Industrial Training Fund Decree (No. 47) announced
- 1972: Nigerian Council for Management Education and Training reconstituted to coordinate future programs (January)
- NIGERIAN ENTERPRISES PROMOTION DECREE (1972) promulgated 23 February)
- Plan for NBCI announced (April)
- 1973: Centre for Management Development established (January)
- Capital Issues Commission founded (March)
- National Bank for Commerce and Industry (NBCI) established (May)
- NEPD Amendment (No. 732) (23 June)
- Nigerian Agricultural Development Bank (NADB) created
- 1974: NEPD Amendment (No. 2) announced (February)
- Government acquires 55% of petroleum industry

Government acquires 40% of NICON (National Insurance Company of Nigeria)

Nigerian Economic Society symposium on indigenization (9 November)

1975: Government acquires 49% of insurance companies Third National Development Plan (declares that government will introduce measures to ensure that indigenous equity holding is reflected in the control of the businesses concerned)

Adeosun panel is convened (17 November)

1976: Adeosun Commission report is submitted (25 March)

Government White Paper commenting on Adeosun report is released (29 June)

Government announces intention to acquire 60% of the banks (1 July)

Nigerian Institute of Management conference on indigenization is held (September)

Dividend payments are restricted to 30% of gross earnings Capital Issues Commission (CIC) is transformed into the Nigerian Securities and Exchange Commission (NSEC)

1977: NIGERIAN ENTERPRISES PROMOTION DECREE (1977) promulgated (12 January)

Dividend payments are restricted to 40%

Nigerian National Petroleum Corporation (NNPC) established (1 April)

1978: Nigerian Reinsurance Company established

Lending operations of insurance companies brought under Central Bank control

1979: Nigeria hires General Superintendence Company of Switzerland (SGS) to monitor transfer pricing of multinational corporations (February)

Dividend payments restricted to 50% of after-tax profits

Securities and Exchange Commission Decree formally establishes NSEC (27 September)

1980: Fourth National Development Plan

Management guidelines issued by the NEPB as a condition for issue of certificates of compliance (May)

Nigerian Industrial policy guidelines announced

1981: Some relaxation of NEPD 2 begun, as several industries are reclassified from Schedule 2 to Schedule 3

NNPC reorganized and decentralized into nine subsidiaries

1982: NEPD requests amendment to NEPD 2 to clarify guidelines regarding management control

1988: Further relaxation of NEPD

1995: Repeal of NEPD and Exchange control Act of 1962 and promulgation of Nigerian investment promotion council decree.

Table 1.2

International Equity Flows to Developed and Emerging Markets
(Net flows in billions of U.S. Dollars)

		Emerging Markets			
	Developed Markets	Latin America	Asia	Other	Total
1989	38.6	8.20	3.43	-0.29	3.3
1990	10.6	0.43	6.03	-0.58	5.9
1991	29.4	0.72	2.45	0.30	3.5
1992	76.5	6.98	3.36	-0.27	10.1
1993	-10.0	9.89	3.89	-0.62	13.2
1994	84.9	11.15	4.73	-0.10	15.8
1995	31.9	9.64	10.95	1.86	21.9
1996	126.5	20.01	38.93	2.23	61.2
AveAverage 1989-96	48.5	7.4	9.22	0.32	16.8

Source: Baring Securities: Cross-Border Analysis.

been opened by relevant agencies in order to ensure that Nigeria takes advantage of this irreversible globalization trend. The climax of the campaign for foreign investment was reached in the 1995 Budget when the Nigerian Enterprises Promotion Decree of 1972 and 1977 including the Exchange Control Act of 1962 were all repealed. Conversely the Nigerian Investment Promotion Decree of 1995 was promulgated.

In the 1997 Budget the government openly admitted that:

For ever 20 years government has been investing in projects that were exclusively meant for the private sector. These investments were through loans from multilateral institutions, the international capital market as well as internally generated revenue. The door was shut to private investments.

Apart from this self indictment by the Abacha led Federal Government the 1997

Budget statement added that:

Government is prepared to enter into investor protection agreement with foreign governments or private organisations wishing to invest in Nigeria. Government would welcome investments in areas of telecommunications, electricity generation, exploration of petroleum sector, export refineries, coal and bitumen exploitation, hotel and tourism. Government is prepared to discuss additional incentives with prospective investors, so as to tailor such incentives to meet with each investor's needs. The laws that inhibit competition in all sectors of the economy will be repealed in 1997.

Similarly, in the concluding remarks of the 1998 Budget specification, the then

Honourable Minister of Finance declared thus:

Being a Budget of Transition we drew heavily from the lessons of all the past budgets of this administration. Our aim has been to consolidate the platform of continuity in economic reforms, a process which has now climaxed in this Budget's historic and comprehensive opening up of the economy in all ramifications. The significance of this development which we expect will not be lost on all potential investors, is that there must be very few, if any economies that can claim to be more open than ours. Budget 1998 is a signal to the global community of investors that our nation is ready and endowed to benefit fully from the wisdom of the market.

As for the Abubakar administration the reversing of Nigerian's investment image was his first concern on assumption of office. Later in 1998 he consequently undertook official visits to the United Kingdom, the United States of America and France.

The new democratic government in Nigeria has left nobody in doubt on the main thrust of their economic policy. President Obasanjo during his election campaigns made the attraction of foreign investment one of his strong points.

Consequently, immediately Obasanjo won the election he embarked on a tour of Europe and America to solicit for foreign investment.

President Obasanjo has within his first year in office received and hosted different trade missions. The Nigerian Investment Promotion Council (NIPC) has since the take off the new democratic government launched many aggressive moves to attract more foreign investors. Recently in the month of July 1999 the United States Agency for International Development (USAID) organised a seminar for the employees of the Nigerian Investment Promotion Council, an activity which would have been impossible two years ago. In confirmation and recognition of the problem being studied government has recently projected a N10 trillion inflow of foreign invest-

ment with the next 10 years with an estimated growth rate of 10 percent in order for the economy to reach expected heights with the decade. (Nigerian Economic Policy 1999-2003)

1.2 STATEMENT OF THE PROBLEM

There are two major obstacles to higher economic growth faced by Nigeria in the 21st century. These two obstacles are: low investment and shortages of foreign exchange. Table 1.3 depicts external sector indicators from 1980 - 1995 comprising the balance of payments, external assets, foreign exchange flows, export of goods and service, imports, and average exchange rates. Table 1.3 confirms that Nigeria has had a weak balance of payment position since the past fifteen years. Foreign investment could address the problems of low investment and shortages of foreign exchange. It brings in foreign exchange supplements domestic savings, and raises investment.

On the other hand, import - substituting investment can reduce import bills, while investment in export industries will increase foreign exchange earnings. There could be other spill over effects: the expansion of local industries to supply inputs to the new plants, the rise in domestic demand, the boost in income through taxation and the transfer of labour (including management skills and technology). Foreign investment could also increase the efficiency of the domestic economy even before the anticipated investment flows. However, as pointed out by Messing (1996) the demand for investment capital in developing countries exceeds the supply. In addition Transnational corporations, the main suppliers of foreign direct investment and portfolio investment make investments decisions based upon the laws of economics, not the laws of politics; upon economic rationalism, not economic nationalism. In determining where to invest Transnational corporations evaluate and balance both positive and negative factors, including obstacles to foreign investments.

NIGERIA: MAJOR ECONOMIC, FINANCIAL AND BANKING INDICATORS

TABLE 1.3: EXTERNAL SECTOR INDICATORS

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1. BALANCE OF PAYMENTS (N'b)																
Overall Position	2.4	3.0	-1.4	-0.3	0.4	0.3	-0.8	0.2	-2.3	8.7	-5.8	-15.5	-101.4	-41.7	-42.6	-144.8
Current Account Position	2.4	-4.0	-4.9	-3.1	0.0	2.2	-3.0	-0.3	-1.0	8.2	10.4	-12.6	5.1	-19.6	-48.5	-266.4
Capital Account Position	0.1	0.9	3.5	2.7	0.2	1.8	-1.9	1.7	0.1	1.5	-23.9	-2.2	-94.2	-19.7	7.6	118.1
2. EXTERNAL ASSETS (N'b)	5.7	2.6	1.1	0.8	1.4	1.9	6.2	8.0	10.3	23.2	45.5	57.7	39.6	61.4	58.9	104.4
CBN(%)	96.7	94.1	96.4	87.5	75.9	84.6	58.0	58.3	32.0	58.0	76.7	76.7	35.3	47.4	61.6	29.7
Others (%)	3.3	5.9	3.6	12.5	24.1	15.4	42.0	41.7	68.0	41.8	23.3	23.3	64.7	52.6	38.4	70.3
3. FOREIGN EXCHANGE FLOWS (\$'b)																
Inflow	26.0	21.4	15.0	11.7	12.1	12.4	7.2	6.6	6.5	8.1	11.0	12.1	10.6	7.5	6.1	8.5
Outflow	21.0	26.4	17.0	12.1	11.7	11.7	6.5	5.3	6.3	6.7	9.1	12.1	12.3	7.4	6.3	8.1
Net	4.4	-5.0	-2.1	-0.4	0.5	0.6	0.7	1.3	0.2	1.4	1.9	0.0	-1.7	0.1	-0.2	0.4
4. EXPORTS OF GOODS & SERVICES (N'b)	14.9	11.9	8.6	7.6	9.4	12.2	8.4	31.4	31.7	63.2	120.1	132.4	226.9	245.7	215.5	751.6
Oil (%)	90.9	89.7	93.3	92.5	94.5	91.9	88.2	89.7	89.5	87.0	88.8	88.3	88.8	87.0	93.2	96.8
Non-Oil (Including Invisibles) (%)	9.1	10.3	6.7	7.5	5.5	8.1	11.8	10.3	10.5	13.0	11.2	11.7	11.2	13.0	6.8	3.1
Non-Oil (Excluding Invisibles) (%)	3.7	2.9	2.4	3.9	2.6	4.1	5.8	6.8	8.8	4.7	2.7	3.5	1.9	2.0	2.5	2.7
5. IMPORT (N'b)	9.1	12.9	10.8	8.9	7.2	7.1	5.9	17.9	21.4	30.9	45.7	89.5	143.2	165.6	161	656.6
Capital Goods (%)	33.5	31.1	32.8	32.4	32.1	35.2	40.8	42.4	32.0	44.7	40.5	38.0	31.7	26.4	24.8	21.5
Raw Materials (%)	26.8	24.4	25.1	25.9	29.7	35.3	29.5	33.5	39.2	27.9	32.8	26.8	33.9	38.6	39.1	45.3
6. AVERAGE EXCHANGE RATES																
Official (N/\$)	0.5469	0.6048	0.6731	0.7235	0.7642	0.8924	1.2713	3.5971	4.5065	7.3855	7.9422	9.9095	17.2985	22.0654	21.8861	21.8661
Official (N/)	-	-	-	-	-	-	-	-	8.0895	11.0110	14.3563	17.4720	30.4033	33.1352	33.6745	34.582
Bureau de Change (N/)	-	-	-	-	-	-	-	-	10.1300	9.5540	13.4078	20.3940	35.9775	23.4246	78.5891	
Parallel Market (N/\$)	-	-	-	-	-	-	-	-	6.0500	10.5300	9.6067	13.4254	20.3396	36.1527	60.7608	83.5421

Source: Central Bank of Nigeria 1996

NIGERIA: MAJOR ECONOMIC, FINANCIAL AND BANKING INDICATORS

TABLE 1.4: REAL SECTOR INDICATORS

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
1. GPD AT 1984 FACTOR COST (N'billion)	-	70.4	70.2	66.4	63.0	68.9	71.1	70.7	77.8	83.5	90.3	94.6	97.4	100.0	101.0	103.2
Growth Rate (%) of Aggregate GDP	-	-	-0.3	-5.4	-5.1	9.4	3.2	-0.6	10.0	7.3	8.2	4.8	3.0	2.7	1.0	22
Agriculture	-	-	2.2	-2.7	-4.5	24.3	11.0	-3.9	10.7	5.2	4.2	4.4	3.2	2.9	3.0	3.2
Manufacturing	-	-	12.9	-30.4	10.9	20.4	-3.4	5.3	11.7	1.5	8.8	8.1	-4.8	-4.2	-5.0	2
Crude Oil	-	-	-12.1	-2.3	12.9	8.3	-5.8	-9.2	7.9	14.6	5.5	9.5	2.7	0.2	-2.6	0.8
2. GMP PER CAPITA (M) (AT 1984 CONSTANT MARKET PRICES)	-	-	-	-	-	-	660.1	639.8	686.0	958.7	1,027.1	1,055.6	1,047.2	1,051.8	1,041.8	1,030.9
3. GROSS NATIONAL SAVINGS (Nb) AT 1984 MARKET PRICES)	-	3.9	4.5	4.8	2.7	3.6	3.8	7.9	10.57	15.60	19.29	16.66	12.73	10.43	9.72	10.11
4. POPULATION AND DEMOGRAPHY Population of Nigeria (million)	64.7	66.8	68.4	70.7	73.0	75.5	77.9	80.5	83.2	84.9	86.7	88.5	91.3	93.3	95.2	97
5. UNEMPLOYMENT RATE (%)																
National	-	-	-	-	-	6.1	5.3	7.0	5.3	4.5	3.5	3.1	3.4	2.7	2.0	1.8
Urban	-	-	-	-	-	9.8	9.1	9.8	7.8	8.1	5.9	4.9	4.6	3.8	2.3	3.6
Rural	-	-	-	-	-	5.2	4.6	6.1	4.8	3.7	3.0	2.7	3.2	2.5	1.7	1.4
6. INDUSTRIAL RELATIONS (NO)																
Trade Disputes	355	258	341	184	100	77	87	65	256	144	147	198	185	160	175	196
Work Stoppages	265	234	253	131	49	40	53	38	124	80	102	95	92	90	103	124
Workers Involved ('000)	221	324	2,875	629	42	20	157	57	56	157	255	403	128	880	1,538	1,546
Man-days Lost ('000)	2,351	2,218	9,652	405	302	119	461	143	231	580	1,339	1,957	397	6,192	234,299	235,069

Source: Central Bank of Nigeria 1997

The need and interest in seeking ways of increasing the inflow of foreign investments, especially foreign direct investment is based on the realisation that as can be verified from Table 1.4, Nigeria has a virile population, a vast market for a wide range of industrial products. In addition Nigeria has an abundance of natural resources but has according to Hutchinson of the World Bank benefitted very little from the new developments in the international markets. For example as can be seen from Table 1.5, between 1989 and 1993 official inflows were positive mainly during the years when Nigeria was still more or less implementing the structural adjustment programme. After 1992 when SAP went seriously off track, official flows turned negative. There has been a modest flow of direct investment around \$1.06 billion per year principally into the petroleum sector.

1.2.1 CAPITAL INFLOW FOR ESTABLISHING NEW ENTERPRISES

In order to present a more convincing insight into the nature of the problem under study, actual figures of inflows through newly established enterprises are presented on Table 1.6.

The figures indicate that foreign capital inflow during the last two decades have been extremely low and insignificant even after the review of the indigenization policy in 1988. At N27.9 million in 1990, foreign investment inflow through newly established enterprises comprised machinery and equipment worth N23.7 million or 85 per cent of the total, and foreign currency valued at N4.2 million. Capital inflow for establishing new enterprises in 1991 was more than threefold the level in the preceeding year. It then rose further to N282.3 and N1,405.4 million in 1992 and 1993. In 1994 the value of foreign investment for establishing new companies declined sharply to N292.5 million.

TABLE 1.5
Long Term Financial Flows to Developing Countries
(1989 - 1994)

	1989	1990	1991	1992	1993	1994	1/89/93
Total	84.5	103.4	124.8	153.0	213.1	227.4	678.8
Official	42.6	57.9	61.9	50.3	53.9	54.5	266.6
of which multilateral	11.8	15.2	15.0	12.7	14.5	13.2	69.2
Private	41.9	45.5	62.9	102.7	159.2	172.9	412.2
Debt	12.7	15.0	18.5	41.4	45.7	55.5	133.3
Bonds	5.3	3.4	12.5	12.9	42.1	NA	76.2
Commercial Banks	0.8	0.1	3.9	12.8	2.2	NA	15.4
Suppliers	1.1	7.3	2.2	0.0	2.0	NA	8.2
Other	10.8	7.6	16.8	28.6	45.9	NA	108.7
Direct Investment	25.7	26.7	36.8	47.1	66.6	77.9	202.9
Portfolio Investment	3.5	3.8	7.6	14.2	46.9	39.5	76.0
Import Value Index							
NIGERIA	0.928	0.979	0.978	0.993	0.957	1.000	
Total	3819	2180	1209	3839	688	NA	4057
Official	3918	2340	2007	664	257	NA	7344
of which multilateral	324	560	277	78	236	NA	1475
Private	99	160	798	3175	945	NA	3287
Debt	1981	748	1410	4072	45	NA	8166
Direct Investment	1882	588	612	897	900	NA	4879
Portfolio Investment	0	0	0	0	0	NA	0
1/Preliminary							

Source: 1995 World Debt Tables

1.2.2 SECTORAL DISTRIBUTION OF THE INFLOW OF FOREIGN CAPITAL

Table 1.7 contains the sectoral distribution of the inflow of foreign capital. It indicates that the foreign capital inflow for establishing new companies was invested largely in agriculture and agro-allied, chemical and petrochemical and engineering activities. Other sectors that received foreign capital inflow included computer assembly, hotels and restaurants, urban development, merchant banking and trading. The inference that comes out clearly from the available data is that capital inflow through newly established industries was grossly inadequate. They however rose steadily from 1990 to 1993 owing perhaps to policy review in 1988 but fell sharply in 1994.

1.2.3 FOREIGN INVESTMENT THROUGH EXISTING ENTERPRISES

Data on foreign investment flows through the existing enterprises are presented in Table 1.8. to 1.10 Aggregate inflow through existing foreign/jointly owned companies during the seventies averaged N562.3 million yearly in nominal terms. As a proportion of the gross domestic output it accounted for 3.6 per cent; it represented 9.4 per cent of the real capital formation during the period. Before the introduction of the SAP in 1986, total foreign investment inflow from 1980 averaged N1,341.2 million annually. It constituted 2.3 and 19.5 per cent of the GDP and gross capital formation, respectively. Between 1986 and 1992 foreign investment inflow through existing companies averaged N6,407.9 million annually. At that level, it represented 3.3 and 35.7 per cent of GDP and to capital formation, respectively.

Aggregate outflow through foreign/jointly owned enterprises averaged N1821.9 million annually between 1970 and 1992 and represented 15.7 per cent of gross capital formation during the period.

TABLE 1.6

FOREIGN CAPITAL INFLOW INTO NIGERIA THROUGH NEWLY ESTABLISHED ENTERPRISES (=N= MILLION)

Year	Machinery and Equipment	Cash in Foreign Currency	Total
1990	23.7	4.2	27.9
1991	86.8	11.3	98.1
1992	80.7	201.6	282.3
1993	674.1	731.3	1405.4
1994	112.6	179.9	292.5

SOURCE: INDUSTRIAL DEVELOPMENT CO-ORDINATING COMMITTEE (IDCC)

TABLE 1.7

SECTORAL DISTRIBUTION OF FOREIGN CAPITAL INFLOW INTO NIGERIA THROUGH NEWLY ESTABLISHED ENTERPRISES (NOMINAL VALUE =N= MILLION)

Year	Agricultural & Agro-Allied	Chemical & Petrochemical	Engineering	Other	Total
1990	4.2	4.8	18.9	0.0	27.9
1991	18.2	50.8	631.3	28.5	98.1
1992	94.3	100.2	49.0	38.8	282.3
1993	484.3	339.1	530.3	51.7	1,405.1
1994	28.2	96.1	86.7	81.5	292.5

SOURCE: Industrial Development Co-ordinating Committee (IDCC)

TABLE 1.8

FOREIGN INVESTMENT FLOWS THROUGH EXISTING ENTERPRISES
(=N= MILLION)

Year	Total Inflow	Total Outflow	Inflow in Real Terms	Inflow as Real Terms	Inflow as Proportion of GDP	Inflow as Proportion of Capital Form	Outflow as Proportion of Capital Form	Outflow as Proportion of GDP
1970	251.0	129.4	10.8	5.6	4.4	28.4	14.7	2.3
1971	489.6	170.0	20.6	7.2	6.8	38.2	13.3	2.4
1972	432.8	184.5	17.9	7.6	5.5	30.9	13.2	2.4
1973	577.8	385.2	12.3	8.2	5.2	22.1	14.7	3.4
1974	507.1	458.8	8.9	8.1	2.7	16.0	14.5	2.5
1975	757.4	282.0	16.7	6.2	3.5	13.7	5.1	1.3
1976	521.1	474.8	9.9	9.0	1.9	6.1	5.5	1.7
1977	717.3	519.7	13.2	9.6	2.2	7.2	5.2	1.6
1978	664.7	332.9	9.0	4.5	1.8	6.7	3.4	0.9
1979	704.0	414.1	8.2	4.8	1.6	7.3	4.3	1.0
1980	786.4	319.4	8.9	3.6	1.6	6.9	2.8	0.6
1981	584.9	447.1	7.0	5.4	1.2	5.0	3.9	0.9
1982	2,193.4	568.5	23.3	6.0	4.2	22.5	5.8	1.1
1983	1,673.6	1,116.9	17.0	11.3	2.9	22.4	14.9	2.0
1984	1,385.3	850.5	13.9	8.5	2.2	32.5	20.0	1.3
1985	1,423.5	1,093.8	12.2	9.4	2.0	27.8	21.3	1.5
1986	4,024.0	1,524.4	24.8	9.9	5.5	52.0	19.7	1.1
1987	5,110.8	4,430.8	19.0	16.5	4.7	53.2	46.2	4.1
1988	6,236.7	4,891.1	20.8	16.3	4.3	66.4	52.1	3.4
1989	1,692.7	5,132.1	3.9	12.0	0.8	9.2	27.9	2.3
1990	10,450.2	10,914.5	19.2	20.1	4.0	33.6	35.1	4.2
1991	510.2	3,802.2	8.7	5.9	1.7	15.7	10.7	1.2
1992	11,730.7	3,761.5	11.1	3.3	2.1	19.9	5.9	0.6

SOURCE: INDUSTRIAL DEVELOPMENT CO-ORDINATING COMMITTEE (IDCC)

TABLE 1.9

COMPONENTS OF NET CAPITAL FLOWS
=N= MILLION

Year	Unremitted Profit	Changes in Foreign Share Capital (Net)	Trade and Suppliers Credit (Net)	Other Foreign Liabilities (Net)	Liabilities to Head Office (Net)
1970	37.6	9.8	62.4	-3.6	15.4
1971	59.6	28.4	67.4	-29.0	193.2
1972	68.2	16.3	26.4	-42.0	179.4
1973	83.5	36.7	183.9	-208.5	97.0
1974	85.9	-39.3	81.6	85.6	-16.1
1975	147.6	30.2	151.4	159.9	-13.7
1976	167.7	63.5	76.7	-191.8	-70.0
1977	210.4	35.4	103.3	-86.0	-65.4
1978	192.9	17.3	163.0	-44.4	3.0
1979	165.6	79.0	84.3	50.0	-82.0
1980	104.5	50.5	80.6	201.7	29.7
1981	113.5	41.6	204.4	-279.1	14.4
1982	413.3	66.6	238.4	955.1	48.5
1983	228.8	89.5	664.1	-294.6	-121.3
1984	329.9	53.4	-58.9	233.3	-22.9
1985	317.1	58.7	291.8	-395.2	57.3
1986	316.4	83.8	652.7	481.2	955.5
1987	427.5	152.9	1,119.6	-1,341.4	321.4
1988	396.9	287.0	795.6	-489.3	1,345.6
1989	1,194.5	525.0	661.6	134.9	-439.4
1990	1,538.8	516.9	672.4	-8,329.9	-464.3
1991	2,101.5	669.1	707.2	-1,005.5	1,808.0
1992	889.3	227.0	8,964.4	-1,700.9	8,269.2

SOURCE: INDUSTRIAL DEVELOPMENT CO-ORDINATING COMMITTEE (IDCC)

TABLE 1.10

PROPORTION OF EXTERNAL DEBT SERVICE PAYMENTS AND CAPITAL OUTFLOW
THROUGH EXISTING ENTERPRISES TO TOTAL FOREIGN EXCHANGE OUTFLOW
(=N= MILLION)

Year	Debt Service Payments (1)	Capital outflow Through Existing Enterprises (2)	Total Foreign Exchange Outflow (3)	Proportion of 1 to 3 (%)	Proportion of 2 to 3 (%)
1970	31.0	129.4	592.8	5.2	21.8
1971	29.9	170.0	913.6	3.3	18.6
1972	26.2	184.5	1,234.2	2.1	15.0
1973	30.8	385.2	1,913.1	1.7	21.3
1974	29.1	485.2	2,185.5	1.3	22.2
1975	32.7	282.0	5,517.3	0.6	5.1
1976	30.4	474.8	6,901.2	0.4	6.9
1977	33.4	519.7	8,281.1	0.4	6.3
1978	160.8	332.9	8,948.7	1.8	3.7
1979	183.2	414.1	8,607.3	2.1	4.8
1980	278.3	319.4	11,804.8	2.4	2.7
1981	471.2	447.1	15,993.6	3.0	2.8
1982	874.4	568.5	11,462.4	7.6	5.0
1983	1,174.4	1,116.9	8,751.0	13.1	12.8
1984	1,548.0	850.5	8,908.6	17.4	9.6
1985	3,718.0	1,093.8	16,463.0	35.5	10.5
1986	533.4	1,524.4	9,752.7	5.5	15.6
1987	3,574.6	4,430.8	21,037.0	17.0	21.1
1988	7,006.6	4,891.1	27,912.5	25.1	17.5
1989	12,163.1	5,132.1	49,563.4	24.5	10.4
1990	30,855.8	10,914.5	65,989.8	46.8	16.5
1991	35,334.2	3,802.2	98,178.4	36.0	3.9
1992	40,761.7	3,461.5	116,421.7	35.0	3.0

SOURCE: INDUSTRIAL DEVELOPMENT CO-ORDINATING COMMITTEE
(IDCC)

Between 1970 and 1986, the outflow on an annual basis averaged N545.4 million or 1.7 and 10.7 per cent of GDP and capital formation respectively. After 1986 outflow through jointly owned companies averaged N5,692.7 million per annum. On a net basis, the most significant components of foreign investment inflow through the existing enterprises consisted of unremitted profits and trade and suppliers' credit had averaged nominal values of N178.9 million and N179.6 million, respectively before 1986. Since SAP they recorded respective annual averages of N1,090.3 million. The average of capital inflow in respect of changes in equity participation rose from N42.4 million before SAP to N396.3 million thereafter.

1.2.4.1 FACTORS AFFECTING INFLOW OF FOREIGN DIRECT INVESTMENT: Regulatory and Institutional Arrangements

Over the years, at least up to January 1988, when the most recent industrial policy guidelines were introduced, the institutional arrangements to facilitate the inflow of foreign investment had been rather unsatisfactory. Foreign investors had to go through tortuous, time consuming and costly procedures before obtaining the mandatory business permits required for company incorporation; obtain approvals for expatriate quota, pioneer status, and secure technical and management agreements and approved-user status. These had to be processed in different government ministries and agencies. The experience of paying frequent visits to relevant ministries with overlapping jurisdictions in the administration of the incentives and regulatory framework, no doubt discouraged foreign investment inflow. Also, discretionary powers, ambiguities and in some cases anachronistic provisions, characterised the legislations governing foreign investments. One of the most far reaching developments in the area of enterprise law was the promulgation and enforcement of the Nigerian Enterprises Promotion Decree (NEPD) in 1972 which classified enterprises

into three categories. The first category contained enterprises which required simple technological know how. These were reserved entirely for Nigerians. Enterprises in the second and third categories were to be joint-ventures between Nigerians and foreign partners with varying ceilings on participation by foreigners. The enterprises contained in Schedule Two were to have Nigerian majority shareholding with minority foreign participation. The highly technological group of enterprises listed in Schedule Three could be controlled by foreign investors if they had majority shareholdings. Exclusive or 100 percent ownership of any enterprise by a foreign investor was precluded in the first version of the Decree. The amended version of the Decree published in 1977 also forbids wholly-owned enterprises by foreigners. In the subsequent amended version of the Decree introduced in 1988, the only scheduled enterprises were those reserved for Nigerians. Foreign investors were free to wholly-own any unscheduled enterprise provided it was not in banking, insurance, petroleum prospecting and mining businesses, sectors in which the Federal Government had equity holdings.

The most controversial aspect of the NEPD of 1972 appeared to be its retroactive effect which compelled existing enterprises that did not meet the provisions of the Decree to sell their excess shares to Nigerians at the initial period of the enforcement of the Decree. That aspect of the Decree was regarded by many foreign investors as a form of nationalisation. The enforcement of the Decree, therefore, resulted in the liquidation of some companies owned by important multinationals in the banking and industrial sectors which were averse to ownership dilution considered capable of creating problems of control for the enterprises.

The inflow of new foreign investment since the enforcement of the 1972 Decree had dwindled and has not recovered to the level in the sixties. In contrast, investment appears to be flowing to countries which have not introduced similar regu-

latory arrangements. The experience has tended to confirm the thesis that the flow of foreign investments is responsive to a country's structure of investment incentives. In retrospect, it has been difficult to find acceptable rationale for the introduction of the 1972 Decree except on grounds of national sentiments. It could not have been justifiable on grounds of potential for increased output and employment or technological know-how by Nigerians nor could its continued retention be supported by the apparent prolonged decline in Nigeria's educational standards.

1.2.4.2 MACROECONOMIC ENVIRONMENT

Another important factor that constrained foreign investment inflow to Nigeria was the type of macroeconomic policies adopted in the management of the Nigerian economy. Before the introduction of the SAP in 1986, economic management relied mainly on direct controls in all the sectors of the economy. Monetary policy was based on the strategy of mandatory credit ceilings on individual banks and administratively determined interest rates which discriminated among many sectors. Government fiscal operations also resulted in persistent deficits financed by borrowing from the banking system. The real sector policies also depended on price controls and a system of subsidies. Government participation in industry and agriculture was pervasive, with major basic enterprises being wholly-owned or controlled by government.

This left significantly reduced role for private investment - whether foreign or indigenous. The external sector policies also relied on exchange control regulations which were supported by an over-valued fixed Naira exchange rate regime, quantitative quota restrictions, outright banning of the importation of many commodities, import licensing and strict foreign exchange rationing. Also, the strategy of import substitution was combined with the policy of industrial protection achieved through

the erection of tariff barriers with a view to shielding domestic manufacturers from foreign competition.

The adverse effects of these measures on foreign investment enterprises included substantial low capacity utilization, strong and high import dependence, high cost of production leading to uncompetitiveness in international trade and the consequent inability to export manufactured products. The loss of competitiveness also discouraged agricultural production both for domestic and export use. This development, combined with the over-valuation of the Naira exchange rate, intensified the foreign exchange constraint on the economy, and rendered the sustainability of the inappropriate macroeconomic policies difficult. The financial, trade and exchange rate policies were totally inappropriate for foreign and domestic investments as the economic environment was characterised by instability and distortions arising from the administrative control measures that fixed basic prices well below what would have ruled given the prevailing market fundamentals. Such control measures led to the proliferation and growth of parallel markets and sustained capital flight.

1.2.4.3 **SOCIO-POLITICAL INSTABILITY**

The first National Development Plan (1962 - 1964) was launched with the objective of providing the framework for the industrial take off of the economy. The plan was thus called an "open door plan" which actually saw many foreign investors choosing Nigeria as their sites.

Unfortunately, about five years later when the policy of the young Nigeria state was still being watched by the rest of the world, the country plunged herself into its first military coup d'etat, which was followed by a civil war. Since 1966 when the first coup d'etat took place, Nigeria has witnessed about six additional coups. During most of the military regimes, various controls were put on foreign private investment, such as licensing, quotas, exchange controls, restrictions on capital/dividends trans-

fer etc. Furthermore, the company Act of 1968 was promulgated to replace the United Kingdom Act of 1908. The Act made it compulsory for all companies operating in Nigeria to secure incorporation. All these measures were seen as unnecessary burden by both alien investors as well as other observers. The Act made all the companies in the economy subject to Nigerian laws (through compulsory incorporation) and thus discouraged not only existing foreign private investment but also acted as disincentive to future inbound overseas capital.

1.2.4.4 Impact of Foreign Direct Investment

Due to the controversial nature of foreign direct investment (FDI) it will be necessary to evaluate some of impact of FDI on a developing country such as Nigeria.

The benefits of foreign direct investment include:

- * Transfer of capital, technology and entrepreneurship to recipient or host country.
- * Improvement of the host country's balance of payments
- * Creation of local job and employment opportunities
- * Improved competition in the local economy
- * Greater availability of products for local consumers

On the other hand critical writers on foreign direct investment (FDI) claim that FDI has some potential negative impact which include

- * Political interference on the part of multinational enterprises the agents of FDI
- * Social/cultural disruptions and changes
- * Local economic dependence on decisions made outside the country
- * Introduction of inappropriate technology
- * Depletion of foreign exchange through payment of dividends

Recently, IMF (1997) has warned on the dangers of unrestrained drive for foreign investment following the East Asian financial crises. Although as pointed out by the International Monetary Fund the impacts of foreign direct investment depends on country specific factors. These facts warrant the need to explore what impact foreign direct investment had made or could make in the economy that would justify any passed or future policy on it. The overall evaluation of the impact of foreign direct investment should be on whether it has contributed to economic growth or not.

1.3 OBJECTIVES OF THE STUDY

Generally, in the past budgets (1995-1999) policy makers in Nigeria have been making pronouncements on the readiness of the country to attract foreign investments. There have been proposed changes on our macro economic structures all in an effort to attract foreign investment but still the rate of inflow has not significantly appreciated compared to the size of Nigeria economy.

This study is in relation to the problem stated in section 1.2 designed to provide tested and reliable information on the specific determinants of foreign direct investment in Nigeria.

On the other hand due to the controversial nature of the effects of foreign direct investment it is necessary to evaluate the contributions that could be made or have been made by existing or prospective foreign direct investment in Nigeria.

Specifically, the study in relation to the problems already stated attempts to provide answers to the following research questions:

- (1) Why has the inflow of foreign direct investment not increased despite improvement in our macro-economic structures?
- (2) What factors do foreign investors consider most important in making their investment decisions in a country such as Nigeria?
- (3) Is the economy actually "open" and investor friendly?

- (4) Does political instability negatively affect FDI flows?
- (5) Has foreign direct investment contributed in technology transfer?
- (6) Has foreign direct investment contributed to economic growth?
- (7) What are the linkages or relationships between foreign direct investment and the local economy?

1.4.1 FRAMEWORK AND HYPOTHESES

The following hypotheses are tested. They form the background of the literature review and the framework of the model in chapters 3. They are stated only in the null form to avoid redundancy since the alternative hypotheses are implied.

- Ho₁ Socio-political instability does not affect foreign direct investment flows
- Ho₂ The perception of overall favourable business operating condition does not have effect on foreign direct investment flows thus: $FDI = BX_t + e_t$
- Ho₃ Foreign direct investment in Nigeria does not contribute to economic growth.

The hypotheses on economic growth was tested using gross domestic product growth and export growth as dependent variables; so the subsidiary hypotheses should be:

Ho_{3a}: Foreign direct investment does not enhance the growth of gross domestic product.

Ho_{3b}: Foreign direct investment does not enhance the growth of exports.

In the two subsidiary hypotheses the various investment components namely; public investment, private investment, foreign direct investment, domestic public debt, external debt were used as explanatory variables; thus

$$GDPG = a_0 + a_1 + a_2 + a_3 + a_4 + a_5 + a_6 + E$$

similarly

$$EXPG = B_0 + B_1 + B_2 + B_3 + B_4 + B_5 + B_6 + E$$

1.4.2 METHODOLOGICAL HIGHLIGHTS

The empirical analysis applied in the study are of three dimensions. First a survey of affiliate managers was carried out through a pretested questionnaire on 257 affiliate managers and representatives of foreign companies that participated in the 1999 Lagos International Fair.

Second, the mean, standard deviation and coefficient of variation of the responses were determined.

Third, the study carried out a regression analysis on the determinants and impact of foreign direct investment in Nigeria.

1.5 NEED FOR THE STUDY

Foreign direct investment has been identified by Nigerian economic and financial experts as a necessary instrument for achieving higher growth.

For example the Vision 2010 Committee gave foreign direct investment a very prominent attention as can be seen in their assessment of the situation, when they disclosed that

The Nigerian economy as envisaged will become bouyant making it possible for the country to significantly improve its share of global flows of foreign direct investment to developing countries from around 0.2 per cent in 1991 to about 6.6 per cent in year 2010. The reforms that will be introduced in the wake of implementation of the recommendation of the vision 2010 committee will help create an investor-friendly environment which will encourage and motivate many multinational companies to invest in Nigeria. Employment opportunities will consequently expand for skilled Nigerians.

In addition Thomas Hutcheson the World Bank Senior Economist resident in Nigeria writing in security journal points out that almost half of all the private flows to developing countries have been in the form of foreign direct investment. Developing countries have been increasing their share of total direct foreign investment in the last few years. About 95 per cen of this total has gone to East Asia and Latin America. This can be comfirmed in table 1.11 direct foreign investment is driven by the pursuit of world wide production sourcing and marketing strategies by international business. Investors are responding to the market potential of rising development country incomes including the attractive trade and investment regimes in these countries and to the dramatic changes in information technology.

TABLE 1.11:
Direct Equity Flows to Emerging Markets by Source
 (Net flows in billions of U.S. dollars)

	1995					1996				
	Latin America	Asia	Other	Total Emerging Markets	Total Global	Latin America	Asia	Other	Total Emerging Markets	Total Global
From/to:										
United State	7.03	5.40	0.32	12.75	42.32	9.27	12.62	1.42	23.31	84.84
Japan	0.05	2.05	0.01	2.11	-3.01	0.80	8.68	0.10	9.58	15.33
United Kingdom	1.50	1.75	0.40	3.65	-3.05	1.85	2.14	0.05	4.04	17.92
Continental Europe	0.66	0.66	0.42	1.74	11.11	2.60	2.25	0.41	5.26	34.28
Other	0.15	0.23	0.02	0.40	3.79	0.75	0.95	0.20	1.90	5.04
Emerging Markets	0.25	0.87	0.10	1.22	2.57	4.75	12.28	0.05	17.08	30.23
Total	9.64	1.27	21.87	21.87	53.73	20.01	38.93	2.23	61.17	187.65

Sources: Baring Securities: Cross - Border Analysis.

1.6 SIGNIFICANCE OF THE STUDY

The study is intended to complement recent studies and write ups already cited in section 1.4 that discuss factors affecting the inflow of direct investments but do not include rigorous empirical analysis which are needed to evaluate the significance of different factors. This study is also expected to expand the discussion on host country variables which includes:

- * Socio-political instability
- * Transperancy
- * Corruption and investment
- * Investment and economic growth
- * Transfer of capital and technology

1.7.0 SCOPE AND LIMITATION

1.7.1 STUDY PERIOD (1970 - 1996)

It has been pointed out in section 1.2.4.3 that the first National Development Plan (1962 - 1964) was regarded as an open door period. Soon after, the country was involved in a civil war which lasted till the end of 1969. It therefore becomes more realistic to evaluate the determinants and impact of foreign direct investment from the 1970s when there was a sudden oil price increase and this period also coincided with the global confrontational era against foreign investors. The sudden increase in oil prices made the Nigerian government to bluff foreign investors. It also misled her into thinking that the challenges of industrial development could be adequately met solely by large-scale spending on prestigious projects and consumer goods. Investment decisions, including regulation of foreign private investment were hardly based on any sound long-term considerations nor was there any appreciable prudence in the management of the national resources.

This situation continued until 1988 when the indigenization decree was amended to encourage foreign investment. Foreign investors still had doubtful feelings about the Nigerian government and the economy after the 1988 amendment. The year 1995 however saw the complete repeal of the indigenization decree of 1972 and the Exchange Control Act of 1965.

1.7.2 DEFINITIONS OF FOREIGN DIRECT INVESTMENT (FDI)

Most definitions of Foreign Direct Investment (FDI) seem to have two common elements. One is that FDI involves at least two countries. This criterion as opined by Piggot and Cook (1995:326) relates to the multinational character of FDI. The other is the issue of ownership and control which distinguishes FDI from portfolio investment. Foreign portfolio investment is a simple transfer of financial capital-equity, or loan from one country to another, whereas FDI involves the ownership and control of production activities abroad. In this case what constitutes ownership or control itself is also a controversial issue.

FDI is more complex in nature than portfolio investment since it often involves transfer of inputs such as technical know-how, managerial and organizational ability and so on. FDI is also embodied in the activities of multinational corporation so the definition of FDI cannot be practically considered in isolation from the definition of a multinational corporation, which is also difficult to establish but can be defined as enterprises that own or control production or services facilities outside the country in which they are based. Despite these difficulties it is necessary to define FDI one way or another partly for theoretical clarity and partly for empirical necessity. One useful definition is that given by Piggot and Cook (1993:326-327) thus:

FDI is the acquisition, establishment or increase in production facilities by a firm in a foreign country.

What distinguishes FDI from portfolio investment in the case of acquisition, is that the investing firm acquires enough equity to exercise control over the capital invested, Baker (1990).

Another useful definition of FDI is that given by IMF (1977) as:

The investment conferring a lasting interest in an enterprise operating in an economy other than that of the investor, the investor's purpose being to have effective voice on the management of the enterprise.

Apart from the two definitions given above, there is an elaborate classification of FDI given by Kogima (1978:192-193).

1.7.3 TYPOLOGY OF FOREIGN DIRECT INVESTMENT

Kogima (1978) had used the following format to further classify foreign direct investment. Type A: There are two aspects of this type of FDI. First, a direct foreign

investment is induced by trade barriers and secondly the investment does not make the production cost in the host country lower than the price of export from the investing country. Therefore, this type of direct investment results in the movement of production from a lower cost base to a higher cost base bringing about a waste of real resources for the two countries taken together.

Type B: Export facilitating direct investment such as foreign subsidiaries of trading firms, banks, and assembly factories. It serves to reduce export transaction costs. Type C: Inter and Intra industry cross investment between advanced industrial countries. This type of direct investment is directed to comparative advantageous industries in the host country, resulting in the savings of real resources and prosperous horizontal trade of manufactured goods and higher national welfare for both countries.

Type D: Trade oriented direct foreign investment or the "Japanese" type is direct foreign investment going from a comparatively disadvantageous industry in the investing country will harmoniously promote an up grading of industrial structure on both sides and thus accelerate trade between the two countries.

Type E: Anti trade oriented foreign investment of "American" type starts in a comparatively advantageous industry in the investing country which produces the most sophisticated capital and knowledge intensive new products. This does not conform to the direction of trade which comparative costs suggest and works in antitrade oriented fashion.

There is still one more type of direct foreign investment under-taken by giant multi-national corporation. They combine several types of direct investment and realise extra gains from vertical or horizontal intra-firm integration.

1.7.4 COMPONENTS OF FOREIGN DIRECT INVESTMENT IN NIGERIA

According to Odozi (1996) foreign investment inflow could be classified into two categories: foreign investment for the establishment of new enterprises and foreign investment inflow through the existing enterprises. The distinction is necessary because of the different purposes served by each category. Foreign investment for the establishment of new enterprise plays the initial role of expansion of production

capacity.

The inflow through existing companies could be for various purposes such as expansion of the enterprise, or working capital support. Consequently, the inflow in the first category is made up mainly of machinery and equipment and probably foreign currency imported at the initial stage of the establishment of the local enterprise. The second type however, comprises changes in foreign share capital due to a component of the annual profit ploughed back into business. Other components of the foreign investment inflow through the existing companies include trade and suppliers' credit (net) and the net liabilities to the head office of the parent companies usually comprising royalties on technology and loans. Foreign investment enterprises also contract loans with third parties abroad or affiliates of the local enterprise. A break down of the components from 1970 to 1992 has been shown on Tables 1.8-1.10. The distinction between new foreign investment inflow and the resource flows through existing companies would facilitate an assessment of the impact which changes in policy have had on foreign investment inflow. A higher level of fresh inflow to establish new foreign investment enterprises could indicate improved conditions induced by policy changes. However, the inflow through existing enterprises is motivated by other factors which could be related to management policy including that of the parent company, the economic environment in the host country etc. In the light of the preceeding discussion all references to foreign direct investment in this study is implied to mean the aggregate of the components of foreign direct investment as specified in section 1.7.4.

1.7.5 LIMITATIONS

The study did not cover major forms of indirect investment as pointed out by Kogima (1978) which include new floatation (new issues of national loan bonds and debentures) sale and purchase of existing bonds and stocks (portfolio investments)

and medium term (one to five years) and long term lending by financial intermediaries.

The study might be affected by the paucity of data which is a common problem with empirical research in Nigeria but in particular this area of study.

1.8 DEFINITION OF TERMS

Globalization - The increase in trade and commerce among countries.

Emerging Markets - Attractive equity markets in developing countries.

Multinational - A business enterprise operating in more than one country.

Indigenization - The reduction of equity holdings of foreigners

Free Standing Company - An early form of jointstock company with the characteristics of a multinational enterprise.

Vertical Integration - The extent to which one firm controls successive stages of production which might otherwise be independent in an industry.

Horizontal Integration - The extent to which the producers in the same stage of production in an industry come under some unified activities.

Transparency - The disclosure of a country's mode of economic operation, such as Bank supervision judicial system investment code, and Bankruptcy laws.

Portfolio - A list of securities in which a person or institutional investor has an interest.

Corruption - The impairment of integrity through unlawful means.

Internalization - The concept of reducing the cost of internal and/or special organization either technologically so that the organization of production and transactions will be undertaken within the firm.

Internationalisation - Implies a degree of functional integration between internationally dispersed activities.

Externalization - The expansion of production through various inter-firm contractual arrangements, such as licensing or sub-contracting.

Foreign direct Investment (FDI) - These are equity funds invested in other nations, with participation in management.

Balance of Payment (BOP) - The record of all values of all transactions between a country's residents and the rest of the world.

Theory of comparative advantage - A trade theory which holds that nations should produce those goods for which they have the greatest relative advantage.

Eclectic theory - A theory on foreign direct investment that provides about the geographic distribution of FDI by analysing location factors.

Political risk - The probability that political forces will negatively affect a multinational's profit or impede the attainment of other critical business objectives.

Portfolio investment - The purchase of financial securities in other firms for the purpose of realizing financial gain when these marketable assets are sold.

Privatization - The process of selling government assets to private buyers.

Nationalization - A process by which the government takes control of business assets, sometimes with remuneration of the owners and other times without such remuneration.

Regression analysis - A mathematical approach to forecasting which attempts to test the explanatory power of set of independent variables.

Expropriation - The government seizure of private business coupled with little, if any, compensation to their owners.

1.9 ACRONYMS AND ABBREVIATIONS

BI	-	Business International
CBN	-	Central Bank of Nigeria
E.T.	-	Environ Technology
FDI	-	Foreign Direct Investment
FOS	-	Federal Office of Statistics
NEPD	-	Nigerian Enterprises Promotion Decree
GATT	-	The General Agreement on Tariffs and Trade

GDP -	Gross Domestic Product
GCI -	Global Competitive Index
HIID -	Harvard Institute for International Development
IMF -	International Monetary Fund
IPRS-	Intellectual Property Rights
R & D	- Research and Development
SAP -	Structural Adjustment Programme
TBT -	Technical Barner & Trade
TI -	Transparency International
TRIMS-	Trade Related Investment Measures
WEF -	World Economic Forum
WTO-	World Trade Organization

CHAPTER 2

2.1 REVIEW OF THEORETICAL FRAMEWORK

This chapter reviews the historical background of foreign direct investment on a global level. It reviews relevant literature on the determinants of foreign direct investment (FDI). This chapter will also analyse some recent literature based on the independent variables and theories, of FDI in order to relate them to the hypotheses and research questions.

2.2 RESURGENCE OF INTEREST ON FOREIGN DIRECT INVESTMENT (FDI)

Interest in foreign direct investment as a viable alternative for financing development has according to World Bank report increased in the 1990s. The report points out that the composition of private capital flows in 1990 - 93 shifted toward non-debt flows including foreign direct investment. Developing countries at different income levels have harnessed FDI, although middle income countries have been relatively more successful than low income countries in doing so. Sustainability, is an issue in portfolio investment, particularly because of its sensitivity to financial market conditions. In contrast, FDI flows driven by structural factors, such as the integration of global production are expected to be relatively more sustainable (World Bank 1995).

Another reason for the rising interest in FDI is that it has some inherent advantages for development: risk sharing, market discipline, export orientation and the transfer of technology and managerial expertise. Recent trends show that FDI can be an important and stable source of private capital for developing economies particularly for countries that are able to create a hospitable environment for new foreign investments.

Table 2.1 THE WORLDS LARGEST INDUSTRIAL COMPANIES

Rank				Sales		Profits		Employees	
1994/1996					% change from 1989		% change from 1989		
				\$ millions		\$ millions	Rank	Number	Rank
1	1	General Motors	U.S.	125,126.0	(1.5)	(1,985.7)	485	(147.0)	1
2	4	Royal Dutch/Shell Group	Britain/Neth.	107,203.5	25.3	6,442.1	1	(0.6)	37
3	3	Exxon	U.S.	105,885.0	22.2	5,010.0	3	42.7	62
4	2	Ford Motor	U.S.	98,274.7	1.4	860.1	58	(77.6)	6
5	5	Int'l Business Machines	U.S.	69,018.0	8.8	6,020.0	2	60.2	4
6	6	Toyota Motor	Japan	64,516.1	6.7	2,993.3	7	13.8	67
7	11	IRI	Italy	61,433.0	25.2	926.5	53	(21.3)	2
8	10	British Petroleum	British	59,540.5	20.3	3,013.1	6	(13.9)	49
9	8	Mobil	U.S.	58,770.0	15.3	1,929.0	13	6.6	102
10	7	General Electric	U.S.	58,414.0	5.7	4,303.0	4	9.2	10
11	13	Daimler-Benz	Germany	54,259.2	33.6	1,014.6	46	(70.9)	3
12	9	Hitachi	Japan	50,685.8	(0.4)	1,476.9	28	2.1	11
13	15	Fiat	Italy	47,751.6	30.0	1,346.4	34	(44.2)	9
14	20	Samsung	South Korea	45,042.0	28.0	N.A.		N.A.	
15	14	Philip Morris	U.S.	44,323.0	13.4	3,540.0	5	20.2	24
16	21	Volkswagen	Germany	43,710.2	25.8	651.6	78	24.5	13
17	12	Matsushita Electric Industrial	Japan	43,516.1	1.0	1,649.1	21	(0.9)	18
18	28	ENI	Italy	41,761.9	54.0	1,696.9	19	50.7	41
19	23	Texaco	U.S.	41,235.0	27.2	1,450.0	29	(39.9)	185
20	17	Nissan Motor	Japan	40,217.1	11.5	808.2	64	(9.2)	42
21	18	Unilever	Britain/Neth.	39,971.5	13.3	1,636.8	22	(5.4)	8
22	19	E.I. Du Pont de Nemours	U.S.	39,839.0	13.2	2,310.0	9	(6.9)	33
23	25	Chevron	U.S.	39,262.0	33.3	2,157.0	10	759.4	135
24	22	Siemens	Germany	39,227.6	20.1	913.0	55	16.0	5
25	26	Nestle	Switzerland	33,359.0	13.6	1,634.5	23	10.9	17
26	37	Elf Aquitaine	France	32,939.2	40.2	1,951.3	12	72.3	74
27	16	Chrysler	U.S.	30,868.0	(14.6)	68.0	386	(81.1)	44
28	29	Philips' Gloeilampenfabrieken	Neth.	30,865.7	14.3	(2,327.5)	486	(459.1)	12
29	24	Toshiba	Japan	30,181.5	2.4	922.9	54	(0.8)	34
30	27	Renault	France	30,049.6	9.4	222.2	227	(84.8)	29
31	35	Peugeot	France	29,380.3	22.0	1,700.3	18	5.2	27
32	31	BASF	Germany	29,184.1	15.3	684.7	75	(36.1)	38
33	34	Amoco	U.S.	28,277.0	16.8	1,913.0	14	18.8	132

Table 2.2 INWARD STOCKS OF WORLD FOREIGN DIRECT INVESTMENT 1985-96

Countries/regions	1985 (in billions of US \$)	% of total	1996 (in billion of US \$)	% of total
Developed countries	537.70	72.2	2,269.3	70.3
United States	184.60	24.8	644.7	20.0
Western Europe	245.00	32.9	1,302.5	40.3
EU	226.60	30.4	1,219.2	37.8
Austria	6.10	0.8	19.9	0.6
Belgium/Luxemburg	8.80	1.2	100.8	3.1
Denmark	3.60	0.5	23.4	0.7
Finland	1.30	0.2	9.4	0.3
France	33.40	4.5	168.4	5.2
Germany	36.90	5.0	171.0	0.6
Greece	8.30	1.1	20.3	0.6
Ireland	4.60	0.6	14.0	0.4
Italy	19.00	2.5	75.0	2.3
Netheland	4.60	0.6	4.0	0.4
Portugal	1.30	0.2	6.7	0.2
Spain	8.90	1.2	105.0	3.3
Sweden	5.10	0.7	42.0	1.3
United Kingdom	64.00	8.6	344.7	10.7
Other Western Europe	18.30	2.5	83.3	2.6
Switzerland	10.10	1.4	59.6	1.8
Norway	8.00	1.1	23.1	0.7
Others	0.20	0.0	0.6	0.0
Canada	64.60	8.7	129.2	4.0
Australia and New Zealand	27.10	3.6	156.8	4.9
Japan	4.70	0.6	18.0	0.6
Other developed countries	11.70	1.6	18.1	0.6
Developing countries	207.30	27.8	960.0	29.7
Africa	21.30	2.9	59.5	1.8
Asia	107.50	14.4	535.7	16.6
Latin America and the Caribbean	76.80	10.3	316.1	9.8
Developing Europe	0.50	0.1	2.3	0.1
Central and Eastern Europe	0.20	0.0	46.4	1.4
Total	745.20	100.0	3,229.3	100.0
Addenda:				
Outward stock	690.40		3,178.2	
Inward stock	745.20		3,229.3	
Difference	-54.80		-51.1	

Number might not add up due to rounding.

Source: Adapted from UN, *World Investment Report*, 1997.

2.3 THE EVOLUTION OF INTERNATIONAL BUSINESS ENTERPRISE

Given the prevailing tendency towards nationally based forms of analysis in economics, it is perhaps not surprising to discover that much of the early work relating to the operation of multinational corporation characterised them as quintessentially American form of foreign investment. The studies of Dunning (1958) and Servan-Schreber (1968) and the more theoretical work by Hymer (1960) and Kindleberger (1969) all concentrated on the activities of American companies operating abroad. The work of Hymer (1960) was especially influential in new approach towards the analysis of multinationals. He achieved this reorientation by linking together what he saw as the two essential features of multinationals: they were large-scale oligopolistic producers and they managed international flows of investment as part of their global competitive strategy. Hymer's crucial insight was to demonstrate that multinationals, by linking together their production know how with overseas-based investment, had created a seemingly new type of foreign investment.

Up to this point international transfers of capital were viewed as financial transactions in which investors sought the best return available for a given level of risk. Such international capital flows were capital portfolio investments, a term that indicated that the investors discharged control for the use of their capital to a third party, as for example when they purchased securities issued by a foreign government. According to Hymer, multinationals generated a different form of foreign investment: foreign direct investment (FDI). The firms that engaged in FDI retained direct responsibility for managing their foreign investments, frequently through the creation of subsidiary companies registered abroad and hence, unlike portfolio investors, they did not surrender control of their capital. Foreign investment by these companies did not simply consist of financial transfers but rather involved transfers of a package of modern definition of multinationals as companies that own, manage and control productive assets in countries other than the one that constitutes their home base,

Table 2.3 OUTWARD STOCKS OF FOREIGN DIRECT INVESTMENT 1985-96

Countries/regions	1985	% of total	1996	% of total
	(in billions of US \$)		(in billion of US \$)	
Developed countries	664.2	96.2	2,893.4	91.0
United States	251.0	36.4	794.1	25.0
Western Europe	312.4	45.2	1,585.8	49.9
EU	286.5	41.5	1,404.6	44.2
Austria	1.9	0.3	13.5	0.4
Belgium/Luxemburg	4.7	0.7	73.3	2.3
Denmark	1.8	0.3	22.4	0.7
Finland	1.8	0.3	18.3	0.6
France	37.1	5.4	206.4	6.5
Germany	59.9	8.7	288.4	9.1
Greece	-	-	-	-
Ireland	0.2	0.0	4.5	0.1
Italy	16.3	2.4	118.5	3.7
Netheland	47.8	6.9	184.7	5.8
Portugla	0.2	0.0	3.5	0.1
Spain	2.1	0.3	38.2	1.2
Swden	12.4	1.8	76.3	2.4
United Kingdom	100.3	14.5	356.3	11.2
Other Western Eroupe	26	3.8	181.2	5.7
Switzerland	21.4	3.1	153.3	4.8
Norway	4.6	0.7	27.8	0.9
Canada	40.9	5.9	111.3	3.5
Australia and New Zealand	8.5	1.2	56.6	1.8
Japan	44.3	6.4	330.2	10.4
Other developed countries	7.0	1.0	15.3	0.5
Developing countries	26.1	3.8	282.2	8.9
Total	690.4	100.0	3,178.1	100.0

Number might not add up due to rounding.

Source: Adapted from UN, *World Investment Report*, 1997.

began to permeate the literature of economics. Moreover, the terms 'multinational corporation' and 'foreign direct investment' began to be treated synonymously, as two labels for the same phenomenon.

No data had ever been systematically collected on the growth of multinationals over time because they transcended national boundaries. To help rectify this omission a vast research project was initiated at the Harvard Business School during the 1960s under the direction of Raymond Vernon. This traced the development of 187 United States-based firms (from the Fortune 500 of 1963-4) that controlled six or more foreign manufacturing subsidiaries. Data on 209 of the most important non-United States industrial corporations which, at one time or another, had controlled at least one foreign subsidiary, were added to this.

Altogether, the study collected information on a total of 28 318 foreign subsidiaries and it remains the single most comprehensive statistical account of the growth of multinationals. This main statistical results from the Harvard study were published by Vaupel and Curhan (1974). Table 2.1 contains an updated version of multinational rankings. Table 2.2 and 2.3 show the inward and outward stocks of world foreign direct investment, 1995 - 96.

2.4 EARLY FORMS OF FDI - GLOBAL

The findings of the Harvard study provided a useful guide to the origins of many of the world's most important multinational companies. However, by adopting the methodology of projecting backwards from the present, the study obscured the fact that other less enduring forms of FDI had developed during the nineteenth century. More recent research has clearly illustrated that FDI predated multinational corporations. Moreover, the database in the Harvard study was limited to manufacturing subsidiaries and did not include companies whose activities involved, for example, the provision of services. Thus the study captured the development of manufacturing multinationals but excluded many other forms of FDI.

Until quite recently it was assumed that foreign investments that preceded the rise of multinational companies invariably took the form of portfolio investments. It is certainly the case that, prior to the First World War, many foreign governments took advantage of the London capital market to raise the funds they needed for social overhead capital, and in any way assuming responsibility for their management.

A great many companies were created in the United Kingdom before 1914, however, which operated abroad but which were in practice ultimately controlled by directors based in Britain. For example, a study by Houston and Dunning (1976) showed that of the 13 500 enterprises quoted on the London Stock Exchange in 1914, 2273 operated exclusively or mainly abroad, and 78 per cent of these were registered in the United Kingdom. Wilkins (1988) has termed these enterprises 'free-standing' companies. Unlike conventional multinationals they were set up as operations with no parallel organization in Britain itself. Although most of the shareholders who subscribed to these joint stock companies did not exert control over the company's activities (for which reason they have in the past been incorrectly categorised as portfolio investments) their affairs were nevertheless frequently managed by a board of directors based in Britain. Hence they did constitute a genuine form of foreign direct investment.

2.4.1 FREE-STANDING COMPANIES

The following information on Free-Standing companies were extracted from Harvey and Press (1990), Payne (1980) including Turrel and Van Helten (1986) Wilkins (1988).

The term "free-standing company" was introduced by the American business historian Mira Wilkins (1988) in order to provide a means of classifying forms of FDI that were different from those emanating from the American-style multinational corporation. The main point of distinction, and the reason why the term 'free-standing'

was utilized, lay in the fact that these foreign investments were not a development of a domestic's existing operations. Rather, they represented a situation in which a joint stock company was floated as a means of allowing capital holders in one country to take advantage of an investment opportunity abroad. These were not, therefore, subsidiary companies of an existing domestic enterprise but were independent (free-standing) entities. They were, however, forms of direct (rather than portfolio) investment as long as managerial control of the operation ultimately resided in the country which had provided the investment funds. This appears to have frequently been the case amongst the many companies floated on the London Stock Exchange before the First World War whose operations took place largely or exclusively abroad.

Between the passing of the Limited Liability Act and the First World War (1856-1914), a total of 154 817 Kingdom. A detailed study by Payne (1980) showed that of the 2936 companies formed in Scotland between 1865 and 1995, a little over 10 per cent (318) were concerned with operations overseas. Breaking down this sample of companies by industrial classification shows that the most important activities engaged in were mining and quarrying (37 per cent), finance, insurance and real estate (25 per cent) and agriculture (20 per cent). Manufacturing, on the other hand, was relatively limited (7 per cent), being confined mainly to food and textile products and oil refining.

Particularly prominent among the overseas companies formed at this time were metal mining concerns. Financial institutions, both in Scotland and in London, had gained experience in raising capital for domestic mining concerns and were able to respond with alacrity in the face of potential opportunities abroad. Encouraging reports of potential gold deposits in Madras, India, at the beginning of the 1990s, for example, led within the space of 19 months to the flotation in Britain of 41 companies, 33 of which were successfully launched with an aggregate nominal capital value of over 4.0 million pounds. Before any crushing had actually taken place, a speculative bubble developed which swiftly inflated the share prices of these concerns based

upon overoptimistic predictions of the gold yield. As soon as the true yields became apparent share prices collapsed and, within a year, 15 of the 33 companies had been wound up.

The example of the Indian gold rush speculation illustrates a weakness of this form of overseas investment, namely that the capital holders have inadequate access to accurate information and rely upon the trustworthiness of those promoting and managing the enterprises. It would be mistaken, however, to assume that such problems could not be overcome and by no means all of the gold mining companies formed in India at this time were financial failures. Free-standing companies such as the Mysore Gold Mining Company Limited and the Nundydroog Gold Mining Company Limited, both formed in 1880, drew engineering company, to oversee the management of their organizations and, with the introduction of improved techniques for deep mining, the operations were eventually highly remunerative. Even with good management, however, gold mining remained something of a lottery.

In general, the key to the success of free-standing companies was their ability to draw together the sources of capital, the knowledge of investment opportunities and the required expertise. As Harvey and Press (1990, pp. 109-10) explain: "The situation in mining was little different to that in shipping, railways, tramways, water, manufacturing and financial services. A merchant house with British connections would become aware of a potentially lucrative investment, often through influential local contacts; details would be sent back to London and a syndicate formed; a concession would be floated (usually) in London to exploit the syndicate: The main promotional gains accrued at the point of transfer of a concession from a syndicate to a newly-formed operating company. Usually a substantial price was paid for the concession in cash, debentures or shares, and besides this contracts for construction, management services and supplies might well be granted to syndicate members. According to a contemporary report, the typical profile of the directors of an Indian

gold-mining company formed around 1880 would comprise:

- * Solicitor to the company
- * Financial agent (promoter)
- * Consulting engineer
- * Engineering agent in London
- * Syndicate members
- * Broker
- * Partner infirm to provide machinery
- * Contractor to supply tools and stores
- * Company secretary
- * Vendor of property in India

Mining companies of world renown, such as De Beers and Rio Tinto Zinc, as well as Burmah Oil and Shell, were formed in just this way as free-standing companies. Over time, the role of company promoter seems to have become more and more concentrated into the hands of specialized investment houses and the 1890s saw the formation of a number of joint-stock mining finance companies (Turrell and Van Helten, 1986). These financiers included engineering firms like John Taylor & Sons, and Bewick, Moreing & Co.; merchants such as Julius Wernher, Alfred Beit and Barney Barbatto in South Africa; as well as merchant bankers such as N. M. Rothschild & Sons.

Although each of the individual free-standing companies was nominally an independent concern, a number of informal links existed between groups of them, drawing them into clusters. Particularly important in this respect were financial institutions in the city of London that developed from commission agencies (supervising the trade of other firms for payment of a commission) into investment houses and which promoted a series of free-standing companies during the nineteenth century. These investment houses, as Chapman (1985, 1992) has explained, provided

international networks that linked sources of capital, from London and elsewhere, with investment opportunities abroad. This ability to connect domestic sources of capital and expertise (comprising both technical expertise and financial management skills) with influential contacts abroad enabled investment groups like Finlay & Co. Butterfield & Swire, Anthony Gibbs & Co. and De Beers to emerge as strategic actors in the growth of FDI during the nineteenth century.

Although these institutions were international in scope the organizational structures that they used to manage their overseas assets were clearly different from the conventional form of multinational corporation that developed in the United States.

2.5 THEORIES OF FOREIGN DIRECT INVESTMENT

THE PRE-SECOND WORLD WAR NEOCLASSICAL APPROACH

As has been pointed out by John, et al (1993). The neoclassical economic paradigm is the most widely used in teaching and research. Its origin goes back to the 1870s and its early developments are particularly due to economists in Britain, France, Austria, Switzerland. The general principles on which it is based are:

- * People act rationally and have full knowledge of markets and economic conditions; there is no uncertainty in the system.
- * Consumers want to maximize the utility derived from consumption given their budgetary constraints.
- * Firms are profit maximizers.
- * Markets are perfectly competitive.
- * Resources are scarce and their allocation to various uses is done through the price mechanism.
- * Given the initial distribution of wealth, the distribution of income

between the various factors of production occurs via the price mechanism and it is based on the principle of the contribution to production of each factor of production (particularly labour and capital), via its productivity level and growth. The system as a whole will be in equilibrium, or move towards it, at both the micro and macro levels. These general principles and conclusions are applied in all aspects of economic life from goods to

factors (including labour) markets, to the behaviour of investors, consumers and households.

The application of the neoclassical theory to foreign investment developed along the following lines. Prior to the Second World War there was no theory of foreign direct investment as such. There was a general theory of foreign investment that made no distinction between portfolio investment and direct investment. Foreign investment was considered to involve a transfer of funds and was explained under the general theory of capital movements. This theory followed the same general principles and assumptions as the theory of movements of goods and services across frontiers through international trade, of which it became an extension. For example Ohlin (1933) deals with capital movements in the context of his more well-known theory of international trade.

The general thrust of this neoclassical theory of foreign investment was that movements of funds between countries would take place in response to differentials in interest rates and rates of return on investment. The rate of return was related to the relative endowment of capital by each country in relation to its demand at home. Capital-abundant countries would have lower rates of return and interest than capital-scarce countries. These movements would gradually change the relative endowment of capital in the two countries. The new situation as regards the scarcity or abundance of capital in the two countries would lead to a decline in the rate of return and interest rates in the outward investor's country and an increase in the rates in the country receiving funds, with eventual equalization of interest rates and rate of return on investment across the two countries. Ohlin (1933), Nurkse (1933), and Iversen (1935) were the main proponents of this theory before the Second World War.

This theory stresses the relative endowment of capital in the countries as the main stimulus for the movement of capital across frontiers and thus for foreign investment. There is a parallel in the theory of international trade. This explains

movements of products across frontiers in terms of the relative endowment of factors of production in the two countries (Grimwade (1989)). It is therefore basically an approach is neoclassical in various respects:

- * It emphasizes scarcity and the relative factor endowment of countries
- * It emphasizes profit maximization as the objective and the price mechanism (interest rates) as the main vehicle in encouraging activity.
- * It assumes certainty and perfect knowledge of the markets on the part of the operators.
- * It leads to final equilibrium and price equalization through capital movements
- * The approach is essentially static and involves comparative static analysis (that is comparisons between two static equilibrium positions) in relation to the situation before and after the movements of capital.

2.6 GENERAL QUESTIONS ON THE LITERATURE OF FOREIGN DIRECT INVESTMENT (FDI)

In the literature of foreign direct investment, three questions are generally posed:

- * Why do national firms evolve into multinational organisations?
- * Why do firms locate production in a foreign country rather than licensing or exporting ("internationalization theory")?
- * What determines the geographic pattern of FDI flows? that is on what basis are host countries chosen?

The contributions of different writers in addressing the three questions are presented from section 2.7 to section 2.15 of this study beginning with Steven Hymer's pioneering work on foreign direct investment.

2.7 HYMER'S CRITIQUE

Hymer (1960) researched the international operations of national firms for his dissertation. His work, published in 1976 after his death begins with a powerful critique of the then-prevalent neoclassical theory.

He distinguishes between portfolio and direct investment according to whether

the investor wants to (and does) acquire control over the acquired firm and the activities in which it invests. This distinction proved to be of great relevance and has been used ever since. He noted that direct investment shows peculiarities that do not correspond with the assumptions of the neoclassical theory nor corroborate its conclusions. In particular he notes the following:

- * Direct investment does not necessarily involve movement of funds from country to country as the investor company can borrow money elsewhere and often uses funds in the host country's capital markets or they may originate from profits in existing affiliates of foreign companies.
- * Direct investment often shows a cross-countries pattern with both countries involved being simultaneously home and host country to the other's investment.
- * Direct investment tends to be industry specific rather than country specific. This means that the flow of investment tends to concentrate in specific industries across many countries.

His first point invalidates the whole basis of the neoclassical theory of foreign investment which assumes that funds move from the investor to the inward country. Moreover, if the investment is in response to differentials in capital endowment and interest rates it is not clear how both countries could invest into each other. The relative scarcity of capital in a country should also show a country-specific pattern, not a pattern, linked to industries.

Hymer's critique applies mainly to the ability of the theory to deal with direct investment, not so much with portfolio investment. This was a distinction that was absent in the original neoclassical analysis.

2.8 TRANSACTION COSTS, INTERNALIZATION AND THE MNE

In the 1970s a new strand of neoclassical theory was developed by researchers.

The new development has come to be known as the 'internalization' theory of international production and FDI. Unlike the pre-Second World War approach, this new strand is closely based on the firm, its activities and objectives and its organization rather than on the macro economy.

The theory builds on Coase's criticism of conventional neoclassical theory in relation to the firm and the market. Coase (1937) noted the inconsistency between the assumption that the market and its price mechanism is the best allocator of resources and the fact that in real life a large and increasing amount of resources are allocated internally to firms via internal planning and directives within the organization. The riddle was solved by introducing the concept of 'transaction cost'. Market transactions are costly because the parties need to search for the best opportunities in terms of quality, prices and so forth. Thus firms will prefer to internalize their activities whenever the cost of carrying the transaction in the market exceeds the possible internal diseconomies of scale and organization that may be involved in the larger firm. Any development (technological and/or organizational) that reduces the cost of internal and/or spatial organization will favour internalization, so the organization of production and transactions will be undertaken within the firm.

On the other hand, according to John, et al (1997) excessive internalization has its own cost and disadvantages. These can be assessed in terms of managerial and organizational constraints and diseconomies, including possible diseconomies of operating on an excessively large scale. There may also be a cost attached to the control of a large workforce and its increasing power due to the concentration of labour employed in the same company and country. Coase's analysis opened the way for a whole new approach to the working of markets, firms and institutions in both the private and public sectors. Developments by Williamson (1975 and 1981) further extended his work. The focus of research began to shift from the theory of the firm towards the development of an overall theory of the organization of production

and business. Indeed Williamson attempted to interpret the whole history of the firm and its changing organization in terms of economies in transaction costs. This new twist in the theory of the firm opened the way for a new, less critical, view of large organizations and monopoly power, and a more critical view of organizations and monopoly power, and a more critical view of anti-trust legislation (cf. Pitelis, 1993). Coase himself (1991) clarified the origin of the debate as well as some analytical issues within it.

Coase (1960) takes the debate into the links between economics and law. On the assumption that the costs of transactions are the problem, it is important to have a legal framework that allows clear contracts to be drawn that minimize uncertainties about quality and prices of supplies. The economic relevance of the legal framework and related contracts takes on a double meaning: the contract may be a guarantee that encourages more market transactions and less internalization but the contract involves legal and other expenses that become part of the transaction costs of dealing in the market. Coase (1991, p. 62) summarizes his views as follows:

Transaction costs were used in the one case to show that if they are not included in the analysis, the firm has no purpose, while in the other I showed, as I thought, that if transaction costs were not introduced into the analysis, for the range of problems considered, the law had no purpose.

EXAMPLES OF TRANSACTION COSTS

Coase (1991) illustrates transaction costs thus

1: Consumer

Acquiring a new car involves you in:

- * Research to find which products respond to your needs and specifications and which are the most reliable manufacturers.
- * Finding the best dealers.
- * Finding who offers the best after-sales service and who offers the best prices and credit conditions.

- * Expenses involved in the purchase, including the legal expenses concerning contracts.

2. Product vertical chain

You are the chief executive of a major French company that produces furniture and you want to buy wood. You want to review your strategy for obtaining a supply of wood from South America. Possible transaction costs include:

- * Time and expenses in finding out about the best suppliers in terms of quantity, prices and delivery time.
- * Expenses associated with contracts.
- * Costs of acquiring knowledge of, and adaptation to, different business cultures.

The transaction costs' approach to the relationship between markets and firms has had considerable influence on both economic theory and policy. On the theory side, the period since the mid-1960s has seen a move towards the reinterpretations of many economic concepts, theories and facts in terms of economies of transaction cost. As regards policies, the approach had considerable effects on issues of competition policy. A possible conclusion seems to be that if the growth of the firm occurs as a result of the wish to economize on transaction costs it follows that the concentration of production in large units can be efficient and we need not worry too much about excessive market power of large firms.

The applications of this new approach to the MNE and international production came through the works of McManus (1972), Buckley and Casson (1976), Teece (1977), Rugman (1981) and Caves (1982). The general assumption behind the application of the approach is that markets are imperfect mechanisms in terms of the information they convey. In particular, buyers and sellers have asymmetrical positions as regards access to information. Buyers do not have full information about the product they wish to buy. There are uncertainties in relation to the quality, reliability and relative prices of the products offered by various producers costs are incurred in searching for information about products. In order to cut the uncertainties and reduce

the transactions costs, firms will prefer to internalize the transaction, carrying out production themselves.

Two situations can arise: vertical and horizontal integration. The firm will prefer to internalize the various vertical stages of the production process whenever it wants to cut the uncertainty over supplies of raw materials of components. This explains vertical internalization both at the national and international levels. International horizontal integration (direct production in different countries of the same or similar products) is explained in terms of the need to protect the firm's knowledge from competitors. The firm's knowledge may be in terms of research and development and/or in terms of superior managerial, organizational or marketing skills. This type of knowledge is characterized by the following:

- (a) its acquisition is likely to require large initial costs in research and development;
- (b) it is embodied in intangible assets that are difficult to value and exchange at arm's length on the market; within the firm, these assets become a 'public good'. A public good has low or zero marginal cost although its fixed costs may be high. This means that once the knowledge is acquired it may be in the interest of the firm to utilize it as widely as possible within its own ownership borders. However, if knowledge outside the firm, the firm itself will lose its monopoly over it and its advantage over rivals, and thus eventually the profit which derive from it. In the circumstances, franchising or selling the patent may become risky. The firm may therefore prefer to expand into new markets by producing directly rather than by selling on the market for fear of losing its superior knowledge to its competitors.

Any institutional arrangement that does not threaten the loss of the monopoly over knowledge and its related profits for the firm will favour the externalization of production. Thus a patents system that offers strong protection against imitators will favour licensing rather than internal production as a means of expansion and market

sourcing. The externalization of production through various inter firm contractual arrangements, such as licensing or subcontracting, may be encouraged for other reasons such as the following:

- * The large-scale expansion of the firm through internalization may create organizational and managerial problems that result in diseconomies.
- * A large firm means often employing a large labour force which may then become too powerful and costly.

It should be noted that the choice between internalization/externalization is not necessarily an 'either/or' situation. Companies have developed a whole array of inter-firm relationships with various degrees of externalization.

The theory presents some difficulties, however, for example it cannot fully explain internalization because, after all, the firm could internalize by producing at home and exporting in order to source foreign markets. The theory may thus explain the choice between FDI and licensing but not the choice between exports and FDI. If foreign production is more profitable or efficient due, for example to transportation costs or to trade barriers, then the choice between different sourcing strategies becomes a choice between internalization and externalization. There are, however, different degrees of internal or external co-ordination from full ownership of all the co-ordinated units to inter-firm co-ordination. On the whole, vertical integration is easier to explain with the internalization theory than horizontal integration. Caves (1971 and 1982) explains vertical integration through internalization, and horizontal integration in terms of the desire or need for product differentiation in oligopolistic markets.

The internalization/externalization debate has come into sharp focus since the early 1980s with the debate about the desirability of achieving more streamlined organizations that concentrate on core activities while externalizing the more peripheral activities (often by subcontracting). This has had a big impact and has affected

public organizations to an even larger extent than private ones.

It may be interesting to note the relationship between the development of the Coasian analysis and the changes in the political and economic macro environment. Coase put forward his theory about the determinants of the limits between the expansion of the firm (internalization) versus market transactions. The limits are set by the relative costs of operating within the two structures. In 1937 and in the following decades firms were growing; the advantages of economies of scale were taken for granted. There was not much debate about the efficiency of large-scale organizations. In the 1970s, when the Coasian analysis was resurrected by economists, there was concern about the issue of excessive monopoly power brought about by the growth of firms in the previous decades, transaction costs analysis was partly used to show how internalization led to lower transaction costs and therefore had private and social costs of excessive market power.

The big success of Coase's theory came in the 1980s. This is the period when the wisdom of having larger and larger organizations in both private and public sectors was hotly debated. The benefits of externalization and market transactions became more and more fashionable and expressions like 'downsizing' of firms and 'outsourcing' of production became everyday business vocabulary. The search for a more flexible organization of production went hand-in-hand with the search for the flexibility of employment of labour by firms.

The internalization theory as John, et al (1997) point out would, *prima facie*, appear to be quite different from the traditional neoclassical theory. In what sense can they be grouped together? What are their common characteristics? They certainly differ in the following elements:

- (a) the traditional neoclassical theory of foreign investment is centred on the macro economy while the internalization theory is based on the firm and on the organization of production;
- (b) the neoclassical approach assumes perfect markets and certainty while

the internalization theory considers imperfect markets and uncertainty. The imperfections in the markets exists mainly in terms of asymmetry between buyers and seller and market transaction versus internal transaction within the firm.

- (c) The traditional neoclassical theory deals with typical economic concepts; the internalization theory enters new territory with its attempt to developing a theory of the organization of production.

Their common ground is the following:

- (a) Both theories deal with exchange more than with production (cf. Cantwell, 1991)
- (b) Both theories are concerned with profit maximization and efficiency. In one case these objectives are achieved through the reallocation of capital across nations; in the other they are achieved through the balance between internal allocation and allocation through the market. In the internal allocation theory profit maximization is achieved through economies in transaction costs.

The drive for efficiency is neatly explained in the following passage from McManus (1972, p. 84):

In summary, it has been argued that the international firm is one of the methods by which interdependent activities in different countries can be co-ordinated. There are two equivalent statements of the conditions under which the international firms will be chosen by interdependent producers in different countries: the producers will choose to centralize control if the international firm is the least expensive way in which to obtain a given level of efficiency within the joint activity: the producers will choose to centralize control if the international firm yields the highest level of efficiency for a given cost of co-ordinating their joint activity.

Internalization and integration

The internalization theory of the multinational company uses economies in transaction

costs to explain

- * Vertical integration across frontiers within the same firm;
- * Horizontal integration across frontiers within the same firm.

2.8 MACROECONOMIC APPROACHES

John et al (1997) used the macroeconomic and microeconomic approach to analyse some theories of direct investment. The theory goes back to existing approaches to the life of the product (at the micro level) and to the technological gap theories of trade at the macro level. In particular Posner (1961) considers the technological gap between countries and its effect on trade. At the micro level the various phases of the product's life are analysed by Kuzaetz (1953) and later by Hirsch (1965, p. 1). Vernon noticed that new products are likely to be developed in a country with high per capita income relatively scarce labour and relative abundant capital. The United States was such a country at the time when Vernon was writing. The new product at first requires high-skill labour; it is produced in a relatively monopolistic position and this helps to make it a product which has, at first, a high income elasticity of demand and a low price elasticity of demand. The product is soon exported, by the originating company, to other developed countries and is later produced there directly in order to thwart competitors who might try to imitate it. This is the mature phase of the product, when all the required technological adaptations have been made and when mass production will gradually begin. The product eventually becomes easy to imitate; at this point its demand becomes more price elastic and the firm that initiated production has to find ways to meet competition through prices; it therefore looks for reductions in costs. This makes location in developing countries like Nigeria attractive, particularly since the product is now standardized, mass produced and therefore requires mainly unskilled labour. The shift of production to developing countries is likely to be accompanied by a

pattern of trade in which the developing countries export the product to developed countries including the original one (the United States).

2.9 THE PRODUCT LIFE CYCLE AND TECHNOLOGY TRANSFER

One of the interesting conclusions of the theory concerns the transfer of technology between developed and developing countries. Outdated technology is transferred to the developing countries and this lengthens the life of some plants which might otherwise have to be abandoned.

Many writers further developed and refined the theory and many criticized it. Vernon (1979) himself wrote a critique that set limits to the validity of his (1966) theory. He explained that his theory was no longer as valid in the late 1970s as it had been in the 1960s due to macroeconomic developments. The gap between the United States and other developed countries, particularly Europe, had declined; this meant a decline in the technological gap and in per capita income between the United States and European countries. At the same time companies had acquired the ability to locate worldwide almost from the birth of the new product. Corroboration on this point was to be found in two relevant trends: the widening network of worldwide linkages by the largest American and European companies and the tendency towards the shortening of the lag between the beginning of production of a new product at home and the location of its production abroad. Thus the product life cycle theory, as a theory of international production, was no longer valid or not as widely applicable as in the 1960s.

What seem to have changed, however, are mainly the relationships within developed countries and between the technological advanced country (the United States) and other developed countries. It could be maintained that the theory is still applicable in many cases including the following ones:

- (a) the development of relatively low-demand, luxury, niche markets;

- (b) the cycle between developed and developing countries in general;
- (c) the relationship between developed countries and countries from the former socialist bloc.

It is generally true that it is easier to detect a life cycle sequence in some products than others. For example the motor car industry seemed to fit the model better than consumer audio equipment. In the first industry, the production of some automobile models has been discontinued in developed countries and relocated to developing countries (the Volkswagen Beetle and the Fiat 600 in Nigeria). With regard to audio equipment, however, it is noticeable that items such as the Walkman have appeared throughout the world in terms of both consumption and production almost simultaneously.

The more recent move towards flexible production systems may have dealt a further blow to the validity of Vernon's original approach. Flexible systems rely on economies of scope to be achieved through smaller production runs rather than through large scale standardized production. This means that the last phase of Vernon's cycle may no longer be fully applicable to a large number of products. It also means that the advantages of developing nations for this phase of the product cycle may be lost since flexible production requires more skilled labour and higher level infrastructure. Further criticisms of product life-cycle theory are also emerging in terms of the technological gap element. There is some evidence that technological developments tend to cluster in specific countries and industries (Cantwell, 1989 and 1993). Moreover, companies are increasingly involved in some decentralization of research and development activities (OECD, 1994). All this seems inconsistent with the PLC theory of technological superiority by one country, as pointed out in Cantwell (1994).

The theory has a strong macroeconomic emphasis in that it is linked to the gap in technology and per capita income between countries as well as to the relative

scarcity of factors of production and labour skills. The theory also manages to deal with both FDI and trade flows within developed countries as well as between developed and developing ones. The theory also assumes an imperfect market structure.

2.10 ALIBER'S THEORIES

Two different and strictly macroeconomic approaches were developed by Robert Aliber. The first one was developed in Aliber (1970). It is strongly based on financial flows between countries and on the division of the world into customs areas and currency areas. Countries with high trade barriers will attract FDI because firms will try to bypass the barriers and enter the barred markets by producing directly in the countries concerned. Countries with strong currencies will invest in weak-currency countries in order to maximize the profit from the invested capital. The value of the acquired assets in weak-currency countries is higher for the investor operating from a strong-currency country.

There are various problems with this approach. For example Dunning (1991) notes that overvaluing a currency is likely to explain the timing of outward direct investment but not necessarily its long-term trend and industry structure. We could add that Aliber's theory, if valid at all, is more creation of new capacity through 'greenfield' plants. Greenfield capacity requires a medium to long-term gestation period which is unlikely to be influenced by short-term issues linked to currency valuation. It is also worth noting that, in some respects, Aliber seems to go back to the financial flows aspects of foreign investment stressed by the traditional neoclassical theory; in fact they both deal with movements of funds rather than with international production.

A more recent work by Aliber (1993) puts stronger emphasis on the real economy and less on its financial side. Here Aliber explains patterns of FDI worldwide by looking at differentials in growth rates of national production.

He notices that countries experience period of rapid growth at different times as their industrialization phase occurs at different times. Rapid growth is characterized by an increase in the share of manufacturing output and in high productivity growth as well as a high rate of technological innovation. High growth rates are also associated with high profit rates and high interest rates. As a result, countries with high growth rates attract foreign investment as this seeks growth in the demand for products and high profit/interest rates.

A very detailed analysis of the relationship between different phases of development and international trade has been developed by Rowthorn and Wells (1987). Interestingly enough Rowthorn and Wells link development and growth to trade although not to foreign investment. Aliber links it to foreign investment although not to trade to any great extent.

2.011 STAGNATIONIST VIEWS

Some authors according to John, et al (1997) link problems on the demand side of the macro-economy to foreign investment. For instance, Pitelis (1991) traces the lack of effective demand and stagnation to the monopolistic structure of the economy. The lack of effective demand coupled with the connected increase in the liquidity of companies is likely to lead to foreign investment, particularly through mergers and acquisitions increases capacity for the acquiring firm though not for the world economy as a whole. It also leads to the concentration of market shares in fewer companies worldwide. The degree of monopoly in the economy with consequent longer-term stagnation problems.

Cowling and Sugden (1987) link their theory of international monopoly capitalism to firms' strategic behaviour of companies lead to an increase in the degree of monopoly and to a consequent lack of effective demand. Cowling and Sugden (1987) follows on from Cowling (1982) and it links the strategic behaviour of companies

in 'monopoly capitalism' to some macroeconomic features. In particular, the high and increasing degree of monopoly in the economic system leads to overcapacity and stagnation and therefore leads to unemployment. This is a theme that has long and strong antecedents in the economics literature. It goes back to Hobson (1902), Luxemburg (1913) Kalecki (1939) Baran and Sweezy (1966) and others.

The stagnationist view differs from Aliber's (1993) view in many respects. Both of these approaches consider growth rates and related levels of demand to be relevant. In the case of Aliber, however, the growth rates differ across countries and they are linked to different phases of development and industrialization. In the case of the more recent stagnationist writers (Kalecki, Baran and Sweezy and Cowling Sugden) growth is linked to the monopolistic structure of the economy.

2.012 MARKET STRUCTURE, POWER AND CONFLICTS

Many theories have been developed by looking at what happens within the individual firm - by examining its internal organization and the organization of production in general. The internalization theory could be included in this microeconomic group. It has been included in the first group of theories - those constituting the neoclassical approach - to highlight the efficiency side of its conclusions and of its assumptions in relation to the firm's objectives.

Other authors have placed the working of the firm within the industry in which it operates and developed theories that see FDI as the outcome of interplay between the firm, its objectives and organization, and its rivals within the industry. This approach, which concentrates on the industry rather than the micro and macro economy, has been very fruitful. The authors working within this broadly 'meco-economic' (intermediate between macro and micro) background differ in many respects, in particular in relation to whether they stress market power on the part of the company and whether they consider the structure of the market to be an exogenous

variable or to be endogenous and this affected by the behaviour of the companies. The extent to which the macro environment is a given, fixed variable or can be affected by the action of companies is also an important issue; it can be relevant to both the micro approaches and the 'mesoeconomic' ones (that is those based on the working of the industry).

2.013 AMERICAN PERSPECTIVES ON OLIGOPOLISTIC STRUCTURES

Vernon's (1966, 1974 and 1979) contributions, while set in a broadly macroeconomic framework, also have strong industry and market structure elements. The innovative firm in Vernon (1966) operates in an imperfect market and has a monopolistic advantage deriving from its new product that is reflected in a low price elasticity of demand. The moves towards FDI in European countries and later in developing countries, are largely motivated by strategic behaviour towards FDI, directed at Europe, aims to stop potential rivals from operating in the large European markets. The second move, at the stage when the product is standardized, is designed to reduce costs and thus avert price competition in a product that is no longer new and which can, at this stage, be imitated widely.

Vernon's (1974) contribution links his general theory on the MNE's decisions and behaviour to oligopolistic structures even more strongly and explicitly than in Vernon (1966). In an innovation based oligopoly firms compete through innovation; their demand tends to be price inelastic and they tend to locate production in their home base. In a mature oligopoly the advantages derive not from innovation but from the scale of operations. Companies tend to fear each other and open war is avoided by tacit or explicit collusion on prices and location of production. In situations where economies of scale are not, or are no longer, strong enough to act as barriers for actual or potential rivals, competition will take the form of costs cutting and this affects the location of production. Developing countries are now likely to be favoured

as sites for investment. Vernon calls this a *senescent oligopoly*. The three types of oligopoly clearly match the three phases in the life of the product.

There may be an interesting link between the phases of oligopoly highlighted by Vernon and the trends towards strategic alliances. Alliances and joint ventures may affect the competitive structure of the industry. However, it could be that, like the structure of oligopoly, some alliances are innovation-based, some may be more typical of mature in nature and thus more akin to Vernon's senescent oligopolies.

The strength of Vernon's approach is largely due to its richness. It contains macro as well as industry elements; it deals with technology and production as well as marketing aspects; it deals with foreign production as well as trade.

Knickerbocker (1973) developed Vernon's model further in looking for explanations of the geographical pattern of FDI. Companies become skilled at pioneering new products and this leads them to invest in other developed countries along the lines suggested by the product life cycle model. Knickerbocker noted that FDI tends to bunch up in particular countries and industries and thus the location of investment tends to have a bandwagon pattern. His structure, led him to conclude that 'bunching up' is the result of defensive and aggressive behaviour of oligopolists towards each other. Oligopolists operate in uncertain conditions; following the leader in terms of location of investment gives them a sort of assurance of being able to maintain their overall world position. Knickerbocker stresses the risk and uncertainty faced by firms operating in an oligopolistic environment. Foreign direct investment is a risky strategy but doing nothing to counteract a rivals' move may be even riskier.

Graham (1978 and 1985), also working at Cambridge Massachusetts, uses similar assumptions in respect of the oligopolistic structure of industries and the aggressive or defensive behaviour of firms. His aim is industries and the aggressive or defensive behaviour of firms. His aim is to explain the so-called 'transatlantic reversal', that is the shift in the position of the United States from a net outward

investor to a net inward investor. Graham concludes that it is the defensive behaviour of European companies that leads to investment in the USA within the same industry. Thus intra-industry FDI is seen as the result of an 'exchange of threats' between rival oligopolists. This behaviour avoids a price war which means that competition for locations takes the place of price competition; thus the more aggressive (mutually destructive) pricing strategies are avoided. Interpenetration of markets reduces the likelihood of price wars but also avoids full collusion.

Table 2.4

Oligopolistic Structure and FDI: American Perspectives

Vernon explains	<ul style="list-style-type: none">* FDI* International trade* Relations between USA, Europe and developing countries at different stages.
Knickerbocker explains	<ul style="list-style-type: none">* Bandwagon effect and clustering of FDI in the same industries and locations.
Graham explains	<ul style="list-style-type: none">* Cross-country FDI explained as an exchange of threats between rivals.

Source: John, R. et al. (1997), Global Business Strategy International Thopsm Business Press, London

The oligopolistic structure also plays a very relevant role in the work of Caves (1971 and 1982). Product differentiation is the outcome of competitive behaviour among rivals in an oligopolistic structure. A general strategy of product differentiation is alsolikely to lead to horizontal integration across countries and therefore to FDI in the same products.

A variation on the earlier work emanating from Harvard University was provided in the 1980s by Michael Porter (1980, 1986, 1990). Porter's work placed the emphasis for the unit of analysis on the industry. In order to understand the nature of competitive threats and opportunities and hence derive an appropriate competitive strategy, firms

need to appreciate the competitive forces that impinge on their performance. According to Porter, these competitive forces are industry specific in that they vary in strength and significance from one industry to another.

Porter's approach to understanding the nature of global competition, therefore, is based on a structural analysis of the competitive forces that operate across the industry in question. Globalization will be of significance in an industry whenever competitive conditions dictate that there is an advantage to be gained by the firm from engaging in either global configuration, global co-ordination, or both. Global configuration, involves adopting a policy of optimizing the location of a given activity from a worldwide perspective (for example locating labour-intensive assembly operations in co-efficient regions such as export processing zones). Global co-ordination, by contrast, refers to the benefits to be gained from linking operationally distinct parts of the firm's value-adding activities (referred to by Porter as the firm's blue chain'). These dimensions of global performance, configuration and co-ordination, allow Porter to distinguish between a range of global competitive strategies. Industries in which neither dimension is of great significance for providing economies of scale, such as in the case of ship building represent arenas of global competition (the firms compete with one another for the same group of international customers) in which multinational firms may not be of great importance.

This last observation represents an important distinction between Porter's work and that of economists whose traditional focus for an analysis of internationalization has been the firm. For Porter, global competition, and hence a global industry, is not necessarily concomitant with the emergence of multinational corporations. It is the nature of the industry, rather than the shape of the firms within it, which is the crucial determinant of internationalization in his model. The advantage of such an approach is that it allows for international trade and foreign direct investment to be treated as aspects of competition in global industries rather than as mutually exclusive alternative

available to the firm.

A similar line of approach has recently been followed by a British economist working at the University of Reading. John Cantwell has developed a theory of FDI based on 'technological competence'. For Cantwell (1989 and 1993) technology is the key to internalization within firms, to the location of FDI and to the behaviour of companies towards rivals, and to the development and growth of countries. Companies internalize in order to retain their proprietary knowledge but technology and technological competence have considerable spill-over effects. This means that companies can benefit from each other's technological advances and from a macro environment that is favourable to specific technologies. This leads companies to locate production where the macro environment gives them advantages of the spill-over effects. They tend to locate where companies in the same technological league have located. In the long run this creates technological poles and clusters of FDI location. This approach leads to some decentralization of technological applications within the company as well as to clusters of technology-based FDI in some countries. The tendency towards agglomeration in some countries/locations generates a vicious circle of growth.

Cantwell's approach has elements of internalization theory linked to some macro elements and to elements of behaviour and performance typical of an oligopolistic markets structure. It has similarities with Knickerbocker in terms of its use of the concept of clustering. However, while in Knickerbocker the clustering of FDI is due to the rivalistic behaviour of oligopolists who adopt a follow-my-leader approach in Cantwell it is due to the wish to locate in technological poles and benefit from the spill-over effects of technology. There are also analogies with Vernon's theory in that both stress the role of technology in FDI. However, in Vernon we have a theory based on the technological superiority of one country over others while in Catwell we have poles based in many countries and in the same technological league.

Two British economists, Keith Cowling and Roger Sugden from the University of Warwick, have also been working within an oligopolistic framework. According to Cowling and Sugden, transnationalism makes the situation worse because TNCs have what they call 'special detection powers' - the ability to find the best locations for production - and take advantage of competing bids for inward investment on the part of governments. This is a concept not dissimilar from Vernon's notion of 'global scanners'. They note, moreover, that transnationalism is spreading throughout the world. Small and medium-sized companies work as subcontractors for large TNCs. Since the large TNCs are the ultimate controllers of production, however, this new development, far from leading to a more competitive macro and industry environment, tends to increase the overall degree of monopoly in the system. Location in developing countries and the actual or potential threat of withdrawal of investment from developed countries leads to a divided and more compliant workforce. The advantages of a 'divide and rule' strategy can be used as defensive or aggressive weapons in competition with rivals.

Cowling and Sugden see companies engaged in strategic games of defence and attack, sometimes colluding to avoid open destructive wars, sometimes attacking if they feel strong enough to gain. They all have some retaliatory power. The fear that this might be used by their rivals may lead to collusive behaviour regarding prices or location of production.

It is interesting to note how different theories within the market structure approach may lead to different conclusions. Cowling and Sugden (1987) as well as Hymer, particularly in his later work such as Hymer (1971), and Jenkins (1987) follow a more Marxist tradition. They conclude that transnational strategies increase the monopolistic tendency in the economy. For them market imperfections are endogenous and therefore the conduct and strategies of companies lead to imperfections. On the

other hand, other authors, who also emphasize the oligopolistic structure, consider market imperfections as largely exogenous and conclude that internationalization leads to a more competitive environment. This conclusion seems to be shared by Vernon, Caves, Graham and Cantwell.

We should also note some key differences here between the market power approach and the internalization theory. Both groups of theories stress market imperfections but the imperfections stressed by the internalization school relate to the existence and level of transaction costs carried by the operations of the market. The other group of theorists, by contrast, stress the oligopolistic structure of the economy. The internalization school stresses efficiency as the main objective of decisions; the other approach stresses strategic behaviour. The internalization school, in contrast to the other theorists, is led to the conclusion that the behaviour of firms leads the system towards equilibrium.

Most economists in the market power tradition stress strategic behaviour towards their rivals. We should note that strategic behaviour could also be directed towards labour and government. Sugden (1991), drawing on his earlier work with Cowling, develops the theme of a 'divide and rule' approach towards labour in the context of strategic behaviour by TNCs towards rivals. Letto-Gillies (1988, 1992) sees the issue of strategies towards labour as contributing to the explanation of the growth and pattern of FDI. The thesis is that the fragmentation of production in many countries puts companies in the position of facing a fragmented labour force. This strategy is fragmentation and can be considered a reaction to the increases in the power of labour.

The increase in mass production in the 1960s and 1970s and the related internationalization on the domestic front has according to John, et al (1997) put labour in a strong position vis-a-vis capital. In reaction to this, various strategies have been adopted towards labour, in particular:

a strategy of externalization of some non-core activities through subcontracting and similar arrangements; this leads to organizational and ownership fragmentation of production and of the labour force employed;

a strategy of fragmentation of the labour force through location in various countries; this makes labour organization more difficult.

This approach helps to explain some of the pattern of international production and in particular.

- (a) the increase in FDI in developed countries;
- (b) cross-border investment;
- (c) the large share of intra-industry FDI;
- (d) the increase in sub-contracting including international sub-contracting;
- (e) the increase in the network of operations of TNCs.

A strategy of ownership and geographical fragmentation leads to a weaker position for labor at the level of the company and the macro economy. Moreover, there is a link between strategic behaviour towards labour and towards rivals: success in dealing with labour puts the company in a stronger position against its rivals.

2.015 THE ECLECTIC APPROACH

It is not an easy task, explaining the many changes in the internationalization of economic activities. This is partly due to the complexity of the issues to be explained. Internationalization can take the form of trade, which implies home production and foreign markets. It can take the form of foreign production, which can either be direct, through internalization across countries, or can be implemented through external arrangements such as licensing, franchising, sub-contracting. Mixed arrangements such as joint ventures are also possible and are becoming increasingly common.

It is therefore not surprising that no single theory can easily explain all the relevant phenomena. There are of course theories that are more realistic than others and more successful than others in explaining the real world and in making predictions. None the less the complexity of the phenomena to be explained remains, particularly, when allowance is made for such elements as: intra-industry direct investment, cross-country investment, investment in developed versus developing countries and different patterns in various industries.

John Dunning has been working on foreign direct investment since the 1950s, well before the subject became very widespread in business schools. Indeed Dunning's work greatly contributed to its dissemination. The beginning of his work coincided with the big wave of American investment in Britain. Indeed Dunning began by puzzling over the industry pattern of such investment, the characteristics of American investor companies and characteristics of the macro environment in the home and host countries. He began by trying to explain why, within the United Kingdom labour productivity in United States' sub-sidiaries, was on average, higher than the productivity in United Kingdom owned companies. The traditional explanation given at the time was along conventional neoclassical and macroeconomic lines. Economists were trying to explain it in terms of different factor endowments on the part of the two economic systems. A different explanation focused on the relevance of elements which are specific to the firm and on how firms organized and managed their resources. Dunning used this as the basis for explaining different performance between companies and industries.

In fact, Dunning (1991) traces the development of his own research agenda and its relationship to other works as well as to criticism of his own work. There is also an extensive reply to his critics in Dunning (1988).

Dunning's work went through various developments and refinements. Culminating in Dunning (1977) which tried to explain the 'why', 'where' and 'when' of

international production and trade by developing a system for classifying and analysing various advantages likely to influence decisions regarding the type of international activities under-taken as well as their country and industry pattern.

The advantages are grouped by Dunning into 'Ownership', 'Locational' and 'Internalization' (OLI) advantages. The advantages are specific to, respectively:

- (a) Firms;
- (b) countries/locations; and
- (c) the organization of production.

The third type considers the advantages of internal versus external production. Dunning (1980, p. 275) explains his eclectic approach thus:

Its principal hypothesis is that a firm will engage in foreign direct investment if three conditions are satisfied:

- (1) It possesses net ownership advantages vis-a-vis firm of other nationalities in serving particular markets. These ownership advantages largely take the form of the possession of intangible assets, which are, at least for a period of time, exclusive or specific to the firm possessing them.
- (2) Assuming condition (1) is satisfied, it must be more beneficial to the enterprise possessing these advantages to use them itself rather than to sell them or lease them to foreign firms, i.e. for it to internalize its advantages through an extension of its own activities rather than externalize them through licensing and similar contracts with independent firms.
- (3) Assuming conditions (1) and (2) are satisfied, it must be profitable for the enterprise to utilize these advantages in conjunction with at least some factor inputs (including natural resources) outside its home country; otherwise foreign markets would be served entirely by exports and domestic markets by domestic production.

This approach is 'eclectic' in that it combines elements or various theories in a broad

classificatory framework. It allows the analyst to consider all the possible influences on the determinants of the extent and patterns of various international activities. The advantages in each category can be many. There are also inter-relationships between the various categories. Ownership advantages can be enhanced or stifled by locational-specific elements. The distinction between ownership and internalization advantages is not always clear cut. The generality of the theoretical framework can thus become both an asset and a liability for Dunning's approach. He is well aware of this and writes, partly in reply to his critics: 'The eclectic paradigm is to be regarded more as a framework for analysing the determinants of international production than a predictive theory of the multinational firm' (199, p. 124). The eclectic paradigm has been very widely accepted in the international business academic community as operational, practical framework for researchers into international business problems. For example the United Nations Centre on TNCs has often used this framework to analyse the geographical and industry pattern of FDI.

The eclectic theory of international production.

Dunning (1981: 80-81) summarizes the eclectic paradigm thus

- (1) Ownership specific advantages (of enterprises of one nationality, or affiliates of same, over those of another).
 - (a) Which need not arise due to multinationality. Those due mainly to size and established position, product or process diversification, ability to take advantage of division of labour and specialization, monopoly power, better resource capacity and usage. Proprietary technology, trade marks (protected by patents and legislation).

Production management, organisational; advantages, market systems, research and development capacity; bank of human capacity and experience.

Exclusive or favoured access to inputs such as labour, natural resources, finance, information.

Ability to obtain inputs on favoured terms (due, for example, to size or monopolistic influence).

Exclusive or favoured access to product markets.

Government protection (for example control on market entry).

- (b) Which those branch plants of established enterprises may enjoy over de novo firms.

Access to capacity (administrative, managerial research and development, marketing, etc.) of parent company at favoured prices.

Economies of joint supply (not only in production, but in purchasing, marketing, finance, etc. arrangements.

- (c) Which specifically arise because of multinationality, multinationality enhances the above advantages by offering wider opportunities.

More favoured access to and/or better knowledge about information, inputs, markets.

Ability to take advantage of international differences in factor endowments and markets. Ability to diversify risks, e.g. in different currency areas, and to exploit differences in capitalization ratios.

- (2) Internalization incentive advantages (to protect against, or exploit, market failure).

Reduction of costs (e.g. search, negotiation, monitoring) associated with market transactions.

To avoid costs of enforcing property rights.

Buying uncertainty (about nature and value of inputs, for example technology, being sold).

Where market does not permit price discrimination.

Need of seller to protect quality of products.

To capture economies from externalities and interdependent activities (see 1 (b) above).

To compensate for absence of futures markets.

To control supplies and conditions of sales of inputs (including technology).

To control market outlets (including those which might be used by competitors).

To be able to engage in practices such as cross-subsidization, predatory pricing etc, as a competitive (or anti-competitive) strategy.

(3) Location-specific Advantages:

Spatial distribution of inputs and markets.

Input prices, quality and productivity (for example labour, energy, material, components, semi-finished goods). Transport and communications costs.

Government intervention.

Control on imports (including tariff barriers), tax rates, incentives, climate for investment, political stability etc. Infrastructure (commercial, legal, transportation).

Psychic distance (language, cultural, business, customs differences, etc.).

Economies of research and development, production and marketing (e.g. the extent to which scale economies make for the centralization of production).

2.16 REVIEW OF SELECTED INDEPENDENT VARIABLES

SOCIO-POLITICAL INSTABILITY

In order to enhance understanding of the theoretical framework and increase the robustness of the model. This section will select and discuss some of the independent variables that are believed to be very crucial to foreign direct investment and discuss them based on current literature. One of these variables is the effect of political risk on foreign investment. The effect of political risk on investment has been rather controversial.

Rummel and Heenan (1978) have asserted that the failure of executives to assess the political climate where they do business can have disastrous implications - ranging from simple work stoppages to expropriation of property and loss of life. Whatever the form they say, the potential loss from political risk can be astronomical.

It is useful to distinguish here between "political uncertainty" and "political risk".

Political uncertainty according to Rummel and Heenan (1978) describes and unmeasured subjective doubt about a political environment. Political risk on the other hand denotes a relatively objective measurement usually resulting in a probability

estimate of that doubt. When the international manager makes a probability judgement of an uncertain political event in a host country he according to Root (1973) thereby converts a political uncertainty into a political risk. By converting uncertainties in the political environment to probability terms, political risks provides a mechanism for the objective evaluation of foreign investment climates.

Despite the value of risk analysis, some surveys indicate that few multinational corporations have developed systematic approaches for determining the political fortunes of their overseas markets. Indeed, the political dimension remains one of the most misunderstood and misinterpreted aspects of multinational operations. For many businessmen, political risk is assessed simply from prevailing attitudes, where first impressions and current events dominate. For example, difficulty in clearing customs, a bad meal or other displeasing first hand experience, by senior executives can, unfortunately, have a profound effect on their evaluation of a particular country.

Furthermore as Rummel and Heenan go on to point out chief executives often place undue importance on dramatic events: a student riot, a political kidnapping or a palace coup. This attitude is branded "the odd-lot syndrome" that is the tendency-shared by skittish odd-lot investors - to be overly influenced by periodic swells or optimism or pessimism and hence, seung from onr potentially costly secision to another by sporadic events.

Clearly, business decisions based on first impressions and dramatic but insignificant events are likely to lead to faulty international policy. For some multinationals the effect has been to avoid potentially attractive markets for the wrong reasons, for others supposedly safe havens have erupted. The there is the related problems of focus. In coping with political risk most corporations are engaged in response rather than initiation. Typically for example, they spend a more effort analysing how to encounter expropriation once it has occurred instead of attempting to predict its likelihood beforehand.

APPROACHES IN ANALYSING POLITICAL RISKS

There are a mixture of subjective and objective approaches that dominate corporate attempts to analyse a nation's political climate.

As pointed out by Rummel and Heenan (1978) the four most favoured approaches in use include grand tours, old hands, Delphi techniques and quantitative methods. A brief description of the different approaches is given below.

Grand Tours:

Multinational corporations considering investing in a particular country or region will do some preliminary market research then despatch an executive or a team of people on an inspection tour. Local leaders are contacted and conferences held with government officials and businessmen. After surveying political landscape for several days - even weeks - a company representatives return home to appraise senior management of their impressions.

This grand technique tends to suffer from an overdose of selective information.

Frequently, company observers are briefed in turn but in fact insulated from the political and economic realities of the country visited. This has always happened in the case of Nigeria. No doubt it is difficult to avoid the comfortable but canned presentations which often form the substance of the whirlwind tour.

Old Hands:

In many instances, multinational corporations seek to acquire area or country expertise from seasoned educators, diplomats, journalists or businessmen. In cases where the market potential looms large, this approach can be most effective.

Most multinationals retain such experts on a consulting basis; a few particularly banks and oil companies, hire these professionals full time.

The assignments of these professionals will include assessments of the objec-

tive and personalities of a nation's current leadership, the strenghts and weaknesses of competing political groups and the likelihood of new legislation. The capability and experience of the adviser often determines the quality of his report, but even the experts make mistakes. In the old hands approach, a company puts implicit faith in the judgement of outsiders. Such an approach has obvious drawbacks, but it can provide multinational corporations with an improved understanding of the political dimension.

Delphi Techniques:

This is a futuristic approach and it offers a more systematic approach to political risk analysis.

First, corporate decision makers attempt to identify selective elements influencing a nation's political destiny: size and composition of the armed forces, delays experienced by foreign investors, and political kidnappings for example. Nex, a wide range of experts is asked to rank or weign the importance of these factors for the country under consideration. Then responses are collected and a checklist os the ranked variables is constructed.

Finally, most corporations using the Delphi techniques aggregate the ranked variables of the checklist into an overall measure of index of political risk. To be sure of the checklist or index approach facilitates go/no-go decisions. Nevertheless, as Rummel and Heenan point out, for Delphi assessments to be meaningful requires:

- * A comprehensive and accurate listing of the major determinants of political risk.
- * The well-reasoned and timely opinions of knowledgeable professionals.
- * An appropriate mechanism for weighing and combining individual opinions.

Invariably, however, at least one of these critical factors is missing and the technique begins to produce erroneous conclusions.

In many instance, unwarranted indicators underlie political risk profiles. What emerges according to Rummel and Heenan as "ad hoc quantification where measures or indexes of political risk are established that bear little or no relationship to the data. Naturally, adulterated inputs lead to adulterated outputs. The strength of the Delphi technique rests on the posing of relevant questions. When they are defective the entire structure crumbles.

Another analogy of the deficiency of the Delphi methods can be likened to the household fever thermometer, most indexes of political risk gauge a nation's health along a unidimensionality ranging from hot to cold. We know, however, that temperature taking alone cannot distinguish between a sick and the normal person. So too, for nation states, indeed, modern societies are composed of inter-dependent parts. Culture, religion, technology, politics and many other factors form the gestalt of a nation. Therefore, the task of aggregating important risk elements of multidimensional in nature and attempts to classify a country's fate along a single scale will amount to an inaccurate and misleading analysis.

QUANTITATIVE METHODS:

With much the same precision that econometricians apply to the forecast of economic events, decision-makers can gauge a nation's political future. New tools and techniques using multivariate analysis allow corporate decision-makers not only examine complex political issues but also to confirm intuitive impressions based on the more subjective approaches.

Multivariate analysis according to Hennen and Addelman has two possible uses: (1) to predict future political trends on the basis of current and historical information or (2) describe more fully underlying relationships affecting a nation state.

This using available and appropriate computer software global companies can apply multivariate analysis and can predict much thorny issues as:

What is the likelihood of normalization of U.S. - Nigerian political and economic relationship? And when? (Definition of patterns and trends which countries in sub-saharan Africa represent the best trading risks for Western businessmen? (Development of country and regional typologies). How significant is the political execution in Nigeria inter ethnic revalries, attempted coups in Nigeria Accurate answers to these and other questions provide added crispness to executive evaluations of political conditions.

INTEGRATED ANALYSIS:

When treated independently, each of the most favoured methods is rarely sufficient for a thorough going analysis of political risk.

There is no doubt that grand tours, old hands, Delphi techniques and quantitative method all serve an important role.

According to Rummel and Hennan together with Cookenboo success is more likely when these subjective and objective approaches are brought together in an integrated fashion.

Using the integrated technique, global companies can sort out fact from fiction in making their political productions. One survey for instance by the same Rummel and Hennan indicated that the old assumption that the wider the gap between a nation's rich and poor, the greater its instability, has no validity. Nor does the absence of a middle class by itself increase the risk of future instability instead the findings showed that the political destiny of a nation is influenced by the following independent dimensions:

Domestic instability - The level of national conflict as measured by tendencies toward subversion, rebellion, and turmoil. Among the many variable examine by them are riots, purges, assassinations, guerilla wars and government crisis.

Foreign conflict - The extent to which a nation manifests hostilities against others.

Evaluated by the researchers are a multitude of factors ranging from diplomatic expulsions to military violence.

Political Climate: - The degree to which a government is prone to swing to the far left or right typical indicators include the political alignments, the role of the military in the political process.

Economic Climate: - An overall assessment of the foreign investment climate and particularly the government's predisposition toward economic intervention. Considered are the usual factors reflecting a nation's economic strength: gross national product, inflation, external debt levels, and the like.

These dimensions in turn, are broken down into separate components. In the case of foreign conflict for instance, important independent elements are negative communications, warnings and defensive acts, intensity of violence, negative sanctions and anti-foreign demonstrations. Finally, the best of these components are identified. Threats, protests and accusations of negative communications, alerts mobilizations and troop movement are significant symptoms of warnings and defensive acts.

The point can finally be made that political risk analysis is multidimensional task involving several hundred political, economic and socio-economic factors (indeed one major petrochemical company conducts daily assessments of its overseas markets by examining almost 400 separate variables).

2.017 CORRUPTION AND INVESTMENT

Corruption can be described as the impairment of integrity through unlawful means. Corruption is a universal problem in business, government and society in general. There have been so much written about corruption recently especially how it affects investments in developing countries. More recently transparency international has rated Nigeria together with five other countries to be the most corrupt in the

world.

In the 1997 "Annual World Bank Conference on Development Economics" Rose-Ackerman et al made extensive contribution on corruption and development.

According to Rose - Ackerman (1997) payments are corrupt when they are illegally made to public agents with the goal of obtaining a benefit or avoiding a cost. Such payments are not merely transfers. They affect the behaviour of both payers and recipients. Different societies draw the line between legal gifts and illegal payment. In thinking about where to draw the line one must ask whether payments to agents undermine public goals. Recent cross country studies such as Mauro (1997), indicate that strong legal and government institutions and low levels of corruption help foster investment and economic growth. Corruption is highly correlated with other measures of bureaucratic efficiency such as the amount of red tape and quality of the judiciary these studies therefore cannot determine the effect of any one measure by holding the others constant. The data support the claim that corruption is a function of the amount of red tape, but the amount of red tape, is itself partly a function of prevalence of corruption. Corruption, according to Mauro (1995) is a symptom of other underlying problems rather than an independent variable.

As already stated corruption is a worldwide malaise, no region has escaped the negative impact of corruption, for example, Wei (1997) found that foreign direct investment was negatively associated with corruption. Even East Asia's "miracle" economies were not immune.

Another study, Ades and di Tella (1995) found that corruption can undermine industrial policy, a case in point is the ineffective implementation of the various development plans in Nigeria.

Rose - Ackerman (1997) has in addition articulated six structural features that create incentives for corrupt behaviour.

The government may allocate a scarce benefit to individuals and firms using legal criteria other than willingness to pay bribes clear the market.

Public officials may have little incentive to do their jobs well because of low pay and inadequate monitoring.

Private individuals and firms may seek to lower the costs of taxes duties and regulations imposed on them by government - bribes lower costs for those who pay them.

The government may confer large financial benefits on private firms through contracts, privatizations and concessions - bribes affect the level of monopoly rents and their allocation between private investors and public officials.

Bribes may substitute for legal forms of political influence, and bribery by politicians buys votes.

The judiciary may have the power to impose costs and transfer resources between litigants - bribes can override legal norms.

The above listed incentive structure can be expantiated thus: ***Bribes That Equate Supply and Demand.*** Governments often provide goods and services for free or sell them below market prices. In many cases dual prices exist. For example multiple exchange rates (official autonomous parallel rates) and import quotes are frequent sources of pay offs. When the supply of credit and the rate of interest are controlled by the state, bribes may be paid for access to credit. This is confirmed by various studies, De milo et al (1995) Webster (1993) and Webster and Charap (1993). It has also been found that corrupt markets are less open than competitive ones as claimed by Cartier - Bresson (1995) Gambetta (1993) Rose - Ackerman (1978). The illegality of bribery induces participants to spend resources to keep the transaction secret. Information about bribe prices will not be publicised, and prices may be sticky. Some potential participants may refuse to enter the market because of moral scruples or fear of punishment, and the public may limit their dealing to insiders and trusted friends.

Bribes As Incentives Payments for Bureacrats: Bribes can be paid to receive good service or to avoid delays. In some economic models such bribes are effective

incentives. For example, payoffs to queue or rank managers can be efficient because they create incentives for the managers to work quickly and to favour those who value their time highly Lvi (1985).

Bribes often act as incentive payments to public officials, but tolerance of these payments especially by outside lenders and donors such as the World Bank, is likely to dim the prospects for long term reform. Incentives payments that is widely viewed as acceptable should be legalized, but not all incentive pay schemes, improve bureaucratic efficiency, instead, they can encourage inefficient efforts to maximize financial rewards.

BRIBES TO LOWER COSTS:

Governments impose, regulations, levy taxes and enforce criminal laws. Individuals and firms may pay from these costs for example by colluding with tax collectors and custom officials to lower the sums collected. The economic impact of bribes paid to avoid regulations lower taxes, and supersede laws depends on the efficiency of the underlying systems. In an inefficient legal framework payoffs according to Rose Ackerman (1997) to avoid onerous regulations and taxes may increase efficiency. This argument according to Oxford Analytical is commonly espoused by investors in the developing world. It is a pragmatic justification that grows out of frustration with the existing legal order.

Investors do not pay bribes to avoid inefficient rules and taxes, they pay bribes to reduce the impact of all state imposed burdens, justified or not. Tolerating such corruption can cause serious damage in nations struggling to build viable states.

BRIBES TO OBTAIN CONTRACTS AND CONCESSIONS AND TO PRIVATISE FIRMS:

Bribes paid to win major contracts and concessions and to privatize companies

are generally the preserve of large businesses and higher - level officials. Such bribes appear analogous to cases in which government disburses a scarce benefit. Is there anything distinctive about such corruption?

One difference according to Rose - Ackerman (1997) is the likelihood that these officials are effectively insulated from prosecuting and thus can be less restrained in their corrupt demands than lower level officials. A second difference is that bribery of top officials can have more far reaching economic consequences. As pointed out by Campos and Root (1990) in some countries in Asia where systemic high-level corruption coexists with strong growth. These states have managed to create secure economic environments so that state - supported deals represent credible long term commitments. Even in such countries as Wei (1997) points out corruption is not beneficial because of its distributive costs and the distortion of allocative choices.

Bribes to Buy Political Influence and Votes:

Democracy gives citizens a role in choosing their political leaders. Thus corrupt elected officials can be voted out of office. But democracy is not necessarily a cure for corruption. Some democracies harbour corrupt politicians. Moreover, bribes are often used to fund political parties and election campaigns.

Modern political campaigns require enormous amounts of money. In the absence of public funding, businesses that have a stake in politicians' decisions are the most convenient source of funds. Even if certain contributions from business are legal, firms and politicians may prefer to keep them secret. If a quid pro quo is involved. An entrenched system of illegal payoffs can undermine efforts to reform campaign financing. As observed by Many (1996) in France and Italy political parties are now dominated by business politicians and equivalent of what is called "Money bags" in Nigerian politics.

Bribes to Buy Judicial Decisions:

Through their decisions judges have the power to affect. Thus, like any public official with similar powers they may be tempted to accept bribes. This temptation is stronger when judges are underpaid or over burdened and have poorly equipped and under staffed offices. Even if judges are not themselves corrupt, clerks in charge of assigning cases and advising judges may demand or accept bribes. Buscaglia (1991) points out that the lack of formal court fees creates incentives for low employees and judges to unauthorised fees.

When the judiciary is considered corrupt it introduces uncertainties into business climate, laws may not mean much and those with disputes may avoid bringing them before the courts unless they are certain to be the higher briber for instance in Nigerian there are laws against official corruptions but there have been no impact of these laws on society. Courts can be circumvented by, hiring private arbitrators or resorting to the protection provided by organized crime. One study by Buscaglis (1995) found that most business people try to avoid using the courts to resolve dispute.

A more recent report by the Asian Development Bank (ADB) in their 1999 annual report has attributed the Asian economic crises partly to corruptism. The bank pointed out that it has no tolerance for embezzlement the sale of official posts, nepotism and extortion; under threat of legal sanctions. Also on the bank's black list are other practices such as the selection of uneconomical projects for the opportunity of kickbacks, procurement fraud, bribery misappropriation disclosure of false information.

Furthermore according to ADB report systematic corruption exacts a heavy price on developing economies by reducing investments increasing capital costs, and increasing the time business executives need to spend negotiating with government officials. The bank report concluded that there is evidence that the quality of governance has significant impact on investment and growth. There is also growing international recognition of the damage caused by corruption.

MEASURING CORRUPTION

As pointed out by Wei (1999), by the very nature of corruption (secrecy, illegality, variations across different economic activities) it is impossible to obtain precise information on the extent of corruption in a country unlike for instance, measuring inflation. This difficulty also precludes a precise grading of countries according to their relative degree of corruption.

Nevertheless, one can still get useful information on the seriousness of corruption in a country by surveying experts of firms in that country. Like pornography, corruption is difficult to quantify, but you can know it when you see it. There are several survey based measures of "corruption perception" that are increasingly visible now. Four of such measures are briefly described here.

(a) ***Business International (BI) Index***

Business International Index is based on surveys of experts/consultants (typically one consultant per country) conducted during 1980-83 Business International now a subsidiary of the Economist Intelligence Unit. It ranks countries from one to ten, according to "the degree to which business transactions involve corruption or questionable payments".

(b) ***International Country Risk Guide (ICRG) Index***

Produced every year since 1982 by Political Risk Services, a private international investment risk service. The ICRG corruption index is apparently based on the opinion of experts and supposed to capture the extent to which "high government officials are likely to demand special payments" and to which "illegal payments are generally expected throughout lower levels of government" in the form of "bribes connected with import and export licenses, exchange controls, tax assessments, police protection, or loans".

(c) *Global Competitiveness Report (GCR) Index*

Unlike the BI and ICRG indices, the GCR Index is based on a 1996 survey of firm managers, rather than experts or consultants. Sponsored by the World Economic Forum (WEF), a Europe-based consortium with a large membership of firms, and designed by the Harvard Institute for International Development (HIID), this survey asked the responding firms about various aspects of "competitiveness" in the host countries where they invest. 2381 firms in 58 countries answered the question on corruption which asked the respondent to rate the level of corruption on a one-to-seven scale according to the extent of "irregular, additional payments connected with import and export permits, business licenses, exchange controls, tax assessments, police protection or loan applications". The GCR corruption index for a particular country is the average of all respondents' ratings for that country.

(d) *Transparency International (TI) Index*

Produced annually since 1995 by Transparency International, an international non-governmental organization dedicated to fight corruption worldwide, the index is based on a weighted average of approximately ten surveys of varying coverage. It ranks countries on a one-to-ten scale.

As a survey of surveys, the TI index has its advantages and disadvantages. If the measurement errors in different surveys are independent and identically distributed (iid), the averaging process used to produce the TI index may reduce the measurement error. But iid assumption may not hold. Moreover, since different surveys cover different subsets of countries, the averaging process may introduce new measurement errors when cross-country rankings are produced. One should also note that, as the TI indexes in different years are derived from potentially different set of surveys, they should not be used to measure changes in corruption level over time for a particular country.

As examples of the corruption ratings according to different sources, the BI, TI and GCR indices for a subset of countries is hereby reproduced. In the original indices, large numbers refer to low corruption (e.g. the BI-index value for Singapore is 10). To avoid awkwardness in interpretation the scales are rescaled in by Wei (1999) as shown in Table 2.5 so that low values imply low corruption (e.g. the re-scaled BI index value for Singapore is 1). To facilitate comparison the GCR ratings are rescaled from the original 1-7 range to 1-10 range in the table.

Table 2.5: Corruption Ratings for Selected Countries

	BI	T197	GCR97
Asian countries			
Singapore	1	2.34	1.77
Hong Kong	3	3.72	2.17
Japan	2.25	4.43	2.96
Taiwan	4.25	5.98	4.60
Malaysia	5	5.99	5.67
S. Korea	5.25	6.71	6.20
Thailand	9.5	7.94	7.93
Philippines	6.5	7.95	7.94
China	n.a.	8.12	5.86
India	5.75	8.25	7.30
Indonesia	9.5	8.28	7.94
Pakistan	7	8.47	n.a.
Bangladesh	7	9.20	n.a.
Non-Asia Countries			
Canada	1	1.90	2.37
United Kingdom	1.75	2.72	1.93
Germany	1.5	2.77	2.61
United States	1	3.39	2.41
France	1	4.34	3.51
Mexico	7.75	8.34	6.24
Kenya	6.5	8.70	n.a.
Colombia	6.5	8.77	7.41
Russia	n.a.	8.73	7.61
Nigeria	8	9.24	n.a.

Notes: See the text immediately preceding the table for sources on BI, TI and GCR indices. In the original BI, TI and GCR indices, small numbers imply more corruption. All the indices in the table have been re-scaled so that large numbers imply more corruption. For BI and TI indices, the values in the table = 11 - original scores; and for the GCR index, the values in the table = 8 - original scores. The GCR ratings are rescaled from the original 1-7 range to 1-10 range.

Source: Shang-Jin Wei (1999) "Corruption in Economic Development".

It is worthwhile to emphasize again that these indices reflect people's self-reported perception, as opposed to objective measures of corruption. Perception can be different from reality. However, two things may be worth noting. First, for many questions such as how corruption affects foreign investment, perception - and thus perhaps our measure - could actually matter. Second, despite the very different sources of the surveys, the pairwise correlations among the indices are very high. For example, according to Wei (1997b), the correlation between the BI and TI indices and that between BI and GCR indices are 0.888 and 0.77, respectively. These high correlations suggest that statistical inference on the consequences of corruption is not very sensitive to the choice of corruption index.

2.18 TRANSPERANCY

Transparency can be described as the disclosure of a country's mode of economic operation. It will include disclosure on such things as Bank supervision, judicial system, investment code, and bankruptcy laws. In short it will embrace openness toward the electorate on financial markets including the behavioural, administrative, regulatory accounting and forecasting aspects. A study by George Kopit and Jon Graig of the IMF recommend that to enhance transparency an open legislative debate on the government's budget proposals, accompanied by estimate of tax expenditure and of the cost of quasi-fiscal operations be conducted by non financial enterprises or by financial institutions on behalf of the government. The study calls for a set of clear public accounts and forecasts that rely on accrual-based recording supplemented by cash flow data with consistency between the budget statement and the government balance sheet. The later of course, is critical for determining the magnitude and composition of public sector indebtedness, which should be published along with data on unfounded contingent liabilities and commitments. For any government it is essential to issue periodic statements of its

policy goals and quantitative targets, supported by realistic and well-documented short term forecasts, plus medium to long term scenarios to determine, respectively, the appropriateness of the fiscal stance as well as the sustainability of policies or the need for structural reforms.

Although it is difficult to provide conclusive proof, the IMF study presents some evidence of a positive relationship between fiscal transparency and overall economic performance. In each major region the study claims that countries with a relatively high degree of fiscal transparency are usually associated with greater fiscal discipline, and have been able to achieve higher growth and greater stability than comparable countries within the region. The study claims further that such diverse countries as Botswana, Chile, Denmark and Newzealand stand out as exhibiting both fiscal transparency and robust economic performance. On the other hand the recent crisis in South East Asia illustrates that high growth is not sustainable without sufficient transparency - concerning for example the extent of government - directed or guaranteed lending. It cannot on the other hand be denied that in certain well circumscribed cases - when premature disclosure of sensitive statistical information or policy measures would confer unintended windfall gains on some groups or weaken the effectiveness of those measure - there might be justification for a temporary departure from transparency.

Fiscal transparency can be viewed as a necessary but not sufficient means to governance, but as the IMF study points out in countries where government is required to report its policy intentions and activities frequently to the public where its dealings with private suppliers and financial institutions are subject to open procurement rules. Periodic reporting and audits, there is hardly any room for mismanagement or corruption. By contrast opaque accounting practices, or proliferation or unreported quasi-fiscal activities are all signs of insufficient public accountability.

According to Montiel (1994) Obaseki (1998) an economy is financially open when its residents are able to trade financial assets with residents of another country. The amorphous concept is clearly defined in many applications and it is difficult to measure.

The Keynesian Framework

As opined by Ojo and Obaseki (1998) the essence of macroeconomic policy and management is to ensure that an economy in disequilibrium is restored to equilibrium through the application relevant macroeconomic policy instruments. In a situation where the economy is currently in equilibrium, the same policy instrument can be used to sustain that equilibrium or move the economy to a more acceptable equilibrium. To illustrate we begin with a closed economy under a Keynesian macroeconomic framework. We define the aggregate demand function as:

$$Q^D = Q^D (G, T, (Q-T)^F, MPK^E, i, P, M) \dots$$

+ -
+
-
-
+

This states that aggregate demand (Q^D) is a positive function of expected future income $(Q-T)^F$, future marginal productivity of capital $(MPK)^E$, money supply (M) and government spending (G) - QD is a negative function of taxes (T), the price level (P) and interest rate (i). We assume that the economy is in equilibrium given the type of aggregate supply function. If we assume further that the aggregate supply function is the same whether the economy is closed or open, then the focal point is the aggregate demand function. The terms in bracket in equation (1) are the components of domestic absorption (A) or the summation of consumption, investment and government spending ($C + I + G$).

When the economy becomes an open one, the trade balance is brought into the aggregate demand equation.

Thus, $PQ^D = A + PTB \dots \dots \dots (II)$

where PQ^D = nominal value of aggregate demand

PTB = nominal value of trade balance.

(PX - PIM) or value of exports

minus the value of imports.

When we divide equation (II) by the price level, it becomes

$$= (A/P) + TB \quad \dots \quad (III)$$

Defining a functional form for the trade

balance gives:

$$TB = TB(A/P, A^*/P^*, EP^*/P) \quad \dots \quad (IV)$$

This states that the trade balance is a negative function of domestic absorption (A/P) and a positive function of foreign absorption (A^*/P^*) and the real exchange rate (EP^*/P). Combining equations (I) and (IV), we derive a full aggregate demand function for an open economy in the form:

$$Q^D = Q^D(G, T, (Q-T)^F, MPK^E, i, A^*/P^*, EP^*/P) \quad (V)$$

+ + + +

Where the terms are as defined earlier. Thus, in an open economy, aggregate demand has both domestic foreign components. The foreign component is influenced by foreign absorption and the real exchange rate.

The Policy Instruments for an Open Economy:

The above framework implies that for an open economy in equilibrium to remain stable, internal and external balance must be attained. Internal balance implies the application of macroeconomic policy instruments to achieve sustainable non-inflationary growth and low unemployment. Appropriate combinations of monetary and fiscal policies must, therefore, be used to ensure that the domestic economy is neither beset by inflationary pressures nor serious unemployment. In other words,

monetary and fiscal policies are used to keep domestic absorption in the desirable direction. The open economy must also attain external balance which implies a satisfactory and sustainable balance of payments position. This viable external payments position is of course partly the result of domestic economic policies and performance. In this open setting, there are therefore more policy variables which require fine-tuning in themselves and which also influence domestic monetary and fiscal policies. The main external sector policy instruments include trade, capital movement, interest and exchange rate policies.

Under a trade policy regime, an economy must identify which strategy is better outward or inward orientation. The former defines a situation in which a country opens its markets to the rest of the world and promotes its exports, while under inward orientation, a country imposes significant barriers on international trade and focuses on the development of local industry to satisfy the domestic market. The evidence shows that outward orientation leads to higher growth arising from the effect of trade on the economies of scale, increased competition from abroad, productivity growth and technological improvements. Montiel (1994) including OJO and Obaseki (1998).

An open economy must deal with capital flows, Montiel (1994). In the more usual case of rapid capital inflows within a short interval, monetary policy must stem inflationary pressures and prevent a sharp appreciation of the real exchange rate. Fiscal policy may have to be tightened which ultimately also limits the appreciation of the real exchange rate. Exchange rate flexibility could be appropriate so that a real exchange rate appreciation comes about through a change in the nominal exchange rate and not through higher inflation. Besides these policy measures, a country may need to have regulations to control capital inflows, such as imposition of conditions on short-term borrowing from abroad which is often speculative in nature.

Interest and exchange rate policies must be appropriate in the open economy.

Measures should be put in place to minimize the differential between domestic and international interest rate. Where two economies are open to capital movements, the differential between their domestic interest rates will tend to be equal to the expected movements in the exchange rate between their currencies. If this is not the case, destabilizing capital movements can take place. Exchange rate policy has various options - fixed/flexible, single/dual/multiple, crawling exchange rate band, etc. There is a tendency for increased flexibility of the exchange rate in an open economy with full capital mobility. In this situation, the exchange rate is no longer a direct policy variable. The nominal exchange rate moves endogenously according to the forces of supply and demand. Fiscal and monetary policies must, therefore, be used appropriately to influence the exchange rate which, nonetheless has an important role to play in shaping the international competitiveness of an economy.

Movement Toward Openness:

There is no doubt that the Nigerian economy has become relatively more open over the year as a result of increasing trade relations with the rest of the world. Nigeria's exports increased by 44.3 per cent in 1980, dropped by 60.8 per cent in 1986 and improved in 1987 when an increase of 48.5 per cent was recorded. This was attributed to increases in both oil and non-oil exports. Non-oil exports improved remarkably from the level in 1986 as a result of the incentives given to exporters under the Structural Adjustment Programme. Exports declined consistently between 1991 and 1994. However, exports picked up in 1995 through 1997. The share of non-oil exports in total exports remained rather insignificant throughout the review period, in spite of the incentives in place. Thus, the economy continues to depend largely on foreign exchange receipts from oil exports to finance inneeded imports.

The trend in imports has been largely similar to that of exports. Imports grew by 34.1 per cent in 1980, dropped by 56.4 per cent in 1986 and rose by 56.7 per cent

in 1991. From 1992, imports have consistently declined owing to measures aimed at containing excess liquidity in the banking system. The imports-reserves ratio, a measure of the capacity of the economy to finance required imports, showed that in 1980, the reserves which could finance 7.2 months of imports dropped to 2.3 months in 1981, less than one month in 1983, 7.2 months in 1986 and only 1.1 month in 1992. The situation remained precarious between 1993 and 1995 before an improvement to 7.6 months of imports was recorded in 1996. This was sustained in 1997. Nigeria's imports are largely in the form of raw materials and capital goods. These make up about 60.0 per cent of Nigeria's imports of goods. This category of imports is essential for economic growth and development. The inability to source them internally means that we have to rely on the international economy for their supply. There is, therefore, a limit to which restriction can be applied in order not to compromise the objectives of economic growth. As pointed out further by Ojo and Obaseki (1998) the truth is that Nigeria is highly dependent on external trade and as such, measures should be applied to ensure maximum benefit for the country in the context of globalization. To do otherwise would marginalise Nigeria and reduce welfare generally. Although the analysis of the growth of exports and imports gives an indication as to the extent of the openness of an economy. There are many formal methods of ascertaining the degree of openness of an economy. However, trade flow analysis provides the basis for robust empirical investigation of the openness of an economy. Empirically, openness can be measured by the share of trade (imports plus exports) in total output, measured by the Gross Domestic Product (GDP). This is the wider concept of openness. In the narrow context, the ratio of imports or exports to GDP can represent the openness of an economy.

A trend analysis shows that the Nigeria economy has been relatively more open since 1986 as a result of the policy measures applied under the Structural Adjustment Programme. The broad measure of openness, total trade/GDP, increased

from 0.21 in 1986 to 0.64 in 1987 as a result of the consistent implementation of adjustment measures. The trend showed a decline in 1988 when the index dropped to 0.63. This was attributed to the slippages in the implementation of adjustment policies during the year. In 1990, there was an upward trend in openness when the index reached 1.72. The situation further improved in 1995 when the policy of guided deregulation was introduced. At the end of the year, the index of openness reached a remarkable level of 3.64. The extensive liberalisation of trade and exchange, and a more realistic exchange rate management resulted in development while the economy has recorded remarkable progress in improving trade relations with other countries as reflected by the increasing ratio of total trade GPD, the rate of economic growth has remained sluggish. The low correlation between the openness of the economy and the growth rate of the economy shows that openness has not contributed much to economic growth in Nigeria. In other words, Nigeria has not benefited as expected from the liberalization of the economy. This is probably attributed to the slippages in the implementation of the SAP from 1988 when the relational budget was implemented. Furthermore, the exchange rate could not be determined at the appropriate level owing to expansionary fiscal operations and the generally accommodating monetary policy.

2.019 **TECHNOLOGY TRANSFER**

Technology transfer is a very important and controversial concept when analysing the impacts of foreign direct investment.

The major reason for this controversy is the difficulty in measurement, because according to Shive (1990), the close relationship between foreign direct investment and technology transfer makes it hard to isolate and measure the transferred technology.

Legal Background:

The transfer of technology to Nigerians and Nigerian industries is backed up by the National office of Industrial Property Act 1979. The act has the stated objective, interalia of monitoring on a continuous basis, the transfer of foreign technology to Nigeria. The administration of the Act was entrusted to the National office of Industrial Property which was recently re-named as the National Office of Technology Acquisition and Promotion ("NOTAP"). Full details of the act is contained in appendix 3.

Types of Technology Transfers:

According to Tsurumi (1984:254), technologies can be classified into three namely:

1. *Product-related Technology.*

It emanates from identifiable products that are new to host countries. This technology is often the proprietary possession of investing parent firms. Although specific production-related processes are integral part of such proprietary products, the investing parent firms technological advantage is that it alone owns the product in question.

2. *Production Process-related Technology.*

It originates from identifiable manufacturing processes. This technology is also often a proprietary holding unique to the investing firm. Although specific products accompany specific production processes the technological advantage of investing parent firms is that they possess the unique manufacturing processes not held by indigenous local firms or other foreign investors.

3. *Institution-related Technology.*

This technology results from the body of the firm's organisational expertise

that has grown out of a specific technology related to products and to production processes of investing firms. The operational experience is difficult to separate from the firm and employees affecting it. The firm's way of organizing and motivating employees and managers to produce specific products and services of high quality is but one example of such technology. The proper flow of management information within a given firm across different functional areas and proper communication between an investing parent firm and its subsidiary form the part institution related technology unique to firms. In analysing the controversy surrounding technology transfer, there are critical writers who believe that technology transfer does not exist especially between developed economies and developing economies. This school of thought believe that multinational companies, the main agents of direct foreign investments usually do not have the motive of transferring expertise but rather their main motive is usually the reaping of profit from their hosts country at all costs. Conversely, there is another school of thought the neo conventional writers that believe that technology transfer does exist. This school of thought believes that FDI results because of differences in the level of technology between two countries. For example vernon's product-cycle theory and the Industrial organization theory developed by Hymer (1971), Kindleberger (1970) and Caves (1971), and (1974) all claim that foreign direct investment leads to technology transfer.

The traditional trade theory assumes either that the technological differential between nations is levelled out by intracompany technology transfer or in the dynamic setting that technological change, overtime alters the optimal location of production by means of technology transfer. The industrial organization approach emphasizes that holders of advance technology (intangible assets manifested by product differentiation as well as managerial and marketing skills can exploit their rent fielding advantage to the fullest through FDI. Neither approach trade technology transfer as a free good, identical everywhere before FDI can take place.

Additionally, critical writers on technology transfer in Nigeria and other developing countries argue that the amount of technology transferred by multinational firms is limited because research and development efforts are concentrated in a few firms in the home country of the parent firm and because multinationals attempt to retain a monopoly over their own technology. Although neo conventional writers accept both these statements, they reject the suggestions that they lead to a limited amount of technology transfer.

Although there are no recent empirical evidence on the level of expenditure on research and development by foreign firms past studies on R & D expenditure by foreign firms shows that 40 percent of the firms surveyed did not spend anything on R & D. Their R & D activities were all handled by their parent companies. Government should participate in providing funds for research and development but when compared with other countries of the world the level of R and D funding in Nigeria is insignificant. A comparative analysis of R & D funding by different countries including Nigeria can be seen on Table 2.6.

Due to the insufficient information about the Nigerian case, it is very difficult to evaluate whether foreign direct investment agents, the multinationals transfer much technology because the neo-conventional and critical approaches differ substantially in their conception of technology transfer. In this study we can make use of survey evidence. As pointed by Biersteker (1978) critical writers value national autonomy and control and therefore reject as invalid the transfer of skills and knowledge to indigenous employees of foreign controlled firms that are located in developing countries. They agree as Biersteker further points out that technology transfer has in fact taken place when it is made available to indigenous controlled firms, often with governmental or worker control. Technology transfer takes place either directly or indirectly only after indigenous employees have left the multinationals and taken employment in their own or other domestic establishments. In this connecton, there is ample evidence in Nigeria about successful technicians who have succeeded due to the expert knowledge they acquired from multinationals.

TABLE 2.6

Table: Comparative R & D Effort in Different Countries

S/No	Country	Year	Per Capital R & D expenditure in US\$	Per Capital GNPI in US\$	R & D Expenditure as of GNP
1.	Argentina	1988	12.57	2790	0.4
2.	Australia	1988	199.38	17050	1.3
3.	Austria	1985	109.88	20140	1.3
4.	Brazil	1985	6.41	2940	0.4
5.	Canada	1989	275.34*	20440	1.4
6.	China	370	...
7.	Cuba	1989	26.68	...	0.8
8.	Czechoslovakia	1989	105.24	2470	3.3
9.	Denamark	1989	316.91	23700	1.6
10.	Egypt	1982	1.29	610	0.2
11.	Germany				
	a) Former GDR	1989	407.15	...	4.3
	b) Former FRG	1987	521.76	23650@	2.9
12.	France	1988	394.76	20380	2.3
13.	Guyana	1982	1.20	430	0.2
14.	Hungary	1989	53.64	2720	2.0
15.	India	1992	2.60	330	0.8
16.	Indonesia	1988	0.87	610	0.2
17.	Israel	1985	182.52	11950	3.1
18.	Italy	1988	178.56	18520	1.1
19.	Japan	1988	678.13	26930	2.8
20.	Keya	340	...
21.	Republic of Kore	1988	76.22	6330	1.9
22.	Nigeria	1987	0.22	340	0.1
23.	Pakistan	1987	2.91	400	1.0
24.	Panama	1986	0.10	2130	0.0
25.	Philippines	1984	0.68	730	0.1
26.	Singapor	1987	67.95	14210	0.9
27.	Spain	1988	63.32	12450	0.7
28.	Sweden	1991	712.35	25110	2.8
29.	U.K.	1989	330.44	16550	2.3
30.	U.S.A	1988	568.40	22240	2.9
31.	Former USSR	1988	218.14	3220+	6.5
32.	Venezuela	1985	10.87	2730	0.3

Source: Research & Development Statitics - 1992 - 93
Dept. S & T, Government of India

Note: 1. * Provisional
2. ... Not Available
3. @ Date refers to before unification
4. + Very preliminary estimate.

Most of these businesses are in Aba and Onitsha the commercial nerve centers of the Eastern States. In accepting the more constrained definition of technology transfer used by critical writers, one can still argue that foreign firms have contributed to the dissemination of skills and knowledge ultimately employed in domestic enterprises in Nigeria. It can be recalled that during the Nigerian civil war the capabilities demonstrated were as a result of knowledge gained from multinational firms. For instance, many of the Biafran oil petroleum refiners had been trained in the Port-Harcourt oil refinery originally established, and managed by Shell-B.P. now National Oil Plc. In addition, expatriate managers in the cement and textile industries frequently complain about their high rates of employee turnover, as upper level Nigerian staff members leave to establish their own firms or enter the civil service in managerial and advisory capacities. This aspect of technology transfer can easily be identified again in Aba and Onitsha where textile manufacturing is the dominant business. Another business that provides good evidence of this type of technology transfer is in the Paint business. There are now so many indigenous paint manufacturers. Most of the owners when interviewed for the source of the expertise would refer to Berger Paints or Dulux Paints as their former employers.

In analysing this question, critical writers contend that multinationals through their foreign direct investment tend to introduce inappropriate capital intensive technologies because most of their research and development is undertaken in the industrial country the origin of the investing company where capital intensive techniques abound and transfer of production processes ordinarily takes place.

Neo conventional writers agree that most research and development takes place in the more capital-intensive industrial countries but argue that most are adapted so that they are not significantly more capital intensive than the technologies of their domestic, locally owned competitor.

DEVELOPMENT AND TRANSFER OF TECHNOLOGICAL CAPABILITIES IN NIGERIA: THE CADBURY EXAMPLE

Historically, Nigeria has sought to acquire technology through two broad channels:

- i. transfer of production technologies from foreign enterprise in industrialized countries.
- ii. government's investment in establishing scientific infrastructures such as research institutes, universities and polytechnics; all in order to

integrate technology into the nation's development process.

As has been pointed in section 2 of this study, the experience and evidence so far in Nigeria have, however, been that the research institutes are inadequately funded. In addition, information about inventions and technological breakthroughs are inadequate. Many institutes are merely a stockpile of irrelevant and/or uncompleted projects. Private initiatives have been few and far between, as most individuals and firms do not have the capital resources to set up or fund a research unit.

As rightly asserted by Oil (1999), the Nigerian economy has, therefore, derived little or no benefit from all the approaches to attain technological development. It is therefore, necessary to consider another functional approach in the form of indigenous technology, the angle from which Cadbury Nigeria has approached the issue of technological development.

The Cadbury Nigeria Experience:

Based on the paper presented during the 40th anniversary celebration of FURO by Oni (1999), the process of technological development that Cadbury went through as an organization operating in Nigeria for 20 years, from the late seventies to date, is worth sharing. There is much to learn from the structured approach of converting

a threat to the very foundation and existence of the organization to an opportunity to transform it and not only overcome the obstacles, but also emerge stronger and better able to tackle even bigger challenges.

Background

As pointed out by the Managing Director of the firm, Cadbury Nigeria started manufacturing in 1964 at Agidingbi, Ikeja, producing mainly Bournvita, a malt-based drink. The company's business witnessed phenomenal growth in terms of sales volume and profitability between 1969 and 1981 at an average rate of 20 per cent per annum. The demand for this beverage outstripped production to an extent that supplementary supplies of the finished product (Bournvita) had to be imported from India and the United Kingdom, while production capacity was being increased locally to meet the shortfall.

Bournvita is made from the following five major ingredients: malt extract, glucose, sugar, cocoa powder and skimmed milk powder. Besides the cocoa powder, all others were imported, as indicated in table 2.7 below.

Table 2.7 Ingredients Source and Origin

S/No	Ingredients	Raw Material Source	Origin
1.	Malt extract	Malted barley	Europe
2.	Cocoa powder	Cocoa beans	Nigeria
3.	Glucose syrup	Corn	Europe
4.	Skimmed milk powder	Dairy	Europe
5.	Sugar	Sugar cane/beet	Europe

Source: 1999 Oni 13. The 40th Anniversary of FURO.

In 1977, the first major technological step was taken by installing a plant to produce malt extract locally - thereby eliminating the direct importation of malt extract. Although

the malt extract product depended on malted barely grains which still needed to be imported, at the early stage, the cost of grain importation was much less than that of the finished product (malt extract). Hence, a significant gain was realized in terms of foreign exchange, and more local jobs were created. There was an improved profit margin, as well as a boost in volume growth. This proved to be a most important investment decision, as it not only made a new technology available to local scientists, but also brought in a new plant and equipment, forming the basis for future research and development work. The company benefited a great deal from the resultant growth, well into the eighties. As we stepped into the eighties, however, the national economy began a downward trend. The word distress crept into the nation's economic language, as Nigeria started to experience problems in meeting its external obligations.

A tight fiscal policy was introduced by the Federal Government, and it became mandatory for all manufacturing companies to seek import licenses for all imported goods. As sincere as this policy was meant to be in revamping the nation's economy, it brought the growth of all manufacturing businesses (including Cadbury Nigeria) under the control of government officials, whose mode of operation did not necessarily coincide with business production schedules. Incidentally, many breweries were opened at this time - all of which depended upon malted barley. This increased barley imports to such an extent that government had to take the painful decision of banning it in 1990.

Before the ban on malted barley, the difficulty of getting an import license had become more pronounced as from 1984. Cadbury Nigeria, therefore, started a new technological development drive in search of a local substitute for barley. In this respect, FIRO, played a significant role in a collaborative research effort with Cadbury Nigeria to replace malted barley with a locally grown grain. This research was pursued vigorously right through the 80s until a complete replacement, using sorghum, was achieved before the ban came into effect in 1990. All these innovative steps resulted

in a brand new manufacturing process and a factory, that can process any cereal grain, including barley. This enabled Cadbury to remove barley, and even glucose syrup, from our import list.

The new factory, appropriately called the cereal conversion plant (CCP), which started operation in January 1990, has processed well over 100,000 tonnes of 100 per cent locally sourced grains and is in its seventh year of operation. This has saved Nigeria billions of naira in foreign exchange, in addition to creating employment opportunities for Nigerian farmers, transporters, local technicians/engineers, and workers generally. The revenue realized by the government through this venture is also significant. Besides changing the fate of business in terms of profitability and growth, it has also changed the main source of raw materials used in making Bournvita

Table 2.8 Ingredient Source and Origin

S/No	Ingredients	Source	Made from
1.	Malt extract	Cadbury Nigeria	Sorghum
2.	Cocoa powder	Cadbury Nigeria	Cocoa bean
3.	Glucose syrup	Cadbury Nigeria	Corn/Sorghum
4.	Skimmed milk powder	Europe	Dairy
5.	Sugar	Europe	Sugar cane/beet

*Cocoa powder from Stanmark Cocoa Processing Company (Cadbury Nigeria Group)

Benefits

The investment in this technological development has transformed the cost structure of Bournvita production positively, strengthened the company's balance sheet and has been central to the survival and growth of the company in the past seven years of the plant's operation. The benefits of this research were appropriately timed and coincided with the problems of inflation, naira devaluation, and foreign

exchange scarcity. All these factors had affected the available consumer disposable income and had taken their toll on the Nigerian economy. The spin-off effect of this breakthrough was also felt in about 25 other food processing industries that depend on malt extract and glucose syrup for processing their products.

Technological Development - Key success factors Committed management

Technological development not only creates new opportunities, but also changes the old ways of doing things. This usually improves the structure of the company or organization. The initial cost might be high in some cases, hence there is a need for total commitment on the part of management to time, extent and direction of the change. An initial demonstration of the benefits accruable from the development will help to convince all and assure everyone that all are in the same boat.

Competent Personnel

The adaptation of a new technology needs the right calibre of staff. Changes in technology usually come in the form of modern inputs in systems control and updated processes. The chart showing manpower development in Cadbury Nigeria in the intervening period vividly demonstrates this (Table 2.9). A breakdown of the numbers and the basic disciplines of the graduates will show the strides made in the last 10 years (Table 2.10).

Table 2.9 Management Staff Composition (1975-1995)*

Year	Total No.	Graduates	Non-graduates
1975	10	0	10
1980	139	26	113
1985	226	66	160
1990	323	142	181
1995	459	267	192

* Average Total Number of Employees is 2000

Table 2.10 Graduate Staff Discipline - Analysis

Year	No. of Graduates	Social Sciences	Physical Sciences	Engineering General	Arts
1990	142	62	36	38	7
1995	267	98	75	85	9

* Including: Food Science and Technology, Biochemistry and Microbiology.

Source: Table 2.8 and 2.9

1999 Oni B. Papers on FIRO's 40th Anniversary.

Good market base

Technological development efforts do not come cheap because they usually effect tangible changes in plant operations, e.g., new plants and sometimes expensive pilot plant operations. The organization must have a good resource base to carry out the necessary changes.

Good Financial Engineering

In the highly inflationary economy in which we operate, good financial arrangements (especially when foreign exchange expenditure is required) and financial projections must include sensitivity analyses that will anticipate all possible change. For example, in Cadbury a loan facility was turned down during the project implementation because it was available in dollars, which would have made the eventual repayment an uphill task, due to the unstable nature of the naira,

Right Economic and Political Climate

The economic and political climate are intertwined; both affect each other. In an unstable political climate, more effort is required to bring any innovation to reality. This has been the bane of technological and economic development in Nigeria and most African countries.

The Customer/Consumer

This is by far the most important of all the critical factors for the success of any technological development. Any changes, no matter how technically sophisticated, which do not produce products or services acceptable to the consumer, will lead to a disastrous failure. At every point in the development process, the consumers' opinion must be sought.

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IMPLICATIONS OF THE URUGUAY ROUND AGREEMENTS IN THE ACQUISITION OF TECHNOLOGY FOR DEVELOPMENT

The General Agreement on Tariffs and Trade (GATT) has been used mainly as a forum for the reduction of tariff and non-tariff barriers to international trade in the goods sector. Its jurisdiction has been limited to 'border measures' relating to merchandise trade. The Uruguay Round (1986-1994), however, marks the beginning of a new phase in international relationships in the economic, trade, scientific, and investment fields. Tradition was broken, and GATT was extended not only to the areas of investment, intellectual property rights and services, but also, to include the area of 'trade and environment' and even non-trade issues such as protection of human, animal or plant life and health, Sarbu (1999).

The Uruguay Round contains in a single indivisible package 28 major agreements - 25 in the goods sector, including Trade Related Investment Measures (TRIMs); the 26th agreement was on Trade Related Intellectual Property Rights (TRIPS), the 27th was a General Agreement on Trade in Services (GATS), while the 28th was the agreement setting up the World Trade Organization (WTO).

A quick comparison between GATT and WTO shows that, while GATT is only a temporary agreement between member states acceding to it, based on a preferential and non-reciprocal treatment, WTO is a permanent organization, with its own quarters and secretariat. No preferential treatment is given to member states, which have to comply with the rules and regulations of its constitution.

Hence, the jurisdiction of WTO does not stop at national boundaries or import/export measures, but impinges on domestic policies, laws, regulations and the institutional mechanisms of member countries, not only in areas of trade, but also in investment, technology, services and environment. Today, more than 40 per cent of world trade is in services.

Consequently, as opined by Sarbu (1999) the Uruguay Round will have a

profound impact on the acquisition of foreign technology and the development of indigenous technological capabilities by developing countries. As a result of this, competition in the world market, including the domestic markets of developing countries, will intensify and such competition will be increasingly driven by technological superiority.

The availability and cost of foreign technology, and the terms and conditions on which it is available, as well as the development of domestic technological capabilities will, therefore, be markedly influenced by the agreements of the Uruguay Round.

Nigeria and other developing countries would need to cope with two major trends which are gathering momentum not only from the Uruguay Round Agreements, but also, from other international, regional or bilateral pressures. These are:

- i. The protection and enforcement of Intellectual Property Right (IPRs), including such rights in newly developed areas.
- ii. The observance of environmentally safe technologies and standards.

TRIPS - the Agreement of Trade Related Intellectual Property Right, attracted essential attention and coverage during negotiations, being the most critical and controversial of the Uruguay Round Agreements, which has bearing on the technology acquisition and development policies of developing countries. Implications and Strategies for Nigeria and other Developing Countries.

The Uruguay Round has created opportunities for developing countries to gain from international trade, but this depends upon their ability to cope with the competition and demanding requirements of the markets of industrialized countries.

The ability of Nigeria and other developing countries to compete favourably and meet the demands of the external markets, including disguised barriers to their trade, will in turn, depend upon their technological capacity and strength. The fact

that the developed countries enjoy a huge lead over developing countries in the technological race, lies at the root of their quest for stringent extraterritorial protection of intellectual property rights around the world.

The UNIDO country director in Nigeria lists three basic issues arising from the Uruguay Round Agreements, particularly the TRIPs, TRIMs, TBT (Technical Barriers to Trade), and SPS (Sanitary and Phyto-Sanitary) Measures Agreements, require particular attention.

- (i) terms and conditions, the availability and cost of acquiring foreign technologies
- (ii) the building up of domestic technological capabilities, including the protection of indigenous system
- (iii) the protection of public interest in sectors of vital socio-economic importance for developing countries.

To cope with these challenges, each developing country such as Nigeria would need to analyse these three basic issues under its individual circumstance, and work strategies that best suit its own specific situation. The strategies adopted will vary according to the country's level of technological development, resource endowment and market conditions.

The strengthening of the intellectual property protection system and its extension to new areas, such as micro-organisms and plant varieties, under the TRIPS agreement, has caused immense concern in developing countries, as TRIPS requires uniform and stringent standards for protection of intellectual property rights, irrespective of their stage of economic and technological development. Pragmatism, however, demands that developing countries endeavor to make the best use of the TRIPS agreement, now that it has become a reality. They can react in two ways.

(a) By using the strengthened intellectual property protection system to attract technology-oriented business alliances through foreign direct investment, licensing or other arrangements.

(b) By adopting a well-defined strategy to encourage domestic investment in commercially-oriented research and development (R & D), and to bring about close interaction between industry, the academic research community and government, in order to foster domestic technological capabilities.

Unlike GATT, which allowed some preferential and non-reciprocal concessions to developing countries, the TRIPS agreement does not provide any substantial concessions. The developing countries, however, have been allowed a transition period of five years to implement the agreement, as compared to one year for the developed countries and eleven years for the least developed countries (LDCs).

The core provisions of the Uruguay Round Agreements deal in details with:

- * TRIPS - copyrights, trademarks, trade secrets, integrated circuits, patents, micro-organisms, plant varieties and enforcement of intellectual property rights.
- * TRIMs - applies to investment measures related to trade in goods only
- * GATT - refers to trade in services under which no 'most-favoured nations clause' - MFN, and no 'transparency' will apply to the entire universe of services
- * TBT - Technical Barriers to Trade
- * SPS - Sanitary and Phyto-Sanitary measures.

There is, therefore, scope and need for using TRIPS provision to induce foreign investment through subsidiaries, affiliates to joint ventures, as well as licensing or other forms of contractual management.

A good intellectual property protection system conforming to international standards, coupled with incentives for investment in high technology or high risk R&

D, could attract technology-oriented investments and activities, particularly in countries that have good technological infrastructure (scientists, engineers, technicians, etc.).

Most technological experts including Sarbu (1999) believe that the building up of domestic technological capabilities holds the key for getting the best value out of intellectual property protection systems. The First World Science Report of UNESCO pointed out, in 1993, that investment in R & D is a good indicator of a nation's commitment to science and technology. As such, Japan devotes 3 per cent of its gross domestic product (GDP) or about US \$70 billion yearly to R & D, while US devotes 2.8 percent or about US \$150 billion yearly. The European countries also follow this same trend with respect to R & D activities. The newly industrialized Asian countries are also doing reasonably well, spending up to 1.9 per cent of their GDP on R & D. In contrast, the developing countries do not even spend up to 1 percent of their GDP on R & D. This translates into (per capita) \$650 in Japan; \$600 in the USA; \$400 in the Scandinavian countries; \$300 for countries in the European Union; \$70 in The Republic of Korea; and less than \$10 in the developing countries.

Nearly 75 percent of R & D in developing countries is funded by government. This contrasts sharply with what occurs in the developed nations, where the private sector, especially transactional corporations (TNCs), provide more than 75 percent of R & D spending, particularly, in applied research and commercially-oriented areas.

It is, therefore, imperative that science and technology policies in general, and commercially oriented R & D in particular, are placed as priority on the agenda of national development policies, providing strong fiscal and financial incentives to enterprises and institutions both in the public and private sector, for commercially oriented or original R & D, and promoting alliance between government, domestic industry and domestic research and academic institutions (research labs, universities). Unfortunately, such links are weak in developing countries.

It is also important to promote a 'patent culture' among domestic enterprises,

scientists, technologists, and the research and academic community. A strong intellectual property system should provide the necessary financial and technical assistance to obtain international patents, and to motivate and enable domestic research institutions, scientists and technologists to receive some monetary benefits from their intellectual creativity. A major implication of the strengthened intellectual property protection system, arising from the TRIPS agreement, is the availability, cost and terms and conditions of technologies for developing countries. There is the real danger that once Intellectual Property Rights (IPRs) are heavily protected, the technologies so protected may not be available, or if they are made available, the cost, and terms and conditions may be onerous, depending on the nature of the technology and the global corporate strategy of its owner.

The protection of public interest, consistent with the protection of the rights of the owner of intellectual property, is another important area for policy response. There are no inherent contradictions between the protection of public interest and the protection of IPRs. The TRIPS agreement does not prohibit compulsory licenses, but prohibits automatic, indiscriminate or across the board issuing of compulsory licenses. Hence, the TRIPS agreement provisions should be wisely used in a combined and judicious manner to serve public interests.

As UNIDO experts point out, another important need for developing countries, is the formulation or strengthening of competition laws. In this context, member countries are allowed to adopt appropriate measures, consistent with the provisions of the TRIPS agreement, to prevent or control anti-competitive practices, or to seek expertise and advice from other countries. These could be industrialized countries or international organizations. Three areas of the TRIPS agreement required special attention for the developing countries. These are:

- (i) introduction of product patents in the pharmaceutical sector, as well as agro-chemical sector

- (ii) patenting of micro-organisms (biotechnological inventions)
- (iii) protection of plant varieties (through plant breeders' rights protection, if not patent protection).
- (iv) collaboration with TNCs in new drug development will take up an appropriate part of the chain in phases II and III of clinical testing.

Countries like Brazil, China and India should examine the above options in order to sustain their pharmaceutical industry. Incorporating the above options has proved successful in other developing countries.

The extension of intellectual property protection to areas such as micro-organisms and plant varieties, raises a number of complex issues, especially for the developing countries. Biotechnology is the technology of the future in agriculture and industry, food and medicine, waste management and environmental protection. Therefore, the product is knowledge, not a capital intensive industry. Many developing countries have attached priority to this sector and have started building up their capabilities, if not in the 'new' or 'gene biotechnologies', at least in the more mature areas (e.g., tissue culture, diagnostic kits). In this connection, the developed nations will be paying attention to the policy, legal and institutional framework or patent protection of their biotechnological inventions.

Sarbu (1999) observes that given the substantial availability of plant breeding skills in many developing countries, it is in their best interests to establish a system to protect plant breeders' rights, especially with respect to the development of new or improved plant varieties. This will stimulate private investment in seed industry and enable the public sector institutions to earn some reward for their investment in developing new plant varieties. This could significantly contribute to enhancing their agricultural production and productivity, and even to join the international seed industry.

Perhaps the most important problem that developing countries may face in the emerging trade environment is the availability cost and conditions of

environmentally safe technologies, including those related to packaging materials. The agreements on TBT and SPS give full freedom to countries to adopt and enforce measures they consider necessary to protect human, animal or plant life, health and the environment. Developing countries will be under constant pressure to ensure that their exports, of both agricultural and industrial products, conform to the environmental and safety standards of the importing industrialized countries.

As the European Union's council regulation (No. 880/92 of 23 March, 1992, the 'Eco-Label' award scheme) typifies, environmental standards will attempt to encompass the entire life cycle of a product, starting with the extraction or production of raw materials, progressing through the stages of production, distribution and consumption, and ending with the disposal after use. In other words, the process and production methods (PPM) in developing countries will have to satisfy the desired environmental standards before the end product can be released into the international country market.

Developing countries including Nigeria may face a two-fold problem here: understanding product standard criteria of the importing country, and acquiring the necessary technology to meet these standards. Developing countries should, therefore, participate actively in the work of international standard bodies in establishing or enhancing the technical competence of national regulatory and testing bodies. This will cover not only ISO 9000, but also the new ISO 14000, valid from September 1996, specifying requirements for companies to become environmental friendly.

Developing countries will need to develop and strengthen their skills in choosing and acquiring technology, equipment, raw materials, and the expertise that will enable them to meet the environmental standards adopted by the importing countries. Indeed, the 'Eco-Label', which guarantees that the product is environment-friendly, may increasingly become the 'passport' for gaining entry into industrialized countries. However, the cost of ensuring this label, may eat into the profits or competitive position

of developing country exporters.

In this context, it may be worth noting according to Sarbu (1999) that the major motive behind the drive of industrialized countries to adopt increasingly stringent standards on environmental grounds, may be the fillip it will give to their environment technology sales. It has been observed in the industrialized countries that the promotion of environment-friendly products is good business. The Environ Technology industry, ET, is one of the fastest growing industries world-wide. The global market for ET is currently estimated to be in the US \$200 - 300 billion and it is expected to reach US \$500 - 600 billion by the year 2010. In the United States, the domestic ET industry was estimated to have a turnover of \$134 billion in 1992, with about 45,000 - 60m,000 firms being active in the industry. Besides the large transnational corporations, many small and medium sized firms are also active in this sector, specializing in particular aspects of the ET spectrum.

Alive to the huge business potentials of the ET industry, the US administration has created an office for Environmental Technologies Export (ETE), in its Department of Commerce, with the twin objective of pushing environmental concerns at international fora and promoting US exports of eco-technologies. Both in WTO and in bilateral or regional trade agreements, there will be a growing insistence on the inclusion of tough environmental clauses that will promote the interests of the ET industry in the industrialized countries. It is estimated that while US exports 5-10 per cent of its ET output (despite its being the leading producer), Japan and Germany export about 25 and 30 per cent respectively, of their annual ET production. An important target of their ET sales will no doubt be the markets of the developing countries, especially the large and affluent ones.

Finally, there will be a substantial administrative and institutional burden on developing countries in the implementation of the Uruguay Round Agreements with respect to Intellectual Property Rights, as well as, standards on TBT and SPS. This

will be the case for the LDCs and other developing countries with limited experience in this field. They will have to formulate, amend or reshape their policy, legal, institutional, administrative and judicial framework.

In the matter of patenting 'micro-organisms', for instance, they may need to establish or indicate the 'culture collection' centres where deposits of micro-organisms are to be made. Considering the fact that patenting of naturally occurring micro-organisms is still in an evolutionary stage and the border line between 'discovery' and 'invention' is often settled by court decisions, developing countries may need lawyers who are scientists, and scientists who are lawyers. The TRIPS agreement (that is, the Uruguay Round), recognizes the fact that developing countries will need substantial technical assistance to establish or upgrade their institutional framework for the adoption and enforcement of intellectual property rights.

That is why, while the long-term global effects of the Uruguay Round are expected to be positive, the short-term impact is likely to be negative for many developing countries, particularly in Africa, including Nigeria.

It is pertinent to here mention a few of the things Nigeria could expect, as part of the implications of the Uruguay Round agreements:

- (i) export earnings from cocoa and coffee may be adversely affected
- (ii) with the phasing out of the Multi-Fibre Agreement, the export of textiles, cotton yarn and cotton fabrics present new opportunities for Nigeria - if attention is paid to technology, quality and marketing
- (iii) intellectual property rights will be effectively enforced - piracy will be an area which Nigeria must do a lot to curb, or else there could be retaliation from other countries, even in other sectors
- (iv) the cost of the importation of certain goods, e.g., food items, pharmaceuticals, agro-chemicals will rise
- (v) foreign-owned companies will be obliged to use domestic products, or limit the use of imported products in relation to the value or volume of their local production or exports.

Since Nigeria has signed the Uruguay Round Agreements, what is left is to see how best to take advantage of the new order while minimizing the adverse consequences.

If developing countries are to adequately avail themselves of the positive effects of the Uruguay Round, fundamental and urgent changes will be necessary in the pattern of trade of these countries. These entail a major reappraisal and reorientation of industrial strategies, including, standardization, policies and programmes linking industry, technology and trade.

This is all the more necessary for African countries, including Nigeria, but particularly the LDCs, where the negative effects are likely to be much more pronounced and the process of adjustment to a liberalized trade regime is far more difficult.

The growing technological and quality dimensions, combined with globalization of communication, markets, investments, intellectual property rights and services and the development of strong, regional trading blocs, represent an increasingly difficult challenge for African countries - including Nigeria. African countries, with the exception of South Africa, lag far behind in most of these fields.

The crucial question is the mapping out of an appropriate strategy for industrialization, within emerging world trading systems consistent with operational constraints and the technological capacity of the region. This requires a major restructuring of the pattern of industrial growth in each country's economy, through substantial investment and technology inflow and partnerships, sought not only from transnational corporations, but also, increasingly, from other developing countries and newly industrialized ones, via ECDC/TCDC, with considerable potentials for south-south economic and technological cooperation supported by UNIDO, other UN specialized agencies and international organizations.

2.20 FOREIGN DIRECT INVESTMENT AND BALANCE OF PAYMENT IMPACT

Foreign Direct Investments has a controversial effect on the balance of payment of any country. The balance of payment according to Pilbeam (1992:31) is a statistical record of all economic transactions between residents of the reporting country and residents of the rest of the world during a given time period. The usual reporting period for all the statistics included in the accounts is a year. Some of the statistics that make up the balance of payments are published on a more regular monthly and quarterly basis by different government agencies such as the Federal Office of Statistics (FOS), or the Central Bank of Nigeria. Without question the balance of payments is one of the most important statistical statements for any country. It reveals how many goods and services the country has been exporting and importing and whether the country has been borrowing from or lending money to the rest of the world. In addition, whether or not the central money authority (usually the Central Bank of Nigeria) has added to or reduced its resources of foreign currency is reported in the statistics.

In describing the balance of payments there are some problems that arise with respect to the definition of a resident. Multinational corporations, the prime agents of foreign direct investment are by definition resident in more than one country. For the purposes of balance-of-payments reporting the subsidiaries of a multinational are treated as being a resident in the country in which they are located even if their shares are actually owned by domestic residents. Another problem concerns the treatment of international organisations such as the International Monetary Fund, the World Bank, United Nations and so forth. These institutions are treated as being foreign residents even though they are actually located in the reporting country. Tourists are regarded as being foreign residents if they stay in the reporting country for less than a year.

As Pilbeam (1992:24) further points out the criterion for a transaction to be included in the balance of payments is that it must involve a transaction between a resident of the reporting country and a resident from the rest of the world.

2.21 FDI, INCOME FLOWS AND BALANCE OF PAYMENTS IMPACTS.

Questions on the effects of foreign direct investment on income flows and balance of payments positions have generated great controversy. Because of the different assumptions by critical writers and neoconventional perspectives, opposing views are always presented.

Critical writers on multinationals and foreign direct investment will support their contention that multinational investment contribute to a net outflow of capital from under developed countries, worsening their balance of payments position and contributing to the decapitalization phenomenon. Critical writers frequently refer to empirical findings reported by the UN and to works by Griffin et al.

Neoconventional writers agree that multinational investment may not necessarily contribute to a net inflow of capital. However, they argue that balance of payments effects are very difficult to measure and that empirical findings have tended to be largely indeterminate or favourable with regard to the role of the multinational corporation. As noted by Bierstiker 1978, multinationals mobilize domestic resources more efficiently than indigenous firms, they tend to improve a developing country's balance-of-payments position by reducing imports and opening new export markets.

What can be said is that the impact of FDI on host countries is very complex to explain not only in relation to developing countries but also in developed countries. Foreign-owned firms may import inputs and components rather heavily from abroad, as Japanese plants in the US have tended to do (Garham and Kingman 1989). More fundamental, however, as the Economist (1991) argued, reporting on work by Thomsen and Nicoliades (1991).

"External balances are determined by macroeconomic factors not the behaviour

of specific investors. Japanese FDI might narrow the deficit or it might widen it. For companies, the point of FDI is to shift resources to more efficient sites. When a car firm opens a factory in Britain, this does not necessarily mean it will close one in Japan. It can shift part of its product range to Britain, generally the cheaper end, giving it the chance to use its Japanese resources more efficiently in making higher-value Luxury cars. So the value of its exports might even increase".

2.021 **IMPACT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH**

This study deals specifically with the determinants and impact of foreign direct investment (FDI). It is therefore necessary to first establish the general link between all types of investment and economic growth before singling out and analysing the specific link between FDI and economic growth.

It has to be accepted that the greatest impact which any development source can make is to aid economic growth.

This section will in the light of this expectation adopt a single growth model as in Ariyo (1998) which will bring out the expected effect of each development financing source on economic growth.

INVESTMENT AND GROWTH

Developing economies, particularly in Africa, face a shortage of investible funds, and there is a strong preference for foreign investment and/or national savings to fill the gap. Since this will take some time given the need to provide an enabling environment and revamp the economy before substantial national savings could be realized, the typical developing country is expected to, at least in the short run, be a net foreign borrower (Greene and Khan 1990).

The debt-cum-growth literature, however, notes that any addition to the stock

of external debt over time must contribute to growth and development, and in particular, to the country's ability to make payments to creditors. It, therefore, provides a way of determining debt capacity and optimal foreign borrowing.

For this study, and because of its relevance to the current situation in Nigeria, we adopt a simple model which highlights the condition under which the various development financing sources can contribute positively to growth, (Ariyo 1998a). Following Greene Khan (1990), the model is described by the following equations:

$$Q = f(K) \quad (1)$$

which states that domestic output (Q) is a function of capital stock, where $f(k)$, the marginal product of capital, is positive. That is, $dr/dk = f(k) > 0$. (It is also assumed that the capital stock can be disaggregated as to its domestic or foreign sources of funding, and that their respective marginal products can be accurately measured). Real national income (Y) is defined as the difference between real output and interest payments of foreign debt., i.e.

$$Y = Q - rD \quad (2)$$

where r = foreign interest rate and D = stock of external debt. Combining equations (1) and (2), and differentiating with respect to time, we obtain:

$$\dot{Y} = f(k) - r\dot{D} - r'D \quad (3)$$

where a dot over a variable denotes a time derivative.

By disaggregating savings to comprise private savings (S_p), government savings (S_g), and foreign savings (S_f), we have

$$S = S_p + S_g + S_f \quad (4)$$

Private savings can also be specified as a function of disposable income:

$$S_p = s(1-t)y \quad (5)$$

where s is the average propensity to save and t is the average tax rate on income. Government savings is the fiscal balance which in this model is defined as income tax revenues (T_y) less government expenditures on good and services (G). This is,

$$S_g = Tr - G \quad (6)$$

Finally, foreign savings equals the current account balance (CAB) less foreign borrowing (De):

$$S_f = CAB - D_c \quad (7)$$

At equilibrium, savings (S) will be equal to investment (K), and by substituting (5), (6) and (7) into the identity (4) we obtain:

$$K = S = [S(l-t) + t]y - G + D \quad (8)$$

Converting equation (3) into growth rates and substituting for k from (8) yields:

$$y/y = f_k[S(l-t) + t - G/y] + (f_k - r) D/y - rD/y \quad (9)$$

Equation (9) suggests the following policy implications:

- i. a country can increase its growth of real national income by foreign borrowing as long as the marginal product of (externally-financed) capital f_k exceeds the cost of foreign borrowing (r); the optimal level of foreign borrowing would be attained at the point where $r = f_k$;
- ii. an increase in private saving through an increase in the average propensity to save would raise the growth rate;
- iii. an increase in fiscal deficit brought about either by a decline in tax revenues or an increase in government expenditure, would have an adverse effect on growth, and
- iv. a rise in the foreign interest rate would lower the growth rate (by the value of the debt-to-income ratio), as would a decline in external debt stock (D).

There is also abundant empirical evidence that investment is a major determinant of level, structure and rate of economic development. For instance, East Asia was able to sustain a growth rate of about 7 - 8 per cent because it maintained rates of gross capital formation of about 30 per cent of the GDP. Odedokun (1993) in a study based on a cross-section of 42 African countries also identifies investment as the major factor accounting for the differential growth performance of

the countries in the sample for the period 1970 to 1987. Levine and Renelt (1992) also report that physical investment ratio was the most consistent and robust explanatory variable accounting for differences in growth performance of a large sample of countries over an extended period of time. According to Schmidt-Ilebbel et al (1996), this result corroborates other empirical analyses of the determinants of growth for different regions of the world.

The impact of the composition of investment on real output and growth has received considerable attention in the literature. De Long and Summers (1991, 1993) disaggregate investments into "structures" (construction) and equipment components for a sample of both developing and industrial economies, and found that equipment investment contributes much more to per capita GDP growth than does the structures. This conclusion agrees with the notion that technological progress is largely embodied in new machinery although the findings reported by Auerbach et al (1994) seem to challenge the robustness of some of the results.

Aschauer (1989a & b) adopts the aggregate production function to evaluate the impact of public investment on growth. The findings, based on U.S. data, report an extremely high rate of return for public capital which was between two and five times as high as for private capital, and that the accumulation of public capital has a sizeable positive effect on private investment. These results suggest that an aggressive and appropriate public investment strategy can facilitate accelerated growth. Blejer and Khan (1984) and Easterly and Rebelo (1993) also report that government investment in infrastructure is complementary with private investment although other types of government investment are not. More recently, Greene and Villanueva (1991) and Serven and Salimano (1991) report similar findings based on multi-country panel data, while Musalem (1989) reports a complementarity in private and public investment in a time-series study of investment trends in Mexico.

Balassa (1988), however, reports cross-section estimates showing that an

increase in public investment led to a decline in private investment. Furthermore, he reports a negative correlation between the share of public investment in total investment and the size of incremental capital-output ratios, which indicates that public investment is less efficient than private investment. Khan and Reinhart (1990) also observe that the marginal productivity of public sector capital is negative whereas that of private investment is significantly positive in respect of 24 developing countries.

The perceived critical role of investment in the growth process has, however, been challenged by the neoclassical (Solow) growth model of the 1960s and 1970s which asserts that capital accumulation affects growth only during the transition to the steady state. Rather, long-term growth is determined only by the rate of technological change, which is assumed to be exogenous. Similarly, Kaldor (1957); Robinson (1972); Young (1928) and Schumpeter (1934) considered the separation between investment and innovation (or technical change) as artificial, and viewed most technological innovation as being embodied in new machinery and equipment. The model attributes the cross-country differences in long-term growth performance more to technological change (i.e. unidentified residual factors) and less to investment ratio (investment as a proportion of GDP). Nevertheless, the observed strong correlation, between investment ratios and growth performance tend to undermine the authenticity of the Solow model. In fact, recent research has brought capital accumulation back to the centre stage, suggesting an enhanced role for investment as a principal determinant of growth Schmidt-Hebbel et al (1996).

Although the empirical results reviewed above underscore the significant link between investment and growth, they, however, say little about the direction of causation. Accordingly, Schmidt-Hebbel et al (1996) consider it relevant to distinguish between the cycle and the long term. In the short term, investment was shown to depend on the rate of output growth and/or the rate of capacity utilization, which serve respectively as indicators of future demand and the severity of liquidity

constraints faced by firms. These two variables are very critical to decisions to expand productive capacity. Thus, Serven and Solimano (1993) remark that during the course of the business cycle, output may lead to accelerated investment in the economy. Schmidt-Hebbel et al (1996) opine that this sensitivity of investment to cyclical variations in output and/or other short term factors suggests that a short-term recession may have negative long-term effects by causing a deep investment slump that permanently traps the economy in a low-growth, low-investment equilibrium, thus, suggesting that the growth process may be path-dependent.

Contrary to conventional development economics view that capital accumulation is a fundamental cause of growth over the long term, Behnhabib and Javanovic (1991) and King and Levine (1994) argue that the comovement of investment ratios and growth rates may be largely caused by technological innovation that drives both capital accumulation and output expansion. This, therefore, implies that capital accumulation is a consequence, rather than a cause, of the growth process, and is largely driven by technological factors. Specifically, the cross-country study by Blomstrom, Lipsey, and Zejan (1993), suggests that growth appears to precede, not follow, investment. However, Schmidt-Hebbel et al (1996) have described physical capital accumulation alone as grossly insufficient to guarantee long-term growth without two additional ingredients. The first ingredient is the accumulation of other complementary inputs, such as human capital and technological knowledge.

The second ingredient is the efficiency (or quality) of physical investment. In support of their assertion, Schmidt-Hebbel et al (1996) argue further that a large effort of capital accumulation may have little effect on growth if it is concentrated in activities with low social productivity. They cited the experience of many developing countries in the 1970s, when massive foreign borrowing was used to finance capital-intensive industrial projects that proved to be of doubtful or even negative value to

the society. Similarly, low-quality investment has been blamed for Europe's inferior growth performance relative to the United States despite a higher investment rate in Europe, and for the decline in growth rate in Japan since the late 1970s notwithstanding the high investment rate.

Easterly and Fischer (1994) identify degree of distortions in an economy as the primary determinant of the social productivity of investment. If distortions are severe, increased investment may do more harm than good; it may actually lower social welfare and reduce growth. Easterly and Fischer (1994) specifically refer to the former socialist-economies (considered an extreme case), in which decades of massive capital accumulation in pursuit of scale economies yielded little growth or welfare. Ogiogio (1996b) also reports a negative contribution of public investment to GDP growth in Nigeria for similar reasons. Other less extreme cases are provided by developing countries with high barriers to market forces or foreign trade, or with relative price misalignment, mandatory credit allocation schemes, investment licensing practices, and so forth (Schmudt Hebbel et al 1996).

2.22 THE LINKAGE ISSUE

In order to explore the physical linkages between the foreign and domestic sectors, we should examine Hirschman's concept of linkage effects (Hirschman 1958). Theoretically, firms in closed economies will acquire their intermediate inputs from each other; and, conversely, their outputs may be acquired by other firms for further processing. Thus a firm in a closed economy is bound to develop some links with others in one way or another. Consequently, an initial move to set up a pioneering industry or firm can induce a series of developments resulting in more investment and employment. This is what the linkage theory emphasizes (Schive 1990).

To make the concept operational and identify the key sector (or industry) in this process, Hirschman divides linkage effects into two types, backward and forward,

which are defined as following:

Backward linkage effects, i.e., every nonprimary activity, will induce attempts to supply through domestic production the inputs needed in that activity... forward linkage effects, i.e., every activity that does not by its nature cater exclusively to final demand, will induce attempts to utilize its output in some new activities. (Hirschman 1953, p. 100).

Of these two effects, backwards linkages are usually given more weight. As regards new investment, for example, if the assurance of the market for output is more important to a potential foreign firm than the availability of local input, then backward linkages, by creating demand, will be more effective in stimulating further investment than will forward linkages, that is, supplying local materials. This may be the case for most LDCs, because "economic development is constrained by a shortage of decision-making ability, particularly with respect to decision to invest" (Yotopoulos and Nugent 1973, p. 157).

Elegant as the linkage theory is, however, it is severely limited by its assumption of a closed economy. The links between a newly established firm and the other firms in a closed economy may vanish in an open economy. The extreme case is a foreign enclave in which neither backward nor forward linkage effects are working. The enclavistic aspect of FDI may, however, be directly in the line with the host countries' comparative advantages; for example, even if all materials are imported, processing may still be done by the host country's abundant and inexpensive labour. Thus the fruitlessness of other types of linkage poses no problem in this case. In fact, during a certain phase, "every new development is initially an enclave and it takes time for all innovation to work through and be absorbed" (Meier 1970, p. 505). Enforcing linkage effects without regard to a country's comparative advantages will cause difficulties, as was the case with the import substitution - promotion policies of many LDCs.

The paradox in the linkage argument when a static framework is assumed may be eliminated by giving the argument a dynamic setting. That is to say, linkages are, initially, merely potential effects, with no guarantee of realization. This is, in

fact, what Hirschman mean by linkages, which he carefully defined as "attempts"; under no circumstances will these attempts bear fruit immediately. In the extreme case, linkages remain as pontentials but are never realized (Weiskoff and Wolff 1977). However, the linkage theory asserts, as time passes, or as local conditions begin to favour the development of related industries induced by FDI, linkages do provide a strong intentive or stimulus to accelerate development.

It should be pointed out that lack of concrete data limits a deeper analysis of the linkage issue in the Nigerian case. The study would rely on survey data to access the backward linkages between foreign companies and the Nigerian economy.

CHAPTER 3

METHODOLOGY

3.1 In this chapter the methodology is discussed. The strategies adopted in collecting the survey data on the determinants of foreign direct investment in Nigeria are specified. The hypotheses stated in chapter one are restated in this chapter.

The two analytical techniques namely, survey and statistical data analysis are discussed. The models for analysing the determinants and impact of foreign direct investments are also specified in this chapter.

3.2 RESTATEMENT OF HYPOTHESES

In Chapter One of this study three hypotheses were stated. They are restated in this chapter for confirmation after the literature review which has shed more light on the hypotheses. Based on the literature review the controversies on the effects of socio-political instability on the inflow of foreign direct investment still remains but the empirical evidence to prove or disprove these controversies will be presented in chapter four. Consequently the three hypotheses that were tested are:

H01 Socio-political instability does not affect the inflow or outflow of foreign direct investment.

H02 The perception of overall favourable business operating conditions does not have positive effect on FDI flows.

H03: The inflow of foreign direct investment in Nigeria does not enhance economic growth significantly. As stated already in order to avoid redundancy the alternative hypotheses are implied.

H03 was tested using gross domestic product growth and export growth as dependable variables; so the subsidiary hypotheses should be:

Ho3a: Foreign direct investment does not enhance the growth of gross domestic product.

Ho3b: Foreign direct investment does not enhance the growth of exports

3.3 RESEARCH DESIGN

The survey design is adopted to generate a wide range of information on the determinants and impacts of foreign direct investment (FDI) with the aid of a comprehensive data collection schedule. (Questionnaire)

3.3.1 DATA COLLECTION SCHEDULE ON THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT

3.3.1.1 PRIMARY DATA

The survey was carried out through a questionnaire pretested among 35 post graduate students of International Affairs and Diplomacy, Imo State University. The choice of the students was predicated on the fact that the subject matter of Foreign Direct Investment is a popular topic among students of International Affairs and Diplomacy. It is usually discussed on the general theme of political economy. It was felt and confirmed that the students are knowledgeable about the determinants and impact of Foreign Direct Investment.

As expected the responding students were enthusiastic in participating in the survey. All 35 questionnaires in the pilot test were found useable. The final questionnaire was targeted at foreign affiliate managers, chambers of commerce, commercial attaches, investment agencies and representatives of international agencies such as the World Bank. (See appendix 1 for the questionnaire format). Specifically the information solicited included the following:

- (i) Time of investment arrival in the country that is before 1972 the (indigenization year and 19855-1988) (the SAP years).
- (ii) Size of the investment
- (iii) Number of employees
- (iv) Purchases of local raw materials
- (v) Export orientation
- (vi) Sources of capital
- (vii) Technology Transfer
- (viii) Investment motives

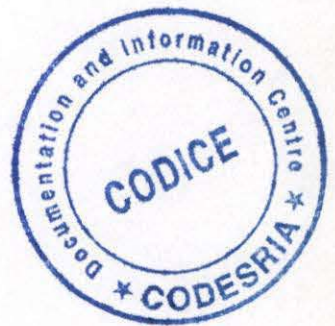
3.3.1.2 In addition respondents were asked to rank about 25 factors (independent variables) according to the importance they attached to them. The choices available and their point values were as follows:

Point Value	Important Scale
0	of no importance
1	of slight importance
2.....	of moderate importance
3	of great importance
4	of maximum importance

The factors that were ranked include the following:

1. Socio-political instability
2. Adequate technology
3. Rapid economic growth
4. Good quality labour
5. Industrial linkages
6. Government attitude towards FDI
7. Trade Liberalization

8. Low labour cost
9. Exchange rate
10. Tax collection for FDI
11. Familiarity with domestic culture
12. Good public infrastructure
13. Good geographic location
14. Other successful examples of FDI
15. Good quality research and development personnel
16. Good planning of EP2
17. Corruption of government officials and agencies
18. Transparency and Openness
19. Investment incentives
20. Inflation
21. Interest rate
22. GDP
23. Market size
24. Competitive advantage
25. Capacity utilization



3.3.1.3 **SECONDARY DATA**

Secondary data was obtained from books, journals, the Central Bank of Nigeria publications, the Federal Office of Statistics, World Bank Publications, Nigerian Economic society and the publications of the Nigerian Security and Exchange Commission.

3.3.1.4 **SAMPLING PROCEDURE**

In the proposal of this study a mail survey approach was suggested. However,

based on the advice given during the proposal defence and the obvious difficulty in achieving a reliable result based on the inefficient mailing system of the country and the general poor attitude to surveys by Nigerian respondents, the researcher was convinced that a mail questionnaire will not be adequate.

Under the circumstances the researcher adopted another strategy for the collection of data from the respondents. The unique opportunity for the collection of such data came during the 19th Lagos International trade fair in Tafawa Balewa Square Lagos from November 5th to 15th 1999.

During the 1999 Lagos international trade fair about 302 foreign companies participated and the foreign countries from which these companies originated included:

- * The United States of America
- * Britain
- * France
- * Poland
- * Israel
- * China
- * South Africa
- * Pakistan
- * Egypt
- * Western Germany
- * Ivory Coast

The 302 foreign firms that participated in the fair compared very well with 395 foreign firms estimated and used by the Central Bank of Nigeria in their 1997 survey of Foreign Private Firms. In addition to the Lagos International trade fair the researcher on the 31st of March 1999 surveyed the 11th Enugu International Trade Fair to ascertain whether there could be new foreign participants but unfortunately the participation by foreign companies was very low and no new participants featured, and surprisingly a company like Anambra Motor Company which participated fully in the Lagos International Trade Fair did not participate in the Enugu International

Trade inspite of the proximity to the fair, rather the Peugeot Automobile Nigeria Limited participated both in the Lagos International Trade Fair and the Enugu International Trade Fair.

In addition to the 302 foreign firms about 801 Local or National firms participated. Thus the fair according to evaluators represented adequately the mood of the foreign investors and it was felt that any foreign company operating in Nigeria or had interest in Nigerian market participated in the fair.

The interviews were carried out from Thursday 11th to Saturday 13th November, 1998. The researcher made use of a research assistant Emmanuel Uroegbulam, a final year Management student of Imo State University, including two other assistants from the University of Lagos.

3.3.1.5 **SAMPLING DESIGN**

All the industrial sectors were represented during the fair it therefore became necessary to apply a stratified sampling technique in the administration of the questionnaire and the interviews. The following industrial sectors were represented in the fair.

- Agriculture and Agro Allied
- Oil and Gas
- Building and Construction
- Plant and Equipment
- Electrical and Electronics
- Food and Drinks
- Household/Domestic products
- Publications and Stationery
- Telecommunications
- Automobile and Allied products
- Banking, Finance and Insurance

Chemical and Allied products
Cosmetics
Office Equipment and Data processing
Furniture and Fittings
Pharmaceutical/Health Care
Sports and Recreation
Textile, Fashion, Heather and Footwear
Chambers of Commerce

In addition eleven foreign countries participated in the fair. The proportion or percentage of participation and representation by each country and sector are given on Tables 3.1 and 3.2.

The number of participation in each stratum (sector) represented the area that investors were mostly interested in at the time of the survey.

The procedure for the administration of the questionnaire was mixed, in certain cases respondents obliged to giving out information on the spot but some respondents preferred that the questionnaire be left with them to be completed at their convenience. The interviews were facilitated by the fact that the respondents were clustered in the bilateral Chambers of Commerce pavilions. For example, the United State pavilion housed over 100 participants while in the Nigerian - British Chambers of Commerce pavilion up to 30 British affiliated companies were housed. The joint German - Nigerian Pavilion housed up to 12 German affiliated companies. On the other hand the Franco - Nigerian Chamber of Commerce and Industry housed over 20 French affiliated companies.

Given the direct personal nature of administering the questionnaire the survey was able to achieve about 85 per cent response. This means that about 257 affiliate companies out of a total of 302 companies were able to provide useful answers.

3.4 ANALYTICAL TECHNIQUES:

Two techniques are employed in the analysis of data. The techniques are described in section 3.4.1 - 3.4.2.1.

3.4.1 SURVEY ANALYSIS ON THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT (FDI)

The analysis of the survey was partly based on simple descriptive analysis of frequency distribution of relevant statistical information. It involved the construction and analysis of one comprehensive frequency distribution table including other simple tables of the type and number of responses which translated into percentages.

3.4.2 STATISTICAL ANALYSIS OF THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT IN NIGERIA

3.4.2.1 Mean, Standard Deviation and Coefficient of Variation of the Determinants of FDI in Nigeria

The first statistical technique on the determinants of foreign direct investment was the determination of the mean, standard deviation and coefficient of variation.

Following Baker and Haslam (1974) the interpretation of the survey findings was initially based on the average (arithmetic mean) (\bar{x}) and its standard deviation (s) for each of the 25 variables on the 257 respondents. The mean (\bar{x}) was computed to provide a single figure which summarized the responses and served as a basis for comparing the degree of importance the respondents attributed to each factor. (See Appendix 3a) The computation of the mean, standard deviation and coefficient of variation helped in determining which are the most important explanatory variables for the regression analysis. The variables with means of high value were selected

as strong explanatory variables.

3.4.2.2 The second statistical technique on the determinants of foreign direct investment was a regression analysis

3.4.2.2.1 Framework for Modelling the Determinants of Foreign Direct Investment (FDI)

The first part of the empirical investigation in this study focuses on the macro-economic and socio-political determinants that influence the inflows of foreign direct investment into Nigeria. There are no simple models or strong theoretical foundations to guide empirical analysis of these issues. However, the results of past studies are employed as an imperfect but useful guide.

In chapter two of this study, three questions commonly posed in the literature of foreign direct investment were pointed out. They included

- * Why do national firms involve into multinational organizations?
- * Why do firms locate production in a foreign country rather than licensing or exporting?
- * What determines the geographic pattern of FDI? That is, on what basis are host countries chosen?

The theoretical foundations addressing the three questions were presented in chapter two. Literature on the determinant of foreign direct investment continues to widen although most of the empirical literature has been published outside Nigeria. For example, recently Taylor and Sarno (1997), have distinguished between two sets of factors affecting FDI, namely push and pull factors. Fernandes Arias and Montiel (1996) Fernandes and Montiel (1996:62) have all argued that FDI "may be more sensitive to domestic (pull) factors than the more-liquid portfolio flows". As Taylor and Sarno (1997) have also indicated, FDI responds to economic fundamentals official policies and financial imperfections. Push and pull are interrelated since the fall in interest rates which tend to push investments towards developing countries also make them better credit risks "pull" factor.

Aharoni (1966) revealed that executives rate political instability as the most important variable apart from market potential. Conversely, Bennett and Green (1972) found that U.S. direct investment are not affected by political instability in the recipient countries. Discriminant analysis of fifty eight developing countries by Root and Ahmed (1979) found that "the number of regular (constitutional) changes in government leadership between 1956-1967 was significant. However, other political variables, such as number of internal armed attacks, the degree of nationalism, and colonial affiliation, were not significant.

Furthermore, Wheeler and Mody (1992) found a broad principle component measure of administrative efficiency and political risk to be statistically insignificant. Lucas (1993) does not directly incorporate proxies for socio-political risk. Rather he finds episodic dummies for good events "such as the Asian and Olympic games in Korea, and Aquino's accession in the Philippines, to be positively related to FDI. Conversely, negative events, such as Sukarno's rule in Indonesia, Park's assassination in Korea, and Marcos martial law in the Philippines had a negative effect on FDI.

In regard to Nigeria there have been a civil war and about seven coups since independence. According to Easterly and Levine (1994) the number of military coups is a common proxy for political instability. Although Helleine (1988) points out, investment incentives created by the government, such as tax holidays, appear to play a limited role country investment decisions. However most of the empirical literature support the notion that specific incentives do have a major impact particularly when these incentives are thought to compensate for other comparative disadvantages. On the other hand, it is generally believed that removing restrictions and providing good business operating conditions will positively affect FDI flows.

Within this context, there is a wide variety of government policies that may increase or decrease FDI flows, it is difficult to quantify these policies as a

comprehensive explanatory variable.

The level of domestic investment has been viewed as an important determinant of FDI. UNCTAD (1993:10) argues that countries with high investment proportion may be attractive markets for foreign investors seeking to increase their participation. According to Kurdle (1995) this variable also plays the role of supplementing gross domestic product and changes in that product by providing additional information on immediate demand conditions and the need for greater production capacity. Thus the level of domestic investment ratio is employed to capture this argument. In stating the problem of this study in Section 1.7 the indigenization decree of 1972-1988 was strongly highlighted as a major disincentive to foreign direct investment. This policy has since been reversed by the repealing of the Nigerian Enterprises Promotion Decree of 1995 and the enactment of the Nigeria Investment Promotion Decree of 1995, with the hope of changing the investment climate. It will therefore be necessary to control for this factor in the analysis by using indigenization dummy.

It was also highlighted in the problem statement that the structural adjustment programme of (1986) aimed at removing restrictions and controls had the potential of influencing FDI flows as is the case in other developing countries where such policies have been practised. This factor can be controlled by a dummy.

The size of the market, typically proxied by the level of GNP, appears to be a major determinant of FDI flows. Bandra and White (1968) found market size to be a significant determinant of U.S. FDI.

Recent results for developing countries seem to indicate that relative wage costs are a significant determinant of FDI flows. Flamm (1984) Schneider and Frey (1985) Lucas (1993) and Wheeler and Mody (1992) all find a wage cost variable to be significant.

Lucas (1993) contends that the exchange rate may have "a residual role with respect to exchange rate risk, for example, in determining the value of repatriated

profits or in threatening restrictions on such remittances. The exchange control Act of 1962 has been repealed. The exchange rate of Naira is comparatively low now, and it should be able to attract more FDI but whether this has helped in bringing in more FDI for Nigeria is yet to be seen.

Since the late 1980s several developing countries such as Nigeria, Argentina, Bolivia, Brazil, Chile and Mexico with large debt burdens have implemented debt conversion programmes. Components of the debt conversion programmes that relate to debt equity swaps and restructuring of institutions are likely to be correlated with FDI flows because these procedures were employed not only to reduce the debt burden but also to encourage foreign investment. The debt equity swaps have been very popular in Nigeria, since 1988.

In examining a set of data on bilateral foreign direct investment in the early 1990s from fourteen major source countries to forty one host countries. Wei (1997) found clear evidence that corruption in host countries discourages foreign investment. According to the corruption ratings for selected countries Nigeria is rated as one of the highest corrupt countries by Business International (BI) index. In the same vein Transparency International (TI) index for 1999, rated Nigeria as one of the most corrupt countries among non Asian countries.

In regard to openness of the economy Taylor and Sarno (1997) are of the view that FDI and other financial flows are expected to be extremely sensitive to a country's openness, particularly to rules concerning the repatriation of capital and income. Furthermore, they contend that the right and freedom to repatriate dividends and capital may be the most important in attracting significant FDI inflows. The ratio of total trade to GDP is used to take care of the level of openness.

3.4.2.2.2 THE MODEL

Following Singh and Jun (1995) and more recently Anyanwu (1998) the foregoing discussions suggest that a general empirical model of the determinants of

foreign direct investment (FDI) in Nigeria has the following form.

$$FDI: f(SPI, COR, OPE, EXR, AVT, MKT, DSW, IGD, SAP, IND, WAC) \quad (1)$$

Where:

FDI = Foreign direct investment (Nominal and real values from 1970-1998)

SPI = Socio-political instability (Number of coup d'tat)

COR = Corruption (for 1999, Nigeria was rated 8 and 9.24 by B1 and T1

respectively: mean values

OPE = Openness (total trade - GDP ratio)

EXR = Exchange rate of Naira to US dollar

AVT = (Average tax rate)

MKT = (Market size/GDP)

DSQ = (Debt equity swaps)

IGD = (Domestic investment - gross domestic product ratio)

SAP = Structural Adjustment Programme
dummy (equals 1 from 1986 to 1993 zero otherwise)

IND = Indigenization policy dummy (equals 1 if 1972 to 1994, zero otherwise)

WAC = Wage cost (Private consumption)

If we are to estimate equation (1) by ordinary least squares (OLS) it may lead to spurious results and inferences, Granger and Newbold (1974) Yale (1926). If over the sample period we find that FDI does not tend to settle at any particular level - that is, if it is non stationary - then, at least, some of its determinants must also be non stationary. Thus if we believe that FDI is affected by a vector of factors x_1 , then we would expect to find a relationship of the form written in equation (2).

$$FDI = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + B_{11}X_{11} + e_t \quad (2)$$

Where

FDI = Dependent variable meaning, Foreign direct investment

B_0	=	autonomous explanatory variable
X_1	=	SPI (Social political instability)
X_2	=	COR (Corruption)
X_3	=	OPE (Openness)
X_4	=	EXR (Exchange rate)
X_5	=	MKT (Market size or GPD)
X_6	=	AVT (Incentive or corporate taxes)
X_7	=	DSW (Debt equity swaps)
X_8	=	WAC (Wage cost)
X_9	=	IGD (Investment/GDP ratio)
X_{10}	=	SAP (Structural Adjustment Programme)
X_{11}	=	IND (Indigenization Policy)
e_t	=	e_t (error term)

Thus rapid changes in FDI is determined by rapid changes in some of the factors. It is possible however, that some of the factors are relatively stable over the sample period but still enter into equation (2).

In equation (2), if FDI is assumed to be an integrated process of order one, $I(1)$ with the determining variables, x_t , is also assumed to contain at least one $I(1)$ variable and no higher-order integrated process, we can analyze the long-run behaviour of FDI by investigating cointegrating relationships of the kind expressed in equation (2).

If cointegration is established in equation (2), that is, the error term e_t is approximately stationary, then $I(1)$ variable in x_t may be thought of as capturing the long-run or permanent components of FDI, while e_t captures the short-run or temporary movements.

Given that e_t is expected to be highly stable over time, equation (2) can be interpreted as a long-run relationship because, on the average, we would expect to

find $FDI = Bx_t$. In the econometric literature, the relationship in equation (2) is termed a *cointegrating relationship*, and there are well developed econometric techniques of testing for such relationships and estimating the parameters. These methods allow us to determine which of the long-run determinants of FDI are important. Such methods are the Eagle and Granger (1987) two-step procedure, the autoregressive distributed lag approach (ARDL) to cointegration (Pesaran and Shin 1995), variants of the residual-based approach proposed by Philips and Ouliaris (1990) and extended by Hansen (1992), the auxiliary regression procedure of Park (1992), a generalization of Johansen's (1988, 1991, 1995) and Johansen and Juselius' (1992) full information maximum likelihood (FIML) approach, and a relatively new approach called the bounds test ascribed to Pesaran et al (1996) (see also Watson 1994; Hamilton 1994; Banerjee et al 1993; Kremers et al 1992; Doornik and Hendry 1994; and Pesaran and Pesaran 1997).

If we assume that actual and desired level of FDI coincide in the long run, then we can think of cointegrating relationship as determining the desired level of

$$FDI = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + B_{11}X_{11} + e_t \quad (3)$$

Under this interpretation equation (2) is the empirical analogue of the theoretical equation (1). Hence the error term e_t can be thought of as the difference between desired and actual FDI, $e_t = FDI_t - FDI_t$. This suggests that, having estimated the long-run parameters B , we can then estimate an error-correction equation that is the empirical counterpart of the theoretical error-correction model:

Where a_0 is a constant term, $j = 0, \dots, p$ denotes the number of lags, and u_t is approximately white noise.

In equation (3), changes in FDI are a function of changes in the variables determining the desired level of FDI - that is, changes in x_t - as well as one lag of the error-correction term itself, e_t . In fact, econometric theory shows that if a cointegrating relationship exists, then such an error-correction model must also exist. Estimating

the dynamic error-correction from them allows us to determine which factors are important in determining short-run movements in FDI.

Equation (3) provides the full dynamic interaction of the determinants of FDI. Estimations were made using statistical package for social sciences (SPSS) 1993.

3.4.4.3 IMPACT OF FOREIGN DIRECT INVESTMENT ON ECONOMIC GROWTH

The Model: Within the context of the hypothesis made on the impact of foreign direct investment on economic growth and the theoretical link between investment and growth noted in chapter two (review of literature) a regression model was formulated to access the effects of investment components on gross domestic product (GDP) and exports growth rates. In this model debt is included as an explanatory variable, given the dominance of debt as the major source of development financing in Nigeria over the years.

Following Tyler (1981) Kavoiusi (1984), Mosches (1989) and more recently Ariyo (1998) we expressed all the investment components in the form of growth rates.

The equations used to estimate the relationship between GDP and export growth rates, respectively, and investment take the following forms:

$$\begin{aligned} \text{GDPG} = & a_0 + a_1 \text{ PUBINVG} + a_2 \text{ PVTINVG} + a_3 \text{ FDIG} + a_4 \text{ FAG} \\ & + a_5 \text{ DOMPDG} + a_6 \text{ EXPDG} + E \text{ ----- (1)} \end{aligned}$$

$$\begin{aligned} \text{EXPG} = & B_0 + B_1 \text{ PUBINVG} + B_2 \text{ PUTINVG} + B_3 \text{ FDIG} + B_4 \text{ FAG} \\ & B_5 \text{ DOMPDG} + B_6 \text{ EXPDG} + E \text{ ----- (2)} \end{aligned}$$

representing the annual growth rate of the following variables.

GDPG	=	GDP growth
PUBINVG	=	Public investment growth
PVTINVG	=	Private investment growth
FDIG	=	Direct foreign investment growth
FAG	=	Foreign aid growth
DOMPDG	=	Domestic public debt growth
EXPDG	=	External public debt growth

CHAPTER 4

4.0 PRESENTATION AND ANALYSIS OF DATA

4.1 INTRODUCTION

This chapter presents and analyses the survey and statistical data on the determinants and impact of foreign direct investments.

4.2 ORGANIZATION OF THE CHAPTER

In order to enable readers to follow the presentation and analysis of data systematically, it is necessary to specify the arrangement of this chapter thus:

1. EMPIRICAL ANALYSIS OF THE DETERMINANTS OF FOREIGN DIRECT INVESTMENTS: SURVEY EVIDENCE
2. EMPIRICAL ANALYSIS OF THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT: STATISTICAL EVIDENCE
3. IMPACT OF FOREIGN DIRECT INVESTMENT ON NIGERIA: STATISTICAL EVIDENCE

4.3 NUMBER OF BUSINESSES AND COUNTRY OF ORIGIN

Different companies from different countries participated in the survey. Excluding the 18 commercial attaches a total of 302 companies participated in the survey. The representation by different companies is shown on table 4.1.

4.4 Sectoral and Industrial distribution of Participating foreign affiliate companies and agencies.

As stated in chapter three, the sampling design adopted by the study is stratified sampling. Most of the industrial sectors (Strata) were represented. The different industrial strata and their representation are shown in table 4.2.

Table 4.1

Number of Businesses and Country of Origin

Country of Origin	Number	Percentage
Britain	106	35
United States of America	94	31
Western Germany	32	10
France	27	9
Poland	8	3
Israel	9	3
China	11	4
Pakistan	6	2
Egypt	3	1.1
South Africa	4	1.3
Ivory Coast	2	1
TOTAL	302	100

Source: Survey data.

Table 4.2

Sectoral/Industrial distribution of participating foreign affiliate companies
and agencies

S/No.	Classification	Percentage	Number
1	Agriculture and Agro Allied	10.03	30
2	Oil and gas	6.30	19
3	Building and construction	3.64	11
4	Plant and Equipment	1.65	5
5	Electrical Electronics	11.02	33
6	Food and Drinks	12.23	37
7	Household/Domestic Products	12.10	36
8	Publication and Stationery	5.06	15
9	Telecommunications	2.04	8
10	Automobile and Allied Products	3.08	9
11	Banking, Finance & Insurance	2.08	6
12	Chemical and Allied Products	6.29	19
13	Cosmetics	5.29	11
14	Office Equipment and data processing	4.30	13
15	Furniture and Fittings	2.31	7
16	Pharmaceutical/Healthcare	2.31	7
17	Sports and Recreation	4.01	12
18	Textile, Fashion, Leather & Footwear	2.64	8
19	Others	3.64	11
		100	302

4.5 EMPIRICAL ANALYSIS OF THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT FLOWS: SURVEY EVIDENCE

Table 4.3 presents a descriptive statistics of respondents ranking on the determinants of foreign direct investments (FDI) in Nigeria. The table analyses the responses according to the degree of importance the respondents (companies) attached to each variable in making their investment decision. The rankings have five weightings beginning with 0 for no importance, 1 for slight importance, 2 for moderate importance, 3 for great importance and 4 for maximum importance.

**DESCRIPTIVE STATISTICS OF RESPONDANTS RANKING ON THE DETERMINANTS
FOREIGN DIRECT INVESTMENT INFLOWS IN NIGERIA: SAMPLE SIZE 257**

IMPORTANCE SCALE AND POINT VALUES/WEIGHTING

	EXPLANATORY VARIABLES	0			1			2				3				OF MAXIMUM IMPORTANCE				TPV
S/N		N.O.C	%	P/V	N.O.C	%	P/V	N.O.C	%	P/V		N.O.C	%	P/V		N.O.C	%	P/V		
1.	Social Political Instability							25	10	20		39	15	47		193	75	772		939
2.	Corruption/Fraud							13	05	26		180	70	540		64	25	256		822
3.	Open/Transparently							26	10	52		167	65	501		64	25	256		809
4.	Exchange Rate							116	45	232		90	35	270		51	20	204		706
5.	Market Size/GDP							26	10	52		44	17	132		189	73	752		936
6.	Average Corporate Tax (Incentive)							144	56	288		90	35	270		23	09	92		650
7.	Debt Equity Swap							136	53	272		103	40	309		18	07	72		653
8.	Wage Cost							87	34	174		136	53	378		44	17	176		728
9.	Ratio of Domestic Invst. to GPD							33	13	66		149	58	447		75	29	300		813
10.	Structural Adjustment							129	54	258		138	46	384						642
11.	Indigenization/Nationalization							141	55	284		95	37	285		20	11	80		648
12.	Good public Infrastructure				64	25	64	121	47	242		72	28	216						522
13.	Other successful example of FDI				116	45	116	95	37	190		46	18	138						444
14.	Good quality research and development facilities and personnel				131	51	131	98	38	196		28	11	84						411
15.	Good EPZ facilities				123	48	123	90	35	180		44	17	134						435
16.	Inflation				121	47	121	85	33	170		51	20	153						432
17.	Interest Rates				126	49	126	87	34	174		44	17	132						432
18.	Govt. attitude toward FDI				64	25	64	121	47	242		72	28	216						522

Legend:

NOC = Number of Companies

PV = Point Values

TPV = Total Point Values

NOTE: The weighting or point values for the importance scale are as follows

Of no importance = 0

Of slight importance = 1

Of moderate importance = 2

Of great importance = 3

The weighting is multiplied by the number of companies responding to the ranking. The different point values are added together to result to the total point values (TPV) which is divided by the sample size of 257 to get the mean value.

4.3.1 SURVEY OPINIONS ON EXPLANATORY VARIABLES

Socio/Political Instability

The respondents of this study especially investors from the United States of America and Britain consistently ranked this factor high in making their investment decision on Nigeria. 75 per cent of the respondents considered socio-political instability to be of maximum importance in investing in Nigeria. This means that the presence of social- political instability would negatively affect 75 per cent of the respondents while 15 per cent considered this explanatory variable to be of great importance. The remaining 10 percent of the respondents indicated that socio-political instability would affect their investment decision moderately. Conclusively socio-political stability is a condition for foreign investors to invest in Nigeria.

CORRUPTION/FRAUD

This particular variable is highly qualitative. In Section 2.16 of this study, a detailed discussion was presented, revealing the different impact of corruption on investments. In discussing corruption, fraud is taken into consideration especially for Nigeria which is notorious for the advanced fee fraud syndicate popularly known as "419". In ranking this particular explanatory variable about 5 per cent of the respondents indicated that corruption moderately affect their investment decision on Nigeria. Another 70 per cent revealed that the existence of corruption in Nigeria greatly and negatively affects their investment decision. 25 per cent of the 257 respondent companies indicated that the fear of corruption in the business environment of Nigeria made a maximum negative impact on their investment consideration on Nigeria. The revelation by the respondents may not be too surprising when it is considered that Nigeria was rated as one of the most corrupt countries in the world by transparency international for the year 1999.

OPENESS AND TRANSPARENCY

The degree of openness of the economy which is the extent to which other countries can trade with Nigeria is an important explanatory. In combination with trade openness the degree of public and private accountability or transparency is an important determinant. 10 per cent of 257 respondents indicated that the degree of openness and transparency moderately affected their investment decision on Nigeria. On the other hand 65 per cent of the respondents revealed that they were greatly affected by the degree of openness in the country and the extent transparency was practised in government and in private business.

EXCHANGE RATE

The rate of exchange between the Naira and other currencies but most especially the United States dollar is a bench mark that determines the attractiveness of investment into the country. It can also encourage or discourage exports. The Naira exchange rate was regarded as moderately important in making investment decisions on Nigeria by approximately 26 companies or 10 per cent of the 257 companies. 35 per cent resulting in about 90 companies regard the Naira exchange to have a great influence in investment decisions, while 20 per cent of the companies which translate to about 50 companies indicated that the stability of the exchange rate made a maximum impact on their investment decisions on Nigeria.

MARKET SIZE

The size of the domestic market which is technically measured by the value of the Gross domestic product (GDP) is a very essential determining factor for investors because it determines the depth of the market and the likely sales revenue of the investors. In ranking this particular variable 10 per cent of the respondent companies felt that the size of the market has a moderate influence in their investment decision. Another 17 per cent regarded market size to be of great importance to their

investment decision. The majority of the 257 companies totalling 188 or 73 per cent ranked market size highest by indicating that it plays a maximum role in their investment decisions on Nigeria.

AVERAGE CORPORATE TAX (INCENTIVES)

Incentives should play a major role in attracting foreign investment. The incentives in Nigeria come in the form of reduction in corporate taxes. The Nigerian government has exempted 16 corporate revenue from companies income tax. These include the incomes of pioneer companies; Profit of any company established by the law of a state for economic development. Other incentives include dividend payable by one company to another company. Profits of duly registered cooperative societies and dividends, interest rent or royalty derived abroad by a company and brought into Nigeria through official channels. Dividends received by companies from investment in wholly export oriented business are also exempted from income tax.

However, in rating this variable 56 per cent of the foreign affiliate considered incentive to be of moderate importance in their investment decisions while 35 per cent of the foreign affiliate saw the presence of incentives to be of great importance in their investment considerations for Nigeria. Only 9 per cent of the foreign affiliate managers considered the presence of investments to be of maximum importance.

It has to be pointed out that the result of this survey is very close to previous survey held elsewhere. For example Transnational (1995) reports that in a survey of 243 United State companies, only 10 per cent listed fiscal incentives as a condition for investment. Other surveys draw similar conclusions. For example, a 1984 survey 52 transnationals found that among 19 factors identified as influencing foreign investment flows, investment offered by host countries, incentives ranked seventh in

importance in developing countries. It has also been found that investors responded to incentives differently, depending on the type of projects. Export oriented investors seeking inexpensive labour valued fiscal incentives more than protection of investments.

DEBT EQUITY SWAPS

Recently, in some developing countries the conversion of debts built up by accumulation of unrepatriated dividends and profits into equity has been an important investment factor. In this regard 53 per cent of the 257 companies indicated that this facility moderately affected their investment decision while about 40 per cent revealed that the option to convert debts into equity had a great influence in their investment decisions. About 7 per cent confirmed that they considered option to be of maximum importance.

WAGE COST:

The level of wages and salaries in the country is an important factor when considering the cost of doing business in Nigeria. The wage cost is among the prime cost of business and it has a direct bearing on the level of profits. In ranking this particular factor 34 per cent of the 257 respondents considered wage cost to be of moderate importance while 53 per cent totalling about 136 companies considered wage cost to be of great importance in their investment decisions. 17 per cent of the respondent considered wage cost to be of utmost importance.

RATIO OF DOMESTIC INVESTMENT TO GDP

The level of domestic investment is an important factor in attracting foreign investors. For example if domestic investment is high savings will correspondingly be high. The economy will correspondingly be bouyant. It is a measure of the

confidence local investors have on their economy. The resulting situation will be for foreign investors to try and reap some of the benefits on the other hand when the level of domestic investment is low, foreign investors will tend to lose confidence in the economy. In ranking this explanatory variable 13 per cent considered it to be of moderate importance while 58 per cent considered the level of domestic investment to be of great importance to their investment decisions. 20 per cent of the 257 companies considered this factor to have maximum effect in their investment decision.

STRUCTURAL ADJUSTMENT

The imposition of certain stringent or correctional economic measures in the macro economic structures of the country was technically termed structural adjustment. This particular measure is usually prescribed by the International Monetary Fund (IMF) or the World Bank on some developing countries to help them correct malfunction of their economy. In ranking this variable 5 per cent respondents considered it to be of moderate importance. The other 46 per cent resulting in about 138 companies considered the existence or the institution of structural adjustment to be of great importance since some of the prescriptions for structural adjustment might include, removal of subsidies and trade liberalization.

INDIGENIZATION / NATIONALIZATION

This particular variable has central impact on foreign investment flows in Nigeria beginning from 1972 when most of the foreign companies in Nigeria were indigenized by reducing the level of equity holding. In few cases some establishment were nationalized completely. Investors would want to be assured that their investments would be protected without abrupt changes to the laws. However the indigenization laws has been modified since 1988 and completely removed in 1995.

In its place the Nigerian Investment Promotion Decree was promulgated. In ranking this factor 55 per cent of the respondents revealed that this particular variable affected their investment decisions moderately 37 per cent of the respondents indicated that indegenization or nationalization problems greatly affected their investment decisions. 11 per cent resulting to about 28 per cent revealed that this particular variable have a maximum influence on their investment decisions.

GOOD PUBLIC INFRASTRUCTURE

Good public infrastructure will include such facilities as good roads, electricity, telephone and postal systems. Included in this variable is the availability of good drinking water and reliable electrical or power system. In ranking this particular explanatory variable 25 per cent totalling 64 companies indicated that this particular variable influenced their investment decision moderately while 28 per cent or 72 companies out of the 257 companies indicated that the need for adequate infrastructure greatly affected their investment decisions.

OTHER SUCCESSFUL EXAMPLES OF FDI

Prospective investors could be motivated by the presence of other companies that have had good experiences in the country. Prospective investors tend to invest where there are concrete evidences of success by other companies.

45 per cent of the respondents to this qualitative explanatory variable indicated that they are slightly affected in their investment decisions by the concept of this variable. 37 per cent out of a sample of 257 revealed that they consider this variable to be of moderate importance while 18 per cent or about 46 companies consider this variable to be of great importance.

Good quality research and development facilities and personnel

The existence of good research and development facilities is of paramount importance. New products development and new method and processes are all only possible through adequate research and development. The facilities for research and development are the conduits for technology transfer. The allegation made against foreign companies who do not consider it necessary to develop their products in the host countries is as result of the host country's inability to provide adequate facilities and personnel for the processing of new technology. On the other hand prospective investors can be attracted based on the possibility of an investor to learn new processes from the host country.

In ranking this variable 51 per cent of the respondent considered this variable to be of slight importance while 38 per cent considered it the variable to be of moderate importance.

11 per cent of the 257 companies considered research and development to be of great importance.

GOOD EPZ FACILITIES

The availability of an export processing zone (EPZ) is an important factor for investors who produce for export. The export processing zone is usually designed to allow exporters to process their exports with minimum cost and constraints. 48 per cent respondents of this study indicated that the consideration of this variable is of slight importance to their investment decisions while 35 per cent of the respondents considered the variable to be of moderate importance.

17 per cent of the 257 companies felt that it was of great importance in their investment decisions.

INFLATION

The level of inflation in a country is of primary importance in determining the cost of doing business. Nigeria has been experiencing double digit inflation for some years especially from 1991 to 1995 when inflation averaged 48 per cent. The rate of inflation is usually a combination of different macro economic factors which can be controlled. 47 per cent of the respondents considered inflation to be of slight importance. On the other hand 33 per cent of the respondents considered inflation to be of moderate importance. 20 per cent of the 257 respondents felt that inflation is of great importance to their investment decisions.

INTEREST RATES

Another analogous variable to inflation is interest rates. Interest rate is a primary determinant in the acquisition of funds. Lending interest rate in Nigeria was lowest in 1974 at 3.4 per cent while 1995 witnessed one the highest interest period at 51.5 per cent while deposit rate was about 58.2 per cent.

49 per cent of the respondents considered interest rates to be of slight importance, while 34 per cent felt that it was of moderate importance. The balance of 17 per cent considered inflation to be great importance to their investment decisions.

GOVERNMENT ATTITUDE TOWARDS FDI

Government attitude towards foreign direct investment (FDI) is the primary force behind the drive for foreign direct investment.

The Nigerian government has displayed very prominent interest in attracting foreign direct investments into Nigeria. The evidence in the positive interest on foreign direct investment can be traced to the last military government of Late General Sani who was able to repeal the exchange control act of 1961 and indigenization decree of 1972 replacing it with the Nigerian investment promotion council decree of

1995. His successor General Abubakar was able to prop up the image of Nigeria within his short tenure and undertook extensive campaigns for foreign investment. The present democratic government of Chief Obasanjo has taken far reaching decisions in order to attract foreign investments resulting qualitative explanatory variance in the large number of foreign trade missions to Nigeria. In ranking this qualitative variable 25 percent of the respondents consider government attitude to be of slight importance while 47 per cent indicated that it was moderately important. 28 per cent considered of the 257 companies considered the variance to be of great importance in their investment decisions on Nigeria.

4.6 ANALYSIS OF OTHER SURVEY DATA

Apart from the ranking of the explanatory variables the questionnaire contained some relevant questions to foreign direct investment.

One of the questions sought to know the presence of foreign directors and foreign equity. According to the responses by foreign affiliate managers foreign. 95 per cent indicated that foreign directors were on their board. The remaining 5% per cent did have foreign directors. The responses are tabulated in table 4.4

Table 4.4
Presence of Foreign Directors and Foreign Equity.

Attributes	Percentage		Number of Companies
Companies with foreign directors	95	244	
Companies without foreign directors	5	13	
Companies quoted in Stock Exchange	46	118	

Source: Survey data

Another question asked the foreign affiliate managers to indicate the time of arrival or incorporation in Nigeria. Some specific time periods were provided for respondents. This question served the purpose of knowing which companies can be designated as old and which ones can be regarded as being young. Those companies arriving before 1972 can be regarded as old since they are the first generation of foreign companies in Nigeria. According to the responses about 45 per cent of the foreign companies arrived before 1972. Another 13 per cent arrived between 1972 - 1988 and about 48 per cent arrived after 1988.

The next question sought to know from the respondents the size of the foreign equity in the different companies. This question is necessary in relation to the indegenization decree which stipulated the equity structure of companies operating Nigeria. As at the time of the survey 78 per cent of the foreign affiliate companies indicated that that foreign equity participation in their companies was up to 40 per cent. While about 22 per cent revealed that foreign equity participation in their company was less than 40 per cent. The responses for the question on foreign directors and size of foreign equity are tabulated on table 4.5

Table 4.5
Arrival Time, Size of Equity

Attributes	Percentage	Number
Arrival Time		
Before 1972	45	116
After 1972 - 1988	13	33
After 1988	42	108
Size of Foreign Equity		
40% of Total Equity	78	200
More than 40%	Nil	0
Less than 40%	22	57

Source: Survey data

Table 4.6
Employment Structure

Number of total Employees	Percentage of Companies	Number of Expatriate Workers	Percentage of companies
50 - 100	40	1 - 5 per cent	85
100 - 500	60	10 per cent and above	NIL

Source: Survey data

Another survey inquiry was based on the number of people employed by the foreign affiliate managers. This question is important in relation to the impact of foreign direct investment on the Nigerian Economy. In analysing the responses it was found out that 40 percent of the 257 companies employed between 50 - 100 people while 60 per cent of 257 employed between 100-500 people. On the other hand about 85 per cent of foreign companies had 1-5 per cent expatriates in their labour force. The question on labour force was aimed at bringing out the posture of foreign companies in regard to technology transfer. Too many expatriates in a foreign based company would indicate the lack of interest by a foreign company in transferring technology to Nigerians. Although the survey is subjective it can be concluded from the responses that an appreciable number of foreign companies employ sizable number of Nigerians. Although recently, there have reports of expatriates taking over from Nigerians in top management signalling a danger in the liberalization policies. The responses on employment structure are tabulated on table 4.6.

Apart from foreign affiliate managers some commercial attaches of foreign embassies participated in the survey. The number of commercial attaches numbered up to 18. It was considered appropriate to direct questions regarding the image of the country and their perception and evaluation of the investment climate.

First, it was necessary to find out whether there were investment inquiries

from their different countries. About 96 per cent of the commercial attaches confirmed that they received investment inquiries from their countries. 65 per cent agreed that the Nigerian investment environment is open and friendly while 40 per cent agreed that there was some transparency in government and business circles. Tables 4.7a and 4.7b show the responses.

Table 4.7a

Analysis of Response by Commercial Attaches: Sample Size (18)

	Percentage			No.
	Number	Yes	No/Not Sure	
Existence of Investment Inquiries	17	96	4	1
Sincerity of investment incentives and reforms	16	89	11	2

Table 4.7b

Sample Size, (18)

Rating of Investment Climate

	Number	Yes	No
		%	%
Open & Friendly		65	35
Transparent		40	60

4.7 EMPIRICAL ANALYSIS OF THE DETERMINANTS OF FOREIGN DIRECT INVESTMENT: STATISTICAL EVIDENCE

4.7.1 Mean, Standard Deviation and Coefficients of Variation of Independent Variables

In this section further analysis will be carried out utilizing the mean standard deviation and coefficients of variation of the variables.

Statistically the mean acts as a balancing point so that observations which are smaller balance out those which are larger. The mean in this study was computed to provide a single figure which summarizes the responses and serves as basis for comparing the degree of importance the respondents attribute to each variable. As already noted in section 3.1. the mean for a single variable is nothing more than the sum of the point values given by the 257 respondents based on the importance scale divided by the total number of respondents (257). Thus for example a variable such as socio-political instability with a mean of 3 - 4 may be interpreted to be of generally great importance to the foreign investors in their analysis and decision to invest in Nigeria.

However, the arithmetic mean does not adequately reveal the diversity of opinions among the respondents pertaining to the importance of a particular variable. A measure which relates the diversity of responses to the average response is the coefficient of variation. This measure is computed by dividing the standard deviation by the arithmetic mean.

The variance and the standard deviation are measuring the "average" scatter around the mean, that is how larger observations fluctuate above it and below it. For example the standard deviation of socio-political instability is approximately 0.65 around its mean of 3.65.

Of the 18 variables analysed 11 may be considered to be of great importance

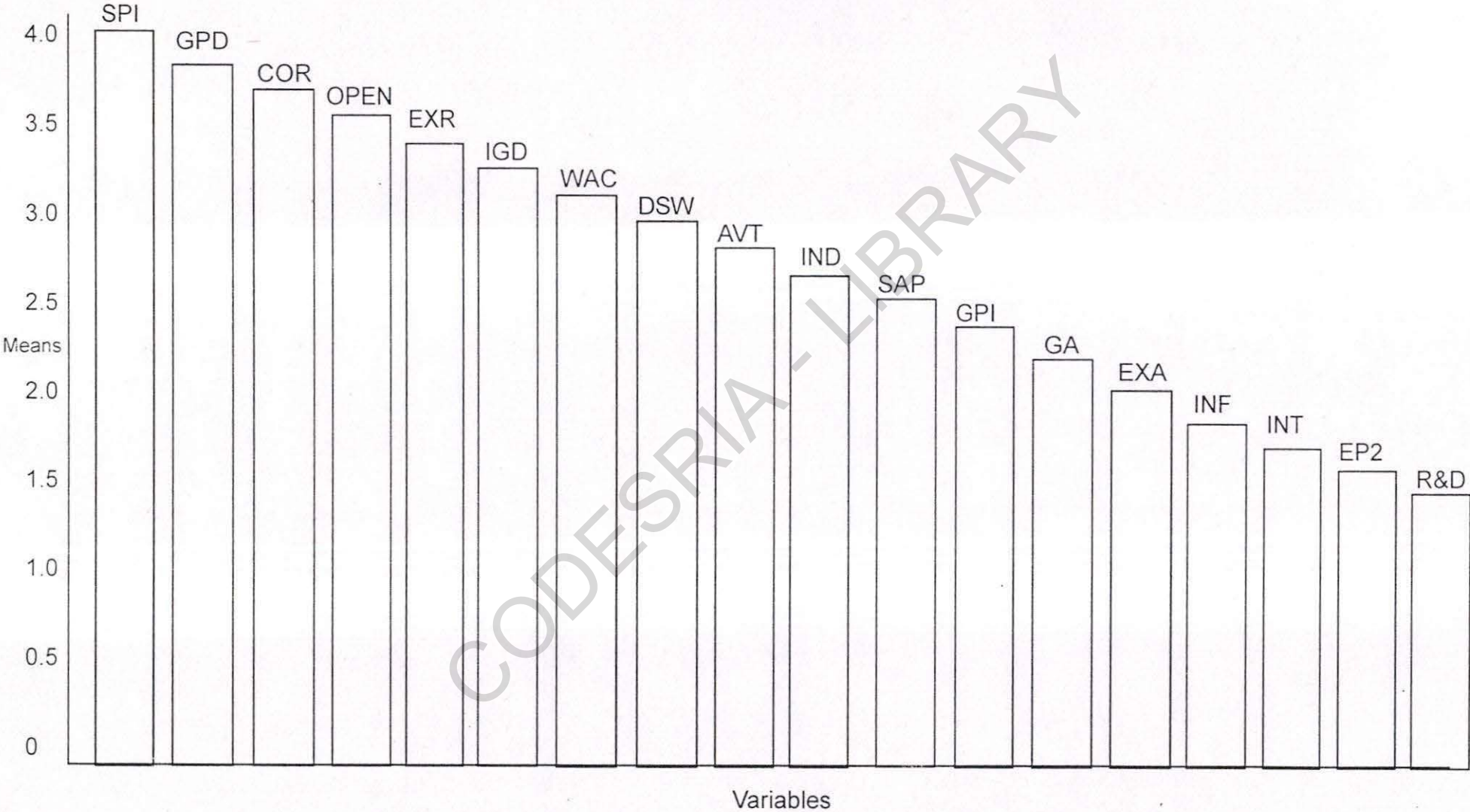
(that is mean values 2.5 or more) 8 can be considered of moderate importance (mean values upto 1.5 or more). The coefficients of variation usually increase as the mean values decrease. This indicates greater diversity of respondents opinion regarding the relative importance of the variables. Table 4.8 presents the results of these computations, and figure 4.1 depicts the ranking.

Table 4.8

Means, Standard deviations, Coefficient of variation for foreign direct investment variables

Explanatory Variables		Mean	Standard Deviation	Coefficient of Variation
1.	Socio-political instability	3.65	0.65	0.18
2.	Corruption/fraud	3.28	0.52	0.16
3.	Open/Transparency	3.15	0.57	0.18
4.	Exchange Rate	2.75	0.76	0.28
5.	Market Size/GDP	3.64	0.66	0.18
6.	Average Co-operate Tax (Incentive)	2.53	0.66	0.26
7.	Debt Equity Swap	2.54	0.62	0.24
8.	Wage Cost	2.83	0.69	0.24
9.	Ratio of Domestic Investment to GDP	2.96	0.66	0.22
10.	Structural Adjustment Programme	2.50	0.50	0.20
11.	Indigenization/Nationalization	2.52	0.63	0.25
12.	Good Public Infrastructure	2.03	0.77	0.37
13.	Other Successful Examples of FDI	1.73	0.74	0.42
14.	Good Quality Research & Dev. Facilities & Personnel	1.60	0.68	0.43
15.	Good EPZ Facilities	1.69	0.75	0.44
16.	Inflation	1.73	0.77	0.45
17.	Interest Rate	1.68	0.75	0.45
18.	Good Attitude towards FDI	2.03	0.73	0.36

Figure 4.8: Means, Standard deviations, Coefficient of variation for foreign direct investment variable



4.7.2 Bases for selection of variables for regression analysis

The study made use of 18 variables in the survey. The researcher considered the 18 variable large for the regression analysis, it was therefor necessary to establish a critaria for selecting the most important variable. The researcher relied on the computation of the mean standard deviation and coefficient of variation of the 18 variables. The weighting were based on a 5 - point scale that is from no importance to maximum importance with a corresponding values of 0 - 4. The scale for great importance rating was adjusted from 2.5 to 3. It then means that any variable with a mean of 2.5 and above was selected for the regression analysis. A total of 11 variables qualified for use in the regression analysis using this method. These variable are listed below:

- * Socio-political instability
- * Corruption
- * Openess/Transparency
- * Exchange rate
- * Market size
- * Average corporate tax (incentives)
- * Debt equity swaps
- * Wage cost
- * Ratio of domestic investment to GDP
- * Structural Adjustment
- * Indigenization/Nationalization

4.8 Regression Results and test of hypotheses

This section presents the results of the regression analysis carried out on foreign direct investment (FDI) and the various explanatory variable for the period under study (1970 - 1997). Appendix 2.A shows the variables. The regression analysis and result also afford the opportunity to test the hypotheses beginning with:

HO1: Sociopolitical instability does not affect foreign direct investment flows.

This first hypothesis was tested by regressing foreign direct investment on social political instability. The proxy for socio-political instability was the number of military coup d'etat within the period. The value of 1 was placed on each year that a military coup d'etat took place in Nigeria and a value of zero was placed on each year without a military coup. Easterly and Levine (1994) Anyanwu (1998).

Table 4.9

Regression results on the determinants of foreign direct investment into Nigeria

Variable	Coefficient	STD Error	T-Value
X1 SPI	6845.143	2466.832	2.775 **
X2 COR	- 962.699	590.737	1.630*
X3 OPE	-.00610	.00458	1.331*
X4 EXR	1413.428	531.105	2.661**
X5 MKT	.762	.286	2.702***
X6 AVT	-.1887	.1197	1.576*
X7 DSW	61.977	13.610	4.554**
X8 WAC	.238	.0455	5.238**
X9 IGD	.343	.0445	7.691**
X10 SAP	6821.895	7859.369	.868
X11 IND	-1190.576	1202.157	-.990
Constant	-15348.454	14828.284	-1.035
R ² .97027			
Durbin Watson 2.55959			
No. of cases 28			
* Significant at 10% * . Significant at 5% ** Significant at 1%***			

Table 4.9 shows the result of the regression. The calculated t-value for political instability at the 95 percent confidence interval is 2.775 as against 1.75 for the tabulated values. This result implies that the null hypothesis suggesting that socio political instability does not affect FDI flows stands rejected conversely the alternative hypothesis is accepted. This result is in line with the survey responses which considered socio political instability of utmost importance in affecting FDI flows.

Ho2: The second hypothesized variable was business operating condition. The null hypothesis states that. *The overall perception of favourable operating condition does not affect FDI flows. The variable used in testing this variable is the average corporate tax (AVT).*

In order to test this hypothesis foreign direct investment was regressed with the average corporate tax since most of the incentives given by government come in form tax. These various incentives numbering up to 16 have been mentioned during the survey analysis. Table 4.9 shows that at 10 percent confidence interval the regression result on average corporate tax and foreign direct investment has t-value of 1.576. It is more than the tabulated value of 1.34. This means that incentives do have major influence on FDI flows. Consequently the hypothesis suggesting that the perception of overall favourable operating condition does not enhance the inflow of foreign direct investment flows stands rejected conversely the alternative hypothesis has to be accepted. The result of the hypothesis is not directly in line with the foreign managers opinion survey. Majority of the respondents in the survey rated the availability of incentives to be of moderate importance in other words incentives do not play a major role in their investment decision. As Helliner (1988) points out, investment incentives created by the government appear to play a limited role in inter-country investment decisions. Most of the empirical literature support the notion that specific incentives do not have a major impact particularly when these incentives are thought to compensate for other comparative disadvantages. On the other hand, it is generally believed that removing

ally believed that removing restrictions and providing good business operating conditions will positively affect FDI flows.

The present Nigerian government is striving hard to improve investment climate by repealing all laws inimical to foreign direct investment.

OTHER EXPLANATORY VARIABLES

Corruption: This qualitative variable is difficult to measure because of lack of unbiased and reliable data. Given the situation a corruption index developed by Transparency International (TI) was used. (See appendix 2A).

There are similar measures from Business International (BI) International Country Risk Guide (ICRG) and Global Competitiveness Report (GCR).

It has to be noted that the indices reflect people's self reported perception as opposed to objective measures of corruption. As stated elsewhere it should be agreed that perception can be different from reality.

When the data on corruption was regressed with foreign direct investment the t-value was 2.38 at the 10 per cent confidence interval. This suggests a significant influence on foreign direct investment flows. When compared with the survey opinion the regression result can be said to be realistic although the result may have been affected by the general notion that Nigeria is comparatively a corrupt country.

Openess of the Economy

This variable was measured using the total trade to GDP ratio for the period under review. When regressed with foreign direct investment it was statistically significant at 90 per cent confidence level with a t-value of (1.33).

Exchange Rate of the Naira:

The exchange rate of the Naira to major currencies especially the United States

dollar is of primary consideration when evaluating the determinants of foreign direct investment flows. In this case when foreign investment was regressed with the exchange rate of the Naira, it was statistically significant with t-value of (2.661) at the 95 per cent confidence interval.

The regression result has a bearing to the foreign affiliate managers survey opinion since the respondents considered this variable to be of great importance in their investment decision. This findings also agrees with previous findings by Lucas (1993) Singh and Jun (1995) and Anyanwu (1998).

Market Size: The size of the market is an important consideration when evaluating trends in FDI flows.

This variable was measured using Gross Domestic Product (GDP) estimate for the period under consideration as a proxy for market size. At the 95 per cent confidence interval, the regression result showed a t-value of 2.702. The statistical significance of the variable confirms the high rating of the survey respondents for this particular variable. Other studies conducted previously elsewhere confirms this finding for example Root and Ahmed 1979 Torris (1985) Shneider and Frey (1985) Petrochilas (1989) Wheeler and Mody (1992) and more recently Anyanwu (1998) all found market size to be significant.

Debt Equity Swaps and Private restructuring

Since about 1988 Nigeria and some other developing countries have engaged in debt conversion scheme. It was necessary to regress FDI on this variable to find out the impact it has on the investment decisions of foreign investors. The regression analyses resulted in a t-value of (4.554) at the 95 per cent confidence interval. This result indicates a high significant relationship with FDI flows.

In the survey of foreign affiliate managers, this variable was moderately rated but the high coefficient in the regression shows the difference between subjective and objective evaluation.

Wage Cost: The cost of employees maintenance or wage cost is a prime cost for business as it determines the level of profits. When this variable was regressed with foreign direct investment it was statistically significant with a t-value of (5.238) at 95 per cent confidence interval.

Domestic investment to gross domestic product ratio:

The ratio and size of domestic investment to that of gross domestic investment should be an important determinant of foreign investment flows. Gross capital formation for each of the year within the period was used to compute the regression which resulted in a t-value of 7.691 at the 95 per cent confidence interval. This result indicates that the rate level and size of domestic investment is a major consideration by foreign investors when deciding on which country to invest. This particular variable was also rated very high by the survey respondents. High level of domestic investment is a confidence builder for foreign investors and low domestic investment level signals lack of confidence by local investors. On the other hand as already pointed the level of domestic investment depends very much on the level of savings by citizens.

Anyanwu (1998) also found this particular variable statistically significant.

Structural Adjustment Programme (SAP)

The structural adjustment programme was initiated in 1985 by the military government in power at that time. It was geared towards the effective and efficient use of macroeconomic structures. The structural adjustment programme was meant to correct such problems as excessive subsidies and over pricing of the Naira. As a result of the adoption of SAP the inflow of foreign direct investment improved within that period. However, when FDI was regressed with at various levels of significant it was found statistically insignificant. The result of regression deviates from the opin-

ion of the survey respondents since majority of the respondents rated the influence of SAP moderately and about 34 per cent considered SAP to be of great importance in their investment decisions.

Indigenization:

Among foreign investors there is always the fear that their investment could be naturalized or the value of it reduced through some nationalization policies.

Foreign investors need to be assured that their investment would be protected. It was necessary to include this variable as an explanatory variable since it formed part of the background to the problem under study.

In order to compute the regression the value of 1 was placed on each year from 1972 when the indigenization decree was promulgated up to 1995 when indigenization decree was repealed. A zero value was placed on the year without indigenization decree. The regression was statistically insignificant at various levels of significance. The regression result is also not directly in line with the survey opinions which was mixed. While majority of the respondents rated the influence of indigenization moderately about 34 per cent rated it very high the rest of respondents considered to be of maximum importance. Again the regression and survey results show the difference between subjective and objective opinions. The statistical insignificance of the regression results may represent greater confidence in the political/legal situation in the country.

4.9 TEST OF HYPOTHESES ON THE IMPACT OF FOREIGN DIRECT INVESTMENT

On the potential impact of foreign direct investment (FDI) on economic growth the third hypothesis (HO3) stated that: Foreign direct investment does not enhance economic growth. From HO3 two subsidiary hypotheses were formulated thus:

HO3a: Foreign direct investment does not enhance the growth Gross Domestic Product.

HO3b: Foreign direct investment does not enhance the growth of exports.

In order to test these hypotheses Gross Domestic Product Growth (GDPG) and export growth were used as a dependent variables and regressed with various investment components including public investment growth(PUBINVG) private investment growth (PVTINVG) foreign direct investment growth (FDIG) foreign aid growth (FAG) domestic public debt growth (DOMPDG) and external public debt (EXPDG).

Tables 4.10a and 4.10b present the results of the regression analysis. The results indicate that the t-values of public investment, private investment and foreign direct investment are statistically significant.

The result of the regression analysis on foreign direct investment implies the rejection of the null hypotheses which suggested that foreign direct investment does not enhance economic growth. Although foreign direct investment was only marginally significant. It should be accepted that if substantial amount of FDI is applied on the economy there would be a corresponding impact on the economy. For example the projections made by the economic advisers to the president on the need for an inflow of about 10 million Naira foreign investment over the next 10 years with an expected growth of 10 percent in GDP could be achieved if those factors militating against inflows are put under control. Presently according to UNCTAD (2000) foreign direct investment in the less developed countries which Nigeria is part of, remained at the 1999 level of \$190 million (N19 million) similarly the share of LDCs of world FDI fell by 17 per cent a trend that has persisted since 1997. This general trend in less developed countries could perhaps explain partly the marginal increase in Nigeria's gross domestic product (GDP) from 2.1 in 1999 to 2.8 in the year 2000. (CBN.) 2001). Although most of the other investment components are statistically significant; foreign aid is not statistically significant which indicates that this particu-

lar variable did not rise to the level by which it could enhance the growth of gross domestic product.

On the other hand if the "Nigerian factor" is taken into consideration the lack of statistical significance of foreign aid could mean that most of the foreign has not been judiciously applied to the very projects for which they were targeted.

HO3b: The analogous hypothesis was on export growth. **The hypothesis, suggested that foreign direct investment does not enhance the growth of exports.** Table 4.10b presents the results of the regression. The regression results indicate that most of the investment components are statistically significant with the exception of foreign aid and external debt. This means that foreign direct investment could enhance and has enhanced the growth of export although the growth is marginal with regard to foreign direct investment.

IMPACT OF FOREIGN DIRECT INVESTMENTS ON GDP GROWTH AND EXPORT GROWTH

Table 4.10a Investment and GDP Growth Rate

Variable	Coefficient	STD Error	T-Value
PUBINVG	8.695	2.619	3.320**
PVTINVG	2.578	.3811	6.765*
FDIG	.619	1.841	11.194**
FAG	1.269	1.143	1.111
DOMPDG	5.312	.661	8.029**
EXPDG	-.93371	.223	4.190*
Constant	29401.282	14900.721	1.973

R2 = .99568

Durbin Watson 1.791.69

Number of cases 28

* Significant at 10% ** Significant at 5% Significant at 1%

Table 4.10b Investment and Export Growth Rate

Variable	Coefficient	STD Error	T-Value
PUINVG	-13.399	3.978	-3.368
PVTING	3.514	.578	6.071
FDIG	15.001	2.798	5.361
FAG	-9.032	1.735	-5.203
DOMPDG	2.308	1.005	2.297
EXDD	.592	.338	1.748
Constant	17482.246	22637.499	.772
R ² = .92933			
Durbin Watson 1.80363			
Number of Cases 28			

4.9.1 TECHNOLOGY TRANSFER

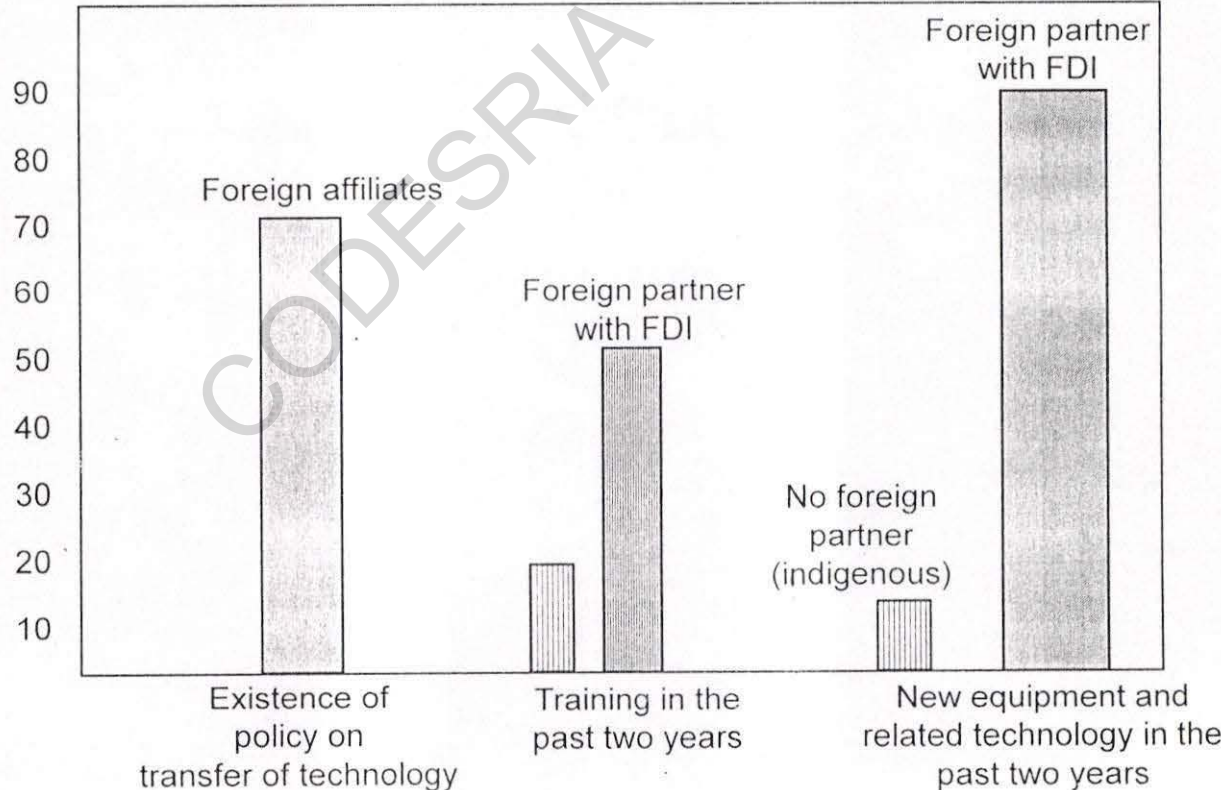
One of the research question posed in this study was on whether foreign direct investment (FDI) does enhance the transfer of technology. In order to enhance the robustness of the findings on this question data from the survey of foreign affiliate managers was used to support the case study on Cadbury Nigeria Plc presented in chapter 2 of this study. See section (2.20-)

Questions regarding the transfer of technology were directed to both indigenous firms and foreign firms during the 1999 Lagos trade fair. The questions were in regard to training and acquisition of new technologies by companies. The responses from the managers reveal a significant difference between firms with and without foreign partnership.

One of the questions asked respondents whether they had any realistic policy on the transfer of technology to Nigerians and whether they had any method of evaluating the policy. Managers were given discrete choices: Yes or no. In answering the two questions 77 per cent of the foreign affiliate managers indicated that they have policies for the deliberate transfer of technology to Nigerians. The follow up question to the managers was whether they had sent their personnel for training either locally

indicated that they have sent their employees on training programmes in the past two years. Among the indigenous companies 13 per cent indicated that they sent out their employees on the use of equipment and machinery in the two years. Another question inquired from the foreign affiliate managers on whether they had received new machinery and equipment or related knowledge in the last two years. The managers were again given discrete choices: yes or no. In analysing the responses a total of 83 per cent of the foreign companies revealed that they had received new machinery and equipment in the last two years. Among the indigenous companies numbering about 50 per cent indicated that they have received machinery and equipment or related knowledge in the previous two years. Figure 4.4 depicts the responses.

Figure 4: Existence of Policy, Training and acquisition of new equipment



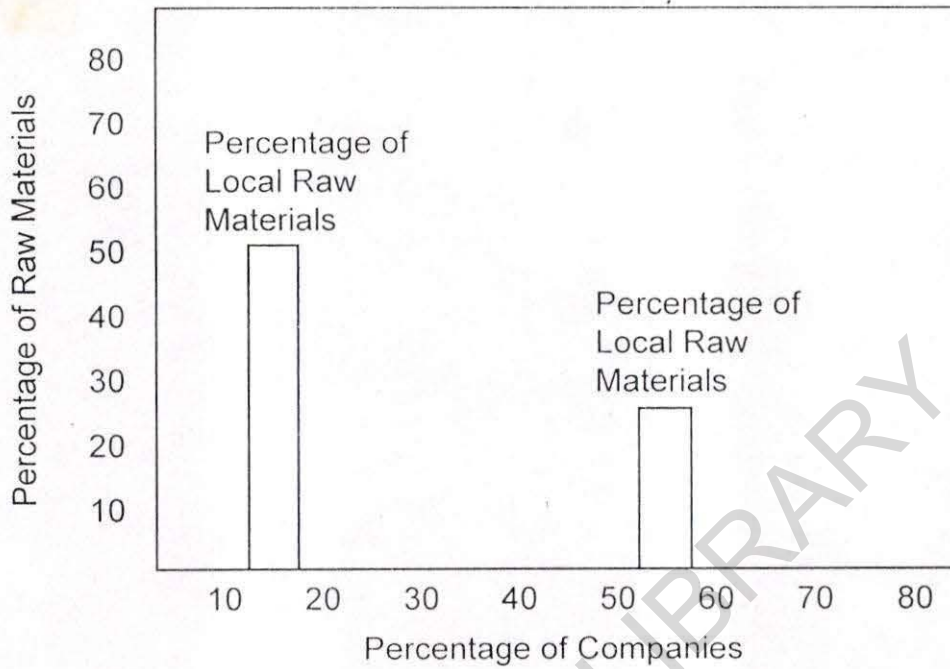
4.9.2 THE LINKAGE ISSUE

Apart from question on technology transfer another research question posed in this study was on what are the linkages between foreign direct investment and the Nigerian economy? As in the case of technology, there is lack of adequate data to carry out deep analysis of the linkages between foreign direct investment and the local economy. As noted in the literature the paradox in the linkage argument when a static framework is assumed may be eliminated by giving the argument a dynamic setting Schive (1990). That is to say, linkages are, initially, merely potential effects with no guarantee of realization. This in fact is what Hirshman meant by linkages, which he carefully defined as "attempts" under no circumstances will these attempts bear fruit immediately. However, the linkage theory asserts that as time passes and as conditions in the local economy begin to improve for FDI, linkages do provide a strong stimulus to accelerate development.

In order to ascertain whether any linkages exist between foreign enterprises and the local economy a question was posed regarding the level of local purchase of raw materials by foreign companies. The question enquired from the foreign affiliate managers the percentage of local raw materials that their companies used in their production. They were provided with range between 30-50 percent. 56 percent of the foreign affiliate managers indicated that their companies sourced between 25-30 percent of this raw materials locally while about 13 percent indicated that they sourced up to 50 or more percent locally. It should be pointed out that majority of the respondents with higher local content in their products were found mostly in the textile and consumer products. However, according to the public relations officer of an automotive company, Peugeot Automobile Nigeria Plc the local content of their product is more than 30 percent.

Another aspect of the responses is that older companies tend to use more local raw materials than younger foreign companies. Figure 4.7 depicts the responses.

Figure 4.3
Local Purchase of Raw Materials



SUMMARY, CONCLUSION AND POLICY IMPLICATIONS

5.1 Overview of the foreign direct investment situation:

The study commences with an overview of the global situation of foreign direct investment by pointing out the emergence of attractive spots for foreign direct investment in the east Asian countries and the attention given by investment analysts to these attractive or emerging markets.

Nigeria has since 1946 championed economic nationalism but with the globalization trend Nigeria since the beginning of 1985 started canvassing for foreign direct investment by the institution of a structural adjustment programme but a more decisive action was taken in 1995 when some core laws inimical to the inflow of foreign direct investment were repealed. Specifically the last military government was responsible for repealing the Exchange Control Act of 1962 and the Nigerian Enterprises Promotion decree of 1972 replacing it with the Nigerian Investment Promotion Council Decree of 1995.

The main thrust of the study is to evaluate the determinants and impacts of foreign direct investment in Nigeria. The specific problem giving rise to the study is the inadequate and fluctuating inflows of foreign direct investment into Nigeria as well as the controversial notion about the impact of foreign direct investment.

In fact as a background to the problem studied the Nigerian government has identified the need for more foreign investment in Nigeria by projecting that Nigeria needs N10 trillion foreign investment spread over 10 years in order to pull off the much desired economic breakthrough. This projected level of foreign investment is expected to result in a growth of 10 per cent in the gross domestic product (GDP). An analogous projection was that made by Dotun Philips, the former Director Gen-

eral of National Institute for Economic Research (NISER). He estimates that Nigeria needs a yearly foreign investment of or an equivalent of 30 billion United States dollars in order to turn the economy around. It should be pointed out that the inadequacy of FDI inflows is not peculiar to Nigeria as UNACTAD (2000) reports that FDI flows to developing countries has remained stagnant since 1997.

The review of the literature was based on certain key determinants of foreign direct investment in Nigeria such as political instability, corruption openness and transparency. The literature review also addressed certain key questions usually asked in the literature of foreign direct investment. These questions include:

- why do national firms involve into multinational organisation?
- Why do firms locate production in a foreign country rather than in licensing or exporting?
- What determines the geographic pattern of FDI flows?

In addressing these questions it has to be noted that prior to second World war there was no theory of foreign direct investment as such. There was a general theory of foreign investment that made no distinction between portfolio investment and direct investment. Foreign investment was considered as a mere transfer of funds and was explained under the general theory of capital movement.

The general thrust of this new classical theory of foreign investment was that movements of funds between countries would take place in response to differentials in interest rates and rates of return between different countries.

In contrast to the Neo classical theory Hymer (1960) was able to point out the advantages of large multinational enterprises and cleared most of the misconceptions on international funds movement. Thus he explained that direct investment does not necessarily involve movement of funds from county to country as the investor company can borrow money elsewhere and often uses in the host country's capital market or they may originate from profits of their foreign subsidiaries.

Secondly, direct investment often exhibits a cross-countries pattern with both countries involved being either home or host to the other's investment.

Thirdly, foreign direct investment tends to be industry specific rather than country specific.

Vernon's (1966, 1974 and 1979) contributions help to explain the product life cycle and technology transfer concept. Vernon (1979) reassessed his own theory by indicating that multinational firms are now more geographically diffused than the product cycle would warrant and the cycle has shortened considerably.]

Knickerbocker (1973) developed Vernon's model further by noting that companies become skilled at pioneering new products and this leads them to invest in other developed countries along the lines suggested by the product life cycle mode.

Graham (1978 and 1985) aimed at explaining the so called trans atlantic reversal; that is the shift in the position of the United States from a net outward investor to a net inward investor. Graham concludes that it is the defensive behaviour of European companies that leads to investment in the USA within the same industry.

Porter (1980, 1986, 1990) placed emphasis for the unit of analysis on the industry. Porter's approach to understanding the nature of global competition is based on a structural analysis of the competitive forces that operate across the industry in question. Globalization will be of significance in an industry whenever competitive conditions dictate that there is an advantage to be gained by the firm engaging in either global configuration, global coordination of both.

Caves (1982) developed the rationale for horizontal integration (specialized intangible assets with low marginal cost of expansion) and vertical integration (reduction of uncertainty and building of barriers to entry). Buckley and Cason (1976) extended Coase's (1937) explanation as to why multinationals internalise intermediate markets: internalizing intermediate production processes reduces uncertainty by

circumventing market imperfections.

It has to be agreed that in addressing the third question Dunning (1973, 1981) was the first to provide a more comprehensive analysis based on the advantages of ownership, location and internalization (OLI).

Dunning's eclectic theory provides some answers about the geographic distribution of FDI by analysing location factors. His taxonomy of location factors emphasizes possession of raw materials labour costs government incentive and servicing of local markets; however the taxonomy does not provide theoretical justification of why certain locational factors are important.

Lucas (1993) analyzed FDI based on a traditional derived-factor demand of a multiple product monopolist. However, his model is based on orthodox neoclassical foundations potentially important variables other than the cost of capital and labour (such as a proxy for the size of the market) or in the case of Nigeria sociopolitical instability, and corruption are not included in the analysis.

Casson (1990) has suggested that the theory of FDI is a "logical" intersection of three distinct theories: the theory of international capital markets which explains the financing and risk-sharing arrangements; the theory of the firm, which describes the location of headquarters management, and input utilization; and trade theory, which describes location of production and destination of sales. Although each theory provides some insight about the complexity of FDI flows, an integrated theory that combines these elements in an analytically persuasive way has not been developed.

5.2 THE IMPACT OF FOREIGN DIRECT INVESTMENT ON THE LOCAL ECONOMY

In general, the economic argument for encouraging an inflow foreign direct investment is that the investment generates income and other economic benefits to

both the investor and the host country. The first obvious contribution of foreign direct investment is to increase the gross domestic product (GDP) of the recipient country. This increased productivity benefits local groups through higher wages and expanded employment, lower prices and improved products for consumers, rent to local resource owners and higher tax revenue to the government. In some cases the expanded production leads to export market and this increases the level of the available foreign exchange funds. By the same token the expanded production from the import substitution effect leads to conservation of foreign exchange. Furthermore forward and backward linkages occurring as production in one operation requires production and services from other areas of the economy. In addition to demand creation (from the vertical integration in other industries, existing domestic investment (and new ones also) may be stimulated in the development of the country's infrastructure, particularly transportation communication, financial markets and industrial structure.

5.2.1 INVESTMENT AND GROWTH

In viewing the relationship between investment and growth there is abundant evidence that investment is a major determinant of the level structure and rate of economic development. the famed economic growth of East Asia was heavily attributed to investment. Odedokwu (1993) in a study based on a cross-section of 42 African countries identifies investment as the major factor accounting for the differential growth performance of the countries in the sample for the period 1970 - 1987. Lovine and Renelt (1992) also report that physical investment ratio was the most consistent and robust explanatory variable accounting for differences in growth performance of a large sample of countries over an extended period of time. Del Long and Summers (1991, 1993) disaggregate investments into (structure), (construction) and equipment components for a sample of developing and industrial econo-

mies, and found that equipment contributes much more to per capita GDP growth than the structures. This conclusion agrees with the notion that technological progress is largely embodied in new machinery although the findings reported by Averbach et al (1994) seem to challenge the robustness of some of the results.

The perceived critical role of investment in the growth process has however been challenged by the neo classical (Solow) growth models of 1960's and 1970s which asserts that capital accumulation affects growth only during the transition to the steady state. Rather, long term growth is determined only by the rate of technological change which is assumed to be exogenous. Similarly, Kaldor (1957); Robinson (1972); Young 1928 and Schumpeter (1934) considered the separation between investment and innovation as being embodied in new machinery and equipment. The model attributes the cross-country differences in long-term growth performance more to technological change and less to investment ratio.

Nevertheless, the observed strong correlation between investment ratios and growth performance tend to undermine the authenticity of the Solow model. In fact, recent research has brought capital accumulation back to the centre stage, suggesting an enhanced role for investment as a principal determinant of growth (Schmidt-Hebbel et al 1996).

5.2.2 TRANSFER OF TECHNOLOGY

Although there is little doubt that technologies make their way across international borders the mechanism through which this occurs are poorly understood. Apart from case studies, most of the empirical evidence is based on aggregate data on cross-sectional surveys and it is subject to multiple interpretations. Technologies may be transferred through several channels. New technologies may be embodied in new varieties of differentiated products or capital goods and equipment. They may be transferred through imports or through arm's-length trade in intellectual prop-

erty, such as licensing contracts. Firms may learn about new technologies by exporting to knowledgeable buyers who share product designs and production techniques, Djankov and Hoekman (2000). Technologies also may be transferred in the context of formal cooperative arrangements between foreign and local firms, such as foreign direct investment (FDI), acquisition or project-specific joint ventures. In all of these cases absorbing and adapting new technologies require workers who have appropriate training and expertise. The absence of such capacity is often held to explain why the total factor productivity (TFP) frequently is lower in developing country firms than in industrial firms, even if both use identical equipment (Park 1987). Foreign direct investment is likely to be associated with the transfer of both hard (machinery, blueprints) and soft (management, information) technologies. It has two dimensions: generic knowledge, such as management skills and quality systems; and specific knowledge, which cannot be obtained at arm's length because of weaknesses in the receiving country's policy environment (such as poor enforcement of intellectual property rights) or because of incentives for internalization. As for generic knowledge, foreign partners may reduce the cost of learning and up-grading by helping to identify and implement systems to ensure that the product meets technical specifications, is delivered on time, and so on.

An important question for the Nigerian case is the extent to which knowledge that multinationals transfer to affiliates diffuse to other firms in the industry. Theoretical models of foreign investment suggest that there should be positive relationship between foreign direct investment and diffusion of knowledge will move from firm to firm through demonstration and imitation effects as is prevalent in Aba and Onitsha the technological base of eastern states of Nigeria.

5.3 METHODOLOGY OF THE STUDY AND HIGHLIGHTS OF FINDINGS:

Given the popularity and importance of this study in economic circles two

broad analytical techniques were adopted in the investigation of the determinant and impact of foreign direct investment (FDI). The first technique involved a broad survey of foreign affiliate managers and local companies in some cases. The second approach involved the application of statistical technique (regression analysis) using available secondary data from the Central Bank of Nigeria and the Federal Office of Statistics (See appendixes 2A and 2B).

The survey involved a total of 302 foreign affiliate companies and about 45 local companies including 18 commercial attaches.

Due to the method of questionnaire administration about 85 response rate resulting in 257 foreign affiliate companies actively and effectively participated in the survey.

The data gathered was analysed using simple descriptive statistics including the computation of the mean standard deviation of the explanatory variables.

5.3.1 FINDINGS BASED ON THE SURVEY

The survey confirmed that socio-political instability was a major deterrent of foreign direct investment inflows. By implication socio-political instability encourages disinvestment. Foreign investors see socio-political instability as the root cause of other macroeconomic malfunctions. In the case of Nigeria the elements of socio-political instability has been lingering since the first military coup d'etat in 1966. the existence of dependable social-political stability is therefore a condition for investing in Nigeria.

Corruption/fraud was considered to be a discouraging factor among foreign investors essentially because it increases the cost of doing business in Nigeria. Corruption is therefore a major obstacle to economic growth and development. It reduces domestic investment discourages foreign investment and inflates government spending. Openness of the economy was highly rated by foreign affiliate man-

agers that is the degree of trade liberalization without excessive restrictions on imports and exports. Transparency in government and private transaction was highly regarded as an important determinant of foreign direct investment.

The stability of the exchange was highly rated by foreign affiliate managers as it plays an important role in attracting new companies and also in restraining older foreign companies from disinvesting from the economy. The size of the Nigerian market was regarded by foreign affiliate managers as a very important factor in choosing Nigeria. Nigeria is regarded as the most populous country in Africa. Investment incentives were not in general highly rated by the foreign affiliate managers as a condition for investment in Nigeria. Incentives in the presence of socio-political instability, corruption and lack of openness and transparency would not yield desired results. Debt equity swaps facility was not considered by foreign affiliate managers as a very important condition for investing in Nigeria. The cost of wages and employee maintenance was considered a major factor in investment decision by foreign affiliate managers. The level of domestic investment as a ratio of gross domestic product was of great importance to the foreign affiliate managers as it increases their confidence in the economy. Structural Adjustment programmes and the Indigenization were not in the top list of factors regarded as being of maximum importance to the foreign affiliate managers. Good public infrastructure in the form of good roads, good electricity and telephone system was not of utmost importance to foreign affiliate managers. Other successful examples of foreign investors was moderately rated; together with the availability of research and development facilities. Inflation, interest rate and the attitude of government to foreign direct investment were moderately rated as investment conditions by foreign affiliate managers.

Apart from the survey opinions on the determinants of foreign direct investment opinions of the foreign affiliate managers were sought on such issues as technology transfer and linkages.

The survey confirmed that a good number of the foreign affiliate companies had policies for technology transfer and that they had avenues for transferring technologies to Nigerians especially when compared with companies that did not have foreign partners. On the linkage issue, it was found that older foreign companies are more inclined to buy their raw materials locally than younger foreign companies.

5.3.2 FINDINGS BASED ON THE USE OF STATISTICAL TECHNIQUES:

The second methodological approach of the study which relied on the use of statistical techniques concentrated mainly on testing the hypotheses on the determinants and impact of foreign direct investment. The statistical analysis were applied to get an objective evidence of the determinants and impact of FDI.

First; the basic statistical technique applied was the rating of the various explanatory variable of the determinance in terms of their mean standard deviation and coefficient of variation. This basic statistical analysis confirmed that socio-political instability and market size were the most important factors for investors wishing to invest in Nigeria. In other words if political atmosphere in Nigeria was stable investors would come to Nigeria. It is based on the value of the mean for the explanatory variables that the most important variable were selected for use in the regression analysis.

The regression results also confirmed the findings on socio-political instability. The test of hypothesis on this variable resulted in a significant value confirming the importance of socio-political instability in discouraging foreign investments and encouraging it when it is stable.

The second hypothesis tested the role of incentives in encouraging foreign direct investment. The regression result confirmed that incentives which usually come in the form of various tax exemptions and reductions are important in encouraging the inflow of foreign direct investment but not in absolute terms. The contribution of this

variable to increasing inflows of FDI are specific on certain types of investors. Regression results on corruption openness, exchange rate, market size, debt, equity swaps, wage cost, and domestic investment to gross domestic product ratio were all positively significant when compared with the survey opinion. On the other hand the regression result indicated insignificant values for such variables as Structural Adjustment Programme (SAP) and indigenization. Again this result is not significantly different from the survey opinion which rated the two variables to be of moderate importance. The insignificant regression values could be as a result of trends in the country which have over taken most of the two factors especially the democratization of the political environment. More over SAP as a specific macroeconomic remedy has been discontinued, in its place an overall structural adjustment has become part of the daily management of the economy. In place of the indigenization decree, the Nigeria investment Promotion Decree of 1995 is now the big force behind foreign investment drives.

5.3.2.1 **IMPACT OF FOREIGN DIRECT INVESTMENT (FDI)**

The third hypothesis tested was on the economic effect of FDI on economic growth. The hypothesis was split into two, namely a test on the impact of FDI on gross domestic product and secondly a test of the impact of FDI on the growth of exports.

The test of hypotheses revealed that foreign direct investment had and could have a significant impact on gross domestic product (GDP) and the growth of exports. The test of hypotheses on these two variables showed that the investment components such as private investment and foreign direct investment domestic public debt all had significant impact on the growth of gross domestic product and exports. This confirms the theory that foreign direct investment could increase productivity which could benefit local groups through higher wages and expanded employ-

ment, lower prices and improved products for consumers. In some cases the expanded production leads to export market and this increases the level of available foreign exchange funds.

5.4 CONCLUSIONS AND POLICY IMPLICATIONS

Conclusively this study has demonstrated that foreign direct investment (FDI) flows are negatively sensitive to socio-political instability in Nigeria at any point in time. Conversely lower country risks encourage FDI inflows. The study has also confirmed that foreign investors place a lot of premium on the size of the market which is usually proxied by the gross domestic product (GDP).

In addition, the study has most importantly shown that the level of domestic investment is a confidence booster to foreign investors. Foreign direct investment cannot singularly lift the economy to projected heights without a good mixture of domestic investment and other variables. The study further demonstrates that the presence of corruption is a demoraliser to foreign investors. On the other hand the ability of government to undertake transparent transaction within an open economy motivate foreign investors. The general conclusion that could be drawn is that transnational corporations (TNCs) want to make investment decisions based upon the laws of economics, not the laws of politics; upon economic rationalization not economic nationalism. In determining where to invest TNC's evaluate and balance both positive and negative factors including obstacles to foreign investment.

By way of impact foreign direct investment can be said to have made a marginal impact on Nigeria's economic growth. FDI has enhanced technology transfer as revealed in chapter two of this study with the Cadbury Nigeria Plc. example and also as confirmed in the survey of foreign affiliate managers.

The implications of the findings can be far reaching but can only be summarized here. In regard to socio-political instability there are still elements of instability

in the Nigeria socio-political environment. This instability is in the form of frequent assassinations of top business and political figures, insecurity of physical and intellectual property; failure to admit or harassment of foreign personnel. In the presence of inadequate socio-political stability the best economic policies, programmes, laws, regulations and attractive investment incentives cannot yield any positive result. Added to the problem of socio-political instability there is the presence of abject poverty in Nigeria, for example the per capita income of Nigerians has fallen from US \$1000 in 1980 to \$300 in 1999. Nigeria is also ranked 146th out of 176 nations in the league of better off nations or put another way Nigeria is ranked amongst the 30 poorest nations of the world. The effect of the general poverty level is that savings will be low and domestic investment cannot be generated. The elements of socio-political instability and the lack of inadequate local investment are the basic reasons why foreign direct investment inflow has not appreciably increased despite attractive incentives. This answers the first and second research question on this study.

Fundamentally it should be realized by government that foreign direct investment inflows lean on the basic theory of investment that is, savings generate domestic investment and in the case of Nigeria we have to go down to basics by building up savings through poverty alleviation and general improvement in the standard of living.

Government must simultaneously encourage domestic investment by working out realistic interest and inflation rates; stabilizing the Naira exchange rate and prescribing realistic investment allowances.

It is not enough to project on optimal foreign investment levels without corresponding measures to boost domestic and foreign investment. For example government has recently projected on a N10 trillion foreign investment inflow for the next 10 years which will result to 10 per cent growth. All those projections are in the "Nigerian Economic Policy 1999-2003". However, the ability to implement or reach the

targets are doubtful.

It is necessary for Nigeria to continue to maintain conducive economic political, legal and socio-cultural environment in order to assure foreign investors that Nigeria is investor friendly. In-consistencies in government policies especially, macro economic policies have to be reduce and if possible eliminated. Foreign investors have to be assured that policies can be reliable even with changes in policy makers. Government should encourage transparency in financial reporting. More liberalized policies and incentives should be put in place after due evaluation. The privatization programme should be realistically pursued because it is expected to bring in capital, management and technology. This will enable Nigeria to benefit adequately form the irreversible globalization trend.

The organized private sector should be able to contribute towards the attraction of foreign direct investment by being more efficient and competitive and by relying on growth that is based on efficiency and effectiveness of operations instead of mal-functions in the economy. For example the present low capacity utilization of 30 per cent should, with the provision of better public infrastructure and incentives be raised to at least 60 per cent before the end of year 2003.

5.5 SUGGESTION FOR FURTHER RESEARCH

This study has dealt with the most common positive impact of foreign direct investment namely technology transfer and linkages.

It did not deal with contentious negative impact, such as dividend payment, the controversial activities of multinational companies in destabilizing governments and the effects on local industries. It would be desirable to carry out a critical analysis of the negative impact of multinationals the prime agents of foreign direct investment in Nigeria.

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APPENDIX I

A SURVEY OF FOREIGN AFFILIATE MANAGERS ON THE DETERMINANTS AND IMPACT OF FOREIGN DIRECT INVESTMENT IN NIGERIA

PART A FOREIGN AFFILIATE MANAGERS

1. What is the nature of your business?

(Please tick appropriate box)

- | | |
|--|---|
| <input type="checkbox"/> Mining and Quarrying | <input type="checkbox"/> Transport and Communication |
| <input type="checkbox"/> Manufacturing | <input type="checkbox"/> Building and Construction Processing |
| <input type="checkbox"/> Agriculture, Forestry | <input type="checkbox"/> Trading and Business Service |
| <input type="checkbox"/> Basic metals and products | <input type="checkbox"/> Electrical Electronics |
| <input type="checkbox"/> Machinery | <input type="checkbox"/> Chemicals |

2. What country is your company affiliated?

(Please tick appropriate box)

- | | |
|--|---|
| <input type="checkbox"/> Japan | <input type="checkbox"/> United States of America |
| <input type="checkbox"/> Europe (Britain, Germany etc) | <input type="checkbox"/> Asia <input type="checkbox"/> Africa |
| <input type="checkbox"/> Others (Please specify) | |

3. What type of ownership structure exist in your company?

- | | |
|---|---|
| <input type="checkbox"/> Joint Venture | <input type="checkbox"/> Wholly owned (Foreign direct investment) |
| <input type="checkbox"/> Foreign branch | <input type="checkbox"/> Franchise |

4. Do you presently have any foreign Directors in your Board of Directors?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

5. Is your company quoted in the Nigerian Stock Exchange?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

6. If No, do you have any foreign equity in your company?

- | | |
|------------------------------|-----------------------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No |
|------------------------------|-----------------------------|

7. When did the investment arrive in Nigeria?

- | | | |
|--------------------------------------|---|-------------------------------------|
| <input type="checkbox"/> Before 1972 | <input type="checkbox"/> After 1972 to 1988 | <input type="checkbox"/> After 1988 |
|--------------------------------------|---|-------------------------------------|

8. What is the approximate size (value) of the foreign equity in your capital structure as at your most recent audited account N _____
9. What is the approximate number of employees in your employment?
50-100 ☐ 100-500 ☐ 500 and above ☐
10. What is the approximate percentage of expatriates in your employment in regard to total employment? 1%-5% ☐ 10% and above ☐
11. How do you source your raw materials? ☐ Locally ☐ Imported
12. What is the approximate percentage of raw materials sourced locally?
Up to 30% and above ☐ Less than 50% ☐
13. Are any of your products exported? Yes ☐ No ☐
14. If No, do you plan to produce for export or for local consumption only?
Yes ☐ No ☐
15. What do you think are the best investments for Nigerian business today?

16. Where does local capital for Nigeria business come from
Banks ☐ Government ☐ Development Banks (NACB, NIDB, NBCI etc.) ☐
17. Do you have a realistic policy on the transfer of technology to Nigerians?
Yes ☐ No ☐
18. Do you have a method of evaluating the realisation of the policy?
Yes ☐ No ☐
19. If Yes, to what extent would you say that the policy has been realised?
Significantly ☐ Insignificantly ☐
20. Do you apply foreign technology in your new product development?
Yes ☐ No ☐
21. If So what percentage of foreign technology is applied in your manufacturing?
10-20 percent ☐ 30-40 percent ☐ 40 and more ☐

22. In the past two years have you sent your personnel to train for new technology and processes? Yes ☐ No ☐

23. Have you obtained new machinery and equipment or related knowledge in the last two years? Yes ☐ No ☐

24. How would you summarise the investment motive of your firm?

Aggressive e.g. to obtain greater profits ☐ Defensive e.g. protect domestic market ☐

PART B - COMMERICAL ATTACHES AND INVESTMENT AGENCIES

25. Do you receive investment inquiries from prospective investors in your country? Yes ☐ No ☐

26. How would you rate the investment climate in Nigeria?

Open and friendly ☐ Transparent ☐

Lacks transparency ☐ Closed and unfriendly ☐

27. Do you think the Nigerian government is sincere with all the investment incentives and reforms being put forward? ☐ Yes ☐ No

PART C - GENERAL

28. What is the degree of importance you would place on the following factors in making your investment decision or advice on Nigeria?

Please tick your considered choice in the box provided.

EXPLANATORY VARIABLES	IMPORTANCE SCALE/POINT VALUE				
	0 of no importance	1 of slight importance	2 of moderate importance	3 of great importance	4 of maximum importance
1. Socio/political instability	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Corruption	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Openess/ Transparency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Exchange Rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Market size/ GDP Rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Average Corporate Tax (Incentives)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Debt equity Swaps	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Level of Domestic Investment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Structural Adjustment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Indigenization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Wage cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Good public infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	of no importance	of slight importance	of moderate importance	of great importance	of maximum importance
13. Other successful examples of FDI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Good quality research and development personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Good planning of EPZ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Inflation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Interest rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Government attitude towards FDI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX 2A

VARIABLES FOR REGRESSION ANALYSIS 1970-1997

YEAR	X1 SPI	X2 COR	X3 OPE	X4 EXR	X5 MKT	X6 AVT	X7 DSW	X8 WAC	X9 IGD	X10 SAP	X11 IND
1970	0	5.8	1,641.8	0.7143	5,205.1	469.4	0	10733.1	1041.02	0	0
1971	0	6.7	2,372.3	0.6955	6,570.7	658.7	0	11242.2	1248.4	0	0
1972	0	5.6	2,424.3	0.6579	7,208.3	640.8	0	12428.7	1585.82	0	1
1973	0	4.5	3,503.2	0.6579	10,990.7	679.3	0	13+31.4	2417.95	0	1
1974	0	5.6	7,532.1	0.6299	18,298.3	813.4	0	13,536.1	3110.7	0	1
1975	1	4.8	8,647.0	0.6159	20,957.0	1,243.2	0	13,688.5	5,019.8	0	1
1976	1	6.3	11,899.6	0.6265	26,656.3	1,400.7	0	16,297.0	8,107.3	0	1
1977	0	7.6	14,724.4	0.6466	31,520.3	1,961.8	0	19,061.2	9,420.6	0	1
1978	0	5.3	14,276.1	0.6060	34,540.1	2,815.2	0	24,340.5	9,386.3	0	1
1979	0	6.7	18,309.3	0.5957	41,947.7	2,031.6	0	25,927	9,094.5	0	1
1980	0	5.7	23,282.3	0.5464	49,632.3	579.2	0	31,695.1	10,841.2	0	1
1981	0	7.6	23,862.9	0.6100	50,456.6	403.0	0	34,563.1	12,215.0	0	1
1982	0	6.7	18,976.9	0.6729	51,570.3	550.0	0	36,564.2	10,922.0	0	1
1983	1	7.6	16,406.2	0.7241	56,709.8	561.5	0	41,457.1	8,135.0	1	1
1984	0	7.2	16,266.3	0.7649	63,006.2	787.2	0	47,962.1	5,417.0	1	1
1985	1	8.6	18,783.4	0.8938	71,368.1	1,004.3	0	56,066.0	5,573.0	1	1
1986	0	8.5	14,409.2	2.0206	72,128.2	1,102.5	0	56,203.8	7,323.0	1	1
1987	0	8.4	48,222.3	4.0179	106,883.2	1,235.2	0	78,328.8	10,661.1	1	1
1988	0	8.3	52,638.5	4.5367	142,678.3	1,550.8	40.00	113,073.5	12,383.7	1	1
1989	1	8.1	88,831.4	7.3916	222,457.6	14,739.9	257.05	138,827.3	18,414.7	1	1
1990	0	8.8	155,604.0	8.0378	257,873.0	26,215.3	217.10	155,273.8	30,626.8	1	1
1991	0	8.9	208,555.6	9.9095	320,257.3	18,325.2	118.36	222,269.9	35,423.9	1	1
1992	0	8.7	353,177.4	17.2984	544,330.7	26,375.1	132.95	404,182.1	58,640.3	1	1
1993	0	8.8	284,870.5	22.0511	619,660.0	30,667.0	34.62	596,790.0	80,948.1	1	1
1994	0	8.4	368,848.0	22.0511	911,070.0	41,718.4	13.35	694,060.0	85,021.8	0	0
1995	0	8.6	1,785,789.1	67.6600	1,960,690.0	135,439.7	98.40	1,775,330.0	114,390.0	0	0
1996	0	8.7	1,872,170.0	81.2528	2,834,800.0	151,000.0	179.25	2,367,960.0	172,100.0	0	0
1997	0	9.4	3,676,651.7	81.6494	2,721,510.0	166,000.0	103.44	2379560	294,600.0	0	0
1998	0	9.6	378,711.8	83.0872	2,961,410.0	174,076.5	88.38	2,817,080	282,780.0	0	0

$$\text{General Model} = \text{FDI} = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + B_6X_6 + B_7X_7 + B_8X_8 + B_9X_9 + B_{10}X_{10} + B_{11}X_{11} === E$$

APPENDIX 2B

VARIABLES FOR REGRESSION ANALYSIS - IMPACT

YEAR	DEP VAR GDRG	a1 PUINVG	a2 PVTINVG	a3 FDIG	a4 FAG	a5 DOMPDG	a6 EXDDG	DEP. VAR EXFG
1970	5205.1	748.7	1536.4	128.6000	45.0	1,111.9	175.0	885.4
1971	6570.7	796.4	1602.3	142.8000	1.8	1,245.7	178.5	1,293.4
1972	7208.3	868.3	1701.5	197.8000	-14.3	1,000.7	178.5	1,434.2
1973	10990.7	857.2746	1604.6422	186.3000	-35.4	1,061.2	276.9	2,278.4
1974	18298.3	1,829.83	1280.881	181.6000	-62.1	1,266.6	322.4	5,794.8
1975	20957.0	3814.174	1466.99	253.0000	-76.8	1,678.9	349.9	4,925.5
1976	62256.3	6477.4809	1892.5973	212.5000	-97.8	2,630.0	374.6	6,751.1
1977	31520.3	5799.7352	3120.5097	245.5000	-118.7	4,636.0	365.1	7,630.7
1978	34540.1	5820.7368	3730.3308	134.5000	-170.6	5,983.1	1,252.1	6,064.4
1979	41947.7	5914.6257	3355.816	184.3000	-233.5	7,231.2	1,611.5	10,836.8
1980	49632.3	7643.5742	3374.9964	404.1000	-315.2	8,231.5	1,866.8	14,186.7
1981	50456.6	8476.7088	3279.679	334.7000	-346.5	11,195.5	2,331.2	11,023.3
1982	51570.3	7168.2717	3145.7883	290.0000	-289.4	15,010.5	8,819.4	8,206.4
1983	56709.8	5954.529	2381.8116	264.3000	-285.8	22,224.3	10,577.7	7,502.5
1984	63006.2	4536.4464	1449.1426	260.4000	-253.8	25,675.0	14,808.7	9,088.0
1985	71368.1	4924.3989	1427.362	434.1000	-232.0	27,952.0	17,300.8	11,720.8
1986	72128.2	8366.8712	2380.2306	735.8000	-240.4	28,440.2	41,452.4	8,920.6
1987	10688.3	10474.5536	4168.4448	2452.8	-96.2	36,790.6	100,789.1	30,360.6
1988	142678.3	13411.7602	5849.8103	1718.2	385.3	47,031.1	133,956.3	31,192.8
1989	222457.6	21578.3872	9788.1344	13877.4	1140.8	47,051.1	240,393.7	57,971.2
1990	257873.0	21661.332	15730.253	4686.0	3614.6	84,124.6	298,614.4	106,886.1
1991	320247.3	32985.4719	19535.0853	6916.1	7291.9	116,200.2	328,054.3	121,535.4
1992	544330.7	64231.0226	25039.2122	14463.1	12680.1	161,900.2	544,264.1	207,266.0
1993	691600.0	91982.8	2074.8	29660.3	-17924.6	261,093.6	633,144.4	218,770.1
1994	911070.0	91922.7	2184.6	22229.2	10952.4	341,266.3	648,813.0	206,059.2
1995	1960690.0	87933.8	2374.7	75940.6	51548.5	341,082.3	716,865.6	950,661.4
1996	2740460.0	88944.6	1976.8	80584.2	61234.0	343,674.1	617,320.0	130,9543.4
1997	2834800.0	929335	2475.6	98796.3	133964.9	359,029.1	595,931.9	120,876.8

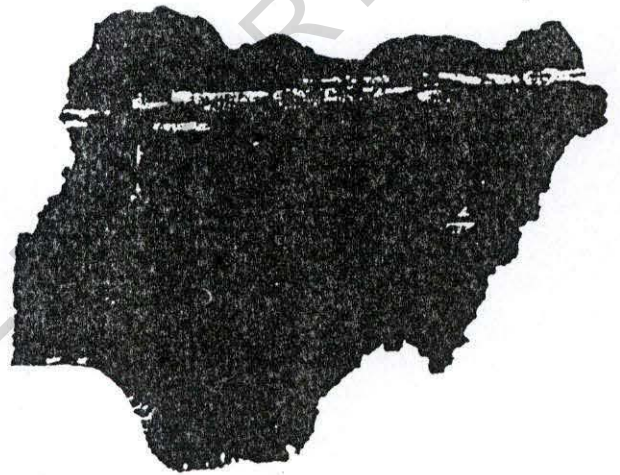
*Dependent Variable

$$\text{GDPG} = a_0 + a_1 \text{ PUBINVG} + a_2 \text{ PVTING} + a_3 \text{ FDIG} + a_4 \text{ FAG} + a_5 \text{ DOGMPDG} + a_6 \text{ EXPDG} + E \text{ --- 1}$$

$$\text{EXPG} = B_0 + B_1 \text{ PUBINVG} + B_2 \text{ PVTING} + B_3 \text{ FDIG} + B_4 \text{ FAG} + B_5 \text{ DOMPDG} + B_6 \text{ EXPDG} + E \text{ --- 2}$$



NIGERIA



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TRANSFER OF TECHNOLOGY



TECHNOLOGY TRANSFER, ROYALTIES, TECHNICAL AND MANAGEMENT FEES, PROTECTION OF INTELLECTUAL AND INDUSTRIAL PROPERTY

NATIONAL OFFICE OF INDUSTRIAL PROPERTY ACT

1 THE ESSENTIAL PRINCIPLES AND FOREIGN EXCHANGE IMPLICATIONS OF THE ACT

The National Office of Industrial Property Act ("the Act") was promulgated in 1979 with the stated objective inter alia of monitoring, on a continuous basis, the transfer of foreign technology to Nigeria. The administration of the Act was entrusted to the National Office of Industrial Property which was recently re-named as the National Office of Technology Acquisition and Promotion ("NOTAP"). NOTAP concerns itself with examining the quality of imported technology with a view to determining its price and to check fairly obvious abuses (e.g. overpricing of real, fake or obsolete technology, etc.). In other words, the principal concern of NOTAP is to register contracts/agreements which deal with the transfer and acquisition of foreign technology. The obligation to ensure that proper registration is effected, is both on the licensor and licensee of such technology.

The categories of contracts/agreements which qualify for registration and/or are registrable as involving the "transfer of foreign technology" are described as those contracts/agreements whose —purpose or intent is, in the opinion of the National Office, wholly or partially for or in connection with any of the following purposes, that is to say —

- the use of trademarks.
- the right to use patented inventions.
- the supply of technical experience in the form of technical assistance of any description whatsoever.
- the supply of detailed engineering drawings.
- the supply of machinery and plant; and
- the provision of operating staff, managerial assistance and the training of personnel..."

In order to prevent abuse and to discourage patent monopolies,

the transfer of obsolete technology, etc. the Director of NOTAP may refuse to register any contract/agreement in which in his opinion:

"the price or other valuable consideration thereon is not commensurate with the technology acquired or to be acquired".

"where provisions are included therein which permit the supplier to regulate or intervene directly or indirectly in the administration of any understanding belonging to the transferee of the technology and are, in his opinion, unnecessary for the due implementation or execution of such contract or agreement".

OR

"where the transferee is obliged to submit to foreign jurisdiction in any controversy arising for decision concerning the interpretation or enforcement in Nigeria of any such contract or agreement or any provisions thereof".

In order to avoid the payment for worthless technology in hard earned foreign currency, it is specifically provided in the Act that —

"no payment shall be made in Nigeria to the credit of any person outside Nigeria by or on the authority of the Central Bank of Nigeria or any licensed Bank in Nigeria in respect of any payments due under a contract or agreement mentioned in this Act unless a Certificate of Registration issued under the Act is presented by the party or parties concerned together with a copy of the contract or agreement certified by the National Office in that behalf".

No obligation to register with NOTAP may arise if the fees related to the contracts are denominated in local currency, without any intention to remit the same. Similarly, there is no obligation to register technical or managerial agreements with NOTAP where these agreements relate to projects funded in the country by international finance institutions who usually provide their foreign exchange components.

1.2 GENERAL RULES APPLICABLE TO ALL TECHNOLOGY TRANSFER CONTRACTS

To satisfy the evaluation criteria of NOTAP all technology



contracts/agreements must exhibit the following features:

- (i) They should include a provision whereby the recipient enterprise in Nigeria acquires explicit rights for the use and exploitation of the technology in question, and the period covering these rights should be clearly specified in the contract.
- (ii) The process or products to be licensed should be clearly defined.
- (iii) In cases where the Nigerian enterprise is acquiring the right to utilise a process, the concept of know-how should be clearly expressed and defined in the contract. In this connection, concepts such as "technical information" or "technical services" should only be treated as complimentary to the know-how.
- (iv) When a technology contract involves various components, each would be evaluated separately and the corresponding remuneration determined, not only in order to ascertain the relative cost of each, but also to provide the basis for determining the licensor's responsibility concerning the performance of any of the elements of the technology package.
- (v) In projects of special importance, the concept of a "net present value" would be introduced as a tool for evaluating the overall remuneration.
- (vi) Where the main element of a contract relates to a technological process, the licensor is obliged to provide process performance guarantees, in order to enable all parties concerned to critically determine its adequacy. Whilst the process guarantees are to be covered by licensor's financial terms (i.e. bonds, etc.) the contract document itself must explicitly cover the rights for the use and exploitation of the technology in question, and the duration of these rights.
- (vii) If the option to pay liquidation damages is available, there should be a provision for the Nigerian enterprise to exercise this right in an independent and unfettered manner.

- (viii) To ensure a continuous flow of information between the licensor and licensee during the life of the contract, such a contract should provide for access to the licensor's plant and related research and development facilities.

1.2.1 Development of National Technology Capability (Manpower and Training)

Clauses should be provided in Technology Agreement to ensure the employment, exposure and training of the appropriate and right calibre of Nigerian staff.

In all technology transfer agreement, NOTAP insists that due attention should be placed on the employment of Nigerians with relevant scientific and technological background to understudy the foreign experts with a view to taking over such responsibilities within the shortest possible time. It is therefore mandatory for overseas investors to submit a comprehensive Training Programme and Management Succession Programme for Nigerians whilst processing their technology transfer agreements.

1.2.2 Consultancy Services

As a matter of deliberate policy, Government is of the view that consultancy services required to execute local projects should be obtained from Nigerian consultancy firms. However, where the necessary expertise is not available, foreign consultancy firms may be invited to work together with a Nigerian consultancy firm in a subordinate capacity. Under current regulations Consultancy Agreements should spell out the following details:

- Definite objectives of the contract;
- Detailed description of the scope of the work programme to be accomplished;
- The time table and targets;
- Time estimates for each task in the programme including training;
- A description of the project teams;
- A description of the management team;
- The fee estimates, usually based on man/hours;
- The billing procedure.



1.2.3 Technical Assistance

Payments for technical assistance would normally be covered through "know-how fees" which are themselves broadly determined as follows:

In situations when the subject matter of a contract covers technical know-how that can be assimilated by the recipient company over a short period of time; e.g. use of formulae, drawings, specifications, etc; payments on a continuous basis would not be accepted. Also not acceptable are limitations that may be imposed pertaining to their use except those pertaining to confidentiality.

As regards the use of non-patented know-how, NOTAP does not accept any restriction on the use of the said know-how after termination of the technology transfer contract.

For practical purposes, the evaluation of the amounts to be paid for technical assistance is the aggregate of the various sums of money that may be determined as adequate compensation for the following components of the such assistance.

(a) Pre-Operational Phase

Pre-investment studies

Technical assistance for the purchase of equipment

Design, fabrication, and supply of equipment and machinery.

Technical assistance in the erection and installation of plant.

Plant start up.

Training of technical personnel in the above areas

(b) Operational Phase

Assistance in the purchase of equipment, spares, raw materials, etc.

Quality control.

Assistance in the operation of the plant including repair and maintenance, efficient production, etc.

Technical improvements of processes and products.

Technical services to clients.

Training of technicians in licensor's or licensee's plants

1.2.4 Managerial Assistance

The kind and scope of these services would depend largely on the sophistication and size of the local enterprise. The expectation is that these services would be obtained over a specific period of time, covering the following matters amongst others:

- Planning and programming;
- Research and development activities;
- Inventory control and accounting;
- Financing and purchase;
- Promotion and marketing.

Managerial assistance services are evaluated having regard to the following:

- a) A definition of the different kinds of services to be provided.
- b) The provision of a training programme in the contract in order to ensure that the various functions of the enterprise can gradually be taken over by the licensee's staff.
- c) Payments for these services are usually examined in relation to the economic benefits to the recipient company and the nation in general.
- d) The responsibility and functions of the licensor must be well articulated in the contract.

1.2.5 Access to Improvements in Technology

As part of its requirements, NOTAP expects that provision would be made to give the local recipient access to improvements on the technology acquired during the period of the agreement.

1.2.6 Territorial Considerations

Under this heading, two issues deserve special attention. The first is the territory of manufacture which is normally restricted to one country. In this connection, the degree of exclusivity (that is, the exclusive use within a territory) to be obtained should be clearly specified in the contract. The second relates to the territory of sales. As a general rule, the licensee should be allowed the right to export to other countries. A contract may not be accepted by NOTAP if it contains a total prohibition of the



port of the products manufactured under licence.

10.1.2.7 Arbitration

In the case of commercial disputes which are not taken to the regular courts, NOTAP expects that the manner of selection of arbitrators and the procedure for arbitration must be clearly expressed to be in accordance with the procedures of the Arbitration and Conciliation Act of Nigeria.

12.8 Governing Law

Technology transfer agreement must state categorically that the governing law of such agreement shall be that of Nigeria. NOTAP is very insistent on this clause in order to minimise the difficulties that had been experienced in the past when some technology transfer agreements relating to business transactions in Nigeria were governed by foreign laws with all that it implies.

12.9 Duration

Under the provisions of the Act, the period of 10 years is stipulated as the maximum duration of an agreement. NOTAP will, however, register agreements with longer terms where:

the technology proposed to be transferred is complex and it is proven to its satisfaction that the technology requires a longer duration for proper absorption, such as in Petro-Chemical Plants, Iron and Steel processing, Space and Computer Technologies, etc.

It is internationally recognised that the technology involved is a rapidly changing one and that the transferee requires to be kept abreast of the frequent changes/developments to remain competitive; for example in electronics, computers and telecommunications businesses.

the licensee is granted the right to sub-license the technology over a period of 10 years;

it is considered to be in the national interest of Nigeria. In practice, NOTAP usually approves a 3-year tenure for

contracts, which may subsequently be renewed upon the expiry of the initial term.

1.2.10 Royalties and Other Technology Payments

The currently applicable rates of fees that may be approved by NOTAP are as follows:

- a) Royalty – Royalty in respect of know-how, patents and other industrial property rights, ranges from 1% - 5% of net sales value.
- b) Trade Marks – As a matter of policy, royalty payments for the use of foreign trade marks will not be allowed except where the trade mark is an internationally recognised one accompanied with licensed know-how, and the product is allowed by the licensor for the export market.

In effect, a "Trade Mark Agreement" simpliciter would not be approved for royalty payments, whilst a "Trade Marks and Know-How Agreement" which does not preclude exports would probably be approved.

- (c) Technical Services – Fees in respect of Technical assistance/ Services range from 1% - 5% of net sales.
- (d) Management Services – A management fee ranging between 2% - 5% of profit before tax is the norm. However, management services for projects where profit is not anticipated during the early years may attract a fee ranging between 1% - 2% of net sales during the first 3 to 5 years only. For the management of a hotel within an international chain of hotels – a basic or lump sum not exceeding 5% of turnover plus an incentive fee not exceeding 12% of Gross Operating Profit ("GOP") is currently applicable. Other payments which are internationally accepted within the hotel industry may also be allowed. Our experience, however, indicate that only hotels located in the economically disadvantaged areas of the country will attract the upper limits of the basic and incentive fees herein stated.

) Consultancy Services – Lump sum payments are allowed in line with the international technology market prices which are in themselves based on man/day or month rates taking into account the nature of services to be performed. However, all such payments may not exceed 5% of the total project cost.

the applicable man/day-month rates will, of course, take account of the complexity and the sophistication of the technological services to be rendered.

) Agricultural and Agro-Allied Projects – Payments for services in this sector is based on a lump sum amount in the initial years (i.e. gestation period) when no sales or profit are anticipated. However, after the gestation period, payments are often based on net sales value as in other sectors.

) Incentive Remuneration – Incentive remuneration is allowed in deserving cases where:-
the local value added is not lower than 70%;
the products are intended for the export market;
the benefit to be derived by the enterprise is considered desirable in the national interest.

) Renewals – Generally, payments in respect of Renewal Agreements attract lower remuneration. Such renewals which are not automatic are considered on merit by NOTAP based on its own monitoring processes and assessments.

Definition of Net Sales – Net Sales shall generally be defined as "Net ex-factory sales price of the product exclusive of excise duties, and other taxes minus the cost of the standard bought out components and the landed cost of imported components irrespective of the source of procurement including customs duties, insurance and freight".

3 IMPLEMENTATION PROCEDURES OF NOTAP

Having established the foregoing, a summary of the various

legal and administrative steps which are necessary for obtaining NOTAP registration is as follows:

- i) A duly completed NOTAP Application Form (viz. Revised Form NOIP 1-84) must be lodged with NOTAP by the recipient or transferee of the technology.
- ii) The said Application Form must be accompanied with the following annexures:
 - an application fee made out in a bank draft payable to the "Director, National Office of Technology Acquisition and Promotion";
 - the Memorandum and Articles of Association of the Company
 - two certified true copies of the Agreement to be registered;
 - two copies of duly completed Questionnaire (viz. Revised Form NOIP 2-84);
 - a copy of the relevant feasibility study;
 - annual audited accounts (if not a new company), and if it is a new company a copy of the Certificate of Incorporation should be submitted as evidence thereof.
- iii) NOTAP then vets the Agreement in order to determine its conformity with its own evaluation criteria. In so doing, NOTAP is at liberty to request for additional and/or more precise information about the nature, age and extent of relevance of the technology and services being transferred. This exercise may, at times, result in the amendment or re-drafting of some clauses in the Agreement.
- iv) Based on the complexity and desirability of the form of technology being transferred, the NOTAP computes and advises the applicant of the fees payable for the use of the technology and the duration approved for the Agreement.
- v) When the Agreement is finally accepted by NOTAP (either in its original form or in an amended form) a "registration fee" as distinct from user fees becomes payable to NOTAP. For this purpose, Agreements are classified into two categories. For Category "A" (i.e. contracts involving a total payment below N500,000 for the



duration of the Agreement) the approval fee presently payable is one thousand naira (N1,000). For Category "B" (i.e. contracts involving a total payment above N500,000 for the duration of the Agreement) the approval fee at present payable is two thousand naira. (N2,000).

- vi) Finally, NOTAP then issues a "Certificate of Registration" to the applicant accompanied with a copy of the Agreement certified by it.

2. LAWS RELATING TO THE PROTECTION OF INTELLECTUAL PROPERTY

2.1 GENERAL PRINCIPLES

Nigeria is still a major importer of technology and finished goods. In this circumstance, its citizens have of necessity become familiar with several international brand names, trademarks, industrial designs, etc. which sometimes are unfortunately being imitated by unscrupulous businessmen. For example, the authors have not only observed the false labelling of goods as regards "country of origin" but also the infringement and "passing-off" of internationally well-known trademarks and designs and the illegal reproduction of cinematograph films, phonographic recordings and books. In some instances, third parties have even succeeded in establishing proprietary rights and a priority claim over international trademarks and designs which did not belong to them.

Following the market practice in most other countries, the Nigerian laws permit a prospective foreign investor to protect his proprietary interest in any trademarks, patents, designs or copyright even before completing the other formalities for establishing a business in Nigeria. Thus, it is in fact possible and often advisable for a manufacturer and exporter of goods into Nigeria to have his trademarks, designs or copyright registered in the country without any intention of establishing a formal business vehicle in Nigeria as this is not a legal requirement or pre-condition for registration. Nigeria is a member of the Paris and Berne Convention.

The various categories of intellectual property law are now examined and the procedures for registration outlined.

2.2 TRADEMARKS ACT: GENERAL PRINCIPLES

The essence of a "trademark" (i.e. a label, name, numeral, signs, etc.) is to establish a connection "in the course of trade between certain goods and a person having the right, either as a proprietor or registered user, to use the mark with or without indication of his identity" on the product to which the mark is affixed. The product labels which must indicate the origin of the goods also represents acknowledged quality of some given products and the goodwill of their manufacturers or producers.

Trademarks may be registered or unregistered. Right in an unregistered trademark may be acquired by use and may exist independently of registration in which case there can only be a "passing-off" action for its infringement. However, the proprietor of an unregistered trademark may oppose the registration of a similar trademark. The basis of this action is a proprietary right not so much in the name itself, but in the goodwill established through usage of the name in connection with the complainant's goods. The party objecting, therefore, must show that the name or mark in question has become associated with his goods, that a reputation or goodwill has attached to them under that name or mark and that use by the person seeking registration of a similar name or mark is likely to cause confusion resulting in damage to the reputation or goodwill of the complainant.

In Nigeria, the Trademark Act indicates what marks are registrable, and provides that a registrable trade mark must contain or consist of at least one of the following essential characteristics:

- the name of the company, individual or firm represented in a special or particular manner.
- the signature of the applicant for registration, or some predecessor in his business.
- an invented word or words.
- a word or words having no direct reference to the character



or quality of the goods and not being according to its ordinary signification a geographical name or surname. any other distinctive mark but a name, signature, word or words other than such as fall within the description in the above paragraphs (i), (ii), (iv) shall not except by order of a court be deemed a distinctive mark.

In addition to the above, it should be noted that trademarks are registrable in Nigeria in different classes. The law, for example, provides that, a trademark must be registered for particular goods or classes of goods. The applicant must in his application, state the goods included in each class separately. If the applicant desires to register the same mark for goods falling within the ambits of more than one class, he must make different applications in respect of each Class. Each such application is treated for all purposes as separate and distinct.

Whist, in theory, speculative trademark registrations reflecting no direct relationship for use on specific goods are discouraged, the current universal practice of granting franchise and licensing rights for the use of well known trademarks on divers goods recommends that proprietors of such trademarks should endeavour, as a protective and anticipatory measure, to effect registration in the country of their proprietary trademarks in divers classes of registration.

2.2.1 Qualification of Act as a Trade Mark Agent

In several jurisdictions, the capacity to act as a trade agent is unqualified. However, in Nigeria, the legal expectation is to engage the services of a lawyer to act as "trademark agent" with regard to the registration of a trade mark and other dealings or transactions on the same. In order to ensure probity and that only persons with good character are appointed as trade mark agents it should be noted that:

"The Registrar shall not be bound to recognise as such agent any person who has been proved to him to have been guilty of conduct discreditable to a trade mark agent or who has been convicted criminally or whose name has been struck off the Roll of Legal Practitioners or (during the term of his suspension) any person who has been suspended from acting as a legal

practitioner".

In practice, proprietors of trade marks have had little or no difficulty in finding competent lawyers to appoint as trademark agent.

2.2.1 Future Trends of Trade Marks Registration

At the time of going to print, certain revisions to the current Trade Marks Act are being contemplated. A significant revision is the possible introduction for registration of "service marks". In effect, signs which may constitute a trade mark may, upon the effective commencement of the proposed law, include "service marks" which are defined as "the shape, form, presentation or packaging of goods or services".

2.3 PATENT AND DESIGNS ACT

2.3.1 Patents

The word "patent" denotes a grant of letters acknowledging a right or monopoly in respect of an invention. When a patent is granted the "Letters Patent" are delivered to the patentee, who is the person entered on the Register of Patents as the proprietor or grantee. A patentee is thereby granted a right in law to prevent others from making, using or dealing in his invention whether by sale, importation or hire. A patent for an invention does not confer upon a patentee any right to manufacture which he does not already hold. What the "Letters Patent" confer is the right to exclude others from the commercial exploitation of a particular invention.

The actual procedure for application for "Letters Patent" is quite simple and straightforward. The applicant (assisted by his/its agent – usually a solicitor in Nigeria) is obliged to complete some Statutory Forms which may be obtained from the Patents and Trademarks Registry and to return the same accompanied by documents relating to the invention. The Application Form and relevant supporting documents are thereafter referred to an "examiner" who investigates the novelty of the invention claimed and establishes whether or not an earlier claim had been made



on it. The examiner's report is not binding on the Registrar but only assists him in arriving at a decision. If the request for a patent is accepted, "Letters Patent" are granted to the applicant or joint-applicants and sealed with the seal of the Registrar of Patents upon payment of the prescribed fees.

2.3.2 Industrial Designs

The word "design" as used in this context means or refers to features of shape, configuration, pattern or ornament applied to an article by any industrial process or means, being features which in the finished article appear to and are judged solely by the eye, but does not include a method or principle of construction or features of shape or configuration which the article made in that shape or configuration has to perform.

The law in Nigeria as regards designs now goes further to provide that any combination of lines or colours or both and any three dimensional form, whether or not associated with colour, is an industrial design if it is intended by the creator to be utilised as a model or pattern to be multiplied by industrial process and is not intended solely to obtain a technical result. Like patents and trade marks, the right of registration of an individual design is vested in the statutory creator, i.e. the person who, whether or not he is the true creator, is the first to file or validly claim a priority for an application for registration of the design, unless the creator was acting on behalf of another person for good consideration in which case that other person is treated as the proprietor.

The generally accepted view is that a mere importer of a foreign design is not its creator for this purpose, though it is not clear whether a mere importer may not be a proprietor by acquisition. Registration of an industrial design confers upon the registered owner the right to preclude any other person from reproducing the design in a manufactured product; or else, in importing, selling or utilising the design for commercial purposes. Reproducing the design in any miniature way is also prohibited by law. The protection provided by the Nigerian law is effective

in the first instance for 5 years from the date of application for registration and two subsequent periods of 5-year renewals making a total of 15 years.

2.4 COPYRIGHT ACT

The Copyright Act ("the Act") promulgated in 1988 makes provisions for the definition, protection, transfer, penalty for infringement of the copyright in literary works, musical works, artistic works, cinematograph films, sound recordings, broadcast and other ancillary matters. In theory, a copyright registration prevents the copying or reproduction of physical material existing in the fields of literature and the arts. Its object is to protect the writer or artist from the unlawful exploitation of their creation but does not give a monopoly to the reproduction of ideas or to any particular form of words or design.

