THE OIL CRISIS IN ECUADOR:
THE SEARCH FOR AN EMERGING SOLUTION.
WITH SPECIAL REFERENCE TO THE PERIOD 1979-1983

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ABSTRACT

In a bid to revitalise the country's flagging oil industry, oil policy in Ecuador during the late 1970's was directed towards stimulating foreign investment in exploration and development work. The transition to a democratic civilian government in August 1979 appeared to signal a change in the direction of oil policy, with the Roldós administration seeking to give fresh impetus to the state-led development of the oil industry.

Although the need for some degree of foreign collaboration was accepted, the main burden of finding new oil reserves was to be assumed by the state oil company, CEPE. Foreign oil companies were merely to supplement CEPE's own efforts, with their exploration work confined to areas of high cost and high risk. The least risky and least costly areas were reserved for CEPE. State control over the CEPE-Texaco consortium was also to be progressively strengthened, with the state oil company assuming complete operational control from Texaco by 1985. To implement both policy objectives, steps were to be taken to restructure and capitalise the country's previously neglected state oil company.

In the event, no steps were taken to restructure and capitalise CEPE and plans to strengthen the company's influence in the operations of the consortium were dropped. By 1983, CEPE's financial position had deteriorated to such an extent that it was barely able to supplement, let alone spearhead, the search for new oil reserves.

The thesis examines why the attempt to give fresh stimulus to the state-led development of the oil industry failed. This will essentially involve a detailed analysis of government policy towards CEPE and the reasons for the collapse in the state company's investment capacity. The thesis looks at the role, if any, that international conditions played in shaping government oil policy and the investment capacity of CEPE. Events in the
domestic political arena are also the subject of analysis. The thesis will suggest that the reasons for the failure of the government's oil strategy may have less to do with international conditions than with the nature of the relationship between the state and CEPE, the priorities of the political elites and Texaco's continued presence in Ecuador.

The thesis also looks at the subsequent shift in policy towards an external (that is, foreign) solution to the country's oil crisis. Although there has never been a state monopoly of the upstream sector in Ecuador, the process of attracting companies to the exploration play proved difficult. This reflected not only domestic political factors, but also a reluctance on the part of oil companies to invest in Ecuador. This reluctance was shaped by factors specific to Ecuador (contractual terms, geology and the country's previous history of acrimonious relations with oil companies) and by international conditions (the decline in world oil prices, changes in company investment strategy and the increasing number of exploration opportunities elsewhere in the world).
For
my Parents
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Tables</td>
<td>6</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>7</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>9</td>
</tr>
<tr>
<td>Notes on Financial Data</td>
<td>10</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>11</td>
</tr>
<tr>
<td>CHAPTER 1 Oil and the Economy</td>
<td>20</td>
</tr>
<tr>
<td>CHAPTER 2 The Rise and Fall of Oil Nationalism:</td>
<td></td>
</tr>
<tr>
<td>Private Sector Responses, 1972-79</td>
<td>32</td>
</tr>
<tr>
<td>CHAPTER 3 CEPE's Formative Years, 1972-78</td>
<td>55</td>
</tr>
<tr>
<td>CHAPTER 4 The Oil Policy of the Roldós Government</td>
<td>77</td>
</tr>
<tr>
<td>CHAPTER 5 In Defence of CEPE</td>
<td>92</td>
</tr>
<tr>
<td>CHAPTER 6 The Removal of Carvajal</td>
<td>110</td>
</tr>
<tr>
<td>CHAPTER 7 Oil Company Perceptions of Ecuador</td>
<td>126</td>
</tr>
<tr>
<td>CHAPTER 8 The Oil Reform Proposals of 1981</td>
<td>139</td>
</tr>
<tr>
<td>CHAPTER 9 The 'Consulta Nacional de Hidrocarburos'</td>
<td>159</td>
</tr>
<tr>
<td>CHAPTER 10 The Economic Crisis of 1982-83</td>
<td>183</td>
</tr>
<tr>
<td>CHAPTER 11 The Demise of CEPE, 1982-84</td>
<td>199</td>
</tr>
<tr>
<td>CHAPTER 12 Oil Company Responses to the First Round of Bidding in 1983</td>
<td>222</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>241</td>
</tr>
</tbody>
</table>

## APPENDICES

| Appendix 1 World Economic and Oil Indicators                            | 252  |
| Appendix 2 Key Domestic Economic Indicators                            | 253  |
| Appendix 3 Key Domestic Oil Indicators                                 | 254  |
| Appendix 4 Distribution of Public Sector Oil Income                    | 256  |
| Appendix 5 CEPE's Income and Expenditure, 1973-1984                    | 260  |
| Appendix 6 Principal Provisions of the Ecuador 'Service' Contract      | 264  |

Notes 268  
Bibliography 284
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table Number</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Distribution of Oil Income, 1972-75</td>
<td>69</td>
</tr>
<tr>
<td>3.2</td>
<td>Distribution of Oil Income, 1976-78</td>
<td>70</td>
</tr>
<tr>
<td>3.3</td>
<td>CEPE's Income from Deliveries to Domestic Refineries</td>
<td>72</td>
</tr>
<tr>
<td>3.4</td>
<td>% Distribution of CEPE's Gross Sales Income, 1974-78</td>
<td>72</td>
</tr>
<tr>
<td>3.5</td>
<td>Sources of CEPE's Investment Finance, 1975-78</td>
<td>73</td>
</tr>
<tr>
<td>3.6</td>
<td>CEPE's Debt-Service Payments</td>
<td>74</td>
</tr>
<tr>
<td>4.1</td>
<td>Distribution of Oil Income, 1978-79</td>
<td>81</td>
</tr>
<tr>
<td>5.1</td>
<td>Projected Distribution of Income in 1980 from CEPE's Crude Exports in 1980</td>
<td>104</td>
</tr>
<tr>
<td>7.1</td>
<td>The Rate of Success in Exploration Work, 1967-79</td>
<td>132</td>
</tr>
<tr>
<td>8.1</td>
<td>Oil Income by Source, 1979-80</td>
<td>143</td>
</tr>
<tr>
<td>8.2</td>
<td>Distribution of Oil Income, 1979-80</td>
<td>144</td>
</tr>
<tr>
<td>11.1</td>
<td>% Distribution of CEPE's Gross Sales Income, 1979-83</td>
<td>201</td>
</tr>
<tr>
<td>11.2</td>
<td>CEPE's Public Sector Oil Income by Source, 1978-83</td>
<td>203</td>
</tr>
<tr>
<td>11.3</td>
<td>Distribution of Revenue from Domestic Oil Price Increases, 1981-83</td>
<td>205</td>
</tr>
<tr>
<td>11.4</td>
<td>CEPE's Income from Deliveries to Domestic Refineries, 1979-83</td>
<td>206</td>
</tr>
<tr>
<td>11.5</td>
<td>Oil Income of the Armed Forces, 1978-83</td>
<td>208</td>
</tr>
<tr>
<td>11.6</td>
<td>CEPE Efficiency Indices, 1975-82</td>
<td>217</td>
</tr>
<tr>
<td>12.1</td>
<td>Analysis of Government Take</td>
<td>231</td>
</tr>
<tr>
<td>12.2</td>
<td>Estimated Government Take by Size of Field</td>
<td>232</td>
</tr>
<tr>
<td>12.3</td>
<td>Analysis of Oil Company Investment</td>
<td>236</td>
</tr>
</tbody>
</table>
ABBREVIATIONS

ASCEPE  Asociación Sindical General de Trabajadores de CEPE-Matriz
BEDE   Banco de Desarrollo del Ecuador (formerly FONADE)
BEV    Banco Ecuatoriano de la Vivienda
CAPP   Comisión Asesora de Política Petrolera
CEOSL  Confederación Ecuatoriana de Obreros Católicos
CEPCO  City Ecuatoriana Production Company
CEPE   Corporación Estatal Petrolera Ecuatoriana
CPP    Concentración de Fuerzas Populares
CONADE Consejo Nacional de Desarrollo
CTE    Confederación de Trabajadores
DGH    Dirección Nacional de Hidrocarburos
DP     Democracia Popular
FONADE Fondo Nacional de Desarrollo
FONAFOR Fondo Nacional de Forestación y Reforestación
FONAPAR Fondo Nacional de Participaciones
FONAVIA Fondo Nacional de Viabilidad Agropecuaria
FONASA Fondo Nacional de Saneamiento Ambiental
ID     Izquierda Democrática
IECE   Instituto de Crédito Educativo y Becas
IERAC  Instituto Ecuatoriano de Reforma Agraria y Colonización
INECCEL Instituto Nacional de Electrificación
JDN    Junta de Defensa Nacional
JUNAPLA Junta Nacional de Planificación y Coordinación
LIBOR  London Inter-Bank Offer Rate
MIN    Movimiento de Integración Nacional
MPD    Movimiento Popular Democrático
OECD   Organisation for Economic Cooperation and Development
OPEC   Organisation of Petroleum Exporting Countries
PCD    Pueblo, Cambio y Democracia
PCE    Partido Conservador
PD     Partido Demócrata
PRE    Partido Roldósista Ecuatoriano
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSC</td>
<td>Partido Social Cristiano</td>
</tr>
<tr>
<td>PSE</td>
<td>Partido Socialista</td>
</tr>
<tr>
<td>ROMPETROL</td>
<td>Romanian State Oil Corporation</td>
</tr>
<tr>
<td>TSE</td>
<td>Tribunal Supremo Electoral</td>
</tr>
</tbody>
</table>
I would like to thank a number of institutions and individuals for substantially easing the problems of writing a thesis that is based, in large measure, on primary source material. I would first like to thank the Central Research Fund of the University of London for funding my research trip to Ecuador in 1987. I would like to thank too the library staff at: the University of London, the London School of Economics, the Institute of Latin American Studies (London), the Institute of Petroleum, the Petroleum Economist and Lloyds Bank International.

I am also grateful for the invaluable help I received in Ecuador, at the Central Bank, the Ministeries of Finance and Energy, and the state oil company CEPE, and from representatives of foreign oil companies currently operating in the country. In particular, I would like to acknowledge the assistance and friendship of Sonia Acosta, Dr Rafael Almedia, Dr Carlos Jaramillo, Miguel Murillo, Dr Gonzalo Zambrano Palacios, Dr Elisa Jaramillo, Rafael Garcia and Peter James. A special word of appreciation too for Clyde Petroleum, which kindly allowed me to visit its oil camp in the Oriente jungle when I first travelled to Ecuador in 1985.

I would also like to express my gratitude to my supervisor at the Department of Government, Dr George Philip, who provided me with invaluable advice and ensured that the thesis had direction and that the main argument was clear and concise.

When a PhD is undertaken on a part-time basis, sacrifices have to be made. Evenings and weekends become periods, not of relaxation, but treasured opportunities to spend time working on the thesis. This situation affects not only the person undertaking the PhD, but also those close to you. It would be difficult to overstate, therefore, the gratitude and appreciation I feel for Alison Jackson, whose patience and forbearance during the last few years have made the completion of my thesis possible.
NOTES ON FINANCIAL DATA

Oil prices per barrel have been expressed in nominal US dollar terms. All other financial data has been presented in dollar terms at constant 1972 prices. Ecuadorian currency (sucres: S/) was converted into US dollars using the following exchange rates: 1972-81 S/25 to the dollar; 1982 S/30; 1983 S/44.12; and 1984 S/62.3. US dollars were then expressed in constant 1972 price terms using the GNP implicit price deflators contained in the 1986 US Department of Commerce 'Statistical Abstract of the United States.'

Information on the state oil company's income and expenditure during the period has been taken from 'Estadísticas Presupuestarias, 1972-87' published in July 1988 by CEPE's Economic and Budget Department. (A summary of the report is contained in Appendix 5). Information on the distribution of the country's oil income throughout the public sector has been based on a Ministry of Finance report 'Estadística de Ingresos Petroleros', published in June 1984. Public sector oil income, it should be noted, essentially covers the income generated from crude and fuel oil exports, royalties, oil income tax, domestic oil price increases and superficiary rights. The most important source of oil income not available for distribution to the public sector is the revenue generated from the sale of oil products on the domestic market.

Both sources provide data on the income CEPE receives from crude and fuel oil exports and domestic oil price rises. The figures presented did, in some instances, differ. In analysing the reasons for CEPE's financial crisis, the manner in which a large part of the country's oil wealth (including that generated by CEPE) is distributed throughout the public sector forms a central part of the thesis. For this reason, information on CEPE's share of crude and fuel oil export income and the revenue generated from domestic oil prices has been based on Ministry of Finance data.
INTRODUCTION

From the mid-1970's onwards, a succession of oil-importing countries in Latin America (for instance, Brazil and Argentina) either abandoned long-established state monopoly policies or revised their oil regulations in a bid to secure foreign collaboration in the search for new oil reserves. A similar, though less clearly defined process was underway in the oil exporting country of Ecuador, with official oil policy in the second half of the 1970's directed towards stimulating foreign investment in exploration and development work.

However, the transition to a civilian government headed by Jaime Roldós appeared to mark a radical change in direction. The Roldós government, and the centre and centre-left groups that dominated Congress, sought to give fresh impetus to the state-led development of the country's upstream sector. The main burden of exploration was to be assumed by CEPE, with foreign companies merely supplementing CEPE's own work. The most prospective areas were to be reserved exclusively for the state, with foreign exploration activity confined to areas of high cost and high risk. State control over the Texaco-CEPE consortium was also to be progressively increased, with CEPE assuming complete operational control by 1985. To ensure that CEPE was properly equipped to undertake the priority tasks assigned to it, steps were to be taken to transform CEPE from an historically undercapitalised and bureaucratic appendage of the state, into an efficient and well-financed instrument of state oil policy.

In the event, CEPE proved unable to fulfill the objectives assigned to it. Not only were plans to replace Texaco as operator dropped, but by 1983 it was clear that CEPE was scarcely in a position to supplement let alone spearhead the search for new oil reserves. Oil policy subsequently moved sharply in favour of attracting extensive foreign oil capital. The fundamental question that the thesis will address is why the attempt to
strengthen CEPE and give fresh impetus to the state-led
development of the oil industry failed. The reasons are complex.

Despite the petrodollar 'windfall' of 1979-80, the international
climate proved to be highly unfavourable to a country heavily
dependent on the continued inflow of oil revenue and foreign
credit. Monetarist ideology and interest rates were in the
ascendancy, OPEC in retreat and prices and demand for the
country's oil and non-oil commodity exports in decline. By the
end of 1982, the final pillar of the economy collapsed when
commercial bank lending to Ecuador was abruptly halted.

International conditions may not have appeared conducive to the
adoption of an expansive and costly exploration campaign by the
state oil company. It is, however, important to determine
precisely how the changes in the international situation may have
shaped the direction of government oil policy, particularly
towards CEPE. To what extent, for instance, did external
developments increase the reluctance or ability of the state to
provide CEPE with the resources necessary to carry out its
priority objectives? More specifically, to what extent was CEPE's
investment capacity affected by the slump in oil prices, rising
interest rates and the curtailment of commercial bank lending?

The experiences of other state oil companies in the region
provides another line of approach, in which international
conditions remain a critical, but indirect, influence on the
finances of a state oil company. A number of writers, most
notably Alfred Saulnier, have suggested that the most important
factor influencing the performance of a state oil company is the
nature of its relationship with the state. Aside from their
entrepreneurial activities, state oil companies in Latin America
have traditionally been required to carry out a multiplicity of
functions, covering a broad mix of political, macroeconomic and
social objectives. To ensure compliance with these 'external'
goals, governments have sought to design adequate control and
monitoring systems and created various mechanisms to appropriate
part of the income generated by the company's activities. This has then been used to finance the state's macroeconomic and political objectives. The state has also sought to impose non-market based pricing mechanisms, which have forced the companies to sell oil products to domestic consumers at prices which are insufficient to cover costs.

Under these circumstances, the government-imposed environment within which a company is required to operate becomes the crucial element in determining the extent to which it develops into an efficient, well-capitalised company. The evidence suggests that the more successful state oil companies exist in those countries where a suitable balance has been established between the government's need to coordinate and control the company, and thus ensure compliance with government-imposed objectives, and the need to allow the company to pursue its entrepreneurial goals without undue government interference.

Such a balance can generally be said to have existed in Brazil and Venezuela. Both Petrobrás and Petrovén have been largely autonomous public enterprises, which have been allowed to operate along competitive, economic-orientated lines. Nevertheless, both companies found their resources under mounting pressure from the state in the early 1980's. In Brazil, Petrobrás was required to prop up flagging sectors of the economy: to help farmers, the company was forced to reduce the price of its fertilizer products, while to protect charcoal producers from the effects of a depressed market, the company was also forced to purchase large stocks of charcoal that were surplus to its needs. 2

Management at Petrovén similarly found its power and autonomy undermined during this period, as the cash-straitened COPEI government systematically interfered with the company's funds and the appointment of senior personnel. Government interference even extended to the confiscation of $6 bn from the company's offshore dollar accounts. By 1982, Petrovén's financial independence was under severe threat.
Both examples illustrate how international conditions served to shift the balance that had previously existed between the needs of the state and those of the state oil company in favour of the former. Do the experiences of Petrobrás and Petrovén provide a possible explanation for CEPE's decapitalisation? Specifically, to what extent did the international crisis serve to alter the traditional relationship that had existed between the Ecuadorian state and CEPE?

It is clear, however, that even before the economic crisis of the 1980's governments have used their state oil companies to raise badly needed revenue, in some instances excessively so. The most notable example of this is the Argentine state oil company Yacimientos Petrolíferos Fiscales (YPF). Historically, the company has been heavily undercapitalised and its efficient development hampered by the imposition of a highly bureaucratic structure of centralised control. As Carl Solberg has shown, the company's financial problems were a direct consequence of the fact that successive governments preferred to milk YPF's revenue rather than to raise finance through other, more politically unpopular, methods. As a result, around 70% of the company's gross sales income was transferred to the national government, provincial governments and a string of state agencies including the National Highway Council and the Provincial Road Fund. To add to the company's financial difficulties, the state has forced YPF to sell oil products on the domestic market at prices that were insufficient to cover its refining and marketing costs.

The experiences of CEPE during the 1970's and early 1980's will be shown to closely resemble those of YPF. This suggests, therefore, that the fundamental reason for CEPE's financial and other problems lie in the nature of its relationship with the state. If this is the case, then the decapitalisation of CEPE and the failure to give fresh impetus to the state-led development of the oil industry cannot simply be explained in terms of a particular moment in time or a particular set of (abnormal) circumstances. All governments, military and civilian,
progressive and conservative, have ignored CEPE's needs and interfered with its finances.

As the thesis will show, the Roldós and Hurtado governments were no exception: both subordinated CEPE's needs to the attainment of wider political and economic objectives and effectively narrowed the options available for revitalising the oil industry. The pursuit of these objectives not only distracted attention from the urgent need to reform and capitalise CEPE, but resulted in the state and Congress systematically siphoning CEPE's funds. This raises further questions, which the thesis will address. Did the secondary importance attached to CEPE reflect the pressing nature of these 'other' priorities, or did it reflect a lack of genuine commitment to the state oil company and the priority objectives assigned to CEPE? It may, perhaps, be significant in this respect that one of the most damaging political decisions taken against CEPE occurred just three months after the government took office, in the midst of OPEC's second oil price offensive.

More general questions also need to be addressed. For instance, are there particular problems facing policy-makers seeking to 'turn' a company round after a poor start? Was there, for instance, a belief that the political and economic costs of creating an efficient and well-capitalised company could outweigh any potential benefits?

This leads on to the final, but perhaps most important, issue that must be addressed. Given the extensive, existing role of the Ecuadorian state in the upstream sector, and the necessity of ensuring the continued inflow of oil income to the economy, how could the political elites afford not to give priority to strengthening CEPE? The answer to this does, I believe, lie in the structure and nature of the Ecuadorian oil industry and CEPE's actual, as opposed to theoretical, role within it. In this respect, the continued presence and dominance of Texaco in
Ecuador will be shown to be the fundamental reason why successive governments have been able to ignore CEPE's needs.

Little has been written on the development of CEPE, either during or after the 1970's. The thesis provides the opportunity to undertake an in-depth analysis of the state oil company. It will look at its financial resources and investment activity, its organisational and administrative structure, the policy disputes that surrounded it and the policy decisions that shaped its future. It will cover, in short, the nature of the relationship that has developed between the state and the political elites on the one hand, and the country's state oil company on the other. By focusing on these issues, a clearer picture will emerge to explain why CEPE has been an historically undercapitalised company and why it has developed into one of the most inefficient state oil companies in the region.

There has, moreover, been no detailed examination on the distribution of the country's oil income throughout the public sector, nor of the extent to which the Ecuadorian armed forces has sought (successfully) to capture virtually one-fourth of the country's oil wealth.

The second theme covered in the thesis looks at the search for an 'external' solution to the country's oil problems and how the government sought to draw foreign companies back into the exploration play. It proved to be a long and difficult process. As well as looking at internal differences on the issue of foreign oil investment, the thesis will place the development of oil policy within a wider domestic political setting. Specifically, it will look at the constraints on policy formation and implementation generally in a highly fragmented and conflictive political environment.

Oil company responses to the process of 'apertura' will also be assessed. Although not averse to investing in countries which had previously pursued nationalist, and nationalising policies, oil
companies adopted a highly cautious approach to Ecuador. To understand the reasons for this, the thesis will look at how oil company investment strategy towards Ecuador was influenced by country-specific factors (contractual terms, geology and the country's recent history of acrimonious relations between the state and oil companies) and international factors (the decline in world oil prices, changes in global company investment strategy and the increasingly numerous opportunities for exploration elsewhere in the world). Although the thesis focuses on the policies of the Roldós and Hurtado governments, it is worth noting that the 'open door' policy initiated during this period did eventually result in a number of oil companies signing exploration contracts in 1985. Thereafter, a succession of oil companies entered the country over the next few years. All of these were signed during the administration of León Febres Cordero, a period not strictly covered by the thesis. As the thesis will show, however, the general direction of government oil policy throughout the 1980's was largely mapped out in 1979-84, with the Osvaldo Hurtado government close to signing contracts with three oil companies in the weeks leading up to the transfer of power to the Febres Cordero government in August 1984.

There has also been little detailed analysis of the problems facing countries which have sought to shift oil policy in a more neo-liberal direction. As the period covered by the thesis highlights, an acceptance of the need for foreign investment will not necessarily diminish the scope for internal conflict over the direction of oil policy. Instead, the internal debate will shift to other, equally important and no less controversial issues. To what extent, for instance, should foreign collaboration be sought, on what terms and to which geological zones?

In the case of Ecuador, the situation was further complicated by the initial unwillingness of foreign oil companies to respond positively to government invitations to undertake exploration
work in the country. The thesis provides the opportunity to examine why oil companies were reluctant for so long to invest in Ecuador and why some eventually decided to bid for exploration blocks in 1983 when the first round of bidding was opened.

Before examining the development of oil policy during the Roldós and Hurtado governments, the first four chapters will 'set the scene.' The themes covered are central to understanding developments in the early 1980's in respect of the domestic economic and political situation, the international environment and the relationship between the state on the one hand and CEPE, Texaco and potential oil investors on the other. Chapter 1 looks first at the economic context within which the new government came to office and the nature of the oil 'crisis' confronting the country. The key issues covered include the economy's increasing dependence on oil revenue and commercial bank loans in the late 1970's, the failure to mobilise non-oil income sources, and the potentially negative consequences of the 1979 oil price hikes for Ecuador, OPEC and the industrialised countries.

Chapter 2 covers the response of oil companies to the nationalist oil policies of the early 1970's, as well as the role played by the United States, Texaco-Gulf and domestic conservatives in the dismantlement of these policies. This chapter highlights the bitter domestic opposition towards both oil nationalism and CEPE, the absence of an organised base of support for oil nationalism and the reasons why oil companies came to regard Ecuador as a 'politically risky' country to invest in. Chapter 3 provides a detailed analysis of CEPE's formative years, looking in particular at its relationship with the state, on the factors inhibiting its ability to develop into an efficient and well-capitalised company and its failure to compensate for the fall-off in private exploration work.

After outlining the oil policies of the Roldós government, chapter 4 suggests that the political climate and economic situation were less favourable to CEPE (and democratic reformism)
than initial indications might have suggested. Concrete evidence of this is provided in chapter 5, which looks at the dispute between the Oil Ministry and CEPE over the direction of oil policy, decisions taken by Congress which undermined CEPE's investment capacity and CEPE's response to these decisions. Chapter 6 concentrates on the reassertion of Oil Ministry control over CEPE and the mix of political and economic factors that began to switch the main emphasis of oil policy away from a largely 'domestic' to an 'external' solution to the country's oil problems.

Chapter 7 is devoted entirely to country-specific and international factors that shaped oil company perceptions of Ecuador as a potential target for investment. Chapter 8 centres on the deteriorating political and economic situation, the declining investment capacity of CEPE and government proposals to create a more attractive investment climate for foreign oil companies. Chapter 9 covers the 'consulta nacional' that was carried out at the end of 1981 on the governments oil reform proposals and the ability or otherwise of CEPE to accomplish the priority objectives assigned to it. Chapter 10 looks at the political and economic crisis that enveloped the country in 1982, together with the decision of Congress to reform the country's Oil Law. Chapter 11 concentrates on the collapse in CEPE's investment capacity and essentially represents an overview of the deterioration in the company's financial position since 1980 and the reasons for this. The final chapter covers oil company responses to the first round of bidding that opened in June 1983 and which eventually led to three 'risk' contracts being signed with Occidental, Belco and Exxon-Hispanoil.
CHAPTER 1: OIL AND THE ECONOMY, 1972-79: AN OVERVIEW

The response of oil consumers to the revolutionary turmoil in Iran provided a welcome and unexpected boost to Ecuador's flagging economy. With fears of a possible oil shortage leading to an undisciplined scramble for supplies during the early weeks of 1979, world oil prices spiralled out of control. In Ecuador, the record crude price of $13.15 pb obtained at the end of 1976 faded into insignificance with each passing month: by June the price of Oriente crude had reached $28.71; six months later prices were moving beyond $32. As a direct consequence of events in the Middle-East, Ecuador's crude export earnings virtually doubled from $371m in 1978 to $631.5m. Public sector oil income, which was composed primarily of the revenue generated by crude and fuel oil exports, oil income tax and royalties, rose by a similar proportion to $619.5m. Some measure of the economic impact of this petrodollar 'windfall' can be gauged by the fact that, for most of the 1970's, oil provided around 60% of total export revenue and 40% of public sector income, and was a vital (in the case of CEPE, the state electricity enterprise INECCEL, and the national development fund FONADE, only) source of income for a variety of public sector entities, including the state budget and the armed forces.

OPEC's second price offensive coincided with the election of a civilian government committed to welfare politics, job creation and an extensive programme of investment in social and rural development projects. The reformist orientation of the electorate that propelled Jaime Roldós to the presidency was further reflected in the composition of Congress. Previously the virtual fiefdom of the country's agro-exporting elites, it was now dominated by urban middle-class groups on the centre and centre-left of the political spectrum. Of the 69 seats in Congress, just one third were held by the previously dominant conservative parties.
The euphoria that surrounded the political ascendency of pro-reformist groups was, however, tempered - or should have been - by the knowledge that the dramatic boost to the state's financial resources had resulted solely from the response of Western oil consumers to events over which Ecuador had no influence and, along with many others at the time, little understanding. The price hikes of 1979 once again highlighted the extent to which the fortune's of the economy and the public sector were inextricably linked to developments in the world oil market.

It is not difficult to see why oil assumed such importance in the economy in the years immediately after Ecuador became an oil exporting country. While the country's total export income between 1964-71 amounted to $1.4 bn, in 1973-75 oil export revenue alone totalled just over $1.5 bn. Nevertheless, the continued predominance of oil when the price and volume of Ecuador's crude exports began to fall from the mid-1970's onwards does suggest that policies to maintain and stimulate non-oil income sources were neglected. The growth of traditional exports, for instance, was discouraged by the maintenance of an overvalued exchange rate and the imposition of a number of export taxes. In the case of coffee producers, these taxes reduced export receipts by as much as 27% in 1979. The combined export volume of the country's main traditional exports meanwhile was 31% lower in 1979 than in 1972. Non-oil tax revenue was also neglected. Prior to Ecuador's emergence as an oil exporter, this had represented over 14% of GDP; by 1979, despite rapid economic growth and the accompanying rise in per capita income, its share had actually fallen to around 10%. This partly reflected generous personal deductions and exemptions which effectively excluded 94% of the country's economically active population from the payment of income tax.

Tax evasion was also extensive, with one report estimating that 'at least half of all potentially taxable income' remained undeclared. The country's most powerful businessman, for
instance, was alleged to have paid a mere $80 in taxes in 1978. Corporate tax income did increase, but here too the extensive availability of attractive fiscal incentives — qualified firms could deduct up to 100% of their outlays for fixed capital from their taxable incomes — placed severe limits on the amount of revenue that could be generated from this source.

The failure to maintain non-oil income sources served to deepen Ecuador's dependency on oil revenue and increased the sensitivity of the economy to fluctuations in the price and volume of the country's crude exports. The sudden hike in oil prices had provided the Roldós government with the financial resources to finance its semi-reformist policies and capitalise CEPE. However, as a cursory glance at the events that followed the first oil boom in 1973-74 would have highlighted, sudden and substantial increases in oil prices could set in motion a chain of developments that were potentially damaging to Ecuador's oil-dependent economy.

**Some Consequences of the 1973-74 OPEC Price Hikes**

The most immediate effect of the four-fold price increase in 1973-74 was to increase the OECD's net oil import bill from around $33 bn in 1973 to $87 bn one year later. This occurred despite oil imports falling by 1m b/d to 25mb b/d. Real GDP growth slowed to just 0.7% after increasing by 6.1% in the preceding year and then fell by 0.2% in 1975. The combination of recession and double-digit inflation caused interest rates to rise from 6% to 10% in 1974, although they subsequently fell in the following two years. According to one estimate, the interest rate rises increased the debt-interest payments of the developing world by $10 bn.

Oil consumption slowed considerably. Energy consumption after 1973-74 had grown disproportionately much less than OECD area GNP. While energy use in the OECD area grew between 1960-73 at the same rate as real OECD GNP, OECD's primary energy
requirements rose in the following six years by around 17%, implying a reduction of energy use per unit of GNP of about 9%. This was due primarily to the reaction of energy users to increased prices together with direct government action to encourage energy conservation and the increased use of non-oil fuels, in particular coal. At the same time as seeking to reduce levels of consumption and thus demand, the OECD countries sought to reduce their dependence on OPEC oil through increased domestic production and by developing non-OPEC sources of oil, particularly those in Alaska, the North Sea and Norway.

The slowdown in oil demand combined with an increase in oil supply sources and a rapid depreciation of the US dollar in 1978 to cause oil prices to fall in real dollar terms, according to one estimate by as much as 17.9%. In Ecuador, the depressed market conditions combined with stagnant oil production and a decline in crude export volume, to cause crude export earnings to fall from $601.9m in 1974 to $413.9m in 1978.

Between 1972-74, the sudden and substantial influx of oil revenue had enabled the economy to grow by an annual average of 15.3% and financed a veritable explosion in public expenditure and imports. To compensate for the fall in export earnings the military junta had two domestic options: to reduce public expenditure and imports and/or mobilise existing or alternative sources of foreign exchange and domestic income. It chose neither, preferring instead to cover the resulting deficits in the public sector and current accounts by turning to foreign commercial banks, all of which were willing to supply an OPEC member with loans on favourable terms. Through this means the government avoided the adjustment policies required in the post oil boom era: the high level of imports and public expenditure were maintained, with loans financing around 70% of the current account deficit. This strategy ensured that there was no decline in public investment either in real terms or relative to GDP, which increased at an annual average rate of 7.2% between
1976 to 1978. The legacy of this strategy was inherited by the Roldós government in the shape of a $2.2 bn external debt.\textsuperscript{15}

Around three-quarters of the external debt was owed to commercial banks, with most of the loans carrying floating rates of interest.\textsuperscript{16} This had not been regarded as a problem when the loans were first contracted. Although nominal rates of interest (both the US Prime Rate and LIBOR) gradually climbed in the late 1970's, the continued growth in world trade and the expansionary policies of the OECD countries ensured that real rates of interest remained low - in the case of LIBOR it was actually negative in 1976 and 1977.\textsuperscript{17} Nevertheless, floating interest rates, together with the dollar denomination of the loans, did serve to heighten the vulnerability of Ecuador's economy to the fiscal and monetary policies of the United States and other OECD countries.

**Early Responses to the 1979 Oil Price Hikes**

In the OECD countries, net oil imports represented over 60% of oil requirements, and oil one-third of total energy needs and 2% of GDP. The price hikes of 1979 were therefore expected to have significant impact on GDP growth, inflation and balance of payments accounts.\textsuperscript{18} Concern was already being expressed in the middle of 1979, with the US government warning that inflation would rise by around two percentage points and unemployment increase by 800,000.\textsuperscript{19} In respect of the European Community, estimates were made that:

\begin{quote}
'every dollar per barrel above the December 1978 price of $12.70 would result in a $3.6 bn annual increase in the Community's oil bill, a $3 bn worsening in its balance of payments on current account, a 0.4% reduction in economic growth and a 0.3% increase in inflation.'\textsuperscript{20}
\end{quote}

By the end of the year, OECD economic indicators revealed a performance below that of the preceding year. GDP growth slowed from 4.1% to 3.2%, while in the USA the rate of growth slowed
even further, from 5.3% to 2.5%. With their combined oil import bill doubling from its 1978 level of $93 bn, the current account balance of the OECD economies moved from a surplus of $6.6 bn to a deficit of nearly $27.5 bn which was projected to double by the end of 1980. This swing was entirely attributable to their transactions with OPEC producers. For reasons which were largely (though not entirely) due to the rapid rise in oil prices, economic forecasts for 1980 pointed to:

'slow growth, rapid inflation and massive balance of payments deficits for most of the industrialised world...[In the USA] expectation of recession in 1980 is almost universal.'

Another disturbing development was the upward movement in OECD inflation, a trend that was encouraged by the adoption of expansionary fiscal and monetary policies. In the United States, inflation moved from 7.7% in 1978 to 11.3%. In an attempt to dampen inflationary pressures and restore confidence in the dollar, the US Federal Reserve Board initiated a policy of severe monetary restraint in October 1979. As a result of this shift in policy, the US prime rate rose from 9% in 1978 to over 12% in 1979.

Even before the upward trend was evident - indeed when real interest rates were barely positive - concern was being expressed in Ecuador that the Roldós government would have to renegotiate its short-term debt. In May, the Quito Chamber of Commerce warned that 'the most acute effect' of the 'chaotic and unbridled' contraction of debts in 1977-79 'will be felt in the next few years.' How 'acute' the effect would be, at least in the absence of major readjustment policies, would largely be determined by developments in the world economy.

The oil price hikes carried potential negative consequences for OPEC producers. With the OECD countries moving into recession, demand for oil could be expected to decline. Renewed impetus could also be expected to be given to oil conservation measures, the development of alternative energy resources and exploration
and development work in non-OPEC countries. The price hikes did, moreover, provide OECD countries with the economic and political incentive to accelerate the development of high cost non-OPEC oil resources, including those in the North Sea and Alaska.

OECD responses to the price hikes were already having an effect on the demand side by the time Roldós assumed the presidency. Although OECD consumption fell only marginally in 1979, the weakening demand pressures had accelerated in the latter part of the year. By the last quarter, demand was 2m b/d lower than in the first quarter of 1979, a fall of 4.4%. Net oil imports did increase, but this reflected a rapid growth in stocks in the second half of the year, when stockbuilding was around 1.75 m b/d in excess of normal seasonal movements. Production from non-OPEC sources meanwhile increased, from 16.7m b/d to 18.1m b/d in 1979, a rise of 8.4%, compared to a 3.7% increase in OPEC's production.26

The Role of OPEC

Whether OPEC could meet these emerging challenges was dependent to a large extent on its ability to act as a unified and disciplined force. From the response to events in 1978-79, it was apparent that the potential for disunity at times of market crisis was high. Saudi Arabia had, together with pre-revolutionary Iran, resisted pressure from other members in 1978 for the $12.70 Marker crude price that had been in effect since the start of 1977 to be increased.27 Demands for an end to the price freeze were coupled with calls for a new pricing formula based on a mixed basket of currencies rather than simply the US dollar. Both demands were rejected on the grounds that they could destabilise the world economy and lead to a further loss of international confidence in the US dollar.

With the outbreak of political turmoil in Iran after September 1978, Saudi Arabia had moved quickly to reduce the pressure on
prices by boosting production by 2.3m b/d to 10m b/d. It then sought to accommodate the growing demands from other OPEC members for controlled price increases to be implemented in 1979. At the end of 1978, a compromise agreement was reached which involved the introduction of a quarterly price adjustment scheme. Implementation of this scheme would have increased average prices in 1979 by 10%, from $12.7 to $13.9.

The agreement was soon overtaken by events in Iran, with the average monthly price for OPEC crudes exceeding $17 in May, while spot prices moved from $13 in January to $29. Despite mounting pressure from other OPEC countries, Saudi Arabia resisted demands to increase the Marker price to $17.5. Instead, a further compromise agreement was reached in March whereby the price agreed for the last quarter of 1979 - $14.5 - would be implemented from the start of April. The increasing disunity within OPEC was further highlighted in June. By this time it had become apparent that the new Islamic regime in Iran intended to maintain production at around two-thirds of the pre-revolutionary level. This would have effectively eliminated the world supply surplus that had emerged since 1977 and created the conditions for the continued upward movement in oil prices. In the event, the meeting failed to re-establish a unified official price structure. Instead, a three-tier pricing structure was established, which was in the event largely ignored by most members including Ecuador. This consisted of the Marker price, set at $18, a surcharged reference price of $20, and an overall ceiling price of $23.5 pb.

A few weeks later, Saudi Arabia responded to US requests to cooperate in bringing price stability to the market by increasing output from around 8.5m b/d to 9.5m b/d. Together with the seasonal drop in demand and increased output from the North Sea, this move eased pressure on supplies and brought a temporary halt to the escalation in prices.
There were a number of reasons for Saudi Arabia's moderate stance on prices. A prime concern was the impact that sudden price increases would have on the developed economies, in particular the United States where a substantial quantity of Saudi oil money was invested. Political and diplomatic factors also played a part. A moderate stance on prices, together with evidence of its ability to manipulate market conditions, were two ways to make the US (and other Western countries) more receptive to its views on the Middle East and to requests for sophisticated military hardware. The resulting desire for close bilateral relations with the US government was reinforced by the Islamic Revolution in Iran, and Saudi fears that the revolutionary turmoil in Tehran could spill over into Saudi Arabia.

There was a further factor. As a result of its huge oil reserves, Saudi Arabia's primary concern was not with short-term economic gains, but the long-term development of its reserves to bank-roll the country into the next century. Spiralling oil prices, together with continued supply disruptions in the Gulf region, were thus deemed harmful for Saudi crude in the long-term since both would give fresh impetus to the development of non-OPEC oil supplies and alternative energy sources.

**The Oil Crisis in Ecuador**

In contrast to Saudi Arabia, Ecuador's vulnerability to depressed market conditions was heightened by the lack of readily available untapped reserves that could be swiftly channelled to the market in the event of a price slump. The central problem facing Ecuador was that the economy was dependent on a commodity whose revenue-generating capacity had been progressively declining throughout the 1970's. In 1973, 77.4% of production had been exported; six years later the proportion had fallen to just 50.6%. This shrinkage in crude export volume reflected both stagnant output and the spiralling increase in domestic oil consumption.
Domestic oil consumption had been increasing by an average annual rate of 15% during the 1970's. This rate of increase had been stimulated by rapid economic growth, the expansion of domestic industry, the sharp increase in the vehicle population and the maintenance of non-market based prices. When consumption had continued to rise sharply even when economic growth slowed, price increases were increasingly seen as the principal method to slow down consumption, as well as halting the smuggling of oil products to Peru and Colombia where prices were higher and reducing waste. Price increases would also encourage the substitution of new energy sources - primarily hydroelectricity - by eliminating the artificial edge enjoyed by oil and oil-related products. The net effect, therefore, would be to slow down the rapid decline in the crude available for export. For a cash-straitened government, a price hike had the additional benefit of mobilising what was possibly the most lucrative source of additional finance for the state.

There was, however, one obstacle. In Ecuador, as in the rest of Latin America, the political pressures against price increases have proved overwhelming, with gasoline prices in particular:

'a major focal point for political unrest. Price increases involve opposition from a powerful urban lobby of professional drivers, car users and bus passengers which contains just enough poor people to convey a populist appeal...'

This was graphically illustrated early in 1978 when the military junta appeared to be preparing the population for a major reversal in the country's low pricing policy. Some indication of the likely political response to such a move was provided in April when transport fares rose by 40%. The ensuing violence left four dead and hundreds injured, with order being restored by the army after ten days of rioting. In the wake of these disturbances, plans for a major price hike were shelved and the junta contented itself with increasing the import tariff on vehicle imports. It was hoped that this would, indirectly, slow
down the growth in gasoline consumption. This was a rather poor substitute for a major price increase, particularly since a number of multinationals were already planning to establish car plants within Ecuador.

The decline in crude export volume also reflected stagnant production. After peaking at 76.2m in 1973, production slumped to 58.7m in 1975 and then recovered to reach 74.2m three years later. It was not until 1979 that production surpassed the 1973 level, though the increase to 78.8m barrels in that year was still insufficient to prevent crude exports falling by 5.5% to 39.9m barrels.

There were two reasons why production remained either stagnant or fell. The main problem was that the country's tiny proven deposit base was being steadily reduced by production without replenishment by new discoveries. As the following chapter highlights, the mass departure of oil companies from the country in the early 1970's led to a dramatic fall-off in private (foreign) sector investment. While an average of 44 wells had been drilled each year in 1971-74, the number fell to just 14 in 1975 and to 12 in 1978.31

Exploration activity after 1974 was largely undertaken by CEPE, though the results proved disappointing. Lack of funds and the vagaries of geology were two factors accounting for CEPE's failure to compensate for the fall-off in foreign exploration activity. However, as a detailed analysis of CEPE's exploration work in chapter 3 will show, political rather than technical reasons often determined where drilling activity would take place. Indeed, of the 150m barrels of new reserves discovered between 1972-79 — all by CEPE — nearly all were in:

'small reservoirs, often of heavy crude, not necessarily near present productive centres and thus difficult to incorporate into production.'32
With no new major production sources discovered during the 1970's, the country remained dependent for virtually all of its oil production on the fields discovered and operated by Texaco-Gulf. This placed the American consortium in a strong bargaining position vis-à-vis the state which it used to full effect to win substantial improvements in its operating conditions. The consortium used a variety of methods to translate its economic power into political influence. One method involved reducing output (and thus exports), while another — which was maintained after 1974 — was the refusal to undertake any fresh investment in maintenance and secondary recovery work. According to a report in 1979, the failure to undertake maintenance work resulted in 54 of the consortium's 214 wells being rendered inoperative due to flooding. In the case of the country's third largest oil field, at Lago Agrio, only 18 of the 24 wells — four of which provided 60% of the fields total output — were producing crude.\textsuperscript{33}

The following chapter looks at the conflict between Texaco-Gulf and the state and the conflictive nature of state-oil company relations generally during the 1970's. This 'historical perspective' is central to understanding the problems facing the country's oil industry and the difficulties that Ecuador was later to face in stimulating foreign oil company interest in the country. The chapter also highlights the bitter divisions that have existed within Ecuador over CEPE and the role that it should play in the country's oil industry.
CHAPTER 2: THE RISE AND FALL OF OIL NATIONALISM: PRIVATE SECTOR RESPONSES

Prior to 1972, one oil executive recalled, 'everything was in favour of the oil companies' which were allowed to operate with little if any interference or supervision from the state.' The contractual terms were highly liberal, allowing long concession periods, large areas and low royalties. Payments to the state were minimal, with companies exempt from the payment of income tax, local taxes and import duties. The weakness of the state's role in the oil industry was further reflected in the absence of a state oil company or state refinery. Production, refining and marketing of the small quantities of crude discovered along the Santa Elena peninsula were controlled entirely by Anglo-Ecuadorian Oilfields, which was then a subsidiary of Burmah Oil. As late as 1966, the government conceded that:

'...the state does not dispose of sufficient personnel to be able to carry out satisfactorily the administration, control and regulation of all aspects of the oil industry."

Oil nationalism was not completely absent. In 1937, a contract with the US company Leonard Exploration was annulled due to legal 'irregularities' and the failure to repay a $126,000 debt to the state. Two years later, attention had switched to the increasing profitability of Anglo-Ecuadorian's operations, with the government giving the company 15 days notice of its intention to renegotiate the contract. After Anglo had responded by increasing its royalty payment from 7% to 10%:

'the companies were again left in peace. A bill submitted to Congress which called for the nationalisation of domestic oil marketing was allowed to lapse after the government extracted loans from Anglo and Shell. A Petroleum Congress, which the government had called in Quito in February 1939, was left with nothing to cheer.'
Aside from periodic allegations that Anglo sought to protect its monopoly of the oil industry by 'buying' congressmen and funding 'favoured' candidates in elections, organised campaigns against the oil companies were notably absent over the next thirty years.*

While the lack of state involvement in the oil sector can be related to the weakness and backwardness of the state itself, the 'free rein' enjoyed by companies also reflected the absence of any significant oil finds. Despite claims by one company in 1921 that the Oriente could contain 'the world's most valuable oil reserves', exploration results proved consistently disappointing.6 This remained the case until 1967 when Texaco-Gulf announced a series of major oil finds in the 1.43m hectare contract area it had obtained three years earlier. With initial estimates suggesting that the fields could contain up to 5 billion barrels, a succession of oil companies flooded into the country. By the end of 1970, 9.4m hectares had been contracted out to 24 foreign companies.7

Faced with the prospect of large-scale production, the state proceeded to tighten the consortium's contract terms, first in 1967 and again in 1969. In the same year, the government brought an end to the 'concession' era by announcing that new areas of the Oriente would be opened up to companies operating under 'association contracts.' There was little interest at this stage, however, in breaking the private sector monopoly over the country's oil industry. According to one report in 1968:

'Calls for the establishment of a state concern to compete with private enterprise are only occasionally heard in Congress, while calls for outright nationalisation have so far found little echo in the country.'

Further steps were taken to tighten the country's oil regulations in September 1971 when the Velasco government revised the 1937 Oil Law. The development period was reduced from 40 to 20
years, a ceiling of 200,000 hectares established for each contract area, the minimum royalty set at 12% on production of 30,000 b/d and payments to the state increased. For companies already operating in the country, however, the most important feature of the new Oil Law was the stipulation that the new regulations were non-retroactive and were therefore applicable only to future contracts. Moreover, although the government also announced that a state oil company would be established, no practical steps were taken to make this a reality. In these circumstances, the relationship between the state and the companies remained heavily weighted in favour of the latter.

The Military and Oil Nationalism

The turning point in state-company relations came in February 1972 with the establishment of a radical, nationalist military government headed by General Rodriguez Lara. The objective political and economic conditions for a policy of oil nationalism could hardly have been better: large quantities of investment had been sunk and, in the Texaco-Gulf contract area at least, substantial quantities of oil found which was scheduled to come on stream in June. Internationally, the oil companies were in retreat in the face of an OPEC offensive, while the upward trend in world oil prices was gathering momentum.

Soon after seizing power, the government informed companies that they had 12 months to renegotiate their contracts to bring them into line with the 1971 Oil Law and to relinquish 60% of their concession areas. The nationalist orientation of the government was further confirmed with the creation of a state oil company, CEPE, the introduction of reference prices, increased tax levels, a 15% surcharge imposed on the f.o.b. value of crude exports and, in November 1973, the entry of Ecuador into OPEC.
The Response of Oil Companies

Companies were reported to be 'shaken' by these measures, leading many to question whether the new operating environment justified the high cost of exploration in Ecuador.9 Due to the remoteness and heavily forested nature of potential oil-bearing zones, the price of failure in Ecuador was considered high by international standards.10 A number of companies were facing severe financial difficulties in meeting their investment commitments even before the change in the political climate. Farm-outs or the outright sale of one company's equity to another were two options that companies had used to alleviate the increasing financial strain.11 Faced now with having to accept tighter contractual terms most chose to close down their operations altogether.

Two companies were denied the option of renegotiating their contracts. 'Minas de Petroleos' and the ADA consortium were expelled for allegedly failing to fulfill their contractual obligations and for irregularities when the contracts were originally awarded. Although both actions caused concern among oil companies, the extension of the ensuing conflicts into the international arena turned Ecuador into a virtual 'no-go' area for oil investors for the remainder of the decade.

Following the expulsion of 'Minas', the radical Oil Minister and principal author of the government's nationalist oil policy Captain Gustavo Jarrin Ampudia placed part of the Minas contract area up for international bid in March 1974. Although the Oil Ministry claimed that 32 companies had expressed interest in the five blocks on offer, bids were only received from Argentina's state oil company Yacimientos Petroliferos Fiscales (YPF) and Poland's KOPEX. Local observers attributed the lack of interest to the difficulties and risks attached to two of the blocks in particular and to the change in the political climate. However, Jarrin claimed that Minas had engineered an 'international boycott' against Ecuador by informing all 32 companies that it
remained the legal owner of the areas up for bid. In the event, YPF signed an agreement in January 1975 to explore for oil in the Pastaza province, though after investing $10.3m and drilling 3 non-commercial wells the company closed down operations four years later.

The annulment of ADA's contract in November 1972 was regarded as virtually an act of theft by the US government and ADA, with the consortium issuing a $25m legal suit against the government. In April 1975, the government contracted out 200,000 hectares of ADA's former contract area (including the area containing the rich Amistad gas field) to the US company Northwest. ADA responded by bringing out another suit claiming that the Northwest bid had resulted from a breach of confidentiality involving a former executive who had been part of the Northwest negotiating team. Subsequently OKC, which had been part of the original ADA consortium, purchased the rights to the ADA company itself and issued a suit of its own. Although both suits remained dormant, further drilling work in the Gulf of Guayaquil remained at a standstill for the remainder of the decade as Northwest itself became embroiled in conflict with the government. (See chapter 7).

Company assessments of the political risk, of what was attractive geologically and even whether the new contractual terms justified continued investment did differ. Seven companies did agree to renegotiate their contracts. However, in all but one case disappointing geology combined with a high tax regime, an increasingly unfavourable political climate and changes in the global investment strategy of companies (which are dealt with in chapter 7) to lead these companies to close down their operations. Sun Oil relinquished its concession in the eastern jungle region in March 1974 after having invested $4.8m in four dry wells. A year earlier, the companies forming the Anglo consortium transferred all their rights to the Anglo company with the latter returning its acreage in the following year after drilling two dry wells. Anglo maintained control of the Santa
Elena fields until 1976 when these were handed over to CEPE. In 1977 OKC closed down its operations after drilling four dry wells.

Cayman's decision to pull out provided a further illustration of the difficulties being experienced by oil companies in their relations with the government. The company had found commercial quantities of oil in 1972. However, the refusal of the government to allow the construction of a 70-mile pipeline to link its fields to the 100,000 b/d Orito-Tumaco line in Colombia (in which Cayman had a 25% controlling interest) prevented the company from exploiting the oil deposits. At the end of 1974, the Petroleum Economist reported that:

'the company was instructed [by the government] to use Texaco-Gulf's line from the Oriente to Esmeraldas, a physical impossibility since the line was already operating at full capacity.'14

Cayman's fields were subsequently operated by City Ecuatoriana Production Company (CEPCO), which was owned by a US based holding company City Investing, which began producing small quantities of oil from its Oriente fields in the late 1970's. Aside from this company the only constant foreign presence in the upstream sector during this period was Texaco-Gulf. The US consortium's decision to renegotiate its contract proved crucial in shaping the direction of government oil policy towards both the private oil sector and CEPE.

Texaco-Gulf: The Private Sector Offensive

The consortium was uniquely vulnerable to government pressure: it had already invested around $250m, commercial quantities of oil had been found and exports were scheduled to begin in August 1972 at a time of rising world oil prices. Ecuador's bargaining position was, however, substantially reduced by the state's lack of previous involvement in the oil industry and the absence of any realistic state alternative to the consortium. Anxious to
reap the benefits of the impending petrodollar windfall, the government was disinclined to provoke Texaco-Gulf's departure or risk a long drawn-out dispute that threatened the inflow of oil revenue. Although negotiations proved lengthy, an apparently amicable agreement was reached in August 1973. Aside from higher tax payments, the key elements in Texaco-Gulf's original 'concession' contract were left untouched. For instance, although the new Oil Law established a maximum contract area of 200,000 hectares, Texaco-Gulf was only required to reduce the areas under its control from 1.1m hectares to 491,000, with the consortium able to choose which areas to retain. Moreover, with the exception of royalties, the consortium's ownership of production and exports remained intact.

Relations soon soured as the government took a number of measures that the consortium considered as 'intolerable.' With world oil prices spiralling following the Middle East oil embargo against the West, Texaco-Gulf pressed for the authorised level of production to be increased from 250,000 b/d to 400,000 b/d. Claiming that its contract area contained 3.42 bn barrels of reserves, of which 1.73 bn had been proved, the consortium promised to develop the remainder once this increase had been authorised. Initially, Jarrín linked any future production increases to a commitment by the consortium to undertake the development work necessary to prove the remaining 1.7 bn barrels of reserves. By May, his position had hardened, with Jarrín reducing production on 22 May 1974 to 210,000 b/d for conservation reasons.

Relations deteriorated further when the government unilaterally revised or reinterpreted the contractual provisions agreed in August. Although the agreement had contained an option for CEPE to acquire a 25% share in Texaco-Gulf the understanding had been that this would only be exercisable in 1977, subject to the negotiation of mutually acceptable terms. Early in 1974 Jarrín informed the consortium that negotiations were to be
opened to enable CEPE to obtain its 25% share in 1974. By the end of May the government:

"bluntly told Texaco-Gulf that it would be taking its 25% share as of 6 June, whether or not the negotiations were finalised."16

In July, the level of income tax payable by the consortium was increased from 44.4% to 49.4% and then, three months later, to 57.4%. In the meantime, the Oil Minister sent a draft decree to the president for the purchase of an additional 26% of Texaco-Gulf to enable CEPE to secure a 51% majority shareholding.

Changes in the world oil market provided Texaco-Gulf with the opportunity to resist and eventually reverse the government's nationalist oil policy. Against the background of a growing world oil glut and the end of the OPEC price offensive, the bargaining relationship between the Ecuadorian state and Texaco-Gulf shifted in favour of the latter. From June 1974 onwards the consortium reduced production:

'stopped purchase orders, and thus ended exports. It cancelled contracts, making oil-dependent workers and businessmen realise that all would be over for them - at least for the time being - if the consortium left. Texaco-Gulf played its cards: it was ready to leave. If the regime wanted to go through with its oil policy, fine. But it would do it alone and face the consequences."17

The economic 'consequences' came in the form of a mounting fiscal crisis, a growing balance of payments deficit and an acute shortage of the foreign exchange necessary to finance the raw material and capital goods imports on which domestic industry was increasingly dependent.

To supplement the consortium's economic offensive the US embassy sought to 'improve' the ideological climate by distributing pamphlets prepared by the US Information Agency attacking 'communism' and stressing the benefits of private enterprise and
foreign investment. External US support was provided as part of the government's overall strategy to divide and undermine OPEC. At the start of 1975, the US government prohibited the granting of tariff concessions to OPEC members and announced its opposition to international lending agencies advancing loans to OPEC countries. Other, less tangible and more covert pressures were also exerted. Rumours, for instance, began circulating that US military aid to Ecuador would be halted unless Jarrín was removed from the Oil Ministry.

A series of meetings took place between local company officials and the government, but with little success. In a bid to break the impasse, the presidents of Texaco and Gulf travelled to Ecuador in March 1975 to meet General Rodríguez Lara. At the meeting, the companies promised to normalise production and exports and carry out a vigorous investment programme if the reference price was reduced. A few days later the Ecuadorian president was informed that the consortium would pull-out unless the reference price was reduced from $13.90 to $10.35, domestic oil prices were increased and that the state paid the consortium '$55.2m' which it claimed was still owed following CEPE's purchase of a 25% shareholding.

Domestic Opposition to Oil Nationalism

Crucially for Texaco-Gulf, these demands were supported by the country's powerful business community. Taking advantage of the economic turmoil, the country's economic élites mounted a major political offensive against a government which had denied them access to state power and whose 'reformist' and 'statist' philosophy was interpreted as a direct assault on the private sector. Concern at the policy direction pursued by the military government was further heightened by Ecuador's entry into OPEC and by the government's 'hard-line' oil policy, both of which jeopardised the country's traditionally close ties with the United States and foreign capital. Together with conservative political organisations, the media, Texaco-Gulf and sympathetic
military officers, the elites sought to manufacture the overthrow of the government.

The private sector claimed that the government was controlled by 'Bolsheviks on a romp to ruin the country.' There had, however, been no attempt to effect a radical transformation of society. All the main sources of the elites economic power remained intact. The government had suspended the right of political parties to operate openly, but no steps were taken to dismantle the country's business chambers or to muzzle the country's 'primitively reactionary' press. As part of their strategy to create a 'crisis' atmosphere and conditions propitious for a coup, both were used to unleash a non-stop campaign denouncing the 'communist' government and claiming that its extreme oil policies were leading the country to economic ruin.

The government itself had few means at its disposal to counter these charges: all of the country's main newspapers, five television channels and - with one exception - 271 radio stations, remained under the control of conservative businessmen with close links with Texaco-Gulf.

A central target of the conservative campaign was CEPE, whose technical, managerial and operational capabilities were the subject of constant ridicule. Although the business community had given their 'tacit approval' to the formation of state enterprises in basic industries, there was increasing concern at the 'statist' orientation of government policy, particularly in respect of the oil industry. As a potential instrument for nationalisation, the campaign against CEPE was supported and encouraged by Texaco-Gulf. At the time, there was little evidence available to link the consortium directly with this campaign. However, the disclosure in the United States at the start of May 1975 that Gulf had paid bribes and funded various political parties in an unidentified Latin American country - then thought to be Venezuela, Bolivia or Ecuador - led to the government seeking an assurance that the country referred to was not Ecuador.
An assurance to this effect was received on 7 May. However, documents were produced in 1976 showing that the deputy editor of the Guayaquil tabloid 'Expreso', Esther Avilés, had received $280,000 from Texaco to fund a press campaign against CEPE and a proposed drilling contract between CEPE and its Romanian counterpart Rompetrol.25

The primary purpose of this campaign was to undermine the position of the military radicals within the government by convincing moderate officers that, in the absence of a credible state alternative to the consortium, the continued inflow of oil revenue could only be secured by reaching an accommodation with Texaco-Gulf.

The Narrow Political Base of Oil Nationalism

One of the striking features of the period was the absence of a broad-based coalition supporting oil nationalism and favouring the state-led development of the oil industry. In his analysis of oil nationalism in Latin America, Philip had found strong evidence to link oil nationalist policies to 'an urban class alliance with a strong middle-class component.'26 In the case of Ecuador, no such alliance emerged. Middle-class technocrats were influential in the state bureaucracy and the national development agency JUNAELA. However, they had no organised base of political support and were therefore unable to mobilise support in defence of the government's programme of reform and oil nationalism. Those middle-class organisations that did exist, notably Izquierda Democratica and the Christian Democratic party, were very much in the embryonic stage of development. Their organisational structure was weak and few links had been established with the social groups they purported to represent.

There was support for the government's oil policies from labour groups and the Communist Party, but these were too small and too fragmented to provide a viable base of support for oil nationalism. Just 16% of the labour force belonged to a trade
union, with 47% of these belonging to one of the three central labour confederations: CTE, CEDOC and CEQSL. The remaining 53% were distributed among over 4,000 independent organisations. The power and influence of the labour movement was further undermined by rampant factionalism, with union leaders preferring to pursue 'personal and ideological rivalries rather than concentrating on advancing the interests of their members.' The influence of the labour movement - and oil workers - on the development of oil policy in Ecuador was (and was to remain) negligible.

No steps were taken by the government to create an organised base of support outside of the military institution. Radical officers, including Jarrín, were military elitists who shared with their more conservative colleagues a distaste for military populism and radical mobilisation politics. Moreover, in view of their overriding concern for order, discipline and institutional unity, the bulk of the officer corps had little taste for mobilisation politics and confrontational policies.

Military radicals and civilian technocrats did, however, assume that a programme of reform and the expansion of the consumer market would generate popular support for the government. There was, in particular, a belief that such a programme would lead to the emergence of a 'modernising' segment of the bourgeoisie which would act as a counterweight to the country's agro-exporting elites. In so doing, both:

'failed to appreciate the industrial bourgeoisie's structural position as well as the depth of its ideological commitment to the symbols and images of the market.'

Far from being an autonomous group or class, the bourgeoisie was inextricably linked to other dominant-class fractions 'in terms of social origins and investment connections, and foreign capital.' The limited differentiation between the principal fractions - agro-exporters, importers, financiers and
industrialists - was most clearly evidenced by Luis Noboa Naranja and Antonio Granda Centeno, whose economic interests spanned commerce, industry, agriculture, livestock, banking and insurance. The twin objectives of government economic policy - the development of domestic industry and the expansion of the consumer market - attracted little support from the bourgeoisie. According to Catherine Conaghan, the increase in urban middle and upper class purchasing power, growing export opportunities, the rise in semi-processing industries and 'symbotic' ties with foreign capital all combined to reduce the obstacles created by mass poverty to continued business growth. With no direct economic interest in policies to expand the internal market, the bourgeoisie 'closed ranks' with the rest of the private sector to condemn state interference in the economy, to oppose even the mildest of socio-economic reforms and to discredit that most visible example of state expansionism, CEPE.

A Divided Military

The political fate of oil nationalism was therefore inextricably linked with the degree of military commitment to the state-led development of the country's oil industry. Crucially for the private sector and Texaco-Gulf, the military was not monolithic on the issue of reform or oil policy. The government that had emerged after February 1972 was essentially a 'coalition' government, composed of a hard-right 'Brazilian' (conservative authoritarian) faction and a radical 'perunistas' faction which sought to emulate the nationalistic and anti-oligarchical policies of the Velasco government in Peru. The influence of the radicals was particularly strong in the navy, though even here there were differences in political outlook. According to Philip, close contacts between naval officers and the Guayaquil business community helped to ensure that 'at least some key naval officers, although nationalist, had little interest in social reform.'
The bulk of the officer corps was composed of less ideologically committed or more moderate, careerist officers. At moments of crisis, these officers were to emerge as a major conservatising influence on government policies. According to Fitch, they were:

\[\text{much more concerned with orderly administration and avoidance of crises than they were with domestic reforms. Despite occasionally bold talk, the government was not willing to accept the political or psychological risks of undertaking any radical changes.}\]

This was graphically illustrated when the radical Minister of Agriculture, Guillermo Maldonado Lince, announced plans to reform the country's feudal agrarian structure. Landowners responded by threatening to withhold all tax and debt payments and halt all further investment, while the media launched a vociferous campaign against the 'traitor' Maldonado Lince. In the face of this pressure, the Minister was forced to resign and the much heralded reform programme dropped.

A similar retreat in the area of oil policy appeared increasingly likely as the country became enveloped in political and economic turmoil. Faced with an oil export embargo, the uncompromising hostility of the business community and the United States, and a worsening economic situation, the balance of power within the military began to shift away from those advocating 'confrontational' and 'adventurist' policies and towards those favouring a more accommodationist posture towards Texaco-Gulf and the government's political opponents.

The first tangible evidence of this shift came in October 1974 when Jarrin was replaced by a moderate, Admiral Luis Salazar Landeta, and his plans for a 51% state share in the consortium dropped. Thereafter, the facade of institutional unity that had been maintained in public since the coup crumbled. While Salazar called for improved operating conditions for the oil companies, the head of CEPE Colonel René Vargas together with
Vice-Admiral Sergio Vásquez Pacheco called for a 'reaffirmation and deepening' of the nationalist oil policy. In June 1975, Vásquez was replaced by a conservative Rear-Admiral Alfredo Poveda Burbano, who in turn was replaced at the Ministry of the Interior by a leading member of the 'Brazilian' faction, General Guillermo Durán Arcentales. The slide to the right combined with Rodríguez Lara's failure to obtain a large OPEC loan at the Algiers Conference to make a major concession to Texaco-Gulf inevitable: in July, the government reduced the tax on the export of crude from 58.58% to 53.03%, thereby reducing the cost per barrel by 43c from $10.84 to $10.41.

The last few months of the government 'looked like a CIA man's dream destabilisation campaign', with the outbreak of a series of strikes and anti-government riots, all of which were 'put to good use by the press and conservative civilian politicians.' Following an unsuccessful coup attempt in September by conservative officers, a string of further concessions followed. In a bid to calm the conservative opposition, the recently imposed 60% tax on imports of non-essential goods was lifted and a number of radical ministers replaced by conservatives with close links to the business community and, in the case of the new Oil Minister Colonel Jaime Dueñas Villavicencio, the American oil company OKC. In a further bid to persuade Texaco to drop its investment boycott, the government ignored an OPEC decision to raise prices by 10% and instead settled for an increase of just 4%, effective from January 1976.

**The Demise of Military Radicalism**

The replacement of the Rodríguez Lara government in January 1976 by a three-man military junta appeared to signal the start of a major change in the direction of the country's oil policies. As Texaco-Gulf had hoped, the oil export boycott and the economic dislocation that followed proved sufficient to convince the bulk of the officer corps that extreme nationalism did not pay and that a more conservative oil policy was needed to maintain
the inflow of oil revenue. All three members of the military junta - Admiral Poveda, General Luis Leora and General Durán - were on the right of the political spectrum, though Durán initially sought to create a 'progressive' image for himself. In the area of oil policy, the primary objective of the new government was to break with the nationalist policies of its predecessor, adopt a more conciliatory approach towards Texaco-Gulf, and move oil policy generally in a more neo-liberal direction.

The institutional disunity of the military had played a key role in limiting the radical, nationalist orientation of the Rodríguez Lara government. The continued absence of ideological unity after 1975 now had the contrasting effect of preventing an immediate break with oil nationalism. To maintain some semblance of institutional unity, a number of military radicals were brought into the cabinet. These included Colonel René Vargas Pazzos, the new Oil Minister. A fellow nationalist, Colonel Luis Piffeiros, became the new manager of CEPE.

Vargas' nationalist credentials soon became evident. In response to a new and 'absurd' demand from Texaco-Gulf for a $1.05 pb tax cut in return for carrying out investment in maintenance and development work, he advocated the total nationalisation of the consortium. The military junta found the idea of nationalisation ideologically distasteful. However, in view of the delicate balance of forces within the military, the junta's own lack of political support and its determination to transfer power to a civilian government, it preferred to remain aloof from the ensuing controversy. It was left to the media, with funds supplied by Texaco, to mount a major campaign against CEPE. The campaign was helped with the publication of a report in May 1976 by the Instituto Ecuatoriano de Normalización, which set technical standards for industry. This proved particularly embarrassing for oil nationalists, since its claim that the valves used by CEPE were unsafe came just two weeks before the corporation was scheduled to assume control over the
internal distribution of all oil products. The anti-CEPE campaign was not confined to the media. In August, 'a high powered explosive device' was hurled at the CEPE headquarters in Quito.

External support designed to undermine the position of the radicals within the military came in the form of an article in the Washington Star. This warned that the nationalisation of Texaco-Gulf could lead to the country's oil industry falling into the hands of Romania, whose state oil company was then holding talks with CEPE on a possible joint drilling venture. It is not known whether this story served to strengthen opposition within the military to the radicals, but as one report noted:

"The thought of East Europeans taking over a strategic resource may be relied upon to provoke a Pavlovian anti-communist response from perhaps the majority of the Ecuadorian officer corps."

The military junta was not sufficiently secure politically to remove Vargas. With a group of progressive army colonels 'making its influence felt in the political arena' any sharp rupture with its predecessor's nationalist oil policies was ruled out. Aware that time was running out, Vargas quickly pressed on with his radical policies, with CEPE's control of the domestic oil market completed on 6 June. Not unexpectedly, a spate of pipeline 'breakages' - these had an uncanny habit of occurring at the most inopportune moments for the government - swiftly followed, causing oil production to fall sharply. The resulting petrol shortage was further aggravated when an oil tanker - 'quite deliberately' according to CEPE - rammed a pier at Guayaquil harbour.

In the same month, Vargas applied, for the first time since its introduction in April 1975, decree 285. This entitled CEPE to receive 25% of authorised production - set at 210,000 b/d - and not 25% of actual production. Since the pipeline had 'broken down' several times in June, the amount of crude that CEPE
demanded as its legal share was substantially higher than Texaco-Gulf would allow. When the 'Ruth' tanker arrived on behalf of the US company Arco to collect 918,839 barrels of crude purchased from CEPE, Texaco - which operated the port even though it was under the legal jurisdiction of the Navy - refused to load the tanker, with Gulf claiming that CEPE had 'stolen' the crude. After a delay loading did take place, though only after Vargas had ordered naval officials to compel Texaco to do so 'at gun-point if necessary.' In late July, Gulf filed a $5.3m suit against Arco and informed CEPE's clients that it retained legal ownership to the crude.

Gulf subsequently called for its own nationalisation, presumably in the belief that a well-compensated withdrawal was the best way of recovering its investment. The government, Gulf charged, had prevented it from earning a reasonable return on its invested capital - a mere 5% compared with the 15-20% it would have liked - by:

'witholding taxes with regard to increased production costs; by failing to pay in full for CEPE's 25% stake; (and) by enforcing the delivery of oil for internal consumption at an uneconomic price.'

The government, with the exception of Vargas, had no enthusiasm for the nationalisation and was anxious that the issue should not be 'politicised' to the advantage of the Left and transformed into a nationwide call for the nationalisation of Texaco. A proposed 'march for the nationalisation of oil' in August was therefore banned and Vargas excluded from the negotiations with Gulf over compensation terms. While his demand that compensation be paid in 5-10 year bonds would clearly have found little favour with Gulf, his exclusion was nevertheless a measure of the extent to which the conservatives had consolidated their influence within the government and the armed forces. Throughout the year, nationalists were gradually eased out of office. In June, the Interior Minister Colonel Richelieu Levoyer, who had publicly accused Texaco of pouring money into the press campaign against
CEPE, was ousted from his post. A few months later, the head of CEPE Colonel Piñeiro was transferred to the Consejo de Seguridad Nacional and replaced by Colonel Héctor Miranda.

Conservative dominance was further confirmed at the end of 1976, when economic policy was placed in the hands of Santiago Sevilla Larrea, an admirer of the Pinochet government. He was also, along with Vargas' eventual replacement General Eduardo Semblantes Polanco, an habitué:

'of the Sunday morning 'polo club' at Quito's exclusive La Carolina racecourse..and..closely linked with..business groups, and particularly with press magnate Antonia Granda Centeno..'

Vargas' political fate was eventually sealed when Durán openly called for the Oil Minister's removal in the hope of ingratiating himself with the country's economic élites while simultaneously eliminating a potential political rival. On 8 February 1977, the government appointed the right-wing chairman of the Joint Chiefs of Staff, General Semblantes to head the Oil Ministry. Vargas meanwhile was despatched to the country's embassy in Chile to assume the post of military attaché. The former CEPE manager Colonel Piñeiro was also transferred abroad, to the country's embassy in Bolivia.

There seems little doubt that these dismissals occurred for political reasons and were designed to facilitate a shift towards a more neo-liberal oil policy. Indeed, the removal of Vargas on the same day as an official statement concerning the arrest of CEPE's marketing director Ramiro Estrella on bribery charges, was timed to cause the maximum damage to his prestige and to the credibility of the nationalist line he represented in the armed forces.

With the military radicals a spent force, the junta sought to effect a decisive break with the country's nationalist past. Official oil policy was now openly directed towards appeasing
Texaco, creating attractive incentives for foreign oil companies and improving Ecuador's image among potential investors.

The Gulf Settlement

The negotiations with Gulf over compensation terms provided the first opportunity to convince potential investors that official attitudes had changed. Agreement was reached on 22 April 1977, though differences remained over the value of Gulf's investments. Rather than sour what had otherwise been an amicable settlement, the two sides appointed an independent arbiter - Deloittes - and abide by its valuation. To back up their good intentions, both endorsed standby letters of credit to cover the disputed amount, totalling $40m. Deloittes eventually placed a $33m price tag on the balance of Gulf's holdings, bringing the total settlement to $115m, only slightly lower than Gulf's original estimate. Aware that oil companies outside Ecuador had been waiting to see how Gulf fared in the dispute, the government honoured the agreement and paid Gulf in full.

The Agreement with Texaco

The priority for the government was to persuade Texaco to end its investment boycott. The company's decision to remain in Ecuador reflected the company's greater regard for the security of its past investments, as well as its own refinery needs. Whereas Gulf had sold its own share of crude to third parties, Texaco had sold directly to its subsidiaries and was therefore able to charge whatever prices it considered convenient. Company officials may also have had a clearer perception of the developing political situation due to the close links that the local company manager René Bucaram maintained with government officials.

The agreement to end Texaco's investment boycott was reached in December 1977. Under the terms agreed, the US company promised to carry out a major investment programme which included the
drilling of ten exploration wells and nine development wells. Secondary recovery work was to be carried out on the Shushufindi field - which contained an estimated 372m additional barrels of reserves - while maintenance work was to be undertaken to increase output from the older fields. To oversee this programme, as well as the consortium's future drilling and production activities, both sides agreed to establish a new operating company 'Petroamazonas.'

The end of Texaco's investment boycott proved costly for the state. Decree 285 was rescinded and made retroactive, while decree 287, issued in 1975, was also rendered harmless. This had established limits on the length of time that companies could hold onto concession areas without undertaking exploration work, and discovered structures without developing them. The deadline for the decree's application had been set for April 1976, by which time all areas under the control of Texaco-Gulf with the exception of the five structures under exploitation, were to revert to the state. Under pressure from Texaco this decree was amended: the areas would now only revert to the state if the deadlines for the new annual work schedules were not respected.

It was further agreed that the system of state-set prices would be replaced by a more flexible market-orientated pricing policy on oil exports. This had been regarded by Texaco as a key condition for its agreement to undertake investment. However, the abandonment of what had been an almost doctrinaire adherence to unrealistically high prices also reflected the marketing difficulties Ecuador was experiencing once cheaper Alaskan and Mexican oil began flowing into the US market. Taxes, which had previously been calculated on a reference price of $13.90, were henceforth based on actual export prices.

Although this decision was mutually beneficial, it was less clear which of the two parties gained most from revisions to the tax system. In December 1975, all the differing individual taxes that Texaco had been required to pay were unified into a single
rate of 71.42%. From December 1977, a new level of income tax was fixed, at 87.31%, and the royalty increased from 17% to 18.57%. Although Finance Minister Sevilla claimed this increased the government’s share by $0.90, from $10.70 to $11.60 pb, Jarrín argued that the agreement - ‘the biggest Christmas present in the country's history’ -:

'...sets taxes at an even lower rate than what was acceptable to Texaco, having a net effect of transferring $13m in unrealised taxes to Texaco.'

Texaco’s profits in 1977 were $1.35 pb, said Jarrín; only $0.95 pb, said Sevilla. The company considered the tax and royalty increases to be 'substantial', but nevertheless still felt that the new terms provided it with a 'reasonable' rate of return on its investment. Early evidence of Texaco's apparent satisfaction with the agreement was provided when the company made a first payment of $13.7m towards its extra tax bill for 1977.61

Attractive Incentives for New Oil Investors

Having reached an agreement with Texaco, the military junta turned its attention towards creating 'attractive incentives' for new investors by liberalising the country's Oil Law. The military junta justified this shift in policy by arguing that CEPE did not have the financial capacity to assume the burden of exploration work, nor, in view of the high risk involved, was it deemed sensible to allow it to do so.62 Reforms to the country's oil law had been agreed on by the middle of 1977, though implementation was apparently delayed until a more 'stable' political situation had emerged.63 As a first step in encouraging foreign investment in exploration work, the junta announced in August that oil companies would receive a 30% exemption on import duties.64

It was not until November 1978 that new contractual terms were officially adopted. The key change was the introduction of the
contract of 'hydrocarbon operations' which contained a number of important new benefits for oil companies. Companies would not be required to pay royalties, superficiary rights or entrance fees, nor would they be obliged to return equipment, machinery and installations at the end of the exploration period. The size of the area that contractors could retain during the exploration period was doubled and the minimum investment required was reduced to one exploratory well per 100,000 hectares, and S/1,000 per hectare in each year in the first three years of the exploitation period. In the event of 'commercially exploitable' quantities of oil being found, companies would receive as payment a volume of hydrocarbons 'enabling him to recover his investment, in adequate terms and with reasonable profit margins.' The hydrocarbons received as payment could not be used to cover domestic needs, though if such oil was required for this purpose it would be purchased by CEPE at international, not domestic, prices.66

The reforms were condemned as a 'sell-out' by former Oil Minister Jarrin who continued to call for the nationalisation of the oil industry. However, this was very much a minority viewpoint. By the late 1970's, even many nationalists were reported to favour the continued presence of Texaco and the collaboration of foreign companies in the increasingly urgent task of reversing the rapid downward trend in the country's oil reserves.66

As the following chapter will show, a fundamental reason for this shift in attitudes was a growing recognition that CEPE did not have the financial, administrative or technical capacity either to assume control of the consortium or to carry out an extensive programme of exploration.
CHAPTER 3: CEPE'S FORMATIVE YEARS

Since a state oil company provides the state with a potential instrument of nationalisation, the existence of CEPE might have been expected to strengthen the bargaining hand of the Ecuadorian government. In the event, the failure of CEPE to develop into a competent and efficient state company was such that it could not even credibly threaten to assume total control of the oil sector. CEPE proved, in the final analysis, to be the achilles heel of oil nationalism.

Conservative groups had argued that CEPE's problems emanated from the government ownership structure: state enterprises were, by their very nature, inherently inefficient. This chapter, however, will suggest that CEPE's problems largely resulted from the government-imposed environment within which the company was required to carry out its entrepreneurial functions and the nature of the company's relationship with the state. Both served to restrict CEPE's ability to develop into an efficient and well-capitalised company.

Other factors that affected CEPE's development should first be mentioned. For instance, teething problems were perhaps inevitable during CEPE's early years in view of the novelty of a state oil company and state involvement in the oil industry. As an early section in chapter 2 highlighted, the nationalist oil policies of the Rodriguez Lara government did not represent the culmination of a process in which the state's role in the oil sector had gradually been increased. The oil policy of the early 1970's instead represented a voyage into previously unchartered waters. More generally, the state's role in the economy had been traditionally limited. Prior to 1970, the only state enterprises consisted of two fertilizer plants, the national railway, a utility and a distillery.
The establishment of a state enterprise in an area in which military officers and civilian technocrats had no experience and little knowledge would in itself have presented problems. However, these problems were compounded by the rapid extension in CEPE's range of activities. By 1976, CEPE had assumed control of the Durán-Quito pipeline; secured a 24% and 12% participation in the Anglo and Gulf refineries respectively; obtained a 25% shareholding in the Texaco-Gulf consortium; initiated exploration and drilling work; assumed control of Anglo's fields along the Santa Elena peninsula; and taken over the marketing and distribution of domestic oil products from Anglo and Gulf.

The preference for a rapid, rather than gradual, expansion of state involvement in the oil industry partly reflected the desire of the military nationalists to give a broader, international dimension to the country's oil policies. It was not coincidental for instance that the decision to purchase a 25% share in the consortium was taken shortly after OPEC had called on oil producers to increase state participation in their respective oil industries. However, a more potent factor underlying the policy of abrupt transformation was the fragmented nature of the military government and the existence of strong domestic opposition to oil nationalism. Faced with opposition to his policies from within the military and from the business community, Jarrín (and for that matter Vargas):

'did not expect to last long enough in office to be able to enjoy a long-term bargaining relationship leading to eventual nationalisation. His aim, rather, was to use the short time which he expected to remain in office to bring about economic and political transformations of a kind that would be irreversible when (as he fully expected) the conservatives regained control.'

This suggests that those who pressed for the rapid extension of CEPE's activities were more preoccupied with ownership per se than with the efficiency of what passed into the hands of the state. Even when these new responsibilities had been assigned to
CEPE, few steps were taken to modernise the company's organisational structure or improve the general level of technical and managerial expertise. The most evident example of this was in the marketing and distribution of domestic oil products, with serious fuel shortages occurring in 1975 and 1977. In the following year, further shortages occurred which paralysed economic activity and resulted in 'immense numbers of consumers queuing for many hours and days for gasoline.'

CEPE argued that these shortages resulted from the 'archaic, obsolete and inadequate' distribution network that it had inherited from Anglo and Gulf. However, there seems little doubt that the planning, overall coordination and control exercised by CEPE was less than satisfactory. According to one report, there was little if any coordination between the various directorates and departments, particularly with regard to the appropriate meshing of the capacity, location and construction schedules of processing and transportation facilities, and in terms of setting overall investment levels and priorities consistent with the country's needs. For much of the decade CEPE had no central office in charge of gathering, processing and distributing information on the company's different activities and different regional operations. Nor, in addition, was there any central office in charge of planning and programming. Instead, each department was left to plan its own activities in isolation, with little idea of what resources were available for their particular activity.

The administrative chaos that characterised CEPE's early years often led to costly errors being made which were exploited by the company's opponents and which did little to generate public confidence in the company. Following the construction of the Esmeraldas refinery in 1977, for instance, it was discovered that no pipeline had been built to transfer the refined products to the main market in Guayaquil. Refineries were the responsibility of the industrial division, while pipelines fell under the transportation division, a situation which undoubtedly
contributed to the confusion. Since the refinery could not operate at full capacity due to the physical problems of removing the refined products, substantial quantities of oil products had to be imported to meet domestic demand. Despite the high financial losses that this entailed, since these oil products were purchased at international prices and sold at the low, domestic prices, work on constructing the pipeline had still not taken place by the end of 1979.6

There was, as a later section on CEPE's exploration work will further confirm, no lack of evidence to support conservative claims that the company was inefficient and that costly mistakes had been made. Nevertheless, there seems little doubt either that CEPE's efficient development was hampered by the external imposition of a highly bureaucratic system of centralised control that encouraged inefficiency and excessive political interference, delayed working schedules and constrained management's ability to manage.

CEPE's Dependency Status

CEPE was not created as an autonomous public sector enterprise. According to article 1 of its Constitution, CEPE was 'a Corporation under public law...tied to the Ministry of Energy and Mines.' It was, therefore, essentially an appendage or 'department' of the Oil Ministry.

CEPE's lack of autonomy and its marginal role in the decision-making process was reinforced by the tight political control exerted over the company's internal structure. Executive authority was exercised by a Board of Directors composed of the Oil Minister, who acted as chairman, the head of the Joint Command of the Armed Forces, the president of JUNAPLA, and the Ministers of Finance and Industry. At board meetings, the CEPE manager had an informative role only with no voting rights and acted as secretary.
The Board's main function was to ensure that CEPE implemented the policies laid down by the Executive. Specifically, it had the power to approve or modify the annual budget presented by the CEPE manager, before submitting it for the final approval of the President. Board approval was required for all contracts and expenditure in excess of S/1,000,000. It also had the authority to appoint the manager of CEPE, who was proposed by the Oil Minister.

As a result of the political nature of the Board, CEPE's operating milieu was exposed - and subjected - to the vagaries of political, regime, ministerial and bureaucratic changes. This in itself was hardly conducive to the efficient development of a state oil company. In CEPE's case, the problem was exacerbated by the absence of a political consensus on oil policy generally or the role of CEPE in particular. The problem of administrative instability was no minor matter: between 1964-79, Ecuador had eight different governments and 12 chief executives; the average term of a Minister of Finance was nine months, an Oil Minister 12 months and a CEPE manager 17 months. This administrative instability adversely affected project implementation, harmed CEPE's operational capabilities, acted as a brake on policy formation, continuity and implementation - key concerns it should be added of foreign oil companies - and frequently paralysed the operations of CEPE while the new manager adapted to his new role.

**Constraints on Management Authority**

The CEPE manager's functions were tightly circumscribed. As the legal representative of CEPE, he was responsible for: executing the decisions of the Board; the technical, financial and administrative performance of the corporation; and the appointment or dismissal of technical-administrative personnel. Without the approval of the Board, he could authorise expenditure and investments up to a value of S/500,000. With the approval of the Oil Minister, the ceiling increased to S/1,000,000. In other
words, his ability to independently authorise expenditure was limited (in dollar terms at constant 1972 prices) to just $20,000 in 1972, equivalent to 2.9% of CEPE's total budget, and $12,240 in 1979, equivalent to just 0.003% of CEPE's total budget of $394.6m. In practice, therefore, Board approval was required for virtually all key operational and investment decisions.

The centralised nature of the decision-making process was reinforced within the organisation by the constraints placed on the CEPE manager's ability to delegate responsibility to his management team. He was required to:

'carry out his numerous activities himself. He must travel to Guayaquil, to Santa Elena, to the Esmeraldas refinery and to CEPE's office in Houston, Texas in order to purchase nuts or colouring for the gasoline because he cannot delegate these trivial tasks to anyone.'

The decision-making process was also highly centralised geographically, with little if any delegation of authority by the head office in Quito to CEPE's local offices. This resulted in excessive and expensive delays in the decision-making process, particularly since the country's inadequate infrastructure made communications difficult. Management at the Esmeraldas refinery, for instance, was required to obtain approval from CEPE's head office for most of its decisions, including any expenditures over $4,000. When seeking such approval, managers relied on radio-telephone links with Quito 'which is frequently not operating.'

In the absence of any meaningful delegation of responsibilities and authority, there was little opportunity for management to exercise its initiative or respond quickly and effectively to situations that required immediate action. They, like the CEPE manager, became weighed under by a mountain of bureaucratic regulations and procedures that often paralysed the decision-making process. This situation was aggravated by CEPE's legal position as a 'department' of the Oil Ministry. Since the
company formed part of the centralised administrative structure of the state, its operations were also constrained from the centre by numerous bureaucratic controls and procedures common to the rest of the public sector. As a result, that which in a private company took minutes, hours or a few days, such as the purchase of equipment, could and frequently did take many months in CEPE.

The frustration experienced by CEPE's management team was heightened by the knowledge that their decision-making functions had been usurped by individuals who had little, if any, knowledge of the oil industry. These included not only the government ministers who sat on the CEPE board, but also the general manager of CEPE himself. One future CEPE manager candidly admitted on his appointment that he had no experience of the oil industry, 'though I do know something of the oil policy of the country.'

As a result of the high degree of administrative instability within central government, few ministers or heads of CEPE remained in their posts long enough to become fully acquainted either with the oil industry or CEPE itself.

Management morale was further undermined by an inadequate reward and remuneration structure. During the 1970's, staff at CEPE formed part of the Ecuadorian civil service and its pay scales were determined by the Law of Remuneration and Classification. Salaries within CEPE were not particularly high in comparison with the private sector. In 1979, for instance, a trained technician at CEPE with one or two years experience could expect to double his salary by moving to a private sector company. This situation was not peculiar to CEPE. While the financial manager of a private sector company with a turnover of over $3m earned a basic salary of between $1,028 to $1,330 a month, the Minister of Agriculture, whose total budget in 1978 amounted to $53.2m, earned just $532.11

CEPE has undoubtedly made serious and costly errors, but since much of the power of decision-making had been removed from
management there was little of substance for which they could be held accountable. Nevertheless, the inconveniences caused by intermittent fuel shortages in particular did little to improve CEPE's credibility or support its claims to be a 'friend of the consumer.' Most crucially, however, in terms of government and public attitudes towards CEPE and foreign oil investment, CEPE's credibility was badly damaged by an exploration strategy that was little short of disastrous, financially and politically.

CEPE's decision to undertake exploration was a source of bitter dispute from the outset, with business groups and the media arguing that foreign companies were better equipped financially and technically to undertake risky and costly exploration work. It is some measure of the failure of CEPE's exploration work during this period that this view began to be shared more widely throughout Ecuadorian society.

**CEPE's Exploration Work**

In what appeared to be an attempt to compensate for the fall-off in private sector investment, CEPE allocated increasing sums of investment to exploration activities after 1975. Between 1976 to 1978, CEPE's investments in upstream activities more than trebled in real terms to $37.5m, equivalent to 43.5% of CEPE's total investments in that year. This partly reflected the emergence of CEPE as a majority shareholder in the consortium, although after reaching $3.3m in 1975 CEPE's investment contribution subsequently slumped to just $0.8m in 1977.¹² Some investment was also used to finance upstream work in the fields formerly owned by Anglo along the Santa Elena peninsula. However, the largest proportion was directed towards funding exploration and drilling work in areas exclusively reserved for CEPE. After completing one exploratory well in 1975 and then 1976, CEPE's drilling activity was stepped up, with 13 exploratory wells drilled between 1977-79.
The atmosphere surrounding CEPE's exploration work verged on the euphoric as CEPE officials announced one successful discovery after another. However, evidence soon emerged that much of the finance in exploration was being wasted on what were termed 'political wells.' The fact that so many companies had explored for oil in Ecuador and then pulled out after failing to discover commercial quantities should have saved CEPE the trouble of exploring in those areas. In fact, the opposite occurred with CEPE drilling 'wildcats' in fields discovered by foreign companies in the previous twenty years. Despite the subsequent claim by CEPE that it had proven 'successful' in its exploration work, the fields 'discovered' were often small, containing heavy crude and located far from the principal production areas.\(^{13}\)

The Shiripuno 'discovery' in particular proved highly damaging to CEPE's credibility. Immense publicity had initially surrounded the announcement of this 'significant' find in March 1977. CEPE officials and nationalists regarded Shiripuno as a positive response to the company's critics and proof of CEPE's ability to undertake exploration work.\(^{14}\) It then became clear that the crude was too dense to be commercial and that the field had not been discovered but merely 'unplugged.' As a result, CEPE's image was further dented and demands intensified for exploration to be left to foreign companies. This view had consistently been voiced by a leading oil expert Cyrano Tama Paz who, through his column in 'Expreso', opposed demands that more finance should be given to CEPE to:

> 'spend on the doubtful, risky and adventurous area of exploration, in which as we all know millions of dollars can be lost in the event of not discovering oil....We vehemently oppose the plan of financing oil exploration with Ecuadorian money because we do not have the millions of dollars that the risky and costly work of exploration requires.\(^{15}\)

CEPE's exploration work even attracted criticism from some left-wing nationalists, with Nueva's oil expert Ignacia Romero
condemning CEPE for having drilled 'absurd' wells. CEPE, he suggested, should 'stop playing blind man's bluff' and concentrate instead on:

'the less glamorous but more effective work of developing and incorporating into production over ten fields which have already been discovered and which could quickly be brought into production.'

The level of success CEPE had achieved in relation to the investment involved also attracted criticism and undoubtedly contributed to the creation of a political environment more conducive to the return of foreign oil companies. Despite spending $123.3m on exploration and production in 1975-79, CEPE discovered just 150m barrels. In other words, for every $1m spent on exploration and production, 1.2 barrels were discovered in areas so isolated that their exploitation was impossible to carry out.

It appears that more than simple incompetence or inexperience lay behind CEPE's exploration strategy and the euphoria that surrounded it. As studies of other Latin American oil industries have shown, over-optimistic assertions of exploration results and the country's oil potential generally have, on occasions, been deliberately encouraged by governments. Such was the case in respect of the Velasco regime in Peru, whose 'wilful over-optimism' was designed to 'impress foreign bankers and secure the best possible terms for Peru's foreign borrowing.'

One can only speculate as to whether similar thought-processes lay behind the euphoria that accompanied CEPE's exploration work in the late 1970's. Tangible confirmation of Ecuador's continued future status as an oil exporter could only have facilitated the military junta's policy of maintaining oil boom conditions by borrowing heavily on the international market. It is possible too that elements within the government may have encouraged the publicity surrounding CEPE's work in order to revitalise company
interest in the country's oil potential and, at the same time, strengthen the state's future bargaining position.

Nevertheless, it appears that the exploration strategy and the euphoria that surrounded it had its roots in CEPE's lack of political and financial autonomy and in the constant attempts by conservative groups to discredit it. As well as instilling national pride in CEPE and asserting its importance, the exploration strategy was designed to create a political environment more responsive to CEPE's financial, and other, needs. For these very same reasons, CEPE was unwilling to risk not finding oil. The exploration strategy pursued by CEPE during the 1970's was therefore devised as a bargaining ploy geared to securing additional financial resources.

It was shown earlier that the state failed to balance its desire for control with the need to respect the organisational, administrative and managerial needs of the company. There was a similar disregard for CEPE's financial needs. Historically, CEPE has been an undercapitalised company which was required to borrow heavily to fund most - over two-thirds - of the investment work undertaken in the 1970's. Indeed, the company's resources were barely sufficient to cover operational costs.16

The Financial Resources of CEPE

In CEPE's first full year of existence, the company's main sources of finance were superficiary rights, a 50% share in the oil pipeline tariff paid by Texaco-Gulf, a share in each gallon of gasoline that passed through the Durán-Quito pipeline and a $600,000 allocation from the state budget. Total income in 1973 amounted to just $5.1m. With the purchase of a 25% share in the consortium in 1974, the Rodriguez Lara government passed legislation which allowed CEPE to receive part of the revenue generated from its share of crude oil exports. In addition, article 20 of CEPE's constitution stated that a further portion of crude export income - the amount to be determined by the CEPE
Board and approved by the president - would be allocated to a 'reserve fund' to help finance CEPE's investment work. The balance remaining was then to be transferred to the Treasury for distribution to the state budget and other public sector entities. The initial intention when CEPE was created therefore was to allow the corporation the capacity to be financially autonomous from the state.

It was an intention that was never realised, with both military governments regarding CEPE as an easy, almost unlimited source of revenue that could be used to finance macroeconomic objectives, fund military expenditure and finance fiscal deficits. The milking of CEPE's revenue proved so 'easy' that a delayed payment of $37.6m from Petroperú for oil delivered by CEPE was simply confiscated by the Minister of Finance - a Board member of CEPE - and rerouted to the Treasury to help finance the budget deficit. Similarly, the delayed payment of $6.5m for the sale of the crude from the tanker 'Ruth' was transferred in its entirety to the Ministry of Finance. In their search for revenue, both military governments preferred to syphon funds from CEPE rather than raise taxes (and thus antagonise upper and middle income earners) or increase domestic oil prices (and thus provoke the hostility of the labour movement and urban transport users).

CEPE's Access to Oil Revenues

The main mechanism used by the state to capture the bulk of CEPE's economic surplus was created by decree 1260-A on 3 December 1974. This established a 'Special System for the Retention and Distribution of Income from CEPE's Exports.' According to the decree, it was essential 'for the higher interests of the country to endow CEPE with the economic resources essential to fulfill its objectives.' It was agreed that CEPE would receive 28% of the income generated from the company's crude oil exports, plus $1.48 for each barrel of crude that it delivered to the refineries for processing.
The remaining 72% of the revenue from CEPE's crude exports was to be used to fund social and capital investment programmes and finance the state budget. A total of 13 public sector entities were entitled to a fixed percentage share of this income: FONADE (47.7182%), the state budget (36.4673%), FONAPAR (3.4855%), the Ministry of Employment (2.7523%), the state universities and technical colleges (2.732%), the Ministry of Health (1.8844%), the National Child Association (0.9165%), IECE (0.1439%), INECEL (0.1195%), the Central Bank (0.0271%), the Province of Esmeraldas (0.0081%) and CEPE (0.1263%).

While the percentage share allocated to CEPE may have initially appeared generous, the decision to rigidly fix the 'tax' at 72% was highly unsatisfactory. The main problem was that it was based, not on net profits, but on gross export income. No account, therefore, was taken of the rapid expansion in CEPE's responsibilities nor the increase in operational costs that resulted. This was no minor defect: between 1974 and 1978 CEPE's operational costs increased almost twenty-fold, from $5.3m to $99.5m. In 1974-76 CEPE's costs had averaged just 18% of total expenditure; by 1978 the proportion had risen to 42%.

Equally disturbing was the fact that CEPE's 28% share of its crude exports was, from the outset, more theoretical than real. Within a few months of decree 1260 being issued, decree 492 of 17 July 1975 was passed which required CEPE to pay a royalty equivalent to 16% of production for more than 60,000 barrels. Two years later, on 12 September 1977, decree 218 was issued which transferred 8% of the revenue from CEPE's (and Texaco's) crude exports to the Junta de Defensa Nacional. The 72:28 ratio, therefore, applied not to gross export income but to gross export income less royalties less the 8% assigned to the military. As a result of these decrees, the proportion of oil income received by CEPE (and other public sector entities) bore little resemblance to the percentages established in 1974.
CEPE had limited access to other oil income sources. It received a large share in the income generated from superficiary rights, but the amounts involved were extremely small. In 1978, for instance, CEPE's 43.5% share brought it a mere $1.8m, with the remainder distributed to the state budget and the Ministeries of Agriculture and Health.

From the income generated by Texaco's exports, CEPE received $0.20 per barrel exported and, from 1977, 0.1154% of the income generated from the 87.31% tax imposed on the company's gross income. The bulk of Texaco's income tax payments - net of royalties and the 8% of export revenue allocated to the military - was distributed to FONADE (43.5815%), the state budget (33.3059%), FONAPAR (6.0730%) and BEV (3.3508%). There were 12 other participants, including the Armed Forces which received 1.7338% and the Air Force which received 1.1559%.

CEPE had no access to royalty income, which was distributed to just three participants. The largest percentage share went to the military, which first secured access to royalty income by virtue of Supreme Decree 2745 (15 December 1965) which stipulated that 20% of royalty income would be transferred to the Air Force. Five years later, a secret decree was issued allocating a further 30% of royalty income to the armed forces in order to finance what was vaguely described as a 'programme of works and investments' necessary to 'protect and defend the nation's sovereignty.' The remaining 50% was distributed to INECEL (47%) and the Province of Esmeraldas (3%).

The Distribution of Oil Income

In 1972, the public sector's oil income totalled $24.7m, with around half of this allocated to the state budget. Most of the remainder was transferred to INECEL (14.9%), the military (13.6%) and the state universities (3.2%). As a result of the addition of new participants or increased allocations to existing oil income sharers, the percentage shares received by public sector
institutions fluctuated. The key addition was FONADE which had been created in 1974 to channel oil income into capital investment programmes. As table 3.1 shows, by 1975 it was receiving one-third of the country's oil income.

Table 3.1: Distribution of Oil Income 1972-75 ($m)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State Budget</td>
<td>15.9</td>
<td>61.9</td>
<td>106.7</td>
<td>83.5</td>
<td>268.0</td>
</tr>
<tr>
<td>FONADE</td>
<td>-</td>
<td>-</td>
<td>122.2</td>
<td>107.9</td>
<td>230.1</td>
</tr>
<tr>
<td>JDN</td>
<td>3.9</td>
<td>6.4</td>
<td>11.4</td>
<td>42.2</td>
<td>63.9</td>
</tr>
<tr>
<td>INECEL</td>
<td>3.9</td>
<td>6.4</td>
<td>11.1</td>
<td>39.9</td>
<td>61.3</td>
</tr>
<tr>
<td>CEPE</td>
<td>1.4</td>
<td>1.7</td>
<td>3.7</td>
<td>23.5</td>
<td>30.3</td>
</tr>
<tr>
<td>State Universities</td>
<td>0.9</td>
<td>4.5</td>
<td>9.8</td>
<td>7.3</td>
<td>22.5</td>
</tr>
<tr>
<td>BEV</td>
<td>-</td>
<td>4.1</td>
<td>10.8</td>
<td>7.1</td>
<td>22.0</td>
</tr>
<tr>
<td>FONAPAR</td>
<td>0.6</td>
<td>3.4</td>
<td>6.9</td>
<td>5.5</td>
<td>16.4</td>
</tr>
<tr>
<td>Other</td>
<td>2.0</td>
<td>16.6</td>
<td>32.5</td>
<td>26.5</td>
<td>77.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28.6</td>
<td>105.0</td>
<td>315.1</td>
<td>343.4</td>
<td>792.1</td>
</tr>
</tbody>
</table>

Note: 'Other' covers IECE, the Ministries of Agriculture, Employment, Health and Natural Resources, the Province of Esmeraldas, the Central Bank, and the Banco de Fomento.

Source: JUNAPLA, Ecuador: Estrategia de Desarrollo (Hidrocarburos), (Quito, July 1979), p 77.

CEPE's percentage share in the country's oil income was just 1.0% in 1974, rising to 7.4% in 1975. During the four-year government of Rodriguez Lara, when nationalists were rapidly extending the company's sphere of responsibilities, CEPE received just 3.7% of the country's oil income, equivalent to $30.3m. The bulk of the country's oil income during this period was channelled to the state budget (30.4%), FONADE (27.3%) and the military (8%).

The most striking development over the next few years was the doubling in the military's share of oil income, which rose from 8.2% to an annual average of 16% in 1976-78. By 1978, the military was receiving 9.9% of CEPE's crude export income, 17.2% of Texaco's income tax payments and 50% of royalty income. In all, the military received $78.2m in 1978, equivalent to 22.7% of total oil income. This figure takes no account of the Ministry of Defence budget which increased from $48.3m in 1973 to $108.9m in 1978. Since the state budget relied heavily on oil
revenues, it is likely that the amount of oil income channelled to the military was substantially higher.

Oil income which might otherwise have been spent on capitalising CEPE or funding social and economic development programmes was therefore consumed by the armed forces and used to advanced their institutional interests. During the period of military rule, the number of men under arms increased from 20,000 to 35,000 while Ecuador's known imports of military weapons - tanks, missiles, fighter planes and armoured personnel carriers - amounted to $704m, with around two-thirds of this total spent by the military junta.23

Table 3.2: Distribution of Oil Income 1976-78 ($m)

<table>
<thead>
<tr>
<th></th>
<th>1976</th>
<th>1977</th>
<th>1978</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FONADE</td>
<td>112.7</td>
<td>78.2</td>
<td>71.0</td>
<td>261.9</td>
</tr>
<tr>
<td>State Budget</td>
<td>91.3</td>
<td>61.5</td>
<td>64.7</td>
<td>217.5</td>
</tr>
<tr>
<td>JDN</td>
<td>28.4</td>
<td>46.3</td>
<td>78.2</td>
<td>152.9</td>
</tr>
<tr>
<td>INECEL</td>
<td>28.0</td>
<td>31.8</td>
<td>50.7</td>
<td>110.5</td>
</tr>
<tr>
<td>CEPE</td>
<td>28.1</td>
<td>26.2</td>
<td>40.3</td>
<td>94.6</td>
</tr>
<tr>
<td>FONAPAR</td>
<td>7.3</td>
<td>5.7</td>
<td>10.5</td>
<td>23.6</td>
</tr>
<tr>
<td>BEV</td>
<td>8.6</td>
<td>6.0</td>
<td>5.6</td>
<td>20.2</td>
</tr>
<tr>
<td>State Universities</td>
<td>7.4</td>
<td>5.2</td>
<td>4.3</td>
<td>16.9</td>
</tr>
<tr>
<td>Other</td>
<td>9.4</td>
<td>4.0</td>
<td>6.0</td>
<td>23.5</td>
</tr>
<tr>
<td>Total</td>
<td>338.2</td>
<td>270.0</td>
<td>343.3</td>
<td>951.5</td>
</tr>
</tbody>
</table>


The shares of most other participants fell, particularly the state budget whose percentage share dropped from 30.4% in 1972-75 to 22.8% in 1976-78. The other major participants in 1976-78 were FONADE, which received 27.5% and INECEL which received 11.6%.

CEPE's own share rose to 9.9% in 1976-78. By 1978, $40.3m worth of oil income was being channelled to CEPE, equivalent to 11.7% of total oil income. Taking the period 1972-78 as a whole, CEPE
received 12.2% of the country's oil income, compared to 28.2% for PONADE, 22.9% for the state budget and 16.5% for the armed forces.

Oil taxes, exports, royalties and superficiary rights were not the only sources of oil income, though they represented the primary components of 'public sector' oil income. Another, potentially important income source, was the sale of oil products on the domestic market, the revenue from which was channelled directly to CEPE.

**Domestic Oil Sales**

Sales to the domestic market represented a potentially lucrative source of income for CEPE. After totalling just 9.5m barrels in 1972, domestic oil consumption had grown rapidly, reaching 22.8m barrels in 1978. However, as a result of government interference in the pricing of oil products, CEPE was unable to reap any financial benefit from this expanding market. The price of the lowest grade gasoline had been frozen at 'S/4' per gallon since 1940, while the price of higher grade gasoline had been fixed at 'S/4.65' since 1959. At these levels, CEPE was unable to cover its refining and marketing costs let alone earn the 'reasonable' profit that it was entitled to under article 73 of the Oil Law. CEPE's inability to satisfy internal demand from domestic oil sources magnified the company's losses. By the end of the decade, CEPE was paying S/41.66 ($1.02) for each imported gallon of gasoline which was then sold on the domestic market for S/4.60 ($0.11), generating a loss of S/37.06 ($0.91) on each imported gallon sold.

The income that CEPE received for each barrel of crude delivered to domestic refineries was also based on government-imposed, non-market based prices. These were set at 'S/36.48', equivalent in nominal dollar terms to $1.46. Here too, therefore, CEPE was deprived of substantial sums of revenue which might have otherwise have been used to fund major investment projects. For
instance, while the 32.2m barrels of crude exported by CEPE in 1979 generated $462.7m, a mere $19.8m was generated from the 22.7m barrels that CEPE delivered from its Oriente fields to the domestic refineries.

Table 3.3: CEPE's Income from Deliveries to Domestic Refineries

<table>
<thead>
<tr>
<th>Year</th>
<th>Barrels (millions)</th>
<th>Price per Barrel ($)</th>
<th>Total Income (in $ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>3.1</td>
<td>$1.26</td>
<td>$3.9</td>
</tr>
<tr>
<td>1975</td>
<td>3.8</td>
<td>$1.16</td>
<td>$4.4</td>
</tr>
<tr>
<td>1976</td>
<td>5.2</td>
<td>$1.10</td>
<td>$5.7</td>
</tr>
<tr>
<td>1977</td>
<td>16.8</td>
<td>$1.04</td>
<td>$17.5</td>
</tr>
<tr>
<td>1978</td>
<td>19.8</td>
<td>$0.97</td>
<td>$19.2</td>
</tr>
<tr>
<td>1979</td>
<td>22.2</td>
<td>$0.89</td>
<td>$19.8</td>
</tr>
</tbody>
</table>

Note: This refers to crude delivered from the Oriente fields. The data has been converted from sucres into dollars. These have then been expressed in constant 1972 price terms.


The Slide into Indebtedness

The combination of high 'taxes', low domestic oil prices and escalating costs left CEPE with insufficient resources to finance its investment programme. As table 3.4 shows, an annual average of 14% of CEPE's gross sales income was left for investment in 1974-78 after the corporation had met its financial obligations to the military and public sector and covered its costs.

Table 3.4: % Distribution of CEPE's Gross Sales Income, 1974-78

<table>
<thead>
<tr>
<th>Year</th>
<th>Sales Costs</th>
<th>Operational Expenditure</th>
<th>Taxes/Public Sector</th>
<th>Surplus/Profit ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>24.1</td>
<td>5.3</td>
<td>56.0</td>
<td>14.6 (0.3m)</td>
</tr>
<tr>
<td>1975</td>
<td>14.3</td>
<td>2.7</td>
<td>62.8</td>
<td>20.2 (5.8m)</td>
</tr>
<tr>
<td>1976</td>
<td>15.8</td>
<td>2.6</td>
<td>71.0</td>
<td>10.6 (15.3m)</td>
</tr>
<tr>
<td>1977</td>
<td>28.1</td>
<td>4.6</td>
<td>50.4</td>
<td>16.9 (54.1m)</td>
</tr>
<tr>
<td>1978</td>
<td>18.9</td>
<td>12.5</td>
<td>57.0</td>
<td>11.6 (50.3m)</td>
</tr>
</tbody>
</table>

Source: CEPE, *Reporte Financiero*, (Quito, 1985), p32
To finance its priority investment projects, CEPE was forced to borrow heavily. In the period to 1978, over 70% of all CEPE's investment expenditure was financed by loans, with most carrying floating rates of interest.

Table 3.5: Sources of Investment Finance, 1975-78 ($m)

<table>
<thead>
<tr>
<th></th>
<th>CEPE</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>6.1</td>
<td>56.3</td>
<td>62.4</td>
</tr>
<tr>
<td>1976</td>
<td>18.5</td>
<td>34.1</td>
<td>52.6</td>
</tr>
<tr>
<td>1977</td>
<td>37.5</td>
<td>21.7</td>
<td>59.2</td>
</tr>
<tr>
<td>1978</td>
<td>7.7</td>
<td>58.0</td>
<td>65.7</td>
</tr>
<tr>
<td>Total</td>
<td>69.8</td>
<td>170.1</td>
<td>239.9</td>
</tr>
</tbody>
</table>


Small loans were obtained for the construction of pipelines, pipeline terminals and storage facilities and the rehabilitation of the Santa Elena oilfields. However, the bulk of the loans contracted during the 1970's were used to purchase a 25% shareholding in the consortium ("$42.8m"), Gulf's 37.5% shareholding ("$115.6m") and finance the construction of the Esmeraldas refinery.

The construction of the refinery was financed with a "$118.8m" loan from FONADE that was contracted in June 1974. Under pressure from the Treasury - which administered FONADE - funds for investment had increasingly been allocated in the form of non-reimbursable loans. CEPE had initially been under the impression that such a 'loan' had been granted for the construction of the refinery. However, early in 1977 the military junta passed a decree obliging CEPE to repay the loan, with the Finance Minister suggesting that the company could repay it with the 'profits' it made from the sale of refined products. At the time, domestic oil sales were being subsidised at the rate of about $190,000 a day.

CEPE's investment capacity, already undermined by government decrees, low domestic oil prices and escalating operational
costs, was reduced still further by the need to meet its mounting debt service obligations. By 1978, CEPE's debt repayments amounted to $73.6m, equivalent to just under one-third of total expenditure. Investment as a proportion of expenditure subsequently fell to just 27.4%, nearly half the level in 1974-76. 26

<table>
<thead>
<tr>
<th>Total Expenditure</th>
<th>Debt Service Payments</th>
<th>% of Total Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1974</td>
<td>62.7</td>
<td>30.4</td>
</tr>
<tr>
<td>1975</td>
<td>94.1</td>
<td>15.1</td>
</tr>
<tr>
<td>1976</td>
<td>86.3</td>
<td>8.9</td>
</tr>
<tr>
<td>1977</td>
<td>128.5</td>
<td>9.9</td>
</tr>
<tr>
<td>1978</td>
<td>239.2</td>
<td>73.6</td>
</tr>
<tr>
<td>Total</td>
<td>850.3</td>
<td>183.9</td>
</tr>
</tbody>
</table>


State Policy Towards Texaco

The manner in which CEPE's needs were ignored contrasts strikingly with state policy towards Texaco after 1974. While CEPE was subject to tight political control, Texaco was allowed to operate the consortium's fields with little if any interference from the state. Even after the nationalisation of Gulf, when the state became majority shareholder, CEPE remained a silent and largely unseen partner. Unlike Texaco - or other foreign oil companies in Ecuador for that matter - CEPE was not reimbursed for its costs or investments in the event of finding commercial quantities of crude. While CEPE was starved of financial resources and forced to resort to extensive borrowing, the state provided all manner of financial and other incentives to improve Texaco's operating conditions.

The 43c tax cut brought the company $18.7m; the decision to confine the oil price increase agreed at Doha in October 1975 to 4% ($0.418 pb) rather than 10% ($1.046), $22.5m; and non-
implementation of the 10% OPEC price rise at the end of 1976, $1.42 pb or $10.1m.\textsuperscript{27}

The benefits extracted by the American company, often to the detriment of CEPE, multiplied still further when Semblantes was Oil Minister. The decision, for instance, to rescind decree 285 and make it retroactive was estimated to have cost CEPE $164m, since the actual level of average daily production in 1977 was only 177,500 b/d, way below the authorised level of 210,000 b/d.\textsuperscript{28} Substantial benefits for Texaco - and further losses for CEPE - also resulted from Ministerial Accord 14052 of 16 December 1977. This rejected CEPE claims (subsequently confirmed) that Texaco had illegally lifted 4.3m barrels of crude in 1977, and instead claimed that just 1.2m barrels had been overlifted. According to one source, the total financial loss caused to the state and CEPE by the Accord was 'not less than $9.9m.'\textsuperscript{29}

Precise figures on the 'profits' obtained by Texaco-Gulf are difficult to obtain. Texaco apparently 'does not keep that sort of information' in Quito, according to a company official.\textsuperscript{30} Philip has suggested that the combination of high taxes, weakening oil prices and the maintenance of a fixed tax reference price did cause the consortium's profits to fall after mid-1974. There is no reason, he wrote:

'to doubt company claims that their profits in Ecuador between June 1974 and October 1975 were negligible or even negative.'\textsuperscript{31}

However, figures compiled by the national development agency JUNAPLA suggest that in that year alone, profits exceeded the consortium's original investments. According to JUNAPLA, the consortium's profits rose from $112.9m in 1973 and then more than doubled in the following year to $255.9m. After declining in 1975, they recovered to reach $266.3m in 1976 - and this despite the fact that virtually no new investment had taken place since 1974.\textsuperscript{32} The fact that the company had recovered its
original investments many times over may have allowed the company to adopt a more uncompromising position and be prepared to call the state's bluff when confronted by policy decisions that it found irksome or unacceptable. Such decisions, as the Roldós government would discover, would include demands for the implementation of an expensive programme of secondary recovery and maintenance work and attempts to increase CEPE's role in the operation of the Oriente fields.
CHAPTER 4: OIL POLICY AND THE ROLDOS GOVERNMENT

CEPE's failure to compensate for the rapid fall-off in private sector investment led to increasing fears that Ecuador's days as an oil exporter were numbered. Time, according to a report in 1979, was fast running out. Unless substantial new quantities of oil reserves were found, the national development agency JUNAPLA warned that Ecuador faced the prospect of becoming the first net oil importing member of OPEC. In the absence of new oil discoveries, the country's oil reserves were projected to fall between 1979-84 from 1.079 bn to 880.3m barrels, while output would slump from 75.7m to just 61.3m. If domestic oil demand continued to increase at the same rate as in 1973-78, Ecuador would become a net oil importer by 1983.'

Faced with the possible loss of the country's main source of foreign exchange, as well as a key source of revenue for the public sector, the Roldós government outlined an extensive programme of exploration and development work involving a mix of private and public investment. In a number of important respects, there was a degree of continuity with the oil policies pursued by the military junta.

Texaco

Until new production sources became available, the financing of welfare policies, social development projects, as well as the capitalisation of CEPE, were dependent on ensuring the continued inflow of oil revenue from the oilfields operated by Texaco. With the older wells showing signs of depletion, a major programme of secondary recovery and maintenance work was drawn up, together with the drilling of ten exploratory wells. Secondary recovery work in Shushufindi and Sacha alone was expected to add 570m barrels to the country's oil reserves. Shushufindi was thought to contain about 300m barrels recoverable through waterflood, which suggested that the field could
eventually produce an additional 80,000 b/d over the following 20 years. This work programme was regarded as essential to ensure that production between 1980-84 averaged at least 225,000 b/d, and thus enabled the government to fulfill its growth and export targets.

In these circumstances, and with the government aware of the high political and economic costs that conflict with Texaco could entail, the US company's continued presence in the country was not in question. The democratic nature of the new government and its political and economic priorities pointed to the government seeking to maintain amicable relations with the company. As Philip notes:

'Democratic governments in oil-exporting countries expect to buy, or at least to maintain, political support by judicious public spending policies. Once these come to benefit the majority or even a large minority of the electorate it becomes crucial for any government to keep up the inflow of revenue. Under such circumstances confrontational or overly ambitious oil policies are generally avoided.'

It was not simply the civilian political elites who had a direct interest in avoiding conflict with Texaco. Having accrued for itself around one-fifth of the country's oil income, the military too had a direct financial interest in ensuring that confrontational policies towards Texaco were avoided and the flow of oil income maintained. From a purely financial perspective, oil policy in respect of Texaco was unlikely to be complicated by a resurgence in military nationalism.

**Foreign Oil Companies**

A further degree of continuity with the policies pursued by the military junta was reflected in the government's announcement that foreign oil companies would be invited to explore for oil on the basis of the contract of hydrocarbon operations established
in November 1978. There was a general acceptance among the main political groups that some form of foreign collaboration was required in the search for new oil reserves. This was even accepted by many who had previously called for a state monopoly of the upstream sector. Calls for the nationalisation of the oil industry were largely confined to the weak and fragmented labour movement and to political parties on the far left whose poor showing in the elections suggested that voters themselves did not hold strong nationalist views.

**CEPE**

There was, however, a clear change of direction in respect of CEPE and the precise role that foreign oil companies would be required to fulfill. While the conservative business community argued for the virtual privatisation of the upstream sector — and CEPE itself — the urban middle-class parties that now dominated Congress argued that the main burden of exploration should be assumed by CEPE. The Roldós government, therefore, drew up an extensive programme of exploration for the company, which included the running of 7,000 km of seismic lines and the drilling of 61 exploratory wells and 207 development wells. All areas considered to be of low risk and cost were reserved exclusively for CEPE. Strict limits, on the other hand, were placed on foreign oil investment. Oil companies wishing to explore were welcome, but only to supplement CEPE's own efforts by exploring in areas of high risk and high cost.

Major steps were also to be taken to make effective CEPE's majority shareholding in the consortium and thereby ensure that Texaco implemented agreed investment programmes. The government reasserted that the US company would be replaced as operator by a new company 'Petroamazonas' in which CEPE would have majority control and that CEPE would assume complete operational control of the consortium by 1985.
As chapter 3 highlighted, CEPE at that time had neither the financial, administrative or technical capacity to undertake an extensive programme of exploration or to assume a more dominant role in the consortium. The company's needs had been consistently neglected by both military governments, which often treated CEPE more like an official finance company than the main instrument of state oil policy. As a matter of urgency, therefore, the government, with the support of parties on the centre and centre-left, promised to take the necessary measures to transform CEPE's structure and financial position.

For a state oil company to be successfully 'turned round' after a poor start, a number of preconditions need to exist. These, according to Alfred Saulniers, include:

'central government recognition that problems exist, government consensus to implant adequate management structures, and government delegation of autonomous management responsibility to the companies themselves. Without these key changes outside the companies, quality management within them will not occur.'

These preconditions appeared to be in place in Ecuador. That CEPE had problems seemed beyond doubt, but there was also widespread acknowledgement that these were rooted, not in the government-ownership structure nor the internal organisation of CEPE, but in the company's Constitution and the government-imposed environment within which it was required to operate. For CEPE to function effectively, the government accepted that it would be necessary to 'restructure [CEPE] administratively, technically and operationally.' Specifically, it was essential to allow CEPE greater managerial and operational autonomy and to take steps that would free management from the bureaucratic constraints that often reduced the decision-making process to a ponderous crawl.

The second priority was to ensure that CEPE had the necessary financial resources to undertake the objectives assigned to it. As
well as increasing domestic oil prices, a firm commitment was
given that part of the additional income generated from the rise
in crude oil prices would be used to 'create a fund so that CEPE
can intensify exploration.' CEPE's financial position had
already been substantially improved as a result of the oil price
hikes, with its share of public sector oil income more than
trebling in real terms, from $40.3m to $146.9m. This was
equivalent to 23.7% of total public sector oil income, double the
percentage share it received in 1978. The company's income from
crude exports rose from $37.6m to $65.1m. The increase would
have been even more substantial if the delayed payment of $37.6m
from Petroperu had not been confiscated by the military junta
and used to finance the budget deficit. However, in percentage
terms CEPE's share of crude export income remained unchanged
from 1978, at 24%. That CEPE's overall percentage share of oil
income rose so dramatically was due entirely to the emergence of
a new source of oil income in the form of fuel oil exports. These
generated $73.6m in 1979, all but a small proportion of which was
transferred directly to CEPE.

Table 4.1: Distribution of Oil Income 1978-79 ($m)

<table>
<thead>
<tr>
<th></th>
<th>1978</th>
<th>% share</th>
<th>1979</th>
<th>% share</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEDE</td>
<td>71.0</td>
<td>20.7</td>
<td>112.8</td>
<td>18.2</td>
<td>+ 59%</td>
</tr>
<tr>
<td>State Budget</td>
<td>64.7</td>
<td>18.8</td>
<td>98.4</td>
<td>15.9</td>
<td>+ 52%</td>
</tr>
<tr>
<td>JDN</td>
<td>78.2</td>
<td>22.7</td>
<td>136.7</td>
<td>22.1</td>
<td>+ 74%</td>
</tr>
<tr>
<td>CEPE</td>
<td>40.3</td>
<td>11.7</td>
<td>146.9</td>
<td>23.7</td>
<td>+ 264%</td>
</tr>
<tr>
<td>INECEL</td>
<td>50.7</td>
<td>14.7</td>
<td>74.9</td>
<td>12.1</td>
<td>+ 48%</td>
</tr>
<tr>
<td>Other</td>
<td>38.4</td>
<td>11.2</td>
<td>49.8</td>
<td>8.0</td>
<td>+ 29%</td>
</tr>
<tr>
<td>Total</td>
<td>343.3</td>
<td></td>
<td>619.5</td>
<td></td>
<td>+ 81%</td>
</tr>
</tbody>
</table>


When all other revenue sources were taken into account (primarily
domestic sales and loans), CEPE's income rose from $269.5m to
$343.1m. After the deduction of 'taxes' and costs, CEPE's surplus
by the end of the year had increased to $97.6m, the highest in
the company's history and equivalent to one-fifth of total sales
income.}
Government policies to boost non-oil income sources, and thereby reduce the sensitivity of the economy and the public sector to fluctuations in both the price and volume of crude oil exports, could also be expected to benefit CEPE, at least indirectly. Particular emphasis was to be placed on the elimination of tax evasion, improved administration and collecting procedures and higher income tax for middle and upper income groups. Steps were also to be taken to increase the prices of domestic oil products. These measures were regarded as essential to finance the government's investment programme and ensure that the state had sufficient resources to service the huge external debt inherited from the military junta.

The failure to mobilise these income sources had, in the past, led cash-straitened governments to sypon revenue from CEPE. It was reasonable to expect, therefore, that the mobilisation of non-oil income sources (as well as the substantial boost in the oil revenue directed to the state budget that occurred in 1979) would reduce the amount of unwelcome political attention that CEPE's funds had attracted in the past.

**Potential Obstacles Facing the Government**

There were potential obstacles to the government's attempt to provide an essentially domestic solution to the country's oil problems. In the first place, the unexpected boost to CEPE's finances in 1979 was likely to be temporary, even if oil prices remained unchanged during 1980. In the final days of the military junta, two further decrees had been issued which were expected to reduce CEPE's income in 1980, in the case of decree 3672-A severely so. This decree, which had been issued on 30 July, stipulated that 50% of the net income from fuel oil exports would be transferred to the state budget. A few days later, on 6 August 1979, decree 337 was passed ordering that part of the revenue from oil exports would be used to finance amortization and interest payments on a $300m loan contracted by the military under decree 274 of 14 September 1978.
The economic situation was also less favourable than the oil price hikes of 1979 might have suggested. When Roldós came to office, he immediately found himself confronted by a $2.2 bn external debt and a budget deficit which was equivalent to $280m. Even more problematic were developments in the international arena. In the closing months of 1979, there were already signs that economic growth in the industrialised countries was slowing and that measures were being developed which were designed to reduce oil consumption whilst simultaneously increasing non-OPEC oil supply sources. Not only was the upward pressure on oil prices already easing, but there were also indications that the era of cheap loans might be coming to a close as the US government sought to dampen inflationary pressures through a policy of tight monetary control and high interest rates. The vulnerability of Ecuador to both these developments was heightened by the economy's excessive dependence on commercial bank loans and the continued inflow of income from a resource whose revenue-generating capacity had been in constant decline since 1974.

The political situation too was less favourable to CEPE (and reform generally) than the 'reformist' complexion of Congress might otherwise have suggested. Despite his stunning electoral victory, Roldós was neither in a position to dictate on his own the policies of his government or appoint the people to carry them out.

**The Balance of Political Forces**

The first problem that Roldós faced was that the 29 seats won by the Concentración de Fuerzas Populares (CFP) - three of which, it should added, belonged to Democracia Popular - were not sufficient to form an overall majority in Congress. Nevertheless, Roldós had expected that this could be achieved by forming alliances with Hurtado's Democracia Popular, Partido Demócrata and Izquierda Democrática, which had emerged as the second largest party with 15 deputies (including two from
Democracia Popular). In view of the general ideological and programmatic affinities of these parties, this was not an unreasonable expectation.

Party labels in Ecuador, however, have rarely provided an accurate indication of an elected official's ideological orientation or likely voting behavior. Political parties have traditionally been:

'alliances of convenience between powerful factions, in which ideology, programmes, or policies have had little importance. More often than not, aspiring young politicians selected their party affiliation on the basis of their own regional origins and family backgrounds rather than on programmatic or ideological criteria.'

Moreover, they have been 'elitist' in the sense that their links with those social groups which they purport to represent have often been weak or non-existent. Little attention either was paid to party development or party organisation, a feature of Ecuadorian politics that was encouraged by the dominant role that elitist cliques, populists and personalists have played on the country's political scene.'

The election results of 1978-79, in particular the emergence of Izquierda Democratica and Democracia Popular, appeared to mark a new chapter in the country's political development. New forms of political organisation had emerged, led by well-trained and well-educated professionals armed with comprehensive programmes. It soon became evident, however, that many of the officials elected to Congress had little commitment to a party culture or ideological consistency.

This was to be demonstrated most graphically in 1979-84 by the continued prevalence of the phenomenon known as the 'cambio de camisetas' and the important political role played by 'independents.' The former, involving elected individuals moving effortlessly from one political party, or interparty alliance,
to another, had been apparent in the run-up to the elections. One of many examples, was the case of the mayor of Quito who, after failing to be selected by the 'social democratic' Izquierda Democratica, ran successfully for the Liberal Party, home of the coastal elite."

Legislation passed in 1978 encouraged such political 'fluidity'. To reduce the plethora of small personalist parties standing for election, the 'Ley de Partidos' stipulated that only individuals affiliated with a legally recognised party could stand for election. According to Catherine Conaghan, one of the side-effects of this attempt to regulate the party system:

'was that it essentially forced many of the politically ambitious into parties as a matter of convenience rather than conviction. Ties between the parties and the new partisan elite were thus often ephemeral...Party affiliations were effortlessly shed by congressmen, once elected, as they calculated their future electoral fortunes and patronage opportunities.'

The absence of party loyalties and a lack of concern for ideological consistency was to be further reflected by the important role played by independents in the formation of cabinets and pro-government alliances. Lacking a definitive position on the problems facing the country, and the solution to them, these individuals were willing to lend their support to a president in return for positions in central or local government.

Parties, therefore, often assumed the character of political patronage organisations in which ideology and programmatic concerns were secondary to the overriding necessity of securing public office for loyal party veterans. It followed from this, that political success was often measured, not in terms of the formulation and implementation of concrete social or economic measures, but on the degree of access to state resources and public office. In these circumstances, party loyalties can (and
did) shift rapidly. As both Roldós and then Hurtado were to discover, this created major problems in the construction of stable and lasting coalitions between parties. It had, moreover, the additional effect of creating great tensions within parties. For instance, by 1981 no single party controlled more than 12 seats. When Congress first met in August 1979 the number of parties totalled 10; by May 1983 the number had risen to 16. The tendency towards fragmentation was to be most apparent in respect of the CFP. Of the 18 parties or groups that appeared at one time or another between 1979-84, splits in the CFP were responsible for six of these. As a result, the CFP's representation collapsed from 29 to just four in 1983.14

The Division of the CFP

Evidence of the continued predominance of patronage politics, and the political problems this created for Roldós, was provided before the government came to office. Earlier in the year, open conflict had broken out between Assad Bucaram, the demagogic CFP leader, and his nephew, Roldós. Viewed as a 'dangerous' leftist by the Right and opposed by the military, Bucaram - considered the most likely to win in any free elections - had been debarred from standing for the presidency when the military junta ruled that all presidential nominees had to be born of parents who were citizens of Ecuador at the time of the candidate's birth.

Following Bucaram's elimination Roldós had been selected to run in his place. This decision was made, it appears, in the belief that Roldós would be a mere 'figurehead' president, with real political power being wielded by Bucaram. In the event, Roldós' independent stance, highlighted by his alliance with Hurtado's Democracia Popular party - which for technical reasons had also been barred from participating in the elections - and the choice of Osvaldo Hurtado as his running mate, severely strained relations between the two men. The complete rupture in relations, and the subsequent division of the CFP into 'bucaramistas' and 'roldósistas', came when Roldós refused to
accede to Bucaram's demand that all cabinet posts should be filled by loyal party militants. 14

Unable to form a majority with the CFP-roldósistas and Hurtado's DP, Roldós had approached Izquierda Democrática for support. Led by Rodrigo Borja, the party had called on its supporters to back Roldós in the second round elections. However, the party was determined from the outset to 'carve out' its own image in order to prepare itself for victory in the 1984 elections. Fearing that too close an association with the Roldós government could damage its future election prospects, ID refused to accept posts in the cabinet or to join a pro-government alliance. Only once, in 1981, was the party prepared to join the government to stabilise the democratic process and implement a legislative programme for the benefit of the popular classes. Even then, such support for the Hurtado government was heavily qualified and, in the event, short-lived.

Bucaram meanwhile, anxious to punish Roldós and exert his dominance in Congress, effectively plunged Executive-Congress relations into a semi-permanent state of conflict by establishing a pact with the Conservative, Liberal and Social Christian parties. As a result of this pact and the fragmentation of pro-reformist parties, conservative groups in Congress assumed an influence that was out of all proportion to the meagre 19 seats they had won in the elections. In return for posts on various congressional committees, the Supreme Court and the Supreme Electoral Tribunal these parties agreed to support Bucaram's election to the presidency of Congress and join him in forming an opposition majority. Once armed with a working majority, Bucaram — together with 17 of the original 29-member CFP delegation — prepared to undermine the authority of Roldós, by sending inflationary and economically embarrassing projects for executive decision and by throwing out, delaying or watering down bills submitted to Congress by Roldós.
The Conservative Opposition

The uncompromising hostility of conservative groups to both Roldós and Hurtado first became apparent following their victory in the first round elections. Having successfully dealt with the radical threat in 1972-75, conservative groups and the business community were loath to standby and see the 'dangerous radical' Roldós and the 'closet Marxist' Hurtado take office. From the outset of the democratization process that was initiated in 1977, conservative political and business groups had, together with 'golpist' elements in the military, made a succession of attempts to manipulate the election process or halt it altogether. After failing to have the first round elections annulled due to 'evidence' of electoral fraud, attempts were made to create conditions propitious for a coup.

Following the collapse of an attempted coup by the head of the 'golpist' faction General Durán in September 1978, conservative groups had then sought to undermine the anti-golpist mentality within the military by plunging the country into political turmoil. To this end, elements within the military organised the assassination in November 1978 of the unsuccessful candidate for the Alfarista Party, Abdon Caldérón Muñoz. Although the assassination and the resulting scandal served instead to further weaken support for the termination of the electoral process, the conservative media made a last ditch attempt to manipulate the voting behavior of the electorate by warning of violence and even civil war if Roldós won the presidential elections.

The formation of a government headed by Roldós and Hurtado was therefore viewed as little short of disastrous by conservative forces. Despite the mildly reformist nature of the new government, the emphasis on tax reforms, the strengthening—though not extension—of the state sector and the emphasis on social welfare, were sufficient in themselves to ensure the uncompromising hostility of the elites and their representatives in Congress to the new government.
Despite their poor electoral showing, the conservative parties were well-placed to block the government's policy initiatives. As a result of the deal reached with Bucaram (and indeed Roldós in May 1980), the right became virtual co-owners of the legislative and juridical apparatus of the state during Roldós' first year of government. When access to political power through the 'back door' was closed, all manner of methods were successfully used to undermine the government and bring the legislative process to a virtual halt. The most favoured method was to constantly call ministers before Congress to justify policy decisions or be questioned on alleged 'irregularities'. Not only did this reduce the time available for Congress to fulfill its legislative function, but it also provided delegates with the opportunity to descredit or punish the government. In the period to 1984, ministers were to be called before Congress on 35 separate occasions.

Due to the vast network of personal and professional links that existed between politicians and the private sector, the elites and their political representatives were also able to indirectly influence the policy process by exerting pressure on individuals within the state apparatus. More directly, the desire of the Roldós and Hurtado administrations to avoid confrontation with the private sector led both to appoint individuals closely linked with the business community to ministerial, or other, state positions.

In summing up the strategies adopted by the conservative opposition in Congress during this period, Mills wrote that:

'supported by the enormous economic apparatus of a powerful section of the private sector, and armed with its legendary political astuteness, the patriarchs of the opposition freely employed flattery and intimidation in order to influence votes and in order to orientate legislative work in such a way as to ensure that the results coincided with their own interests and those of its clients.'
Outside Congress, the propaganda war was undertaken by the media and the Chambers of Industry, Commerce and Agriculture. These, rather than political parties, were regarded as the principal instrument for articulating class interests. According to one survey carried out in 1979-80, only 9% of major industrialists reported a party affiliation, while over 70% reported membership of one or more business interest group organisations. This extra-party activity was to be supplemented at particular moments with more extreme measures to exert pressure on the government. These included calling 'emergency' meetings of the private sector, lock-outs - or at least the threat of them - as well as thinly veiled calls for military intervention.

The Role of the Armed Forces

A key priority of both Roldós and Hurtado was to ensure the smooth transfer of power to a democratically elected government in August 1984. This was seen as an essential step towards the consolidation of a multi-party democracy in a country that had been under military rule for the previous seven years. The accomplishment of this objective was to take precedence over all other policy priorities. Crisis avoidance, in particular the avoidance of open conflict with the business community, was therefore high on the government's political agenda.

Roldós' election to the presidency had caused concern to the military hierarchy, which had favoured the election of the conservative Sixto Dúran. This concern, however, had been dampened by the knowledge that the military had secured for itself a permanent foothold in the Cabinet, in the form of the Defence Minister, and on the boards of the main state enterprises, and a sizeable chunk of the country's oil wealth. Nevertheless, the military's acceptance of a government headed by Roldós was not unqualified. It demanded, and received, a commitment that the new government would eschew 'mobilisation politics' and resist the inevitable pressures from below for increased political participation. Roldós was also required to
give an assurance that no senior officers would be investigated or charged for alleged corruption during the period of military rule.20 The Roldós government, in short, had not been given a blank cheque. Throughout the period under review, concern that the military might once again assume the reins of power was to play a crucial role in moulding the behavior of the government and shaping the direction of official policies, particularly in respect of the business community.
CHAPTER 5: IN DEFENCE OF CEPE

The continued political influence of conservative groups in Congress was particularly worrying for CEPE: the dominant class fractions that they represented were, along with their standard bearer in Congress León Febres Cordero, the very same that had struck an informal alliance with Texaco-Gulf in the early 1970's to undermine oil nationalism and discredit CEPE. In view of their past hostility to CEPE, they could be expected to oppose any plans to capitalise the company or increase its influence in the consortium.

It soon became clear, however, that a number of elected officials in political parties that purportedly favoured strengthening CEPE's role in the upstream sector had doubts over the wisdom of allowing CEPE to assume the main burden of exploration. This was perhaps not surprising, given CEPE's past poor performance and the high costs and risks attached to exploration. The composition of Roldós' first and subsequent cabinets, moreover, were hardly conducive to developing a policy consensus on oil or any other issue. The new president did not enjoy the luxury of selecting individuals for cabinet positions on the basis of their ideological commitment to a common programme.

There were a number of groups and individuals that Roldós could not afford to ignore, either because they had supported him during his election campaign or because they were demanding official posts in return for their support in Congress. Democracia Popular received the vice-presidency and two ministeries, with the post of Oil Minister going to Mauricio Dávalos, a former president of Citibank. The CFP-roldósistas also received two ministeries, with most of the remaining cabinet posts distributed among 'independents', many of whom were close friends of Roldós. Individuals with close links to the private sector, including Rodrigo Paz who became Finance Minister, were
also invited into the cabinet. There was, therefore, considerable scope for policy disagreements, inter-Ministerial conflict, and disgruntlement from organised political groups at the high number of posts reserved for Roldós' friends.

These problems became most apparent with respect to oil policy and the role, if any, that CEPE and foreign oil companies were to play in the exploration sector. Differences within the government over whether any, some or most of the exploration work should be carried out by CEPE first emerged when the Oil Minister Mauricio Dávalos publicly rebuked the new head of CEPE, José Carvajal, for claiming that Ecuador's oil prospects were 'very good' and that the country could count on sufficient reserves for the next 30 to 40 years. What followed was a virtual replay of the disagreement that had taken place a year earlier between Oil Minister General Semblantes and Finance Minister Juan Reyna. When the former claimed that 'there is oil for 20 more years', the Finance Minister retorted that the oil boom was 'over' and that it was time 'to live in reality, to think of the future of Ecuador on the basis of traditional economic resources and to stop depending on oil'.

**Conflict over Oil Policy**

The level of oil reserves in Ecuador has long been a source of dispute, with conflicting figures being presented by the General Board of Hydrocarbons (DGH) and Texaco. DGH oil reserve figures have generally been lower than those presented by the American company. Figures published by the Board in 1979 pointed to oil reserves falling to just 880.3m by 1984, with just 159.6m new reserves being incorporated into production. These projections were largely accepted by Dávalos and played an important role in influencing his view that the crisis confronting the oil industry was of such magnitude, that substantial quantities of foreign oil capital were required as a matter of urgency. Dávalos saw little point in CEPE itself assuming anything more than a marginal role
in exploration work, and believed that the main focus of CEPE's activities should be confined to refining and marketing.

Texaco has consistently presented a far more optimistic picture of the country's oil potential, with the local manager René Bucaram claiming in late 1978 that:

'...the oil boom is not over; it has not even started. There are many possibilities in the Oriente and the coast which ought to be explored, and that, in the worst of lucks, we shall triple present oil reserves.'

Unlike the DGH, whose figures related only to 'proven' reserves, Texaco's oil reserve data included the additional reserves that could be obtained through artificial lift, well reconditioning and water injection. At the end of 1979, Texaco was claiming that the consortium's reserves alone totalled 1.79 bn barrels. This was 19% higher than the estimated level in 1973, even though 598m barrels had been extracted since then. Texaco's projections on the future trend in oil reserves and production levels also differed markedly from the DGH, with Texaco claiming that reserves totalling 1.5 bn barrels could be incorporated into production. Just over half of these could be obtained from secondary recovery work in the Shushufindi and Yuca fields. Far from declining, implementation of a programme of secondary recovery and artificial lift could, Texaco argued, quickly boost the consortium's production by over 10m barrels a year.4

Carvajal largely accepted Texaco's assessment of the current and potential oil situation. The oil sector was experiencing problems, but there was no 'crisis.' With increased funding for CEPE and closer cooperation with Texaco, he argued, the oil situation could be very quickly transformed - and without having to increase the foreign presence in the exploration sector.

Thus, while Dávalos sought to create a 'crisis' atmosphere, Carvajal repeatedly provided a more optimistic interpretation of
the oil situation. By the end of 1979, Carvajal was giving support to revised evaluations by Texaco of the consortium's reserves. These suggested that, through a combination of secondary recovery work and well reconditioning, the country's oil reserves could be virtually doubled.

Carvajal was also reporting that fields waiting to be developed contained more reserves than initially estimates had suggested. The Yuca field, according to Carvajal, contained not 112m barrels but 200m, while reserves in the Cononaco field were estimated to be around 90-100m barrels, over double the original estimate. In areas reserved exclusively for CEPE, all manner of opportunities existed to significantly boost reserves, claimed Carvajal. The most promising were those in the Nororiente, where CEPE's major exploration programme was to be initiated. The Suroriente also represented one of the brightest hopes for a major oil discovery, particularly in Blocks 17 and 19, the two blocks 'most eagerly sought after' by foreign oil companies, according to Carvajal. Although both blocks had previously been drilled by Amoco without success, CEPE believed that Amoco had drilled outside the potentially productive areas. There was also a strong conviction that both blocks formed part of the same structure currently being exploited by Occidental across the border in Peru. Even without drilling to precretacic levels, CEPE estimated that at least 200m barrels of reserves could be discovered.

Highly positive results were also expected from CEPE's drilling programme in the Gulf of Guayaquil, in particular Block 11 which contained the rich Amistad field. Optimism was even being expressed that an additional 60m barrels would be found in the Santa Elena peninsula, where production had been taken place for over 50 years.

For Carvajal, it was difficult to understand why there was so much emphasis on stressing the 'crisis' situation that the country was supposedly facing when so many attractive
possibilities existed. He was later to conclude that this was part of a deliberate strategy designed to prepare the way for the return of the foreign multinationals.

The Removal of Dávalos

The dispute between the two men was not confined to differences over the level of oil reserves. The increasingly bitter nature of the dispute also reflected Dávalos' belief that Carvajal was actively seeking to undermine his own authority and that of the Oil Ministry. It was clear to the Oil Minister from the outset that Carvajal had no intention of 'sitting around waiting for his orders' and was determined to seek a more ambitious, influential and independent course for CEPE. Despite the tight political control imposed on CEPE and its subordinate position vis a vis the Oil Ministry, Carvajal was able to achieve this by seeking influential political support outside the organisation. This he found in the shape of his close friend, Jaime Roldós. As one former CEPE official recalled:

'Crovajal became more influential than the Oil Minister thanks to his close friendship with Roldós. When he wanted certain things done he by-passed the Oil Minister and went straight to the president.'

With the support of Roldós, Carvajal successfully shifted the weight of influence between the Oil Ministry and CEPE in favour of the latter and effectively usurped the functions that were traditionally the preserve of the Oil Minister. According to Weekly Analysis, Carvajal:

'strived to invest the manager of CEPE with the prerogatives to conduct wide-ranging oil policy matters. It was he who negotiated with Texaco; it was CEPE who was to deal with the foreign oil companies...It was CEPE which was to have the louder voice in the consortium's new operator Petroamazonas.'
Presidential approval for Carvajal and CEPE appeared confirmed in December. In a bid to smooth relations between the Oil Ministry and CEPE, and as part of a wider strategy to strengthen his own political position, Roldós announced a cabinet reshuffle. One of the casualties was Dávalos, who was moved to the Central Bank and replaced by an independent José Corsino Cárdenas. He was a former Minister of Industry who had signed the original contract with Texaco-Gulf in 1964. Relations between the Oil Ministry and CEPE improved markedly. This was partly because Cárdenas largely accepted Carvajal's assertion that oil reserves could be doubled within five years, but it was also due to the Oil Minister's willingness to 'take a back seat' and allow Carvajal to assume (or rather maintain) the dominant role in policy-making.

It is important to emphasise that Carvajal recognised that the success of the 'domestic solution' would depend - geology permitting - on the government channelling increased financial resources to CEPE and freeing the company from the highly bureaucratic system of centralised control. At the very least, funds were urgently needed to compensate the company for the income losses that it was expected to suffer as a result of the decrees passed in the last days of the military junta.

Just a few weeks before Dávalos was removed, however, patronage politics had combined with the ideological hostility of conservative groups to set in motion a train of events which was to severely undermine CEPE's investment capacity and lead to the dismissal of Carvajal. The removal of Dávalos proved, in the event, to be a hollow victory for Carvajal.

The Debate on the 1980 Budget Proposals

In October, Congress threw out what observers had generally regarded as an austere but responsible set of budget proposals. The government's package of tax reforms suffered a similar fate. The proposed budget for 1980 was 38% up on the initial 1979
budget, to $873.9m. Most of the increase was required to fund a hike in the minimum wage to $73.44 a month and a hike in teachers salaries. The remainder was needed to cover the state budget's debt service repayments, which were expected to increase from $117.5m in 1979 to $190.9m, equivalent to one-fifth of total budget expenditure.11 The tax reforms had included new taxes on certain consumer goods and measures to improve the collection of taxes and reduce tax evasion. These were expected to provide an additional $66.1m worth of income to finance the 1980 budget.12

The budget debate provided the head of the opposition majority in Congress, Assad Bucaram, with the opportunity to fulfill two political objectives. One was to undermine the authority of Roldós, the other was to supply patronage and short-term benefits to his followers in Guayaquil.13 The opportunity for patronage that the budget presented was widely shared. In the event, the response of elected officials to the government's budget proposals proved to be little different to the reactions engendered by previous budget debates. Commenting on a budget some 20 years earlier, Peter Pyne concluded that:

'Most Congresses saw in the budget an opportunity to increase their electoral popularity and for some it provided an opportunity for personal financial enrichment. Legislators have traditionally established public works projects in their constituencies financed by budgetary allocations for which inadequate revenues have been provided...It allowed them [legislators] to benefit through the disbursement of public funds without suffering the unpopularity that the imposition of additional taxation would have involved.'14

Little had, indeed, changed. After throwing out the package of tax reforms, Congress proceeded to embark on a spending spree. The minimum monthly salary was increased to $97.92 and several new public works programmes designed to satisfy demands from the provinces were adopted. The inclusion of new road programmes alone more than doubled the expenditure programme of the Ministry
of Public Works, from $59.4m to $129.9m. Overall, budget expenditure jumped from $876.6m to $1.1 bn, while the expected budget deficit rose to around $391.7m.\textsuperscript{15}

The authority of the Roldós government, and the finances of the state, came under further pressure, with Bucaram seeking executive approval for a number of highly inflationary, but politically popular, projects. These included the reduction in the basic working week from 44 hours to 40 hours, retirement for women after 25 years, the expansion of higher and vocational education and a price freeze on basic goods, services and rents. Although Roldós could have vetoed these bills, as indeed he did with 38 of the 67 bills presented in the first session of Congress, the need to maintain his popular base of support compelled him to sanction a number of Bucaram's proposals.\textsuperscript{16}

The problem the government now faced was how to finance a previously austere but now grossly inflated budget. The most obvious and most lucrative step was to raise domestic oil prices. However, prospects for a price increase were not encouraging with Bucaram voicing his opposition to any increase, however small.\textsuperscript{17} The government, no doubt concerned at the likely political reaction on the streets, appeared uncertain what to do. On 1 November, Dávalos announced that the government was 'establishing how much, when and how a progressive increase in the price of gasoline will be implemented', only to deny a few days later that increases were being planned. By mid-November, the Oil Minister had reverted to his previous stance saying that prices would be increased gradually and that a new brand of gasoline would soon be available costing S/15 ($0.37) per gallon.\textsuperscript{10}

There was a growing expectation that the hike in salaries would be used as the pretext for raising prices. Amid fears of a price hike, and with speculators increasing the price of staple goods even before the introduction of the new minimum wage, violent demonstrations by students and workers broke out in the
A key concern, apparently, was the impact that any price increases would have on transport fares. Even though fuel costs represented a fraction of total transportation costs, bus owners were expected to follow a price hike with fare increases. The government, already besieged by an opposition-dominated Congress, swiftly retreated. It was not yet ready to take the politically risky but financially attractive step of increasing domestic oil prices.

**The November Decrees**

As in the past, the government took the politically easy way out to finance part of the deficit. To finance the salary increases for teachers, an additional tax of 'S/5' was imposed on each barrel of oil exported by Texaco, CEPE and City Investing. Two weeks later, on 19 November, a further law was passed which channelled a large chunk of the 'windfall' in oil revenues to the municipal and provincial councils. The law, which was signed by Roldós in January, stipulated that the first 'S/2.1 bn' of oil revenue would be transferred to the municipal and provincial councils. The remaining oil revenue would be distributed throughout the public sector as before, with one crucial difference: the crude export price on which the shares of income participants including CEPE would be calculated was frozen at $23.50 per barrel (in January the average price of Ecuadorian crude was $36.6), while a ceiling of $17.50 pb was established for fuel oil exports (CEPE's average sales price in January was $28.14). In other words, a ceiling was placed on the dollar amount that each participant could receive from 1 January 1980. The income from crude and fuel oil exports sold above this price was to be transferred directly to the Treasury to finance the social and economic infrastructural work of the councils.

According to Congressional spokesmen, these measures were expected to bring an additional $183.8m to the Treasury, leaving just under $190m of the projected deficit to be financed through other means. This was considered by the Minister of Finance
Rodrigo Paz to be a 'manageable' figure, though this statement was made on the assumption that there would be no further increases in budget expenditure and that income projections for the year were met.20

This new revision in the distribution of public sector oil income was to severely undermine CEPE's investment capacity. More generally, the November decrees were expected to substantially reduce the investment capacity of those public sector enterprises whose revenue largely originated from oil export activities and lead to a further deepening of the country's dependence on external finance. According to Weekly Analysis:

'New oil income is now officially directed to current - and not capital - expenses. High oil prices will not benefit BEDE (formerly FONADE) nor for that matter CEPE, INECEL, INERHI or IETEL but will be used to cover payroll needs and projects of local interest. Not only that, but expenses have been blown so out of proportion that not even steep oil price increases have sufficed to bring the deficit to manageable proportions. Meanwhile the programmes which would increase government income and help foot future budgets such as oil exploration are left resourceless. The goose that lays the golden eggs has been slain.' 21

The Revised System of Oil Income Distribution

An even longer process was now involved before the income shares of those public sector entities with access to the country's oil revenue could be calculated and distributed. Before income from CEPE's crude exports could be distributed in the manner established in 1974, the S/5 tax imposed on each barrel of oil exported had first to be deducted. A calculation then had to be made of the amount of revenue generated on the basis of $23.5 pb. All additional revenue generated above this price ceiling was immediately transferred to the municipal and provincial councils. Before the revenue generated on the basis of $23.5 pb could be distributed, however, 8% was deducted and transferred to the
armed forces. It was only then that the 72:28 distribution ratio established in 1974 came into effect. CEPE's '28%' share, therefore, was calculated on the basis of $23.5 pb exported, less royalties, less the 8% assigned to the Junta Nacional Defensa, less decree 337 (covering the provision of funds for debt servicing), less the S/5 tax on each barrel exported.

CEPE's share of fuel oil export income - which had been over 80% in 1979 - was also expected to be heavily reduced by the $17.50 price ceiling. The problem was compounded, however, by the decree issued by the military which required CEPE to share half of its fuel oil export income with the state budget.

The new distribution system was also applied to the income generated from the 87.31% tax on Texaco's gross income. CEPE was largely unaffected since its participation in oil tax revenue was negligible. The November decrees, however, had damaging financial consequences for BEDE (formerly FONADE). To determine the amount of revenue available for distribution, the 87.31% income tax was imposed on the revenue generated by exports at a price of $23.5, plus deliveries to the domestic market - at $1.48 per barrel - less the S/5 tax. Income generated above the price ceiling was channelled directly to the municipal and provincial councils and the state budget. The remaining income (less the $0.20 that CEPE received for each barrel exported by Texaco and the 8% allocated to the military) was then available for distribution to 16 public sector entities in the percentages established by decree 2959 in 1977.

The income from the 18.5% royalty imposed on Texaco and CEPE had traditionally been shared between the military and INECEL. As a result of the November decrees, only the income generated at the price of $23.5, less the S/5 tax was available for distribution, with the JDN receiving a 50% share and INECEL 47%. All income generated at prices above this level was to be transferred to the municipal and provincial councils and the state budget.
The Response of CEPE

Following this latest move to use the state oil company's funds to overcome fiscal problems and fund social development programmes, Carvajal warned Roldós that CEPE could be pushed to the brink of bankruptcy within two years.²² The company's deputy head of Finance, Raúl Molina, predicted that CEPE's share of crude export revenue would slump to just 7% in 1980, while its budget deficit would reach $44.8m by the end of 1980 and then more than treble in the following year to $176.3m.²³

The financial consequences for CEPE of the decrees passed by both the military junta and the Roldós government were detailed in an internal memorandum to Carvajal from Raúl Molina.²⁴ On the assumption that CEPE's income from crude exports would gross $439.1m in 1980, the company would have received, on the basis of the 28% share stipulated in 1974, $122.9m. However, decree 492 was expected to reduce this figure by $41.9m to $81.1m, equivalent to 18% of CEPE's gross crude export income. Decree 218, which transferred 8% of export revenue to the JDN, was expected to lose CEPE $9.8m and decree 337 a further $12.8m. By this stage, CEPE's crude export income would be just $58.4m, equivalent to just 12% of gross crude export income.²⁵ The S/5 tax, meanwhile, was expected to reduce CEPE's crude export income by $0.6m, while the implementation of the $23.50 price ceiling was projected to deprive CEPE of $26.8m. In all, as a result of decrees passed by the military junta and Congress, CEPE's projected crude export revenue was expected to be reduced by $92m, leaving the company with just $30.9m. This was equivalent to 7% of crude export revenue, and less than half the sum it had received in 1979.²⁶

With respect to fuel oil exports, the decision to transfer 50% of net income from this source to the state budget was expected to reduce CEPE's income by $39.7m. Implementation of the price ceiling of $17.50 was expected to cut CEPE's income by a further $9.3m, leaving CEPE with just $44.5m, equivalent to 48% of the
projected gross income from this source of $93.6m. In 1979, CEPE had received $73.6m, equivalent to over 80% of total fuel oil export income.

As a result of these decrees, CEPE's income was expected to be reduced in 1980 by $143.2m. According to Molina, each barrel of oil produced by the company in 1980 would generate, on average, $18.144. Of this CEPE would receive $2.139 less production and transport costs, leaving the corporation with just $0.913 to finance its exploration and investment projects.27

As table 5.1 shows, while CEPE's share of its crude export income was expected to slump to 7.1%, the shares of the state budget and military were forecast to jump to 44.9% and 25.9% respectively.

Table 5.1: Projected Distribution of Income in 1980 from CEPE's Crude Exports

<table>
<thead>
<tr>
<th></th>
<th>$ million</th>
<th>% share of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Budget</td>
<td>197.2</td>
<td>44.9</td>
</tr>
<tr>
<td>Junta Defensa Nacional</td>
<td>113.9</td>
<td>25.9</td>
</tr>
<tr>
<td>INECEL</td>
<td>43.6</td>
<td>9.9</td>
</tr>
<tr>
<td>Banco de Desarrollo</td>
<td>37.6</td>
<td>8.6</td>
</tr>
<tr>
<td>CEPE</td>
<td>31.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Other</td>
<td>15.8</td>
<td>3.6</td>
</tr>
<tr>
<td>Total</td>
<td>439.1</td>
<td>100.0</td>
</tr>
</tbody>
</table>


CEPE officials responded to these latest measures to syphon off the company's revenue by putting forward proposals to Roldós for safeguarding CEPE's financial position and improving its efficiency. According to company officials, one of the central problems affecting CEPE's operational capabilities was its archaic Constitution, which served to 'impede the efficient and flexible management of its activities.' It was, therefore, considered necessary to reform CEPE's Constitution and replace it with a modern legal framework which would allow the state company a degree of economic, managerial and administrative autonomy.
'similar to that of a private company.' It was accepted that CEPE should remain within the public sector and that the formulation of oil policy should remain in the hands of the president and his cabinet. However, officials called for senior management to be given greater decision-making powers and for the introduction of modern technology and accounting systems to ensure that decisions were taken on the basis of business not political criteria.

CEPE emphasised that it was not opposed to the distribution of the country's oil income throughout the public sector, since the oil wealth was the 'property of the state and therefore the whole community.' There was an acceptance that the company was required to fulfill social as well as entrepreneurial objectives. However, it was CEPE's marginal share in the very oil income that it generated, together with other politically imposed constraints that compelled the company to operate under very different conditions to domestic and foreign private companies, that CEPE officials found irksome. For instance, in contrast to foreign oil companies like Texaco, CEPE was not reimbursed by the state for its investments and costs in the event of discovering commercial quantities of oil nor was it permitted to receive a reasonable profit from its business activities. Measures needed to be taken, therefore, to ensure that:

'CEPE's position must be no different to that which prevails for multinational companies...On the contrary, it requires a common treatment that will enable it to operate in conditions at least similar to those under which foreign companies operate in Ecuador. Neither the freezing of prices...nor secret decrees have affected the profits or income of foreign oil companies. On the contrary, they have reduced and weakened the income and financial situation of the state oil company.'

On the other hand, the situation of CEPE 'cannot be equal to the rest of the participants' in oil income, since none of these are
required 'to meet the continued increases in costs and expenditures on production, transport, refining and marketing, as well as saving some of its income for investment projects.'

A series of proposals were put forward to ensure that CEPE had the necessary resources to cover its costs and fund priority investment projects. In the immediate term, CEPE called for revisions to the November decrees. The key demand was for the price ceilings to be raised from $23.5 to $37.8 for crude exports and from $17.5 to $22 for fuel oil exports. These measures alone would provide CEPE with an additional $23.6m and $7.6m of crude and fuel export income respectively. Other demands from CEPE, together with the additional income that their implementation was expected to bring, included eliminating Article 3 (d) of Ministerial Accord 057 of 11 February 1980 and transferring the increase in derivative prices charged to ships with international routes to CEPE ($21.3m), and allowing CEPE to receive a 'commission' of 2% on the real value of royalty exports ($6.5m).

As well as seeking revisions to the distribution system covering existing oil revenue sources, Carvajal pressed for CEPE to receive 30% of the income generated from new production sources. If this demand was implemented in respect of the Yuca field, which was close to coming on-stream, CEPE's income could be increased by as much as $63.6m. Other measures which Carvajal advocated to bring extra revenue to CEPE included a substantial hike in domestic oil prices and an increase in the authorised level of production. Carvajal faced strong opposition to both demands; however, in the latter case from urban transport users and the labour movement, and in the former from the DGH and, after the removal of Cardenas, Oil Minister César Robalino. On the basis of revised reserve estimates from Texaco, Carvajal had argued that output levels could be increased by 10,000 b/d. Later, he went further and suggested that output from the Shushufindi field could be increased from 100,000 b/d to 150,000 b/d without risking any structural damage. By May, Carvajal was
calling for an immediate increase in the consortium's production from 204,000 b/d to 220,000 b/d, at least until production from CEPE's Nororiente fields (which were expected to add 50,000 b/d by 1983) came on stream. The Oil Minister and the head of DGH Marcelo Guerra refused to compromise, repeating their view that output increases could only be justified if secondary recovery work was carried out by the consortium or if new fields were incorporated into production. 36

The Mood of Optimism

CEPE's demands coincided with a series of highly optimistic claims in respect of the company's drilling activities. Even the normally cautious Weekly Analysis reported in May 1980 that 'there is promise of hydrocarbons almost everywhere' and that 'a minor oil boom may still be on in the near future for Ecuador.' 36

A spate of discoveries in the Nororiente in the first half of the year appeared to justify this optimism:

'The first wells drilled in the Sansahuari and Cuyabeno fields have tossed reserves of about 70m barrels. More recent drilling, in the fields known as Secoya and Shuara have proven good for 200m...All told, and including the exploitation of Bermejo - discovered and returned by Texaco - the CEPE bloc in the Nororiente may be worth about 300-400m barrels of reserves, excluding the precretacic...' 37

Further discoveries were made later in the year at Tetete and Shushuqui. CEPE's stepped-up exploration campaign - 10 wells drilled in 1979 and nine in 1980, compared to 13 in 1975-78 - appeared to be achieving substantial success. Few days passed on which CEPE officials did not announce some new success or other in the company's exploration work. There was, in addition, continued optimism surrounding the oil potential of areas yet to be drilled. Aside from the Suroriente, the consortium's fields and the Santa Elena peninsula, preliminary studies along the central northern coast suggested that the hydrocarbons potential was 'three to four times' larger than that of the Nororiente. 38
Carvajal later claimed that Manabi alone had 'huge' oil potential and could contain an oil reservoir larger even than the Amazonian oilfields. These announcements were supplemented by a vigorous TV and newspaper advertising campaign extolling the virtues of CEPE and emphasising the importance of its work to the economy and 'its sole shareholder: the Ecuadorian people.' According to Weekly Analysis:

'Carvajal was fully aware of the public's need to know, the media's need to inform and the government's need to cast an image of dynamism. The Manager of CEPE became the star of the government team.'

However, the fact that CEPE felt it necessary to publicise (often in a blatantly inflated manner) its achievements suggested that political motives lay behind this campaign. It seems likely that the hype surrounding CEPE's exploration work in 1980 - like that which surrounded its work in the late 1970's - was aimed at creating a political environment more receptive to CEPE's demands for increased funding. If Congress agreed to this, Carvajal argued, then Ecuador would have no need to bring foreign oil companies into the exploration play.

There was, however, little prospect of more resources being channelled to CEPE. Having just changed the system of oil income distribution, Congress was hardly likely to revise or cancel the November decrees. To do so would have deprived the state of the resources to fund its social development programme and the Congress of the means to finance patronage politics. Unless resources were diverted from the councils and the state budget to CEPE, then the only other significant source of oil income left was that allocated to the military.

Beyond lobbying Congress and the president and publicising CEPE's 'successes' Carvajal had few other means at his disposal to persuade Congress to meet his demands. Lacking any organisational independence and with little political clout, CEPE was clearly at a disadvantage to other pressure groups within society - for
instance, organised labour, the military, regional interests - seeking increased allocations from the state. CEPE's claims for more funds were further weakened by the purpose for which these were to be used and, increasingly, concern over whether existing resources were being managed efficiently. Not only was exploration highly costly, but CEPE's past performance cast doubts on its technical capacity to maintain an expansive and successful programme of exploration. There were, after all, other less costly alternatives available to boost the country's oil reserves - secondary recovery work by Texaco and foreign oil investment - neither of which, it should be added, required a diversification of oil revenues away from existing income sharers.

It was also clear from the middle of 1980 onwards that Carvajal's influence was waning. This partly reflected an increasing belief that Carvajal had been at best over-optimistic, at worst deceitful, in his claims regarding CEPE's exploration successes and the country's oil situation. More importantly, changes in the balance of political forces within Congress and the cabinet saw a further weakening of Roldós' authority during 1980. This eventually proved fatal for Carvajal, since the power and influence that he had accumulated had been built on his close links and friendship with Roldós. Particularly worrying for the CEPE manager was the increased representation in the cabinet of the Democracia Popular, which had made little secret of its hostility towards Carvajal following the removal of Dávalos from the Oil Ministry.
CHAPTER 6: THE REMOVAL OF CARVAJAL

The process of government had remained in a state of virtual paralysis for most of 1980. Following the budget debate, the attention of the opposition groups had focused on an executive project covering the legal establishment of the Consejo Nacional de Desarrollo which was to replace the Junta Nacional de Planificacion y Coordinacion Economica (JUNAPLA). The government wanted CONADE to be headed by the vice-president of the Republic, and hence Hurtado. The occasion was used by Bucaram (unsuccessfully in the event) to undermine Hurtado by attempting to have the president of Congress (and thus himself) to head CONADE. By March, attention had turned to the National Development Plan itself. Conservative groups attacked its more 'radical' elements, while Bucaram denounced the Plan as unconstitutional since it had been formulated by CONADE which lacked legal recognition.

The rise in the political temperature in March was linked to a speech made by Roldós at a mass meeting in Quito. Although ostensibly planned to announce the formulation of the National Development Programme, Roldós used the occasion to condemn attempts by opposition groups to undermine democracy and sabotage the government's legislative programme. More significantly, he hinted that constitutional reforms might be introduced to limit the power of Congress. Following the meeting, Roldós announced a package of reform proposals. These included reducing the period between congressional elections from five years to an unspecified period and, more threateningly for Bucaram and his conservative allies, granting the president the right to dissolve Congress once during its five year term and force new legislative elections. Aware that these changes would require the support of two-thirds of Congress, government spokesmen pointed out that under the 1978 Constitution Roldós would be within his rights to hold a national referendum on the issue if Congress rejected his proposals.
Expectations that a referendum would be held intensified following the rejection by Congress of Roldós' proposals and of compromise proposals drawn up by a Commission of Notables, composed of religious, political and business leaders. Opposition groups then launched a counter-attack by demanding that the Minister of Government, Carlos Feraud, appear before Congress on 6 May, just three days before the threatened referendum. At the last minute, Roldós reached a deal with conservative groups which effectively undermined Bucaram's dominance within Congress. The knowledge that their obstructionist tactics in Congress would have resulted in Roldós winning the referendum was sufficient to undermine the unity of the opposition bloc. The Conservative and Liberal delegates officially withdrew from the Bucaram-led block, while the ID took steps to reach a legislative 'understanding' with Roldós. This was to lead to the election of the idista, Raúl Baca Carbo, as president of Congress in place of Bucaram. More immediately, the restructuring in the balance of political forces within Congress resulted in delegates voting by 33 to 27 against the censure of Feraud in June.

Events in May did, however, represent a major defeat for Roldós and democratic reformism. Following the decision to drop the threat of a referendum, Weekly Analysis concluded:

'that the government is foregoing the possibility of enacting controversial social radical legislation...When Bucaram joined the Conservatives Roldós denounced him for joining the oligarchy and backward social forces. Now the same Conservatives are included among the enlightened, while Bucaram himself bears the onus of being an anachronism.'

The influence of the Conservatives, Liberals and CFP 'bucaramistas' remained extensive throughout 1980, with their control of the judiciary and the permanent commissions remaining largely intact. Moreover, due to the fragmentation of the CFP and the continued refusal of idista delegates to provide formal support to Roldós, the voting strength of conservative groups remained out of all proportion to their numerical representation.
Throughout the year, they continued to bring the process of government to a halt, with six ministers been hauled before Congress for questioning. As a result, not a single project of law was approved during the second session of Congress that opened in August 1980. The inherent weakness of the 'new majority* on the one hand and the extraordinary vitality of the opposition on the other, led 'Nueva' to conclude that the pro-government alliance forged in May:

'was more a psychological than political triumph over the oligarchical-Bucaram alliance which was in no manner displaced from its privileged position within Congress.'²

The reformist credentials of the government were further dented when the National Development Plan was published. In terms of both tone and content, it differed from the original draft, with policies likely to provoke opposition from the private sector, most notably the advocacy of worker participation on company boards, removed.

It is important to emphasise, however, that radical change had never been on the agenda of the new government. As events in May confirmed, the priority political objective for both Roldós and Hurtado, was to ensure the :

'consolidation of the democratic, multi-party system, and not the implementation of a radical transformation of society.'³

In pursuit of this objective, Roldós was reluctant to overly antagonise the business community and their political representatives in Congress. As events in the recent past had shown, moreover, sections of the private sector, particularly the agro-exporting elites in Guayaquil, were not averse to using extra-constitutional means, including the threat of a military coup, to secure their political objectives. Although committed to the increased involvement of the popular classes in the political process, a referendum threatened to extend the highly
charged and conflictive atmosphere of Congress into Ecuadorian society as a whole. It did, moreover, carry the risk of antagonising a conservative-dominated military that was opposed to anything that smacked of 'mobilisation politics.'

The spectre of military intervention had, in fact, been raised in the weeks before the threatened referendum. In December, a special congressional committee had been established to investigate acts of corruption during military rule, as well as the murder of Abdón Calderón, the Aztra massacre and the Previsora bank scandal. Military concern was further raised when DP delegates called for an extraordinary session of Congress to try the three members of the military junta. The military hierarchy had responded to these moves by issuing a series of communiqués which condemned the committee's activities, and reminded the political elites of the central role played by the military junta in the return to civilian government. According to one report:

'this implicit accusation of ingratitude on the part of the new government is seen by some as a clear sign that the military are not prepared to be pushed too far.'

Economic, as well as political factors, served to constrain Roldós' reformist impulses. By the middle of the year, the government's economic programme was in complete disarray. An annual average GDP growth rate of not less than 6.5% in 1979-84 had been projected, with the growth target for 1980 set at 5.6%. By the middle of 1980, the most optimistic projections now pointed to GDP rising by 4.2% in 1980. If correct, that would require GDP rising by an annual average of 7.5% in 1981-84 to reach the 6.5% average required over the four year period.

The central problem confronting the government was that the primary assumptions on which the financing of the state budget and the public sector investment strategy had been based -
namely, an average oil price of $37.7 and output averaging 205,191 b/d (75.1m barrels) were overly optimistic.

Oil Market Trends

By the middle of the year, the oil price hikes of 1979 were contributing to a slowing down in the rate of economic growth in the OECD countries, in particular the USA where GDP for the year actually fell by 0.2%. According to the OECD:

'energy conservation induced by the price increases and supported by other measures is reducing energy demand and has led, along with the lower induced economic growth, to a less volatile oil market situation.'6

OECD consumption in the first half of the year averaged 39m b/d, around 2.5m b/d down on the same period one year earlier. In a bid to prevent oil prices declining, OPEC's aggregate output during the year was progressively reduced: by the last quarter of the year, it had fallen to 24m b/d, 23% lower than in the same quarter in 1979. These cut-backs failed to arrest the drift towards a buyers market. This was partly because of increased production from Mexico and the North Sea and partly because of Saudi Arabia's decision in March 1980 to maintain output at 9.5m b/d, even though world output exceeded consumption by around 1m b/d. Saudi production strategy appeared to be aimed at cajoling OPEC members into agreeing a long-term pricing strategy in which oil prices were to be adjusted quarterly in line with inflation, currency exchange fluctuations and the real rate of GDP growth in OECD countries.

The impact of these developments on the price of Oriente crude became evident in the early months of the year. Prices fell sharply, from $36.58 in January to just $31.78 in April. After recovering to $35.26 in May and June respectively, they resumed their downward trend. By September, when prices averaged $32.10, Weekly Analysis warned that the state budget's oil income would be $88.9m lower than originally expected.7 The fall in oil prices
combined with lower than expected revenue from non-oil sources and further increases in budget expenditure - to $1.1bn - to lead to a revised budget deficit of between $327.7m and $374.5m. With no steps having been taken to mobilise non-oil revenue sources to compensate for the inflated budget, a number of state investment projects were either cancelled or postponed and allocations to BEDE heavily cut-back. These measures were officially expected to reduce the deficit by $156.9m, with a large chunk of the remainder having to be covered through further borrowing.

The only domestic option available to compensate for the price declines was to boost crude exports, by reducing oil consumption and/or boosting production. By the middle of the year, the oil price falls and the mounting fiscal crisis led to attention turning once again to the issue of domestic oil prices. Such a move had been encouraged by Carvajal, who claimed that it could provide CEPE with an additional $49.3m. Expectations of a price hike rose in July, when Roldós announced that 'realistic' prices should be imposed on sugar, milk and oil products. However, this statement appears to have been made to prepare the population psychologically for a future increase in prices. With his room for manoeuvre highly constrained by Congress and his popular standing damaged by events in May, Roldós was reluctant to mobilise what was potentially the most lucrative source of revenue for the state. Instead, a new 92 octane gasoline was introduced at the new 'political' price of S/18.2 ($0.42). This was expected to reduce the state subsidy by a mere $11.2m.

Developments in the area of production proved equally disappointing, with output for the year eventually falling from 78.8m to 74.8m. With domestic consumption rising by around 10%, the volume of crude available for export fell during the year by 16%, to 33.4m barrels, equivalent to just 44% of total production. The government's output projections had assumed that the Yuca field would be incorporated on schedule and thus boost output by 8,000 b/d and that maintenance and secondary recovery
work would be carried out. The failure of the consortium to fulfill these targets — production from the Lago Agrio field actually slumped by 32% — was the key reason for the drop in output.

**Texaco-State Relations**

Texaco remained reluctant to invest in maintenance or secondary recovery work, arguing that output could be increased on the basis of existing known reserves. These were now estimated by the company to be 1.4 bn barrels, almost double the DGH's revised figure of 900m. Texaco (and Carvajal) was anxious to take advantage of the price hikes and had pressed for the consortium's output to be increased from 204,000 b/d to 220,000 b/d. These demands were refused by the DGH and the Oil Ministry which claimed that this could damage older oil structures. No increase was possible, therefore, until secondary recovery work had been carried out. By September, there was also a growing body of opinion within the Oil Ministry that production should be held back because of the softening of oil prices. It was, argued one in September, '1,000 times more preferable to have the oil stored in the wells of the Oriente where it does not cost us a penny than to store it in barges in Esmeraldas.'

Despite its reluctance to undertake investment, Texaco was always more forthcoming in informing the government of the immense benefits that a programme of secondary recovery could bring. Reserves, the company claimed, could be boosted by over 500m barrels and, with little difficulty, production capacity raised to 88m barrels. Why then Texaco's reluctance to undertake a programme of secondary recovery work? Cost was one factor. Not only was the initial investment required high but extraction costs were expected to be over three times the level currently being incurred by the company. High extraction costs combined with three other factors to raise doubts over whether the profits obtained from secondary recovery work could justify the initial investment. First, the company's income tax was rigidly fixed at
87.31%, second there was no guarantee that the authorised output level would be increased and third, and most importantly, the company had no guarantee that the additional output from a programme of secondary recovery work would not simply be diverted to meet domestic needs. There was, then, the possibility that investments made by Texaco would have no impact on its export levels.\(^1\)

The company's exportable surplus had shrunk considerably since the early 1970's, together with the amount of income that the company's operations in Ecuador generated. When viewed in terms of net profit per barrel, Texaco appeared to be earning 'windfall' profits in 1979 and 1980 as a result of the oil price hikes. According to one estimate, the company's net profit had increased from $1.1448 pb (equivalent to a 28.73% rate of return) to $1.6895 (equivalent to a rate of return of 43.05%), almost double what the company was claiming in 1976.\(^3\) The representation of Texaco's profits in these terms, however, served to mask the rapid decline in the number of barrels on which this net profit was earned. Due to rising domestic oil consumption and the increase in the royalty tax from 16% in 1973 to 18.5% in December 1977, just 8.3m barrels of Texaco's production share of 28.9m barrels in 1979 was available for export, around half the level registered five years previously. Texaco's deliveries to the domestic refineries, on the other hand, totalled 13.3m barrels. By the end of 1980, Texaco's exports (depleted further by the judgement that it had overlifted 4.3m barrels in 1977) had slumped to just 5.3m barrels, scarcely 20% of the company's production share.

This would not have been such a problem if the crude delivered to the domestic refineries was paid for at international prices. If this had been the case, Texaco's deliveries to the domestic refineries would have generated pre-tax income of $508.3m in 1980. However, with prices frozen at $1.48, Texaco received a mere $21.1m.\(^4\)
The refusal to undertake secondary recovery work may also have reflected concern that the company might not be in Ecuador to enjoy the fruits of its investments. Aside from the perennial problem of low domestic prices and declining export volume, other issues had emerged which soured relations between Texaco and the Roldós government. On 30 July 1980, the Special Judge on Hydrocarbons, ex-Oil Minister Cárdenas ruled that Texaco had indeed illegally lifted 4.3m barrels of crude in 1977 and that this should be returned to CEPE. The company responded by refusing to export its share of crude and threatened to cancel the payment for the excess exports that Semblantes had adjudged that Texaco had made in 1977, but which, due to constant legal wrangling, had still not been paid. The protest proved short-lived: with oil prices moving to over $40 in the following month the company dropped its export boycott and effectively accepted Cárdenas' ruling.

The government's commitment to place operational control of the consortium in the hands of Petroamazonas posed greater problems. The new operating company was regarded by the government as essential to allow closer state supervision of the consortium's activities and ensure that Texaco complied with its investment obligations. However, after striving over the years to maintain its hegemonic position within the country's oil industry, Texaco was ill-disposed to any measure which would allow control of the consortium to pass to CEPE, which Texaco regarded as inefficient, amateurish and too political. In Texaco's view, moreover, Petroamazonas was simply a 'trojan horse' conceived in order to effect nationalisation 'through the back-door.'

When talks on Petroamazonas had first taken place between Dávalos and Texaco, the company stubbornly rejected any moves that would undermine its operational role. The government had demanded that CEPE should, as the majority partner, hold the majority of seats on the board of Petroamazonas. This proved unacceptable to Texaco, which demanded equal voting representation on a board
chaired by René Bucaram. In the face of this impasse, negotiations were soon brought to an end. Some observers suggested that Dávalos himself had little interest in the project.  

Discussions were later reopened by Carvajal, though with little success. If the government was serious in reducing Texaco's control of the consortium, only two options remained: to impose Petroamazonas unilaterally and thus risk Texaco's departure, or begin a process of full-scale nationalisation. Neither option held much attraction for the government, which was anxious to maintain its good relations with the United States and the international banking sector and improve Ecuador's image among potential oil investors.

Such a move would, in addition, threaten the government's semi-reformist programme and its priority objective of consolidating the democratic process. As events in the 1970's highlighted, the domestic political and economic costs of a dispute with the company were likely to be high. CEPE itself, moreover, was not yet a viable alternative to Texaco. It remained undercapitalised, its operational efficiency was suspect and it lacked the knowledge and expertise to undertake either secondary recovery work or precretacic drilling.

There is some doubt as to whether Carvajal himself was particularly anxious for CEPE to assume control of the consortium. His prime concern was to expand CEPE's exploration work in areas exclusively reserved for the state and he had little interest in diverting any of the company's already limited technical and financial resources away from these areas. In any event, it was hardly realistic to expect CEPE to assume responsibility for operating the Texaco bloc and undertake an expensive programme of secondary recovery work while simultaneously undertaking a stepped-up exploration programme.
There was little prospect of CEPE having any spare financial capacity in the near future. Indeed, political developments during the year were combining with growing economic pressure to undermine the position of the one individual most closely identified with the establishment of a financially strong and independent state oil company.

The Dismissal of Carvajal

The restructuring of political forces after May 1980, and the further diminishment in Roldós ability to dictate on his own government policy or cabinet appointments, proved fatal for Carvajal. In the deals reached in May, there had been no formal pledges of support from conservative groups. No formal support either had been received from Izquierda Democratica, which continued to stress that it would treat each issue that came before Congress on its merits. Although ID sought no ministerial posts, other groups within the 'new majority' did expect a larger share of political power, in particular the five DP deputies and the 12 CFP-roldósistas. The problem facing Roldós was that these demands could only be met by removing other pro-government elements, most notably his close friends and 'independents'. The increasing influence of the DP posed a particular problem for Carvajal since the party held him responsible for the removal of Dávalos in December. 19 The DP party was to play a central role in the campaign to undermine Carvajal's position at the state oil company.

Question-marks over Carvajal's managerial qualities were first raised following claims that one of CEPE's clients had nearly been allowed to sail with a free shipment of crude. On 23 January and 9 May, CEPE had been authorised to make a spot sale to the Essex company of 1.1m barrels and 680,000 barrels respectively. However, as a result of oil price falls over the next few months, Essex obtained CEPE's permission to reduce the 1.1m sale to just 394,168 barrels, with CEPE cashing the $500,000 guarantee. Less than a month later, Essex 'repurchased' the
remaining 720,000 barrels at a much lower price. On 21 June and 29 June, two tankers chartered by Essex were loaded with 1.94m barrels of crude even though CEPE had not received any letters of credit. Hence the claim that Essex was on the point of sailing with a free load until the 'mistake' was discovered at the last minute.

Independent observers largely dismissed these claims, pointing out that no sailing permits had been issued to the company. It was further noted that, given the shortage of storage facilities, it was common for tankers to be loaded prior to the delivery of letters of credit. On CEPE's marketing strategy generally, Weekly Analysis, which covered the Essex story extensively, found that the allegations of incompetence were largely unfounded:

'What counts is that the state corporation will set a viable marketing policy that will bring to the State the best possible return on the sale of its most treasured non-renewable resource. At present, it seems that CEPE is succeeding at that.'

The campaign against Carvajal gathered force when Cárdenas was replaced in August by César Robalino, a member of Democracia Popular. He had earlier been under-Secretary to Oil Minister Salazar, whose criticisms of CEPE and calls for a rapprochement with Texaco had brought him into open conflict with military nationalists in 1975. Robalino's appointment now brought the Oil Ministry and CEPE into open and hostile conflict. Determined not to share the same fate as his party colleague Mauricio Dávalos, Robalino sought from the outset to clip the wings of the CEPE manager and re-establish Oil Ministry dominance over key areas of oil policy. In his first statement to the press, Robalino pointedly remarked that it was the cabinet and the Oil Ministry that formulated oil policy. CEPE's role was simply to implement these policies.

Robalino made little secret from the outset that he wanted Carvajal removed from office. Within two months, he had
successfully engineered Carvajal's removal. According to one former CEPE official, the Oil Minister, irked by Carvajal's continued habit of reporting direct to Roldós rather than to himself:

'informed Hurtado that, unless Carvajal was removed, he would hand in his resignation.'

Under pressure from the DP and his vice-president, Roldós dismissed Carvajal in October and replaced him with his private secretary Javier Vidal Maspon on 31 October 1980.

A mix of factors led to Carvajal's removal. There were rumours that his close relationship with Roldós had turned sour, though how true this was is difficult to ascertain. Robalino himself, when asked to explain Carvajal's dismissal, merely suggested that 'mi queridisimo amigo Pepe Carvajal' had 'lost the confidence' of the president. Even if this claim lacked substance, it is difficult to imagine a different conclusion to the conflict between Robalino and Carvajal. As a result of developments in May, the DP had managed to accumulate an impressive degree of political influence both in the cabinet and on the CEPE Board. Indeed, with the exception of the military representative, all of the Board's members were from the DP. Lacking any real autonomy in respect of cabinet and other appointments and anxious to avoid antagonising the DP and Hurtado, Roldós had little option but to dispense with Carvajal's services.

Personalities, revenge and conflict over bureaucratic turf were central to the dispute between Robalino and Carvajal. There were, however, a number of major policy differences between the two men. As was noted earlier, Carvajal had been in dispute with the Oil Ministry over the level of daily output in the consortium's fields. While Carvajal had called for output to be increased to 220,000 b/d - primarily as a means to increase exports, reduce the budget deficit and provide additional finances for CEPE - this had been consistently rejected by the Oil Ministry. Robalino
echoed DGH claims that output could barely be kept at the current level of 204,000 b/d without damaging the older oil structures.26

The two men also held differing views on the extent of the crisis facing the oil industry and CEPE's capacity to solve it without the collaboration of foreign oil companies. Even before Robalino became Oil Minister, the political and economic environment and the mood of optimism surrounding CEPE's ability to boost the country's oil reserves had changed dramatically. CEPE's 'successes' were being called into question, with suspicions growing that Carvajal was deliberately exaggerating the significance of CEPE's oil discoveries. This concern mounted when Carvajal described the discovery of the Pungarayacu field close to Tena as 'spectacular', claiming that this field alone could increase reserves by 136% to over 3 bn barrels.27 This provoked an outcry, with opponents dismissing Pungarayacu as 'a myth'.28 Despite Carvajal's repeated condemnation of CEPE's past practice of unplugging wildcats previously discovered by foreign companies, there were indeed suspicions that this was just another 'political well':

'the heavy oil deposits concerned have been known to exist for more than 100 years. Shell carried out exploratory drillings at the site some time ago, and decided that the quality of oil was such that exploitation of the deposits would not be worthwhile for many years.'29

Robalino's own view was that Carvajal was deliberately distorting the country's oil situation in order to block attempts to bring foreign companies into the exploration play.

For Carvajal's supporters within CEPE, the issue of foreign oil investment was central to the dispute between the two men. After his dismissal, CEPE officials issued a series of press statements claiming that a campaign had been orchestrated by domestic pressure groups and multinational companies to 'discredit CEPE's activities' and 'secure the dismissal of Carvajal.'30 CEPE's deputy head of Production Oscar Gárzon, one of over 100 CEPE
officials to resign in protest at Carjal's dismissal (others included Jorge Salazar, deputy head of Human Resources and Wilson Pastor, deputy head of Planning) was convinced that Carvajal's dismissal was part of a wider campaign to minimise CEPE's achievements in order to create a political environment more supportive of measures to attract foreign oil companies back to Ecuador.31

Carvajal himself rejected as 'a cheap fabrication' suggestions that his dismissal was the result of differences over production policy.32 He was convinced that his dismissal was part of an attempt to gain control of CEPE by the DP, with the support of 'certain business interests and voracious transnationals' who 'viewed with relish the multiple contracts worth up to $S/50,000m ($1.1 bn) that CEPE would be negotiating over the next few years.'33 This claim followed rumours that a number of projects earmarked for CEPE, including construction of a lubricants plant, a petrochemical complex in Santa Elena and a fertilizer plant close to Posorja, were to be undertaken by foreign companies. These groups, Carvajal claimed, regarded his removal as essential in order to 'open up' the exploration sector to foreign companies and make available certain areas that had previously been exclusively reserved for CEPE. Carvajal referred in particular to Blocks 15 and 17 and the Gulf of Guayaquil.

Developments following his departure appeared to confirm Carvajal's suspicions. Once Robalino was firmly established at the Oil Ministry, he switched attention away from CEPE's exploration 'successes' and focused instead on the critical nature of the country's oil crisis and the urgent need to revitalise foreign exploration activity. The development of a 'crisis' atmosphere was seen as essential to bring the issue of foreign oil investment onto the forefront of the political agenda. With the primary interest of Congress focused on political exercises, little interest or attention had been paid to the issue. In these circumstances, no steps had been taken to
draw up the regulations required to cover the award of contracts of hydrocarbon operations.

Robalino also recognised that high oil prices and the string of discoveries announced by CEPE were hardly the conditions that would induce a sense of urgency among the political elites. Although insufficient to reverse the downward trend in the economy, the oil price hikes had provided sufficient financial resources to enable Congress to satisfy the demands of their local constituencies through salary and wage hikes, extensive public works projects in the regions and all manner of incentives for employers. With Carvajal claiming that the country's oil reserves were close to 3 bn barrels, the financial resources to fund patronage politics appeared assured.

Domestic factors were not the only obstacle facing Robalino's attempts to bring oil companies back to the exploration play. As the following chapter will show, there was no certainty that oil companies would actually wish to invest in Ecuador.
CHAPTER 7: OIL COMPANY PERCEPTIONS OF ECUADOR

A developing country's need for foreign oil capital will typically be greater than the priority assigned by oil companies to investing in that country. This is partly due to the nature of the oil industry itself. Given the capital constraints that most are forced to operate under, and risks and costs inherent in exploration, oil companies must of necessity be highly selective and cautious in their allocation of exploration capital. This need has been reinforced by developments in the oil industry over the last twenty years. With most of the 'easily discoverable' reserves now found, the risks and costs attached to exploration have risen considerably. Companies have increasingly been required to explore for oil in remote areas, at great depth, onshore or offshore, and in geological formations and physical environments which require highly sophisticated and expensive technology.

The Competitive Environment

Companies were required to be highly selective for another reason: most have available to them more exploration opportunities than they can possibly avail themselves of. By the end of the 1970's, Ecuador was simply one of a number of developing countries seeking to attract foreign oil capital and expertise. Concern over the lack of, or depletion in, oil reserves; the increasing scarcity of economic resources; disappointing geology; the technical and financial limitations of the state oil company; and the risks and costs inherent in exploration - these factors had combined with political developments specific to each country to cause a general shift towards a more neo-liberal approach to the issue of foreign oil investment. In Latin America itself, a succession of countries either abandoned nationalist oil policies or dismantled long established state monopolies of the upstream sector in a bid to attract foreign investment.
Ecuador was not simply in competition for foreign capital and expertise with other countries in Latin America and the Third World. It was also in competition with countries in the developed world, where most drilling activity has traditionally been concentrated. The United States alone accounted for 73% of the 3.78m wells drilled in the period up to the end of 1981. A further 0.83m had been drilled in other developed countries, with just 0.2m wells having been drilled in the developing countries.\(^1\)

A number of factors have accounted for the limited exploration undertaken by oil companies in Latin America and developing countries generally. Many countries had, for instance, established state oil companies with monopoly or near monopoly rights over exploration and production. Interest in Latin America was further diminished in the 1950's and 1960's with oil company attention focused on the Middle East, where huge quantities of oil reserves had been found, capable of sustaining world demand for several decades into the future.

**The Oil Potential of Latin America**

Company perceptions of Latin America's oil potential may also have accounted for the 'marginalisation' of the region in terms of global oil company exploration activity. All else being equal, it is clearly more logical for an oil company to direct its exploration activities towards areas that are believed to contain the largest quantities of undiscovered oil reserves. However, given the various methods used to evaluate the oil reserve potential of a particular area, estimates can vary widely. The oil potential of Latin America, in particular, has long been a source of dispute. In 1976, Dr B F Grossling of the United States Geological Service, placed Latin America's reserve potential at between 490 bn to 1,225 bn barrels, while other sources estimated a reserve potential of 620 bn barrels.\(^2\)

Oil company assessments of the region's oil potential have generally been less optimistic. According to Odell, they had
'largely written Latin America off as a habitat for future oil reserves on a large scale', with company estimates allocating Latin America between 7% and 12%, that is between 150 bn and 240 bn barrels, of the world's 2,000 bn barrels of ultimately recoverable oil reserves.\footnote{3}

More recent company estimates have reaffirmed that, by world standards, Latin America's reserve potential is limited. According to Conoco, around 800 billion barrels of oil reserves are still waiting to be found, with 33% of these situated in the Middle East and a further 21% in the USSR. Latin America was thought to hold around 5% or 40 bn barrels. This proportion was the same as China, higher than South-East Asia (3%), Greater India (1%) and Australia (1%) but lower than North America (9%), Western Europe (8%), Africa (8%) and Central America (6%).\footnote{4}

The Oil Market Revolution of the 1970's

Events in the 1970's, when companies were either nationalised or forced to accept tougher contractual terms, served to further reduce the attractiveness of investing in Latin America. There was, in general, an increased reluctance to invest in what can loosely be termed 'politically difficult' areas:

> 'the very success of the OPEC countries in breaking the power of the major oil companies and their parent governments increased the difficulties of attracting such foreign investment...there was a marked reluctance by the companies to enter particular countries or at least to explore thoroughly if the initial indications were unfavourable.'\footnote{5}

Henceforth, the political risk factor assumed increasing importance in influencing oil company investment decisions. It was no longer sufficient for a host government or company officials to assure management that the country had good hydrocarbons potential, that contractual terms were acceptable and that fiscal terms permitted an adequate rate of return. Oil companies now had to be convinced that the political environment
was relatively stable and favourable and, more to the point, that the sanctity of contracts would be respected by the authorities. According to a vice-president of Conoco:

'Economic and political considerations are now a more significant factor in evaluating exploration opportunities. Not only must we discover hydrocarbons, we must be able to develop and produce them at a profit over the longer term. Therefore, the explorationist needs the confidence that the terms applying today will remain favourable during the life of the contract. Rapid, unexpected changes in contract terms - much too common today - are one of the biggest concerns of the industry.'

Some oil companies did continue to invest in Latin America and Third World countries. Nevertheless, it can generally be said that the oil market revolution and the resulting reluctance to invest in 'politically difficult' areas, led oil companies to redi-vert their exploration capital to their countries of origin and to developed countries generally.

Changes to tax legislation served to increase the reluctance of US companies to invest overseas. In this respect, Philip cites amendments to the petroleum tax system in 1975 which prevented US companies from writing off the costs of foreign exploration and development against their US income, and an Internal Revenue Service ruling in 1977 that:

'crude-oil-sharing contracts with host governments did not involve payments of taxation and that these payments could not therefore be offset against taxation in the USA.'

The Emergence of New Areas for Investment

The marginalisation of Latin America in oil company exploration activity was reinforced in the 1970's by the emergence of new exploration opportunities in the developed countries. OPEC's policies of sudden, sizeable price increases in 1973-74 and 1979-
80, provided the industrialised countries with the financial and political incentive to channel increasing amounts of exploration investment into 'new' areas outside of OPEC countries. These included high-cost production areas in Alaska and the North Sea. The enormous amounts of profit and cash flow generated by high oil prices could not only justify investment in rather hostile and otherwise unviable producing areas, but also guarantee a speedy recovery of the large capital outlay.

For a variety of reasons, therefore, private oil investment in the 1970's retreated to countries like the United States, Norway, Alaska and the United Kingdom, where geologically promising areas were known to exist and where the political risk was perceived to be minimal. The extent to which foreign oil investment continued to be concentrated in the developed countries at the very time that Ecuador was seeking investment was shown in a report issued by the Massachusetts Institute of Technology (MIT). This found that almost 80% of oil company exploration expenditure in 1981 had been sunk in the developed countries: over $64 bn, compared with $18 bn in the developing countries. Out of a global total of 20,800 wells drilled in 1981, almost 19,000 were in the developed countries, with 18,300 of these in North America alone, and just 1,800 in the developing countries.

**Oil Company Activity in Latin America**

Ecuador did not escape from the effect of these changes in oil company investment strategy. The one consolation for Ecuadorian officials, however, was that companies did not completely write-off Latin America. Even Peru and Bolivia successfully attracted investment, despite having undertaken expropriations just a few years previously. The Velasco government, for instance, persuaded a number of oil companies to explore in the Amazonia region on the basis of crude-sharing contracts. Interest, however, waned as a result of disappointing drilling results and the US tax amendments in 1975. Although oil companies recognised that 'there's oil in the jungle', few if any companies were
inclined to explore there 'unless the government comes up with much, much more in the way of incentives.'

Nevertheless, Peru's later experiences do highlight how company interest in a marginal exploration play can be revitalised if sufficiently attractive terms are offered. Although some steps were immediately taken to offer companies a more flexible method of payment, the key change occurred with Law 23231 in July 1980. This granted companies a tax credit for reinvestments in exploration and/or development work equivalent to 40-50% of total pre-tax profits. As a result, oil company interest was reawakened and three risk contracts signed in early 1982.

Other countries in the region also secured oil company collaboration in the exploration sector. In Brazil, attempts to lure the foreign private sector back to the country's exploration play on the basis of the 'risk' contract system began in 1975. Over the next 13 years, nearly all of the country's sedimentary basins not already earmarked for Petrobrás were opened up in a succession of bidding rounds and numerous contracts awarded.10 Similarly, during the Videla government in Argentina, a number of companies entered the country following the dismantlement of nationalist policies.11 Companies were also active in Colombia where they operated under association contracts which involved a 50-50 production split.12

Oil Company Perceptions of Ecuador

The shift in company investment strategy, the increased reluctance to invest in countries deemed 'politically difficult', and the intense competition for foreign capital did pose problems for Ecuador. These were not, however, insurmountable, as the continued activity of some companies in Latin America indicated. Ecuador did have some advantages. The exploration results of those companies that had entered other Latin American countries in the 1970's had generally proved disappointing. Of the 17
contracts signed in Bolivia, just two were in force by 1979 and only one company - Occidental - was producing crude. Similarly in Brazil, no oil had been found by the end of 1980.

The Geological Attractiveness of Ecuador

Ecuador also had the advantage of being located in a proven oil province, with company estimates placing the country's total undiscovered oil reserves at the bottom end of the 3 to 15 billion barrel range. Nevertheless, there were 30 other countries in the world, including Brazil and Argentina, which, in terms of oil potential, offered more attractive exploration plays for oil investors.¹³

Ecuador was not therefore a priority investment target for oil companies. This judgement was reinforced by the knowledge that those companies that had followed Texaco-Gulf into the Oriente had, with one exception, all failed to find commercial quantities of oil. Although the rate of success in exploration work in the late 1960's had been one of the highest in the world, averaging around 90%, it had been highly irregular thereafter, falling to an annual average of 35% in the period 1972-79.¹⁴

Table 7.1: The Rate of Success in Exploration Work 1967-79

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<th>Year</th>
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<td>50%</td>
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<tr>
<td>1974</td>
<td>26%</td>
</tr>
<tr>
<td>1975</td>
<td>33%</td>
</tr>
<tr>
<td>1976</td>
<td>-</td>
</tr>
<tr>
<td>1977</td>
<td>40%</td>
</tr>
<tr>
<td>1978</td>
<td>26%</td>
</tr>
<tr>
<td>1979</td>
<td>38%</td>
</tr>
<tr>
<td>1980</td>
<td>100%</td>
</tr>
<tr>
<td>1981</td>
<td>-</td>
</tr>
</tbody>
</table>


Not only had the rate of success been irregular, but the discoveries that had been made in the 1970's and 1980 suggested that any new oil reserves waiting to be found were unlikely to
be situated in large reservoirs. It was likely that they would be distributed in small and medium sized fields, at greater depth and containing heavier forms of crude than that currently being exploited in the Oriente.

The geological attractiveness of Ecuador was further reduced by the knowledge that the Roldós administration had reserved for CEPE (and in 1973, Texaco had reserved for itself) the least risky and thus most prospective areas. While Carvajal was head of CEPE, these referred principally to areas in the Nororiente, the Suroriente, the Santa Elena peninsula and the Gulf of Guayaquil. Foreign risk capital and technology, on the other hand, was to be confined to areas of high risk and cost or to areas requiring highly sophisticated and expensive equipment. As a result of the extensive exploration work that had been undertaken over the preceding 50 years, there were few areas in Ecuador for which seismic and other information did not exist. Without access to some of the more prospective areas, for instance Blocks 15 and 17 in the Suroriente, and the Gulf of Guayaquil, it was unlikely that companies would accept an invitation to explore in the country.15

**The Acquisition Environment**

For a number of reasons, companies did not believe that the economic rewards currently available for investors in Ecuador were sufficiently attractive to justify investment. Particular concern was expressed at the 87.31% tax rate, which compared unfavourably with the levels established in other countries, and the government's policy of maintaining non-market based prices for domestic oil products and deliveries to the refineries.16 There was also a general dissatisfaction with the terms of the contract model on offer.

The Roldós government had initially envisaged that companies would be invited to Ecuador on the basis of the contract of hydrocarbon operations drawn up in 1978 by the military junta.
With the return to civilian rule scheduled for August 1979, there had been no real expectation when this new contract model was introduced that interested companies would enter into serious negotiations until the political complexion of the new government had become clear.

A few months after the Roldós government had taken office and announced its intention to attract foreign oil investment, the International Herald Tribune reported that:

'...a number of foreign oil executives have been in and out of Quito in the past few months, indicating that the government may be drawing some of them back into exploration.'

Such optimistic claims were misplaced. Indeed, in the meetings referred to by the Tribune, the government had been left in no doubt that unless more substantial incentives were offered, and until investors were convinced that the sanctity of contracts would be respected, no investment would be forthcoming.

Although nationalists in Ecuador had severely criticised the new contract form as over-generous, the response of the oil companies was, at best, lukewarm, while the specialist oil magazine 'World Oil' even went so far as to claim in 1978 that:

'the new petroleum law is nothing more than the same old hodge-podge of amendments to Decree 1459. Although this is a very complex document, its meaning is clear. No matter what the Junta and the petroleum minister say, there is a strong feeling within CEPE and in the Ministry that foreign oil companies should be given their walking papers.'

There were a number of elements in the contract model which, when set against the contractual terms offered elsewhere, concerned potential investors. As well as having to invest at least 10% of their net profits in Ecuador, either in their own businesses or those connected with other hydrocarbons activities, companies were required to pay yearly to the state after the
start of the exploitation period an amount 'which shall depend on
the production of the contract area' to fund energy research.
Within six months after the start of operations, companies had to
ensure that at least 95% of labourers, 90% of administrative
staff and 75% of technical staff were native Ecuadorians. Concern
too was expressed at the clause stipulating that a company which
had entered into a contract for the exploration and exploitation
of crude oil had no rights to any natural gas discovered.
Additional contracts for the exploitation of gas could be signed,
though only if the contractor had discovered what the law vaguely
termed as 'commercially exploitable' fields.19

It is possible that the failure of the military junta to
establish competitive contractual terms resulted from its own
political weakness and the continued influence of military
nationalists. Despite its bold talk, the military proved
unwilling to accept the political and psychological risks that
could accompany any sharp break with the country's nationalist
past. According to Weekly Analysis:

'Changes in oil policy which were too drastic
could lead to attacks on the government from
the left and nationalists who felt a sell-out
had taken place. It was therefore necessary
for Semblantes to preserve the present measure
of control over the oil industry and
participation in profits which were the
plusses of the 'nationalistic' policy followed
by his two predecessors.'20

On the other hand, in a number of respects the contract terms
had been substantially liberalised: companies were exempt from
the payment of royalties, surface duties and entrance fees and
were no longer obliged to return equipment, machinery and
installations. Moreover, the new contract decreed that the
contractor would be paid in oil, not cash. It is difficult to
find here any concern about provoking a nationalist 'backlash.'
It is possible, then, that the military junta simply under-
estimated the increasingly competitive environment for foreign
capital and expertise and the resulting need for Ecuador to at
least match the incentives being offered elsewhere. After all, just a few years earlier a number of companies had signed contracts to operate in Ecuador under terms far more onerous than those which were currently on offer.

The Political Risk Factor

While World Oil may have undervalued the contractual changes that had taken place, the tone and content of its comments does highlight the concern among oil companies regarding Ecuador's recent history of acrimonious relations with foreign oil investors. According to a report in the Financial Times, companies claimed that previous governments had been 'too haphazard and carefree' in setting and enforcing the conditions under which companies operated.21

Assessments of the political risks attached to investing in a particular country often vary from company to company. Some companies, for instance, were initially willing to renegotiate their contracts with the Rodriguez Lara, while two - YPF and Northwest - signed contracts in 1975 as most of the remaining companies in Ecuador left the country. Despite these exceptions, a general consensus did emerge that Ecuador was too politically risky to justify investment in what was, in any case, a marginal exploration play. There was, as chapter 2 highlighted, a wealth of evidence on which to base this view. The revision in contract terms, legal squabbles, the conflict between the state and Texaco-Gulf and Gulf's call for its own nationalisation made Ecuador virtually a no-go area for foreign companies. What particularly puzzled potential investors was that, even when the country's nationalist oil policies were being dismantled in a bid to stimulate foreign investment, official treatment of companies operating in the country was at best inconsistent and unreliable, at worst downright antagonistic. Such, in the minds of potential investors, appeared to be the case in respect of the government's treatment of the Northwest company.
The company proved reluctant to implement its work programme. Initially, Northwest claimed that the seismic data was difficult to interpret and, then, that it was finding it difficult to obtain the necessary rigs. A more likely reason for the delay was the ADA consortium's continued claims over the concession area and its threat to initiate legal action against Northwest. There were also strong economic reasons explaining the company's inactivity. The original plan had been for an ammonia and urea plant to be built to process gas from the contract area into fertilizer. However, the subsequent collapse in the world price of fertilizer made the project in Northwest's view unprofitable. The government nevertheless remained firmly committed to using the gas to develop the country's fertilizer industry. In these circumstances, Northwest, claiming that its contract permitted it to cease operations if they became uneconomic, suspended all drilling and exploration work. The dispute continued into late 1979, when CEPE eventually rescinded the contract, assumed all exploitation and drilling rights and took over the company's drilling equipment, machinery and vehicles. Following this decision - taken just a few months after the implementation of reforms to the country's Oil Law - Business Latin America commented that:

'the government's handling of the Northwest dispute is a discouraging reminder to all companies of the contrariness that can sometimes surface in Ecuadorian policy-making, particularly where natural resources are concerned.'

This 'contrariness' was experienced at first hand by one oil major. A company official recounted how, after receiving an encouraging visit from one Oil Minister, a team of officials was sent to Quito at the Minister's request to study in detail the opportunities for investment. From the reception that the team received on its arrival, it was clear that the company was not welcome. The company official concerned was convinced that the Oil Minister had been soundly rebuked on his return to Ecuador, most probably by CEPE, and told that no further talks should take
place. Humiliation of this order was not easily forgotten by the company concerned.

**Improving the Investment Climate for Investors**

It could be expected, therefore, that the government could face major problems in securing foreign oil capital. These problems could, however, be considerably eased by the government offering more geologically attractive areas and offering more attractive economic rewards and contractual terms that were at least as favourable as those existing elsewhere. If the government was serious in its intention to secure foreign investment, then there was no other option available but to significantly improve the investment climate for companies. Equally importantly, Robalino and the government had to convince potential investors that Ecuador was no longer a politically risky country to deal with and that the sanctity of any contract signed would be respected.
CHAPTER 8: THE PROPOSED OIL REFORMS OF 1981

Before turning his attention to the task of bringing foreign companies back into the exploration play, Robalino's first priority was to persuade Texaco to undertake a programme of secondary recovery work. Even if the swift return of foreign oil companies was achieved it was evident, given the time-lags involved in exploration, that the state would remain dependent on the oil revenue generated from the consortium's fields.

The 1980 Agreement with Texaco

Discussions between Robalino and the company began on 3 October. Three weeks later, Texaco was reported to have agreed to undertake secondary recovery and maintenance work. The 36 month programme was expected to increase recoverable reserves by 350m barrels. Why Robalino had more apparent success in obtaining an agreement with Texaco is unclear. His version was that Texaco had been given the option of undertaking investment or selling its 37.5% shareholding to the state, though no independent evidence was found to confirm this. For reasons which were outlined earlier, it seems doubtful that the government would have seriously entertained the idea of expelling Texaco or risk provoking its departure. Given suggestions by Carvajal and nationalists that he was a 'good friend' or 'tool' of the oil multinationals, he may have been anxious to 'prove' otherwise by making such a claim.

Texaco was not averse to reneging on commitments to invest (none of the investment that it had promised to undertake in the 1977 agreement had been carried out), but in this instance the agreement was eventually implemented. Why then the sudden change of heart? There appear to have been three reasons. One relates to the oil price hikes. There was evidence early in 1980 that these had served to renew the companies interest in a number of fields that it had discovered in the early 1970's, but whose development
had not been considered commercial. Under the new market conditions, Texaco was now anxious to undertake development work, particularly in the Cononaco field which was thought to contain 137m barrels. However, since the company had failed to develop these fields within five years of the discovery date, ownership had reverted to the state in line with article 43 of the Oil Law. Despite repeated efforts by the DGH and the Oil Ministry throughout 1980, no legal 'loophole' could be found to transfer ownership of the fields back to Texaco. *

In view of the role played by the level of oil prices in undermining Texaco's previous reluctance to undertake investment, the timing of the agreement at the end of October may, therefore, be significant. Just a few weeks previously, oil prices had received an unexpected boost with the outbreak of the Iran-Iraq war. Despite attempts by Saudi Arabia to compensate for the expected shortfall in supplies by boosting production by 800,000 b/d, fears remained regarding the vulnerability of export supply routes in the Gulf. These fears led consumers to initiate a massive stockpiling programme 'of such magnitude as has not been contemplated in the history of the market..' By December, oil prices had moved beyond $40.

The importance of the new market conditions on Texaco's investment strategy was further reflected by the company's hesitation in implementing the agreed programme when prices began to soften in the first few months of 1981. Nevertheless, the fact that the programme was eventually implemented, and that further work programmes were also carried out even when prices went into virtual free-fall, indicates that non-price factors may also have led to Texaco ending its investment boycott. In this respect, the most crucial factor was that the company's contract expired in June 1992. During the 1970's, Texaco could afford to maintain a boycott on investment, either in the hope of obtaining further improvements to its operating conditions, or until more favourable market conditions emerged. On the other hand, Texaco's own estimates suggested that over 500m worth of reserves could be
extracted using secondary recovery methods. It would be surprising if Texaco was prepared to depart from the country leaving these reserves intact. In these circumstances, it was only a matter of time before Texaco itself dropped its previous reluctance to undertake secondary recovery work and sought to extract as many barrels as possible prior to 1992. The start of secondary recovery work could not be delayed into the late 1980's, since there was a danger that it would not be in the country to reap the fruits of its investment. The most appropriate period would therefore be in the early part of the decade. It seems likely that the sharp rise in oil prices, and the need to ensure that as many barrels as possible were extracted before 1992, encouraged the company to opt for 1981 (when the investment programme was to begin) rather than 1982 or 1983.

Texaco's agreement to undertake secondary recovery is unlikely to have been unconditional. The company would have sought assurances on a number of outstanding issues, for instance domestic oil prices (which were increased in 1981, 1982 and 1983), the price received for each barrel delivered to the refineries (also substantially increased in 1982, 1983 and 1984) and production levels (which were also increased after 1980). Texaco would also have required a guarantee that the proposal for establishing Petroamazonas was removed from the agenda and that no other proposals would emerge which could undermine the company's role as operator. Certainly, little was heard again of Petroamazonas. When asked after the agreement if the joint operating company was to be established, Robalino was reported to be 'non-committal' on the issue. With the progress of time, it became clear that the government had completely abandoned the idea of establishing a joint-operating company or of installing CEPE as operator.

Following his agreement with Texaco, Robalino turned his attention to the issue of foreign oil investment. With the oil companies having voiced their criticisms of the contract of
hydrocarbon operations, the principal task was to draw up new contractual terms. However, even assuming that this could be achieved quickly - the initial deadline was the end of October - it was by no means certain that these would receive either the attention or support of a Congress locked in constant dispute with the Roldós government. A further problem facing Robalino was the 'mood of optimism' generated by Carvajal and the hike in oil prices. The Oil Minister saw it as essential to create an atmosphere of 'crisis' in order to create a political environment more receptive to proposals to reform the country's oil regulations.

The Economy and the External Debt

Robalino was helped in this respect by developments in the domestic and international economy. With the boost in oil prices in the last quarter of the year, CEPE's average oil price for 1980 reached $35.26. This was $12 more than in 1979, and helped crude export revenue to rise by 24% to $781.3m despite the exportable surplus falling by 16% to 33.4m barrels, the lowest recorded level since 1972. The average oil price, however, was still $2.50 pb short of the level on which government revenue projections had been based. With no measures taken to mobilise non-oil income sources, and with non-oil export revenue falling by 10%, the current account deficit rose to $360m, the public sector deficit to $221.7m and the state budget deficit to $93m. To finance these, the government contracted $617.9m worth of external loans, equal to one third of the total debt at the end of the year.

The use of extensive borrowing was to some extent understandable when loans were cheap, but the costs were rising dramatically in 1980. In response to the US government's tight monetary policies, the nominal LIBOR rate topped 14%, while the US prime rate exceeded 15%. Finance available for public investment, already diminished by the explosion in current expenditure, fell further with interest payments on the debt rising from $196.8m to
Total debt-service payments amounted to $789.9m, equivalent to 55% of export revenue. In respect of the state budget, one-fifth of total expenditure was required to service its debt.

The Impact of the November Decrees

CEPE's financial position was seriously undermined during the year, with the implementation of the decrees passed during the last days of the military junta and the imposition of the price ceilings introduced by Congress in November 1979. As table 8.1 shows, high oil prices had brought a dramatic boost to public sector oil income, which increased by 22.6% to $753.7m.

Table 8.1: Oil Income by Source, 1979-80 ($)

<table>
<thead>
<tr>
<th>Source</th>
<th>1979</th>
<th>1980</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEPE's Exports</td>
<td>271.4</td>
<td>333.4</td>
<td>+22.8</td>
</tr>
<tr>
<td>Fuel Oil Exports</td>
<td>89.2</td>
<td>100.2</td>
<td>+12.3</td>
</tr>
<tr>
<td>Income Tax</td>
<td>85.6</td>
<td>81.5</td>
<td>-4.7</td>
</tr>
<tr>
<td>Royalties</td>
<td>157.1</td>
<td>223.8</td>
<td>+42.4</td>
</tr>
<tr>
<td>Overliftings</td>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Superficiary Rights</td>
<td>1.4</td>
<td>1.1</td>
<td>-20.8</td>
</tr>
<tr>
<td>Other</td>
<td>10.5</td>
<td>13.7</td>
<td>+30.5</td>
</tr>
<tr>
<td>Total</td>
<td>619.5</td>
<td>753.7</td>
<td>+21.6</td>
</tr>
</tbody>
</table>


Due to the decrees passed in 1979, the benefits of this increased oil income were accrued almost entirely by the state budget to meet current expenditure programmes. Overall its oil income jumped by 155.6% to $251.4m. The state budget's share of crude export income doubled to 46.1%, its share of fuel oil export income increased from 17.1% to 29.8% and it gained access to one-fifth of royalty income. The councils, meanwhile, received 25% of Texaco's tax payment and a similar proportion of fuel oil export income. The military's share of oil income also increased substantially, by 20.5%, to $164.8m. It received 17.4% of CEPE's crude export income, 22.7% of Texaco's income tax and 39.5% of royalty income. In all, just over one-fifth of the
country's oil income was directed into the coffers of the armed forces.

Aside from CEPE, the main loser of the decrees was BEDE, whose overall percentage share fell from 18.2% to 8.3%, while its actual oil revenue was almost halved from $112.8m to $62m. Projections for 1981 suggested that its oil income would be a mere $42.6m 'and shall dwindle thereafter'. Although INECEL's oil revenue rose by 12.6%, the decision to allocate 21% of royalty income to the state budget cost the company over $20m, equivalent to just over one-third of the company's budget deficit in 1980.

The decrees had a dramatic impact on CEPE's finances. Even though the country's oil income rose in real terms by a fifth, CEPE's public sector oil income fell by 19% from $146.9m to $108.9m. The company's share of fuel oil export income collapsed from 82.5% to 46% while its share of crude export income dropped from 24% to 18.5%. After having received 23.7% of the country's public sector oil income in 1979, CEPE's share by the end of 1980 had slumped to 14.4%.

Table 8.2: Distribution of Oil Income, 1979-80 ($)

<table>
<thead>
<tr>
<th></th>
<th>1979</th>
<th>1980</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Budget</td>
<td>98.4</td>
<td>251.4</td>
<td>+155.5</td>
</tr>
<tr>
<td>JDN</td>
<td>136.7</td>
<td>164.8</td>
<td>+20.5</td>
</tr>
<tr>
<td>BEDE</td>
<td>112.8</td>
<td>62.0</td>
<td>-45.0</td>
</tr>
<tr>
<td>CEPE</td>
<td>146.9</td>
<td>108.9</td>
<td>-25.8</td>
</tr>
<tr>
<td>INECEL</td>
<td>74.9</td>
<td>84.3</td>
<td>+12.6</td>
</tr>
<tr>
<td>Councils</td>
<td>-</td>
<td>44.9</td>
<td>-</td>
</tr>
<tr>
<td>Other</td>
<td>49.8</td>
<td>37.4</td>
<td>-24.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>619.5</td>
<td>753.7</td>
<td>+21.6</td>
</tr>
</tbody>
</table>

CEPE's gross sales income increased during the year by over 20%, but the state's increased 'tax' take meant that net income rose by just 5.9% to $379.6m. Operational costs, on the other hand, rose by 30%; by the end of the year these were consuming 68% of CEPE's net income, with a further 10% of income used to service the company's $161.6m debt. Squeezed by the state on the one hand and rising costs on the other, CEPE's investments in 1980 fell from $60.4m to $56.1m, their lowest level since 1976. At the end of the year, CEPE's budget deficit had reached $35.4m, with CEPE officials forecasting that this would rise to $172.3m in 1981 and then to $224.2m in 1982, pushing the corporation into a state of virtual bankruptcy. Revised estimates were then produced pointing to CEPE having an accumulated budget deficit of between $784m to $897m between 1980-84.

CEPE's Search for External Funding

During the year, CEPE made the first of a number of approaches to the World Bank for loans to fund exploration and development work in the Oriente and along the Santa Elena peninsula. Since extending its energy-lending activities to include upstream activities in 1974, a number of Latin American countries had successfully approached the World Bank for funds. These included Petroperú and the Bolivian state oil company YPFB, which received $32m each for exploration drilling, as well Ecopetrol and Petrobrás. CEPE proved less fortunate, with its request for a loan rejected on the grounds that it had failed to meet the Bank's required policy conditions. A loan would only be considered when a more realistic - that is, higher - domestic pricing structure for gasoline and other oil products had been introduced and when there was clear evidence that the country's spiralling external debt was being brought under control.

The Bank's reluctance to respond positively to CEPE's request also reflected concern that the company's lack of investment was partly, if not largely, due to operational inefficiency. This concern was reinforced by the explosion in the CEPE's operational
costs. In 1980, these had increased to $172.6m, equivalent to 68% of total expenditure, and were the key factor causing investment to fall in real terms by 7%.

Although CEPE officials argued that the rise in costs resulted from the company's work in the Nororiente, World Bank officials pointed to CEPE's highly bureaucratic system of centralised control as the key factor. In a report issued in 1979, the Bank had called for major structural reforms to be introduced which were similar to those proposed by Carvajal. It was essential, the Bank stated:

'to increase the corporation's independence from standard government administrative regulation. While CEPE is probably too important to be given complete budgetary autonomy, the system chosen should allow for rapid implementation of decisions.'

To improve the efficient operation of CEPE, the report continued, the company must be allowed to operate along commercial lines and to be managed by 'technically-competent administrators' rather than 'political appointees'. A loan was therefore conditional on the government implementing major reforms to the corporation's structure and improving its efficiency. Far from improving, however, evidence suggests that the constraints on CEPE's ability to function efficiently actually increased during the first year of the Roldós government.

New Bureaucratic Constraints

With the attention of the political elites concentrated on more pressing political matters, and with the legislative function of Congress remaining in a state of virtual paralysis, no steps had been taken by the government to reform CEPE. Some internal organisational changes had been made by Carvajal which were designed to ensure closer coordination between departments. As a result, Martz claimed, CEPE had been administratively strengthened, with work, responsibility and authority reorganised...
in functional terms, 'while planning took on a coherence of procedures previously foreign to the corporation.' Tinkering with CEPE's internal structure, however, had little measurable impact on CEPE's efficient functioning. Carvajal himself implicitly admitted the irrelevancy of his own reforms a few years later, when he claimed it was 'impossible' to work in CEPE.

Indeed, there are grounds for believing that CEPE's efficiency declined still further with the transition to a civilian government. The principal problem, it appears, lay in the presence of an overbearing system of control in the shape of the Controller-General. By virtue of the 'Ley Organica de la Administracion Financiera de Control' he was required to oversee the use to which public funds are spent. Although this law had been passed in the mid-1970's, the military dominance of CEPE during this period had served to reduce the need (or desire) for a rigid external civilian system of control. The situation changed markedly with the transition to a civilian government, with the Controller-General assuming a central role in the operations of CEPE. As a result, managerial authority was further undermined, the decision-making process slowed to a ponderous crawl and morale among CEPE officials reduced to perhaps the lowest level in the company's history.

At any time, for whatever amount, officials at CEPE were required by the Controller-General to justify payments they had authorised. Even former CEPE officials who had left the company some years previously could be called on to explain decisions that they had taken. As one former official remarked, 'you were assumed to be a thief unless you could prove otherwise.'

While some safeguards were necessary to guard against the misuse of public funds, the system as it stood served to freeze through fear the ability or desire of management to personally take decisions. For those matters that could not be pushed to the bottom of the 'In' tray, it was a case of safety in numbers. When
contracts were to be signed or requisitions for equipment drawn up, it was necessary for a CEPE official to ensure that his signature sat alongside around twenty others. According to one former management official:

'Nobody wants to sign a contract unless they have at least twenty signatures so that they can protect themselves. Even after five years following the signing of the contract the officials of the Controller-General at CEPE can still come and ask you to justify it. If you wish to go by the book it is impossible for you to make any concrete decisions: it would for instance take 6-12 months to obtain drilling equipment for a particular site. Many managers prefer to do nothing rather than to take the risk of being accused of criminal activities like corruption.'

Carvajal claimed that the 'highly damaging' activities of the Controller General created a sense of 'paranoia' among CEPE employees. Newly appointed managers of CEPE, he remarked, are forced to pursue one of two options: either respect to the letter all the legal and bureaucratic rules and therefore paralyse CEPE's work, or 'work for the benefit of the country and CEPE' and ignore these regulations. Force of circumstances often led to the choice of the latter. Faced with a four day deadline, Carvajal took the decision to move a drilling rig from one location to another without waiting to receive the required authorisation from the Controller-General. Some 37 days after the rig had 'illegally' been moved and made operational the authorisation duly arrived.

With CEPE's efficiency and morale already badly undermined by the resignation of over 100 skilled and motivated staff, the activities of the Controller-General served to compound the company's existing problems. Two former officials (both now employed with international oil companies) recalled that their decision to leave CEPE was directly related to their frustration with having to justify every decision they made to people who had little understanding of the complexities of the oil market. One
recalled how he was regularly required to explain why he had sold crude at a lower price in one month than, for instance, six months earlier.\textsuperscript{20}

\textbf{The Gravity of the Oil Crisis}

CEPE's financial problems and the absence of measures to reform its structure served to increase the logic of drawing in private investment. To facilitate this shift, Robalino strove to paint a bleak picture of Ecuador's oil situation and the capacity of CEPE to make any significant contribution to improving it. In contrast to the praise previously heaped on CEPE, Robalino emphasised that the company could only carry out a 'small' part of the exploration work required. Some successes had occurred, but these would only have a minor impact on reserves and production, since the traditional fields in the Oriente were already showing signs of exhaustion. There was also a danger that, in the absence of more substantial and sustained investment, these discoveries would be developed slowly at a rate sufficient only to meet growing domestic demand and would therefore have no measurable impact on export levels.

The change in mood was illustrated by a report from the Comisión Asesora de Política Petrolera (CAPP). This claimed that Ecuador's proven, recoverable reserves at the end of 1980 were a mere 767.1m barrels. This was less than half that claimed by Texaco and significantly lower even than the DGH's own estimates. The situation was not expected to improve over the next six years, with CAPP suggesting that CEPE could, at best, incorporate just 150m barrels into production. Assuming an annual growth rate in domestic consumption of 7\% and a production rate equivalent to 10\% of reserves, Ecuador would become a net oil importer by the middle of 1986. CAPP felt that even this scenario (considered the most pessimistic yet most realistic), was itself over-optimistic since 17 of the 21 fields waiting to be incorporated belonged to CEPE. CAPP went so far as to question whether CEPE had the
financial and administrative resources to incorporate all or a significant proportion of these fields between 1980-87.21

While emphasising that the oil situation was 'desperate' rather than 'potentially optimistic', concrete steps were taken by Robalino to revitalise private sector investment in exploration. The following section outlines the various options that were considered in the process leading up to Robalino's proposals to reform the 1978 Oil Law. Despite his determination to secure foreign participation in exploration, it was surprising how little, if any, attention was given to the terms being offered to companies elsewhere.

**Government Proposals to Reform the 1978 Oil Law**

There were three principal forms of contract under which foreign oil companies could operate in Ecuador: the contract of association, the joint venture contract, and the contract of hydrocarbon operations. None of these were considered appropriate, either for constitutional or economic reasons, by the government. Under the association and joint venture contracts, the contractor exploited, along with its associate CEPE, a non-renewable resource and was entitled to receive an agreed share of any oil produced from the contract area. This contract form was therefore deemed to contravene article 46 of the Constitution which reserved the 'economic exploitation of non-renewable natural resources' exclusively to the state. It was further considered that, since CEPE contributed its rights over the land, wells, and hydrocarbons in the contract area, article 1 of the Oil Law was also contravened. This stated that hydrocarbon fields and all the substances which they contain belong 'to the inalienable and imprescriptable patrimony of the State'.

There were a number of economic aspects of the association and joint venture contracts which the government found to be either irrelevant or unacceptable. The payment of surface duties and entrance fees, for instance, were considered to be an archaic
left-over from the 'concession' era and of little economic value to the state. Significantly, the key economic objection was that both contracts allowed the contractor to receive oil, not only as part of his legitimate share in production, but also as reimbursement for his investments. 22

The contract of hydrocarbon operations overcame many of the constitutional difficulties, since the contractor was simply an operator with no rights over the land, wells or hydrocarbons in the contract area. Although the contractor had access to the oil produced, this was in the form of a payment and was not based on a concept of 'participation' that implied that the state would only exercise partial ownership of the oil discovered. Nevertheless, the government was wholly opposed to placing CEPE under any obligation to deliver crude to the contractor, either as reimbursement for his investments or payment for his services. To do so would be 'damaging' to the national interest, in view of the high level of oil prices and the expanding domestic oil market. 23

The Proposed Service Contract

Having rejected all existing contract forms, Robalino drew up a new type of risk contract. Under the 'service contract', the contractor would undertake at his own risk and expense and at the service of CEPE, the exploration and exploitation of hydrocarbons. Only in the event of commercially exploitable hydrocarbons being found would the contractor be reimbursed for his investments and costs and receive a service fee plus a 'reasonable' profit. Crucially, the government decided that both payments would only be made in cash, not oil. The proposed contract did, however, allow the contractor a preferential right
to buy all or part of the exportable surplus. This was, in the government's view, a key incentive for foreign oil companies:

'since oil extracting companies are normally also involved in marketing and refining for which they need to rely on secure supplies of crude oil.'

The contractor would not be liable to the payment of royalties, superficiary rights, entry fees, or surface duties. However, he would be liable to an annual payment of S/600,000 (equivalent to $13,453 in 1980) during the exploration period and S/1,500,000 ($33,632) during the exploitation period, for the use of water and natural materials in the contract area. The contractor would also be required to pay an annual allowance to the state to finance oil research work.

Oil Tax Reform Proposals

A new method of calculating company taxation was also proposed. Under decree 2059 of 19 December 1977, oil companies had been subject to a fixed income tax rate of 87.31%. However, the Roldós government took the view that, since any wells found in the Oriente were likely to be small or medium sized, it would be 'very difficult' to declare the commerciality of these new fields if income tax continued to be fixed at a uniform rate. In addition, since a company would merely be operating on behalf of CEPE with no rights over the oil extracted, it would be wrong to maintain the 87.31% tax since this included export taxes, which assumed that the contractor had some ownership to the oil produced. The government proposed a new income tax system, with the rate varying in accordance with the volume of recoverable reserves. The tax level was to range from 48% for fields containing up to 100m barrels, up to a maximum of 89% for fields with over 1,500m barrels of reserves.
The government appeared confident that the new contract contained sufficient incentives to attract companies to Ecuador. According to Robalino, it:

'would provide greater flexibility within the country's legal framework for foreign companies with a proven record to finance and conduct exploration onshore and off. US firms are going to learn that Ecuador is no longer a difficult country to deal with. What matters to foreign oil companies is net profits and we shall be competitive on that score.'

At the time, Oil Ministry officials claimed that the rate of return would be between 20 to 30%, 'comparable with the best of similar operations in other parts of the world.'

When the reform proposals were sent to Congress on 9 April, they were accompanied by the government's latest oil reserve estimates. Not for the first time in Ecuadorian oil history, the level of oil reserves was manipulated for political ends. The government was now claiming that reserves had fallen by 43% between 1972 and 1980, from 1.5 bn barrels to just 650m and that Ecuador would be importing oil within six years. By 1987, Ecuador would have to import, at international prices, between 40-50,000 b/d of oil derivatives to cover domestic demand, at a cost to the state of $770m on the basis of existing (1981) prices.

The Oil Minister also emphasised again that CEPE lacked the financial and technical capacity to undertake anything more than a fraction of the required exploration work, pointing out that a minimum of $25m would be required to explore in an onshore block and $50m in an offshore block.

If Robalino had wanted the proposals to become law as swiftly as possible, his timing could not have been worse. Within one month, the country was mourning the death of Roldós, while the private sector was mobilising to undermine the authority of the new president and 'closet Marxist' Osvaldo Hurtado. For the rest of 1981, the political climate ensured that little that required
the approval of Congress had much chance of being debated, much less implemented. Contrary to the claims of some observers, therefore, the delays that were to take place in revising the country's oil regulations did not result from an 'increasingly nationalistic' Congress.30 Indeed, when Robalino's proposals were eventually the subject of debate they were rejected for not being sufficiently attractive to potential investors.

The 'Convergencia Democrática'

While the bitterness that had surrounded relations between Roldós and Congress had largely dissipated when Bucaram failed to be elected as president of Congress for the 1980-81 session, the process of government remained in a virtual state of paralysis. This resulted not only from Roldós' inability to forge a stable pro-government majority, but from the constant political maneuverings of groups on the centre-left, most notably Democracia Popular and Izquierda Democrática. Faced with continued pressure from the former for more ministerial positions, another major cabinet reshuffle was ordered just a few weeks after Robalino's reforms were presented to Congress. On 16 May, Robalino was transferred to the Finance Ministry and replaced by his under-secretary at the Oil Ministry, Eduardo Ortega Gómez, who was closely linked to Democracia Popular.

The leader of Izquierda Democrática, Rodrigo Borja, had continued to oppose any explicit involvement with the government. However, some senior ID leaders, notably Raúl Baca Carbo, believed that the chronic paralysis of Congress threatened the future of democracy itself and were pressing for closer cooperation with the government. This more 'collaborationist' stance was to prevail in the crisis atmosphere that followed Roldós' death and the installation of Hurtado as president.
The response of the private sector to developments in May verged on near panic, with many businessmen convinced that Hurtado was:

'some sort of Christian Communist, secretly bent upon the destruction of private enterprise and committed to irresponsible social spending.'

This view was reinforced when Hurtado successfully constructed a pro-government majority composed of the DP, ID, Roldósismo pericidistas and the PD. The 'Convergencia Democrática' provided the opportunity to undertake a number of reforms. In June, tax reform returned onto the political agenda. Claiming that only 19% (132,307) of the country's total tax liable population had paid income tax in 1980, Hurtado stated that steps would be taken against those found guilty of tax evasion. Robalino later announced that legal action was being taken against 4,300 tax evaders and that a bill was before Congress imposing new taxes on the middle and upper class to finance public investment projects. The Agriculture Minister, meanwhile, proclaimed that a new agrarian code was being elaborated to change the structure of land tenancy. To add to the business community's discomfort, the government announced that import tariffs on 500 items.

The response of the private sector was predictable. With 'reform' back on the agenda, the Chamber of Industry launched a major publicity campaign 'without precedent' against a 'socialistic' government which was seeking to 'eradicate' free enterprise and private property. Within Congress, the offensive was led by the standard bearer of the business community, León Febres Cordero, who called on the Minister of Government, Carlos Feraud, to appear before Congress on 10 September. He had, according to Febres Cordero, committed legal 'irregularities' when purchasing Christmas gifts for the families of policemen.

Feraud had never made any secret of the fact that short-cuts had been taken to ensure swift delivery of the gifts at a time when the police force was threatening to go on strike. Nevertheless,
Febres Cordero successfully turned a minor scandal into a 'cause celebre' which forced the Minister to resign. This was due largely to the fact that, despite its reformist rhetoric, the 'Convergencia':

'could not in the end overcome the fundamental differences between its members and the political imperatives to which they responded before whichever ideological consideration or extra-party programme.'\textsuperscript{36}

The fragility of the alliance had been evident as early as June when the PCD block, without the backing of Hurtado's DP party or Izquierda Democratica, mustered sufficient support to elect Roldós' brother León to the vice-presidency. Strained from the outset, relations between the president and vice-president were later to collapse altogether, when Hurtado suggested publicly that Jaime Roldós' greatest fault had been his tendency to appoint friends and relatives to jobs for which they were not competent. Roldós subsequently counter-charged that Hurtado had committed 'treason', by decorating Peruvian officers and presenting a book to President Belaunde just one year after the border conflict between the two countries. This attempt to embarrass Hurtado, however, backfired:

'By focusing on the award of Ecuadorian decorations of the military attachés in Quito, he [Roldós] impugned the honour, not so much of the President, but of the Armed Forces, which were responsible for the awards. This had the effect of pushing the President and the Armed Forces closer together.'\textsuperscript{36}

By the end of January 1982, the PCD had withdrawn from the government, Roldós excluded from Cabinet meetings and his role as head of CONADE 'reduced to nothing'.\textsuperscript{37}

It was, however, Izquierda Democratica which precipitated the collapse of the 'Convergencia'. From the outset, the party had stressed that its participation did not signify unqualified support for the government. With its eyes still firmly set on
the 1984 Presidential elections, it sought to avoid too close an association with a government facing mounting economic problems. As if to emphasise the party's independence, 'idistas' Arturo Córdova and Rodrigo Borja announced their intention in August to call the Minister of Social Welfare, Alfredo Mancero, before Congress for questioning. A month later, when Feraud was called before Congress, the ID was 'happy enough' to join in the sniping. The collapse of the Convergencia and the departure of Feraud became complete when ID placed the full weight of its 12 votes behind those of the opposition.

Although Izquierda Democratica maintained its independence and refused to accept ministerial posts, the party's influence in the policy-making process became increasingly significant. When Robalino had submitted his proposals to Congress in April, these had been passed to one of parliament's Permanent Commissions. Composed of representatives of different parties, their primary function was to scrutinise executive proposals and - if necessary - revise them before passing them to Congress for approval. This had apparently been done in respect of Robalino's proposals, though when Congress reconvened in August, no opportunity had arisen to debate the proposals. They therefore collected dust until October, when the chairmanship of the 'Comisión Legislativa de lo Económico, Agrario, Industrial y Comercial', passed to the idista Hugo Caicedo.

Caicedo took the unusual step of inviting a wide spectrum of organisations and individuals to submit their views on: the crisis facing the country's oil industry; the role that CEPE should play in solving it; the necessity or otherwise of securing foreign collaboration; and the oil reform proposals submitted by Robalino. In response to those critical of this decision, Caicedo argued that the legal, political and economic implications of the government's proposals were of such importance that discussion of the issue could not, as in the past, be confined to a small clique of government officials and oil experts. The behavior of Congress over the preceding two years may also have convinced
Caicedo that a proper debate on the oil reforms could only be undertaken outside of Congress. Undoubtedly, the 'Consulta Nacional de Hidrocarburos' was an ideal vehicle for promoting not only Izquierda Democrática but the political ambitions of Hugo Caicedo, a man whose knowledge of the oil industry was derived almost entirely from the former CEPE official, Wilson Pástor. Nevertheless, the 'depoliticisation' of the oil issue and the emergence of a 'national consensus' on the issue of foreign oil investment were clearly essential in view of past company concern over Ecuador's political 'reliability'. As Hugo Caicedo rightly recognised, the perceived political risk of investing in Ecuador could be substantially minimised if such a consensus could clearly be shown to exist:

'Foreign companies, particularly petroleum companies, are not going to invest in a country where public opinion and the main economic, political and social groups and the government present an image of instability and division. Events in the last decade have shown us that... companies will not invest in circumstances where the rules of the game may change overnight.'
CHAPTER 9: CONSULTA NACIONAL DE HIDROCARBUROS

When the debate was initiated at the end of 1981, the country's economic situation was on the verge of crisis as a result of the continuing recession in the industrialised countries, trends in the world oil market and US monetary and fiscal policy. Before analysing the responses to the 'consulta nacional', the impact of these developments on the twin pillars of the economy - terms of trade and foreign loans - will briefly be assessed.

Non-Oil Exports

In response to the downturn in world trade and the rapid appreciation of the US dollar, world commodity prices during 1981 slumped by 15.5% after increasing by 13.4% in the preceding year. In Ecuador, the unitary price of banana exports fell by 4%, coffee by 22.7%, granual coffee by 27.4% and processed coffee by 25.3%. With no steps having been taken to revitalise the agricultural sector, through land reform and other measures essential to improve productivity, the sharp deterioration in the terms of trade was compounded by lower export volumes in the case of bananas (-5.2%), and processed cacao (-21.3%). By the years end, the country's non-oil export revenue had fallen by 22.1%.

Trends in the World Oil Market in 1981

The situation in respect of oil prices was little better, with CEPE's average monthly sales price sliding from $40.40 in January to just $32.16 in October. Prices were being squeezed by pressures on both the demand and supply side. On the one hand, the deepening recession in the OECD countries was combining with oil substitution measures and the abolition of price controls in the United States to reduce demand from the main oil-consuming nations. By the last quarter of the year, OECD oil consumption and oil imports had dropped to a level 2m b/d lower than in the
same quarter twelve months earlier. Oil supplies, on the other hand, remained in plentiful supply partly as a result of increased production from non-OPEC sources and partly as a result of the stock manipulation activities of the IEA member states.

OPEC proved unable to protect the interests of Ecuador, with the organisation bitterly divided on how it should respond to market developments. Saudi Arabia continued to pump oil in excess of market needs in order to pressurise OPEC into reaching an agreement on a long-term price and production strategy. When agreements were reached, they were either never implemented or were ineffective. In June, for instance, OPEC decided to reduce output by 10% to maintain the Marker crude price at a ceiling of $36, with a maximum OPEC price of $41 until the end of the year. However, this only had a marginal impact on prices since both Iran and Iraq were exempt from the cutback. In addition, the output reduction calculation had been based on the planned production levels of individual countries for the first half of the year rather than on actual current levels, which in several cases were already substantially below target.

It was not until October that OPEC attempted to regain control of a market that was becoming increasingly dominated by the stock manipulation activities of oil consumers and the price cutting activities of non-OPEC producers. A unified pricing structure was agreed, with the Marker crude reduced to $34. An agreement was also reached on a set of value differentials for the pricing of all other OPEC crudes, in accordance with their respective qualities and geographical locations. Saudi Arabia, meanwhile, cut output to 8.5m b/d, warning that this could either be reduced to defend the new pricing structure against downward market pressures or raised to counter any fresh attempts by other OPEC countries to raise prices above their agreed levels.

The agreement helped push the price of Oriente crude back to around $34.50 for the remainder of the year, close to the
average for the year as a whole. Although prices were lower than in 1980, crude export earnings managed to increase as a result of higher export volume. This reflected a slight fall in the amount of crude required for the domestic market and an increase in output from 74.8m to 76.8m. The boost in production was possible due to the 2m barrels produced by the Yuca field in its first full year and to increased output from the Sacha field. Crude exports (including royalties but excluding compensation exports) rose to 38.5m compared to 33.4m in 1980, while the value of the country's total oil exports (both crude and fuel oil) reached $882.7m, unchanged from 1980.

**Domestic Politics and the External Debt**

With total export revenue falling in real terms and imports continuing to rise, the current account deficit rose during the year from $360m to $512.2m, equivalent to 7.9% of GDP. With oil prices a full $3.50 lower than the price on which government revenues for the year had been based, the public sector deficit rose to $290.8m, equivalent to 4.1% of GDP, while the state budget deficit jumped from $98.2m to $344.3m, equivalent to 4.3% of GDP. To help finance these deficits, the government drew heavily on the country's international reserves. Although these provided around $153.3m, the strategy left the Central Bank at the end of the year with reserves that barely covered two months of imports. In these circumstances, the government undertook further, substantial borrowing on the international money markets. In this year alone $767m worth of new loans were contracted: by the end of the years the public external debt had reached $2.2 bn.

The substantial new debts contracted during 1981 - and since August 1979 generally - did not simply reflect the declining revenue-generating potential of the country's main exports. They were a direct consequence of the government's inability to forge a sufficiently cohesive majority to enact measures to reduce the negative impact of the deteriorating external situation on the
economy. Confronted by a Congress in which he had no natural majority and under mounting political pressure from the business sector, Hurtado sought to avoid political confrontation by contracting loans to cover the current account, public sector and state budget deficits.

This strategy brought some degree of political peace and flexibility for the government. However, the steadily increasing cost of borrowing increased still further with the election to office in November of a Reagan government committed to sweeping tax reductions, increased military spending, and a strong dollar. Fearing that if it accommodated the predicted sharp increase in the fiscal deficit with any expansionary monetary policy, the Federal Reserve Board chose to counter loose fiscal policy with a further tightening of monetary policy. While this helped to reduce US inflation from 12.9% in 1980 to 10.5%, this strategy sent interest rates spiralling. In 1981, the prime rate increased from 15.3% to 18.9%, while LIBOR rose from 14% to 16.8%. More disturbing, was the dramatic rise in the level of real interest rates: in the case of the prime Rate they rose from 1.8% to 8.5%, while in the case of LIBOR the rate increased from 0.6% to 6.4%.

As a result of US monetary and fiscal policy, interest payments on Ecuador's external debt rose in real terms by 12% in 1981 to $319.8 million. The country's total debt-servicing payments, meanwhile rose from $789.8 million to $1.1 billion, equivalent to 71% of the country's export revenue. A further, related problem facing Ecuador was the increasingly short-term nature of the country's external debt. By the end of the year, over half of the total debt contracted with commercial banks had a maturity of less than 12 months, while a further $188 million was payable within two to three years. The link between the service cost of a loan and the income stream from the investment it had financed had thus been broken: new loans were now being obtained, not for investment purposes, but finance the service cost of short-term loans.
Declining oil and non-oil export prices and the rising level of the country's debt-service payments were to emerge as major factors in moulding the views of those who participated in the 'consulta nacional'. Another important factor was the rapid deterioration in CEPE's financial situation.

**CEPE's Finances in 1981**

During 1981, the amount of oil income transferred to the public sector rose from $753.8m to $813.6m. This was partly because of the 'normalisation' of Texaco's exports but it was primarily due to the hike in domestic oil prices earlier in the year. Crude export income, however, slumped by 29%, despite the increase in crude export volume, from $333.4m to $236.9m. This affected all participants, none more so than CEPE, which saw its income from this source crash from $61.5m to $29.7m. Revenue from fuel oil exports also fell, by just 4% though that was sufficient to reduce CEPE's income by over $10m. The state budget, in contrast, more then doubled its income from this source by taking over the share that had previously been allocated to the municipal and provincial councils. In 1979, CEPE had received 82.5% of fuel oil export revenue and the state budget 17.1%; by 1981 CEPE's share had fallen to 36.6% while the state budget's share had more than trebled to 63.4%.

The rise in domestic oil prices in February 1981 generated an additional $219.9m for the public sector. The decision had been taken in December 1979 that income from this source would be transferred to the state budget. There was no indication, though, on whether this would be its final destination or whether it would be subsequently redistributed. It was not until March 1980 that precise details became available. According to Ministerial Accord 054, the government stipulated that CEPE would be entitled to a maximum of $3000m. The balance remaining was then to be distributed to: the JDN (33.9%), the Ministry of Agriculture and Fishing (33.9%), 'frontier' zones and marginal urban areas (16.95%), the Ministry of Public Education, in order to...
subsidise student transport (5.09%), the Ministry of Health (5.08%) and state enterprises affected by the price increase (5.08%).

The price hikes in 1981 brought CEPE an additional $53.3m. This was the primary reason for the 16.3% increase in CEPE's oil income, since its income from crude and fuel oil exports fell by 51.7% and 23.4% respectively. Without this new income source, CEPE's oil revenue for 1981 would have collapsed and pushed its deficit well over the eventual end of year figure of $37.4m, equivalent to 0.5% of GDP. As a result of government decrees, $21.3m worth of unpaid bills owed by INECEL and other electricity companies and a decline in domestic oil demand, CEPE's overall income fell in real terms by 3.7% to $365.3m. Expenditure on the other hand rose by 21.7%. Although investment increased by 28.6%, operational costs rose by 20%, equivalent to 58% of total expenditure. The servicing of the company's debts increased by 13% to $28.2m, equivalent to 9% of total expenditure.

The external debt and CEPE's financial situation were, in the minds of those who participated in the 'consulta nacional', two of the key factors that made the participation of foreign oil capital essential. There were, however, other factors, as the following analysis of responses will highlight.

The Level of Oil Reserves in Ecuador

Whether Ecuador needed foreign oil investment depended partly on the extent of the crisis confronting not only the economy, but the oil sector itself. There was a general consensus that the methodology used by Robalino to arrive at an oil reserve level of 650m barrels was highly suspect. Having assumed that reserves in 1972 stood at 1.5 bn, the government had then deducted for each of the following 8 years an average annual production rate of 75m barrels, in other words 600m barrels. That would have left 900m barrels, but the government - on the basis of 'new information'
on the wells currently under exploitation' - deducted a further 250m barrels, to leave just 650m at the end of 31 December 1980. This seems rather odd, since the Oil Ministry had fixed a production rate of around 80m barrels, which on the basis of 650m barrels of reserves would have meant that within 8 years the country's reserves would have been completely depleted.

There were other indications which suggest that the government was being less than honest. Despite the availability of precise data, it managed to 'lose' 39.2m barrels of reserves. Average daily production between 1973-80 was 192,350 not 200,000 barrels and annual production averaged 70m, not 75m, barrels. More seriously, officials at CEPE confessed that they knew nothing of the 'new information' that, at a stroke, had reduced reserves by 250m to 650m barrels.12

Closer inspection of the government's figures reveal that account was only taken of oil reserves discovered by Texaco-Gulf in the years up to 1972. No consideration was given to the reserves that could be obtained through secondary recovery in the consortium's fields, which Robalino himself had claimed would amount to 450m barrels, or to the reserves contained in the consortium's new fields. These were estimated at the time to be around 100-200m barrels. The government also excluded the reserves in CEPE's new fields in the Nororiente, which were estimated to be 120m barrels. In reality, therefore, the level of recoverable reserves in Ecuador was nearer 1.5 bn barrels, almost twice that claimed by the government.

Some participants, conscious of the way in which the level of reserves have been consistently manipulated for political purposes, remained sceptical of the government's projections. The former head of CEPE, José Carvajal, repeated his accusation
that the Oil Ministry was deliberately exaggerating the country's energy problems, while the University Commission claimed that:

"the crisis and collapse that the government predicts in its document are the same that were announced in 1975, 1976 and in 1978....Time has passed and these situations have not occurred."

These were very much minority viewpoints. Although there were disagreements over the size of the country's oil reserves, and the precise growth rate in domestic oil consumption, there was a clear consensus among political parties of the right, centre and non-Marxist Left: unless an extensive search for new oil reserves was carried out and measures taken to slow down the rate of growth in domestic oil consumption, Ecuador faced the prospect of becoming a net oil importer by the mid-1980's.

The Challenge Facing the Oil Sector

According to the College of Geological Engineers, even with the incorporation of CEPE's new fields in the Nororiente and the implementation of secondary recovery work, the country's reserve/production ratio would reach 'critical levels' between 1985-90. This view was echoed by Wilson Pastor, who claimed that unless substantial quantities of new oil reserves were discovered, the average level of production would fall from 240,000 b/d in 1981-85 to 220,000 b/d in 1986-90. With domestic demand forecast to rise from 110,000 b/d to 170,000 b/d, the amount of production available for export would fall from 130,000 b/d in 1981-86 to 50,000 b/d in 1986-90.

To simply maintain the volume of exports at 130,000 b/d - which then represented around 50% of total output - production would have to be increased by 120,000 b/d to 340,000 b/d. For this to be achieved, at least 700m barrels of new oil reserves needed to be found between 1981-86. Based on the current cost of discovering and developing new deposits in CEPE's Nororiente
fields, the total minimum investment required was placed at between $409m to $613m. 17

CEPE: a Viable Alternative to Foreign Investment?

Assessments on the ability of CEPE to undertake this task alone reflected the scale of the crisis, the high cost involved, and the company's technical and financial capacity. Izquierda Democratica, like other participants, believed that:

'in view of the financial situation of the country and CEPE in particular, and given the large sums of investment required for an extensive exploration campaign one can conclude that the country does not have the capacity to undertake said campaign alone.'18

CEPE was already overburdened, both financially and administratively. It's priority projects included exploration work in the Nororiente ($71.6m); the development of gas fields in the Gulf ($148m - $204m); programmes of secondary recovery ($12.8m); exploration work in the Suroriente ($153.4m); drilling in the precretacic, where each exploratory well was estimated to cost $4.1m; and the construction of the Atahualpa Refinery ($434.5m.) 19 A totally domestic solution to the country's oil problems was, therefore, inconceivable:

'CEPE can support a third of the $511m worth of investment needed between now and 1986. It would be illusionary to believe that CEPE can, by itself, start the exploration of the 14m hectares of potential hydrocarbon areas which the country possesses. In terms of the investment needed between now and 1986, the challenge the country must immediately confront is this: more than $1,000m [in nominal dollar terms].'20

The Cost of Exploration

It seems clear, however, that the investment figures cited by Pástor under-estimated the investment required since this
estimate had been based on the cost of exploring and producing oil in CEPE's Nororiente fields. At that time, these were considered to be much lower than in other potential oil-bearing areas. At the start of 1981, drilling costs in CEPE's Nororiente fields amounted to $1.5m for an exploration well and $1m for a development well, while production costs were initially estimated to be $5 per barrel.²¹ A more realistic assessment of the amount of investment required would have to assume that production costs would increase since new oil discoveries were likely to be found at greater depths, onshore and offshore, and far from an existing infrastructure.

More specifically, the search for hydrocarbons in Ecuador was expected to be carried out at depths of between 4,500-6,000 metres, both on-shore in the Oriente and in the Coastal areas of Manabi, and offshore in the Gulf of Guayaquil. Oil reserves in these areas were expected to contain denser crude, of between 12-18 API, compared to the lighter crude of 29 - 30 API that Ecuador had been producing since 1972. The estimated cost of drilling an on-shore exploratory well to a depth of 16-18,000 feet in, for instance, Manabi was around $8m, with between $3m and $7m required for a development well. In the Gulf of Guayaquil, the estimated cost was even higher, at $10-$12m to depths of 16-18,000 feet and $4-6m to depths of 10-12,000 feet.²²

Large sums of investment were also required to exploit the heavy crude deposits at Pungarayacu close to the Tena field. This was thought to contain around 10,000 m barrels of heavy crude. As the National Polytechnic School pointed out, although there was no geological risk involved and drilling costs were similar to those of the Oriente, the high extraction costs and the specialised equipment required meant that foreign assistance was essential:

'Because of the volume of investment required to facilitate commercial exploitation of these deposits foreign financial and technological investment will have to be attracted ...even though we are dealing with investments that involve no geological risk.'²³
Other potential hydrocarbon areas that required investment (though their successful exploitation was not expected to radically change the country’s oil situation) included the gas deposits in the Gulf, and areas in the Nororiente, Centroriente and the Suroriente region close to the Peruvian side of the border.

**The Need for Foreign Expertise**

The cost involved in exploring and developing new oil-zones was not the only factor that necessitated extensive foreign collaboration. A number of respondents argued that even if CEPE had sufficient funds, foreign collaboration was still required since CEPE lacked the necessary technical expertise and trained personnel to undertake work in these areas:

> 'the oil reality that the country now confronts in respect of the new sub-soil zones that must be explored both now and in the medium term require technologies of which CEPE has not had experience: exploration in the sea, the extraction of heavy crude and the exploitation of reserves using secondary recovery techniques.'

This argument was regarded as spurious by Marxist groups. While accepting that CEPE had neither the technology or the necessary technological expertise, these groups maintained that CEPE could simply contract-out the necessary exploration and drilling work to specialist service companies. This was, after all, the usual procedure followed by private oil companies. As one oil official, explained:

> 'Each phase of exploration requires the assistance of outside contractors. We don't do seismic or drilling ourselves...(and) when drilling has taken place the oil company needs the services of contractors to carry out the electric logging of the well to see if any oil has been found. If oil is believed to have been found another contractor is required to test the well for the quantity and quality of the oil.'
The fact that CEPE itself did not have the necessary technology or expertise was not therefore regarded by some as a justification for the entry of new foreign oil companies or, for that matter, the continued presence of Texaco. The assumption underlying this argument, namely that technical expertise is relatively unimportant, has generally been regarded as, at best, misleading:

'the overall planning of a project involves contracting the right functions to the right people and coordinating a number of stages (making sure that all necessary inputs arrive in time, that drilling sites are selected when drilling rigs become available, that expertise is quickly on hand when there is a mechanical breakdown etc) in a way that requires a high level of managerial and technical talent.'

Conservative groups and Texaco had consistently argued that CEPE lacked the necessary managerial, technical expertise and administrative capacity to supervise efficiently work subcontracted out to specialist oil companies. This view was also echoed by Izquierda Democratica, which forcefully rejected the arguments of the nationalists:

'The argument that with financial resources CEPE could sub-contract every type of technology ignores the fact that in a business development of this sort a high level of experience is needed to ensure efficient control over the subcontraction of the technologies.'

The Nature of Oil Exploration

There was a general acceptance among many that private oil companies were better equipped to tackle the expensive and risky task of discovering reserves. This was not only because of their managerial and technical expertise but because, by operating in
different parts of the world, failures in some projects could be compensated by successes in others. As one leading oil expert pointed out:

'Even if Ecuador had the financial resources to carry out its exploration programme, the risk would be fairly high and costly for the country....It would not be worth taking it on when there is a much more advantageous alternative if we accept the collaboration of foreign risk capital.28

The high risks and costs that could be involved were to be graphically illustrated in 1982 when, CEPE suspended exploration in the Gulf of Guayaquil. Over $18m was invested by CEPE in the first well, which failed to find commercial quantities of oil. Similar results were obtained from a second and third well, both of which consumed over $30m worth of investment. Together with the cost of hiring a rig from the Mexican firm Permago, the total amount of finance involved in CEPE's failed offshore drilling venture exceeded $90m.29 Such an expensive failure inflicted serious damage on CEPE's credibility and the policy that allowed it to undertake risky exploration ventures, particularly at a time when the country was in the midst of a mounting liquidity crisis.

The Future Role of Foreign Oil Companies

While there was a consensus on the need to attract foreign oil investment, differences emerged on how much foreign collaboration should be sought. While conservatives demanded the virtual 'privatisation' of exploration work, groups on the centre and centre-left attached conditions to the involvement of oil companies. Apart from stressing the need to ensure that the 'national interest' was safeguarded, there was a reassertion of the policy laid down in the National Development Plan. This had stated that foreign oil participation should be limited to zones of high risk and high cost and that it should merely
complement, and not replace, CEPE's own exploration work. In the view of Democracia Popular:

'Exploration work designed to increase our reserves corresponds principally to CEPE...In a complementary form this must be reinforced with the participation of foreign companies, both state and private.'

This view was also shared by Izquierda Democratica, which also stressed the need to ensure that a diverse range of foreign companies were invited to explore for oil, in terms of geographic origin and type of capital (private and public). Priority should be given to state oil companies, from Latin America and other friendly countries including members of OPEC. It was essential, in addition, to ensure that the political authority of the state was not undermined by the return of the oil multinationals. Any return had to be gradual and controlled:

'An uncontrolled return to the country of some of the most powerful oil companies in the world could have dangerous political implications for Ecuador. As in the past these companies will inevitably seek to defend their own interests by using their economic power to influence developments in the political sector....If the most powerful and well-known companies enter Ecuador simultaneously, it is likely that they will unleash political and economic pressures that are beyond the control of the State.'

To protect the interests of the state, it was essential to ensure that steps were taken to strengthen CEPE, prior to the return of foreign oil companies.

Measures to Restructure and Capitalise CEPE

Administrative reforms were regarded as essential to transform CEPE. It was necessary, Izquierda Democratica argued, to provide CEPE with greater autonomy, insulate it from political interference and allow it to develop along the lines of a normal
business concern. Political concerns were also in the minds of some of those who sought major reforms to CEPE:

'The proponents of 'neo-liberalism' have not and will not cease from claiming that when an economic sector is in the hands of the state it becomes inefficient...This is not so...[But]...if CEPE in the short term is not transformed into a proper company the forces opposed to its existence will end up winning the ideological and political battle, dismantling its activities into various private companies.'

Although the necessity of ensuring that CEPE had adequate financial resources was generally recognised, few participants offered practical suggestions on how this could be achieved. Of those that did, each stressed the need for legislative changes to ensure that in those areas exclusively under its control CEPE-like foreign oil companies - should be reimbursed for its investments and costs and receive a reasonable profit. The establishment of a fund to finance CEPE's upstream activities was also proposed, with the Partido Democrata suggesting that CEPE receive at least $3 from every barrel exported and $1 for every barrel sold to the domestic market to be used exclusively for its exploration and exploitation activities.

Izquierda Democratica called for the rechannelling of the country's oil income in favour of CEPE 'without harming the other participants in oil income.' This one statement implicitly carried within it something that none of the centre and centre-left groups were willing to publicly concede. It effectively accepted that the capitalisation of CEPE, and thus its priority task of spearheading the search for new oil reserves, was not a viable possibility, certainly in the short-term and most probably in the medium term. The reason for this was that, since all existing oil income sources had already been earmarked, the capitalisation of CEPE could only occur by diverting income away from existing revenue sharers. This, however, would pose immense political problems, not least because any meaningful addition to
CEPE's funds could only be achieved at the expense of the two main recipients of oil income: the state budget and the armed forces.

Izquierda Democratica's proposal on how CEPE could be capitalised confirms this interpretation. The party proposed that part of the income generated from the future activities of companies operating under 'service' contracts should be placed into a fund to finance CEPE's exploration and exploitation work. Even assuming that contracts were signed with oil companies in 1982, this would effectively delay the capitalisation of CEPE, until the late 1980's at the very least.

The establishment of an exploration fund for CEPE was outlined in greater detail by Wilson Pástor, who had criticised the government's oil reform proposals for concentrating exclusively on foreign oil companies:

'without taking into parallel consideration the even more urgent tax reforms that CEPE requires...to guarantee it the income that can be reinvested into petroleum exploration and exploitation.'

Pástor proposed the introduction of a tax system that would divert part of the economic surplus generated by foreign oil companies into a 'Permanent Fund of Reinvestment' that would be used to finance CEPE's own exploration and exploitation work. Under the distribution system proposed by Pástor, CEPE would receive in the worst of cases (when income is lowest) 1/15th of the annual value of production at international prices and in the best of cases (when income is highest) 2/15's.

Although there was general agreement that the government should take steps to encourage foreign oil investment, not all of those involved in the 'consulta nacional' were convinced that the changes proposed by Robalino would stimulate investor interest in Ecuador. Initial company responses appeared to confirm this.
Oil Company Responses to the Proposed Service Contract

Most companies responded cautiously when Robalino first sent his proposals to Congress. No doubt they were mindful of the 'haphazard and carefree' way in which previous governments had set and enforced the conditions under which oil companies operated in the country. At the time, the Petroleum Economist wrote that:

'there is some question as to whether the industry would respond to them meaningfully in any event, given the unfortunate long-standing record of discord between the government and the private sector.'

There was a general view that the proposed revisions were 'disappointing' and that the Peruvian contracts were 'more attractive.' Donald Kiefer, who coordinated negotiations for Mobil's exploration units, was certainly unimpressed. In the third week of April 1981 he, together with representatives from four other oil companies, had met with Robalino. Clearly disappointed by what he had heard, Kiefer left the meeting claiming that Mobil still needed some 'positive reason' to invest in Ecuador, though he added that the company would 'wait and see what comes out of Parliament' before passing any final judgement.

The principal concern was the absence of any certainty that a company would have access to any of the crude produced from its contract area. A director of Clyde Petroleum's Ecuadorian operations, Esteban Serrano, felt that this 'has been a major stumbling block' for a number of companies interested in returning to Ecuador. René Bucaram similarly warned that unless companies were allowed to receive payment in oil, no
company would be interested in coming to Ecuador:

'no matter how good the profitability that it offers it... Oil companies...require secure access to the crude in order to ensure supplies to their installations outside the country.'

**Domestic Responses to the Proposed Service Contract**

The government's argument that the new service contract substantially overcame the technical and legal problems that characterised existing contract models received wide support, except from groups on the Marxist left and the labour movement. According to the CTE, the proposed reforms were 'illegal' and:

'seek to create a new legal, economic and tax framework favourable to the monopoly interests of oil companies to the detriment of the sacred interests of the people and the nation. The approval of these reforms will lead to the decapitalisation of the country and an increase in the benefits for foreign monopolies.'

As most participants recognised, and as the comments of the oil companies highlight, the proposals were sufficiently unattractive to ensure that no foreign companies would wish to invest in Ecuador. The editor of Weekly Analysis Walter Spurrier, echoed the views of most when he declared that:

'the main danger [that the proposed contract] faces is being excessively favourable to the state and thus find no takers...[since]...there does not seem to be a certainty that the company will get access to crude, which must be the reason why any important oil company may choose to bid in the first place.'

Payment in cash rather than oil was considered to be a major disincentive to potential oil investors. Conversely, few accepted the government's view that the preferential purchase option was a 'key' incentive, since this option was currently available in most countries seeking to attract oil investment. One such
example was the contract signed in March 1979 between Ecopetrol and Sunray Colombia Oil company in which production from the contract area was to be shared equally between the two companies once royalties had been deducted. More recently, in the contract signed between Petroperú and the Superior Oil company in March 1981, clause 7 stated that 'the contractor will receive as compensation for his service...a part of the total volume of hydrocarbons produced in the contract area.' Moreover, under the proposed Ecuadorian contract the preferential option was not considered to be a particularly significant incentive for another reason. As both Spurrier and the economist Eduardo Santos pointed out, it would presumably be sufficient for another company to offer a cent more per barrel than the contractor was prepared to match, for the latter company to lose its option to buy the crude that it had found.

On the other hand, fears were also expressed that the preferential option could increase the country's economic dependence on particular economic blocks, by undermining the state's ability to diversify the geographic destiny of its crude oil exports. To negate this possible danger, Wilson Pástor recommended that:

'When awarding blocks for exploitation the state must establish a policy of diversification, not only in terms of the geographic origin of the contractors but also on the type of foreign capital, private or public. This means that the negative aspect to the country of the preferential purchase option can be partly neutralised in the awarding of the blocks to be explored.'

Views on the Oil Tax Reform Proposals

Aside from restricting payments to companies to cash, the main criticism directed at the government's proposals was the decision to link income tax to oil reserve levels. Most rejected the implicit assertion that the profitability of a well was directly linked with the volume of reserves and that there was a
direct relationship between reserves and the investments and costs incurred by the contractor. The situation was a great deal more complex than the government supposed. A multitude of factors influenced the level of costs and thus net income, for instance: the depth and location of the oil; the distance of the oil field from an existing infrastructure; and the quality of the crude found. Since oil wells with similar volumes of reserves could have completely different production costs and, therefore, different levels on income, most respondents felt it was 'absurd and unjust' to apply the same level of income tax.

Others pointed out that under the government's tax system, companies would have little incentive to focus their activity on those areas likely to hold the largest quantities of oil reserves. In the view of the College of Geological Engineers, such a tax system would act 'as a brake on the exploitation of certain wells' and stimulate exploration activity towards those areas with least oil-bearing potential.47

The third criticism was that the tax proposals had been based on false assumptions: namely, that the tax would be applied to reserves containing crude of 20–30 API, and located onshore at a depth of around 10,000 feet. It was shown earlier, however, that the country's hydrocarbon potential was situated in the Suroriente, which was far from an existing infrastructure; precretacitic zones in Manabí at depths of 4–6,000 metres; offshore zones, where investments were several times higher than onshore; and in zones containing heavy crude and requiring highly sophisticated and costly extraction methods. In these circumstances, the government's tax system would result in many of these fields classified as 'uncommercial'. Under the aforementioned conditions, there were likely to be wells with limited volumes of oil which would generate larger quantities of income per barrel than others containing greater quantities of oil but which are situated at greater depths or offshore or which contain heavy density crude.
Revised Package of Reforms

On the basis of these comments, the Economic and Budget Commissions drew up a revised package of reforms which were later to be presented to, and passed by, Congress in August 1982. One of the key changes was that the company would be paid for its services and be reimbursed for its expenses and investments in cash, oil or a combination of both. Any payments in oil could only be made on part of the exportable balance of the production from the contract area. Where the contractor was reimbursed or paid in cash, he would have a preferential option to buy up to 50% of this exportable balance.

The changes to the Tax Law advocated by the government were considered by the Permanent Legislative Commission for the Budget which presented its own proposals on 24 June 1982. According to its president Wifredo Lucero, these contained a number of incentives, one of the most important of which was:

'to make the contracting companies subject to the general regulations of the Tax Law, thus enabling them to avail themselves of tax credit, eliminating at the same time double taxation for which they are liable under the present law.'

The Commission also adopted a progressive tax system. The tax increment - that is the rate over and above the ordinary (maximum) income tax rate of 44.4% - would be linked to the volume of production and not, as the government had proposed, to the size of oil reserves. Under the formula to be used, tax would be zero on production below 30,000 b/d and 3% at 30,000 b/d, plus 1% for every 10,000 barrels in excess of 30,000 barrels up to a maximum of 30%. Crude oils of less than 15.0 API were to be excluded from this tax.

The revised reforms also stipulated that a maximum of two contracts could be signed, one of which had to cover an offshore area of not more than 400,000 hectares, while the maximum
onshore area was set at 200,000 hectares. Contractors would be required to commit themselves to an annual minimum investment of $120 and $180 per hectare, for onshore and offshore blocks respectively. Given the size of the blocks, this was equivalent to a minimum investment of $24m onshore and $72m offshore during the first three years of exploration. The exploration period was four years, extendable for another two, while the exploitation period could last up to a maximum of 20 years. (Full details of the Ecuadorian 'service' contract are contained in Appendix 6.)

The Award of Service Contracts

Differences did emerge over the procedures governing the award of 'service' contracts. While the government was reported to be seeking a free hand to pre-select firms and negotiate with them directly, Izquierda Democratica successfully argued in favour of imposing 'a lengthy bidding procedure for contracts.' In the proposed Oil Law, the authors stipulated that the award of Service contracts to companies 'of proven experience with adequate technical and financial backing' would be carried out through 'a special system of bidding.' This was necessary to 'guarantee the interests of the country'; avoid the chaotic manner in which concession areas had been distributed in the 1960's; and ensure 'the diversification in the award [of service contracts] to private and state concerns.' Under the proposals, a Special Bids Committee was to be established, composed of the Oil Minister, the Minister of Defence, the Minister of Trade and Commerce, the State Controller and the general manager of CEPE who would act as secretary.

Distribution of Future Oil Income

The final matter that required attention before the revised proposals were placed before Congress concerned the allocation of the income generated from 'service' contract areas. Having taken for itself over 20% of the country's oil income from existing sources, pressure was exerted by the military to ensure that it
received a sizeable chunk of revenue from future oil income sources. For 'national defence' purposes, therefore, 12.5% of gross production from each contract area was to be sold on the international market by CEPE, with the income accruing entirely to the Junta Defensa Nacional.

It is worth reiterating a point made earlier that neither Roldós nor Hurtado were likely to undertake 'nationalistic' policies towards Texaco, since the finances of the state and the health of the economy was dependent on the continued inflow of oil revenue from the consortium's exports. Similarly, as a result of its major share in the country's oil income, the military itself had no financial interest in policies that threatened to interrupt the continuous inflow of oil income. With this new allocation, the military now had a direct financial interest in the participation and success of new foreign oil companies in the oil sector.

This was also the case for CEPE. From the net revenue generated from 'service' contract areas operated by foreign companies, the draft Oil Law stated that 'the president of the Republic will designate the necessary resources in order to form a permanent fund to finance the search for new reserves of hydrocarbons.' No percentage figure was given, but CEPE officials later claimed that 25% of net income was to be transferred to this fund. The policy of confining foreign collaboration to a supplementary role had effectively been abandoned. Wilson Pastor, who advised Izquierda Democratica on oil matters, was clear in his own mind on the meaning of this decision. For the remainder of the 1980's:

'foreign investment will be the priority. CEPE will be left to develop known fields which carry minimal risk. After 1990, CEPE will begin to make risk investments, using the revenue generated by foreign oil companies.'

As part of the continuing commitment to use the country's oil wealth to fund social development projects, the draft Tax Law stressed the 'urgent need for rural development in the Amazon
region and in the frontier provinces' and for 'promoting economy in fuel consumption in transport.' From the income tax originating from the new contracts, 6% was to be used for infrastructural and rural development programmes, mainly in the Amazon Region, Carchi and Esmeraldas but also in El Oro Province and Loja Province, while 4% would be used for the same purpose in other provinces. A further 2% would be used to finance a 'Fund for the Promotion and Development of the National Electrified Interprovincial and Urban Transport System.'
CHAPTER 10: THE ECONOMIC CRISIS OF 1982-83

The increased emphasis on attracting foreign oil investment and improving the contractual terms under which companies would operate in Ecuador had, therefore, taken place prior to the economic crisis that enveloped the country in 1982-83. Events during this period thus merely served to reinforce the urgent need to bring foreign companies into the exploration play.

CEPE's own role in risk investment came under mounting criticism during the year following the company's drilling failures in the Gulf of Guayaquil. The Gulf had been classified as 'low risk' and had therefore been exclusively reserved for CEPE. When drilling work had first begun, there was an expectation that the Gulf could provide an oil discovery of a size that could radically change the country's oil situation. Government statements after drilling had started increased this expectation. At the beginning of April, Oil Minister Ortega announced that CEPE had struck oil. Two weeks later, Finance Minister Jaime Morillo informed a group of bankers and businessmen in London that the 'successful' discovery in the Gulf could enable Ecuador to double its crude exports to over 200,000 b/d. This claim, which was based more on guesswork than hard data, was clearly designed to improve Ecuador's credit rating at a time when bank lending had slowed considerably. However, as late as June, Ortega was still talking of 'highly positive results' from CEPE's drilling work. In the event, CEPE's first venture into offshore drilling proved to be the company's most expensive failure in its history. Some crude oil had been discovered, but the quantity found was 'meagre' and not in amounts sufficient to justify commercial exploitation. No commercial discoveries were made in two other wells.

CEPE's failure in the Gulf not only highlighted once again the need for officials to adopt a more cautious approach when interpreting incomplete data. It also showed that even in...
allegedly 'low risk' areas, there was no certainty that oil would be found in commercial quantities. Moreover, the Gulf failure highlighted the high costs that could result from the failure to discover oil. CEPE's offshore venture consumed over $90m, with CEPE required to pay Permago $60,000 a day for leasing the drilling platform.

Expensive drilling failures are rarely acceptable, but what made CEPE's even more unacceptable was that this failure occurred during a year when the twin pillars of economic growth - terms of trade and foreign borrowing - eventually crumbled and pushed the economy into deep recession.

**Oil Market Trends**

Central to the crisis of 1982 was the deepening recession in the industrialised countries, in particular the United States where GDP fell by 2.5%. One immediate consequence of this was a further downward trend in oil consumption. By the first half of the year, OECD oil consumption was running at 34.4m b/d, 3.1% down on the average for the preceding year and 16% lower than in 1979. Net oil imports fell by 2m b/d to 18m b/d, just one-third of the average level for 1979. With non-OPEC countries continuing to pump oil in excess of market needs and oil companies making substantial reductions to the large stockpiles that had been accumulated since 1979, oil prices fell sharply.

OPEC's response to the high output, low price strategy of non-OPEC producers and the subsequent decline in its market share was often belated and inadequate. There was, for instance, no OPEC response to the price reductions that followed Mexico's decision in January to reduce its oil price by $2 to $26.50. It was only in March, when further reductions followed BMWOC's $4 price-cut, that OPEC attempted to defend the existing marker price of $34 by introducing a production ceiling 17.5m b/d. It proved impossible to implement from the outset. Iran, which was already producing in excess of 600-700,000 b/d, reaffirmed that
it intended to increase output to 3m b/d in order to finance the war against Iraq. Other OPEC members also continued to produce in excess of their quotas. Four months after the agreement, Venezuela announced that the quota system had collapsed and that it would therefore increase output by 20%.\footnote{7}

It was already clear from the start of April that Oriente crude was being sold below $34. The first public indication of this came on 3 May when an Oil Ministry official 'admitted' that CEPE had sold 1.82m barrels in the previous week at between $31.10 and $33 a barrel.\footnote{8} Two months later, the Oil Minister was enveloped in political controversy following reports that Petrobrás had paid $32.50 for crude purchased in July. The Oil Minister initially denied that Ecuador had broken with the OPEC pricing agreement, claiming that distance and carriage costs had required a price reduction of $1.50 to ensure that Ecuador's crude remained competitive.\footnote{8} It soon became clear that sales under $34 were increasingly the rule rather than the exception following the refusal of a number of CEPE's clients to renew long-term contracts unless the $34 price level was reduced. By the middle of July just two contracts, each for 15,000 b/d, had been renewed forcing the corporation to sell the bulk of its crude on the spot market at an average price of just $31.21.\footnote{10} On 21 July, Ecuador officially broke with the OPEC pricing structure and cut the price of Oriente crude by $1.75, effective from the start of July.\footnote{11} This decision led the Head of Energy Studies at the Permanent Secretariat of OPEC to call on Ecuador to explain the reasons behind this move.\footnote{12} Following what Ortega described as this 'impertinence', the Oil Minister demanded - and received - an apology from the Secretary-General of OPEC who claimed that the official had merely been expressing 'personal views'. The conduct of oil policy, he added, was a sovereign matter over which OPEC had no jurisdiction.\footnote{13}

In March, the Hurtado government had made a belated attempt to grapple with the sharp fall in oil prices. In a bid to stimulate non-oil exports, a 'disguised' devaluation was introduced on 5
March with the introduction of multiple exchange rates. The official exchange rate remained at S/25. However, a rate of S/30 was established for non-oil exports while, in a bid to protect industry, an exchange rate of between S/28 to S/30 was established for importers of non-essential products. These measures were unlikely to have any significant affect on non-oil exports, however, given the current state of the world economy. As a result of the downturn in the volume of world trade and the substantial appreciation in the dollar, world commodity prices (including those for Ecuador's traditional exports) were to continue to fall sharply during the year.\textsuperscript{14}

Two months later, in May, an economic stabilisation package was introduced which included a 32\% devaluation of the sucre - from S/25 to S/33 - new tariffs on imports and the abandonment of numerous capital projects, including the Atahualpa refinery and the Toachi hydroelectric plant.\textsuperscript{15} Some indication of the ineffectiveness of these measures came just a few months later when the Central Bank announced that international reserves had fallen to just $154.3m equivalent to just two months of imports and projected that the current account deficit would reach $573.8m by the end of the year.\textsuperscript{16}

**Political Constraints on Meeting the Crisis**

Hurtado's ability or willingness to take tougher measures to deal with the economic situation continued to be heavily constrained by his weak political position within Congress and by the uncompromising hostility of the business community. Even though government policies after the collapse of the 'Convergencia' were highly favourable to the private sector, increasingly so as the country's economic crisis intensified, Hurtado was the subject of a constant barrage of criticism by the business community. Following the May measures, which were denounced as an attempt to 'demolish' the private sector, calls were made for a strike by industrialists, while the Guayaquil Chamber of Agriculture went
further by suggesting that military rule might be preferable to a government headed by Osvaldo Hurtado.17

Rumours of a military coup were rife during 1982. According to Hurtado, 'there wasn't a cocktail party or social get-together' where military officers were not approached by civilian leaders to stage a coup.18 Catherine Conaghan has suggested that the primary source of this antagonism lay, 'not in the substance of economic policy' but in the business sector's 'fixation' on the issue of access to influence and policy-making style. Like Rodríguez Lara before him, Hurtado consciously sought to insulate economic policy-making from the direct pressures of business organisations.19 This interpretation was acknowledged by Hurtado himself when he remarked that the main reason for the hostility of the business sector was that:

'...they knew they couldn't pick up the phone and give me orders in a country where the government traditionally ruled in consultation with the Chambers.'20

Determined to fulfill his priority objective of stabilising the democratic system and transferring power to an elected government in 1984, Hurtado gradually succumbed to private sector pressure. To calm the opposition, legislation protecting consumer rights was dropped, together with a proposal to stamp out 'illicit' personal enrichment. By September, government threats to take legal action against tax evaders had also been shelved. By the end of the year, the Quito Chamber of Commerce was able to report that the 'frontal attack' against the business community by the government had ceased.21

Whether Hurtado would have succeeded in obtaining Congressional approval for these, or any other measures, was in any case doubtful. Throughout 1982, he remained beholden to constantly shifting alliances in a Congress concerned more with political exercises than with the pressing task of developing and implementing policies to tackle the economic crisis. After the
collapse of the 'Convergencia' and the withdrawal of the PCD, Hurtado had successfully manufactured a pro-government coalition consisting of three PD delegates, the 12 Roldósista delegates and the CFP. When the PCD had been created it was seen by the executive as a useful instrument to combat the 'bucaramistas' and to establish a political base of support for the government. The process had thus been reversed, with the government regarding the CFP as a counterweight to the PCD. After Assad Bucaram's death in November 1981, the party's key figures (with the important exception of Averroes Bucaram) were inclined to adopt a more positive and less obstructive role in Congress: at the end of January, the CFP entered government and received two ministries and a variety of other posts in the state apparatus, as well as the presidency of Congress.

The Impeachment of Oil Minister Ortega

The fragility of the alliance with the CFP became apparent immediately after Congressional approval for the reforms to the Oil and Oil Tax Laws on 6 August 1982. After CEPE's expensive failure in the Gulf of Guayaquil, the search had immediately begun for a scapegoat. It was found in the shape of Oil Minister Ortega. He was ordered to appear before Congress to be questioned by Hugo Caicedo, who focused on the Permago contract, and Febres Cordero, who questioned the Minister on his 'illegal' decision to increase electricity tariffs. The questioning of Ortega, which took place between 18 August and 7 September, illustrates how effective the strategy of calling 'ministers to account' could be in bringing the legislative process to a standstill. In the case of Ortega, the questioning:

'occupied more than 50 hours of replies, counter-replies and debates and was converted into a major confrontation between the government and the opposition, a confrontation which concerned not simply one ministerial post but the prestige and administrative integrity of a regime that faced an increasingly stubborn opposition.'
Most independent observers believed that the enquiry had thrown up a 'few trivial procedural irregularities' which should not have been enough to impeach a minister. There were some suggestions that the decision to drill in the Gulf had been taken after pressures from Guayaquilian business groups, though it does seem as if detailed seismic studies had been undertaken and that the decision to drill had been backed by local and foreign oil experts.

If the pro-government alliance had remained intact, Hurtado would not have found it necessary to appoint the country's fifth Oil Minister in 33 months. Ortega's fate was sealed when the deputy head of the CFP, Averroes Bucaram, seized the opportunity to undermine the 'collaborationist' faction within the CFP and break the alliance with the government. His unilateral announcement that the CFP would vote to censure Ortega for illegally raising electricity tariffs proved sufficient to tip the balance against Ortega, who lost the vote of censure by 39 votes to 26 votes. Following Ortega's impeachment, the CEPE manager Jorge Pareja resigned in disgust at this 'absurd' vote of censure.

The drawing-up of regulations covering the award of service contracts and the opening of the first bidding round, were consequently delayed. Parejo's replacement at CEPE was Rear-Admiral Raúl Jaramillo who had a thorough grounding in the country's oil industry having served as the military's representative on the CEPE Board. The same, however, could not be said for the new Oil Minister, Gustavo Galinda. He was a civil engineer who had taught at Guayaquil Polytechnic, and had little knowledge of the oil industry. Further delays in bringing in foreign oil investment were, therefore, bound to occur while Galinda developed his knowledge of the industry and built up those personal contacts which are essential when seeking business with outside investors. It was not, therefore, until February 1983 that the detailed regulations covering the award of service contracts were eventually published, with the date for the first bidding round set for 13 June 1983.
The Remaining Pillar of Growth

The Ortega affair served to illustrate the continuing inability of the executive to assert its authority over a Congress that remained preoccupied with the pursuit of short-term political gains. After nearly three years, virtually no steps had been taken to mobilise alternative sources of non-oil income. Moves had been made to increase domestic oil prices, though the economic benefits had been limited by devaluation and inflation and by the decision to transfer a third of this new revenue to the military. Few steps either had been taken to reduce the deficits of the state budget and the public sector or the mounting deficit on the current account.

There was, in fact, a virtual continuation of the economic strategy pursued by the military junta in the late 1970's. Rather than adopt the adjustment policies that were needed when the second oil boom had come to an end, the current account and public sector deficits continued to be financed by extensive borrowing. In 1982, over $1 bn worth of loans were contracted, with two-thirds of these carrying floating rates of interest and maturity terms of just 12 months. With the tight monetary policies of the Reagan government pushing the real interest rates to an average of 8% in 1982, one-third of Ecuador's export revenue was earmarked to cover interest payments. Total debt servicing payments, meanwhile, were equivalent to 72.6% of total export revenue.25

The maintenance of high levels of imports and public expenditure and the ability of Ecuador to meet its debt-servicing obligations was sustainable, however, only for as long as Ecuador found willing lenders among the international banking community.

Trends in Bank Lending Activities

A slowdown in the growth rate in bank lending had been apparent in 1980, when the rate of increase slowed from 24% in 1979, to
19% in 1980 and then to 17.2% in the following year. This slowdown was partly attributable to the global economic recession which reduced the supply of credits and savings available in the international financial markets. A further factor was the decline in world oil prices. With the subsequent reduction in the current account surpluses of oil-exporting countries, an important source of liquidity in the international financial markets disappeared. After registering surpluses of $35.8 bn and $56.9 bn in 1979 and 1980, the OPEC current account surplus dropped to $20.6 bn in 1981 and then actually turned into a deficit of $5.5 bn in the following year. OPEC as a group - and the high absorbers in particular - thus became a net borrower itself from the international banking system. With the growing fiscal deficits in the OECD economies, in particular the United States, absorbing an ever larger portion of the dwindling OPEC surplus, the excess supply of funds available to the developing countries after 1981 steadily shrunk.

Two events in 1982 specific to Latin America served to cause new lending to the region to fall sharply. US support for Britain in the Falklands/Malvinas conflict exploded the assumption that the United States could be depended on to rescue Latin American countries which fell into a serious payments crisis. By July, the OECD reported that the rapid rise in the real burden of debt service was:

'intensifying lenders' concerns about credit worthiness, inducing a more cautious attitude towards increased bank lending...’

Concern on the part of the international banking community turned to panic when the Mexican government ran out of foreign exchange in August and declared a 90 day moratorium on the repayment of the principal due on its external debt. Mexico was not alone: faced with rising interest payments, declining commodity prices, an appreciating dollar and weak export markets - each of which arose largely from the monetary-fiscal policy mix pursued by the Reagan government - an increasing number of Latin American
countries found it impossible to meet their debt-servicing obligations. Now classified as a credit risk, the growth in bank lending to the region slowed to just 9% in 1982 and then virtually ceased in 1983.\(^{30}\)

**The Debt Crisis in Ecuador**

Changing bank perceptions of Ecuador's credit worthiness combined with the crisis situation affecting other Latin American countries to virtually curtail all further bank lending. By October 1982:

'commercial banks, increasingly worried about Ecuador's high level of public and private debt, the possible collapse of oil prices, and the financial plight of other Latin American countries, decided to limit net lending to Ecuador drastically.'\(^{31}\)

With oil and non-oil exports in the doldrums and foreign borrowing curtailed, the economic strategy that had enabled successive governments to maintain growth, investment and high levels of imports and public expenditure crumbled. The most immediate problem facing the Hurtado government was the knowledge that around $482m worth of short-term loans fell due between November 1982 and the end of 1983. At the end of October, the Finance Minister Pedro Pinto announced that Ecuador would be suspending all capital payments on the public sector foreign debt. The government then quickly opened negotiations with its major creditor banks for the rescheduling of this portion of debt. How the banks responded to Ecuador's request would largely depend largely on the IMF conferring its seal of approval on Hurtado's attempts to grapple with the economic crisis.\(^{32}\)

**The Programme of Economic Adjustment**

The IMF emerged as a key player in the drama that was unfolding throughout Latin America. One country after another was informed by commercial banks that agreements on debt rescheduling and
fresh loans would be tied to the implementation of an austerity programme drawn up and monitored by the IMF. While the precise details of the programmes established varied from country to country, each were geared to sharply reducing the current account deficit, through stimulating exports and restricting imports. These were combined with austerity measures to reduce consumer demand and public expenditure and steps to channel local production away from the domestic market into exports. This strategy inevitably required a devaluation of the local currency to enable locally produced goods to become cheaper on the world market.

In order to reschedule its short-term debt and receive fresh loans from commercial banks in 1983 - which had been limited to just $431m, equivalent at 1972 prices to $208m - Ecuador was required to balance the public sector and current accounts by drastically reducing expenditure and imports. At the same time, measures were required to stimulate non-oil exports and increase public sector revenue. The main purpose of these measures was to ensure that the country generated a sufficient financial surplus to cover the repayment of interest. The fresh loans, it should be noted, carried even higher rates of interest than those that had been advanced just a few months earlier. According to one report, banks involved in 'rescue packages' were 'doubling, sometimes trebling their normal commission rates and margins.' According to ECLA, during the first round of reschedulings in the region, spreads averaged 2.25% above LIBOR, with commissions of 1.25%. In other words, the banks had doubled the cost of their new loans, compared to 1980-81, and earned around $1.7 bn in profits. The tough stance adopted by the banks prompted the Financial Times to comment:

'So we get reschedulings, with the accompaniment of vast telexes, higher interest rates, spreads and other fees, which make the whole problem in the long run just a little more unmanageable. The banks of course know this very well.'
The terms that Ecuador was eventually forced to accept when agreement was reached in January 1983 were similarly harsh, with the interest rate set at LIBOR plus 2.25% (or the US Prime rate plus 2 1/8%), with the rate of commission fixed at 1.25%, equivalent to $13.75m. In the case of the $431m worth of fresh loans in 1983, the interest rate was even higher, at LIBOR plus 2 3/8%.36

The first package of austerity measures was introduced in October. This included the removal of the wheat subsidy, a 53% increase in bread prices and a doubling in the price of gasoline super extra and regular to S/40 and S/20 respectively. Absolute prohibitions were introduced on some imports which, while helping to limit the outflow of foreign exchange, also served to put a further brake on economic activity and push the country deeper into recession. Plans were also drawn up to increase taxes on non-essential goods including beer, cigarettes and cars and reductions in tax exemptions for industry. Response to the government's austerity measures from the labour movement came in the form of a rash of riots and strikes in September and October. The FUT condemned the government's earlier devaluation measures and demanded a 75% increase in the minimum wage, a freeze on transport fares and water rates and the extension of state control of the economy. To add to the government's problems strikes broke out in the transport sector as bus and truck drivers pressed for substantial increases in fares, demands which the government met half-way by announcing increases of 50%.37

The London Agreement

As the government began implementing the IMF programme, the economy was further undermined as oil prices spiralled downwards. OPEC itself remained in a state of virtual paralysis, with members still unable to agree on the allocation of production quotas. Reports were circulating, meanwhile, that Saudi Arabia, Kuwait, Qatar and the UAE were considering a $4 per barrel cut in their oil prices unless 'renegade' members refrained from price-
discounting activities and adhered to new production quotas. This move was opposed by, among others, Venezuela and Ecuador. OPEC's continuing failure to reassert its control over the international market and to protect its weaker members was reflected at the start of February. In that month, the Hurtado government abolished CEPE's minimum contract price of $31.50 and ordered the company to float the export price of its crude 'according to world market conditions.' Saudi Arabia then announced on 10 February that a cut in the Marker price was 'inevitable' and that it would no longer play the role of defending the benchmark and 'will let others bear the responsibility of their mistakes.' A few days later, BNOC added to the pressure by reducing the price of North Sea crude by $3 pb, to $30.50. This move was matched by Norway, while Nigeria responded by warning that it would match any further reductions 'cent for cent.' Gulf producers, meanwhile, renewed their threat to implement drastic price cuts if no agreement was reached on production quotas.

An imminent price war thus threatened to add to Ecuador's economic problems. The threat, however, proved sufficient to cause OPEC to make a concerted attempt to bring a semblance of stability back to the oil market. Meeting in London on 14 March, OPEC agreed to reduce the price of the Marker crude from $34 to $29 and to establish a production ceiling of 17.5m b/d. Quotas were allocated to each country, with the exception of Saudi Arabia which was to act as 'swing producer' to supply the balancing quantities to meet market requirements. Member countries also undertook to avoid giving discounts and to refrain from dumping oil products on the market at prices which would jeopardise the new pricing structure. The choice of venue for the meeting was significant, reflecting OPEC's declining influence in the market and the recognition that only an informal understanding with the key non-OPEC producers - the UK, Mexico and Norway - could ensure that the agreement was fully implemented and respected. After the London Agreement, Mexico brought its prices into line with new OPEC prices, announced
that it would be limiting its exports in 1983 to 1.5m b/d and indicated that it would cooperate closely with Venezuela on pricing matters. The BNOC, meanwhile, brought Brent crude into line with Nigerian crude.

Although Ecuador officially accepted the decision to introduce production quotas, there was little likelihood that the government would introduce a production quota of 200,000 b/d. Stagnant levels of production, declining oil reserves and rising domestic consumption had, in the past, restricted Ecuador's ability to compensate for price declines by boosting crude export volume. That position had to some extent now changed. With the start-up of production in September and October 1982 from the Shushuqui, Secoya, Shuara and Charapa fields in the Nororiente, total output had been averaging around 243,000 b/d by December 1982. There was, in addition, the expectation that the incorporation of the Bermejo, Cuyabeno, Sansahuari and Tetete fields - planned for the middle of 1983 - would provide an additional 20,000 b/d.¹ Three further fields were to be brought on stream during the early part of 1984.

With recession and domestic oil price hikes reducing the amount of production required for the domestic market, these production increases were expected to translate into higher export volume. In view of the country's acute liquidity situation, compliance with the ceiling made little economic sense. Nor indeed would it have met with favour from the IMF and Ecuador's creditors. Although the government publicly accepted the quota, it preferred to express the 200,000 b/d ceiling in millions. This enabled Ecuador to round off output in excess of this figure to 0.2m b/d, and in this way allow output to rise to a maximum of 250,000 b/d and still appear to be within its production quota. This had, according to one report, 'apparently been accepted in OPEC circles.'⁴² Thus, in the first quarter of 1983, output averaged 228,842 b/d, in the second 229,800 b/d, in the third 242,500 b/d and in the fourth 245,600 b/d. The average daily level for the year as a whole reached 237,500 b/d. With an
additional 8 million barrels of crude from CEPE's Nororiente fields boosting total production by 11% to 86.345m, and the amount of crude required for the domestic market actually falling by 20%, the country's crude export volume jumped from 32.9m to 50.9m.

Austerity and Recession in 1983

In the same month that production ceilings were introduced, Hurtado introduced a further package of austerity measures which included raising the price of gasoline extra from S/15 to S/30. The sucre was devalued by a further 21% to S/33 per US dollar and a programme of automatic 'mini-devaluations' instituted trimming the official exchange rate by four centavos per working day in order to reach a rate of S/50 to the dollar. Further tight restrictions were imposed on public expenditure and imports, while commercial interest rates were increased by 2% to 16%.

Given the depressed state of world trade and low commodity prices, there was little likelihood that the elimination of the current account deficit, which reached nearly $482m in 1982, could be achieved through stimulating non-oil exports. With prices for Ecuador's main non-oil exports, in particular bananas (down 0.7%) and processed cacao (down 54.8%), remaining depressed, Ecuador was faced with having to export a substantially larger volume of goods in order to simply earn the same number of dollars as in 1982.

While such a massive increase in export volume would have been difficult in normal circumstances, it became an impossibility when heavy floods followed in the wake of 'El Niño'. Extensive damage was caused to the physical infrastructure and crops, causing real agricultural output to fall by 14%. Export volume subsequently collapsed, by 27.8% in the case of bananas, 43.8% in the case of processed cacao and 86% in respect of coffee. Far from non-oil exports being stimulated, revenue from these sources collapsed by 25%. In these circumstances, the only,
and most painful, option left to balance the current account was through a drastic reduction in imports. By the end of the year, these had been cut by 34% and the current account deficit reduced to just $64.5m, less than 1% of GDP. With imports cut and external financing for the public sector reduced from 4.5% of GDP to just 0.8%, investment for the year fell by 28%, consumption by 6%, and real GDP by 2.8%.44
CHAPTER 11: THE DEMISE OF CEPE, 1982-84

Events in 1982-83 coincided with a sharp deterioration in CEPE's financial situation. After falling from $379.6m in 1980 to $301.8m in 1982, CEPE's income slumped to just $228.2m in 1983. The company's investment capacity fell accordingly, from $101.6m in 1981 to $60.1m two years later. The accomplishment of CEPE's $1.4 bn investment programme for 1984-88, which was published in 1983, appeared fairly hopeless. With projected income estimated at $1.63 bn, $1.1 bn of which would be required to cover operational costs, CEPE was expected to be able to fund, at most, a third of its priority investment projects from its own resources, leaving the remainder to be covered by loans and joint venture arrangements. At the time, CEPE officials projected that the company's budget deficit would rise from $42.1m in 1984 to $204.2m in 1988, with the accumulated budget deficit totalling $679.8m.¹

Declining Investment in Exploration

Investment in upstream activities fell after peaking at $84.7m in 1981. By 1983, it had fallen to $51.2m; one year later investment had dropped to just $44.8m, equivalent to 16.3% of expenditure.² Official acceptance that CEPE would only be able to undertake a fraction of the exploration and development work needed was evident from the start of 1983. The first indication of this was when the government decided to offer 11 blocks to companies in the first bidding round - scheduled for June 1983 - covering 1.4m hectares onshore and 1.6m offshore. The blocks on offer included a number of those which had previously been reserved exclusively for CEPE, including the highly prospective Block 15. A few months later, Oil Minister Galinda announced that ownership of the disputed Dureno, Coca, Culebra and Cononaco fields would be transferred from CEPE to the consortium. The discovery after three years of the 'legal loophole' followed a meeting with
Texaco on 14 July where the company had informed Galinda of its plans to develop the most important field, Cononaco.3

CEPE's existing exploration activities were also cut-back. After its failure in the Gulf of Guayaquil, CEPE had turned its attention to the Suroriente. Five wells had been drilled since the start of 1982, with oil found in all but one. However, the crude was of high density, in insufficient quantities to be commercial and far from an existing infrastructure. Following the completion of the fifth well in March 1984, amid mounting claims that CEPE was indulging in another 'adventure', drilling was suspended for four months. This 'suspension' was taken in the full knowledge that the decision on whether CEPE should continue operations in the area would be taken by the incoming president Febres Cordero, whose hostility to CEPE in general, and the company's involvement in exploration work in particular, was legion.4 There was little surprise, therefore, when the new government brought CEPE's drilling activity in the area to an end and reserved the area for foreign oil companies. The meaning of these decisions was clear, if not publicly acknowledged: CEPE was in no position to spearhead the search for new oil reserves; indeed it was scarcely in a position to perform any significant supplementary role. Henceforth, the main burden of exploration would be assumed by foreign oil companies, with CEPE concentrating the bulk of its depleted resources and efforts on developing its fields in the Nororiente.

The Background to CEPE's Financial Crisis

To what extent can the collapse in CEPE's finances and investment capacity be linked to the oil price slump and the curtailment in bank lending? Although the timing might suggest otherwise, the decline in CEPE's financial situation cannot be directly linked to developments in the international environment, in particular the world oil market. The thesis has sought to show that the reasons for CEPE's financial and other problems are rooted in
the domestic political sphere and, in particular, in the nature of the company's relationship with the state.

The first point to note is that CEPE's financial problems cannot be directly linked to the fall in the export price of crude and fuel oil. As a result of the decrees passed in November 1979, it was largely immaterial from CEPE's own perspective as to whether the price it was receiving for its exports was $40, $30, or $25. A link between the depressed oil market and CEPE's finances would only have been established if crude prices had fallen to below $23.50, or fuel oil prices fell below $17.50.

The importance of domestic political factors can also be seen from the data contained in Table 11.1 below.

Table 11.1: % Distribution of CEPE's Gross Sales Income, 1979-83

<table>
<thead>
<tr>
<th></th>
<th>Sales Costs</th>
<th>Operational Expenditure</th>
<th>Taxes/ Public Sector</th>
<th>Surplus/ Profit ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>15.9</td>
<td>19.9</td>
<td>44.2</td>
<td>20.0 (97.6m)</td>
</tr>
<tr>
<td>1980</td>
<td>14.1</td>
<td>15.8</td>
<td>58.3</td>
<td>11.8 (69.3m)</td>
</tr>
<tr>
<td>1981</td>
<td>10.2</td>
<td>10.3</td>
<td>71.4</td>
<td>8.1 (63.7m)</td>
</tr>
<tr>
<td>1982</td>
<td>22.7</td>
<td>6.9</td>
<td>67.4</td>
<td>3.0 (22.1m)</td>
</tr>
<tr>
<td>1983</td>
<td>22.4</td>
<td>2.4</td>
<td>70.3</td>
<td>4.9 (39.3)</td>
</tr>
</tbody>
</table>

Source: CEPE, Reporte Financiera, (Quito, 1985), p 32

The table shows that CEPE's profit margins began to narrow significantly, not in 1981 when the oil price decline was underway, but in 1980. In this year, CEPE's average export price was $35.2, a full $12 higher than in the preceding year, its gross sales income increased by 21% and the proportion of gross income used to over operating costs fell, albeit marginally. Nevertheless, the proportion of CEPE's gross income available for investment actually fell from 20% to 11.8%. This apparent paradox was also evident in 1983. In the year when the economy severely contracted and CEPE's income and investment collapsed, the company's gross sales income actually rose to its highest recorded level, to $794.8m. Although this was nearly double that of 1979, just 4.9% of this was available for investment. As table
11.1 indicates, and as the following analysis will confirm, the fundamental factors leading to the decapitalisation of CEPE in the early 1980's was the substantial increase in the proportion of CEPE's gross sales income diverted to central government and the public sector.

CEPE's Income from Crude and Fuel Oil Exports

It was shown in chapter 4 that the oil price hikes of 1979 had brought sizeable financial benefits to an historically undercapitalised company. Although CEPE's crude exports fell in 1979 by 25%, the oil price hikes and the start-up of fuel oil exports boosted CEPE's public sector oil income from $40.3m to $146.9m. In percentage terms, CEPE in 1979 received 24% of its crude export income and 82.5% of total fuel oil export income; in all 23.7% of public sector income was allocated to CEPE, over twice the peak percentage level achieved in 1978.

However, the beneficial affects of high oil prices proved even more temporary for CEPE than for the economy as a whole. In the midst of OPEC's second price offensive, a succession of decrees were passed during the last days of the military junta. These alone would have seriously eroded CEPE's financial situation from 1980 onwards. However, CEPE's finances were further undermined by the Roldós government, which froze the price levels on which CEPE's share of crude and fuel oil export income was calculated at $23.50 and $17.50. This decree not only prevented CEPE from gaining any further financial benefit from high oil prices, but it also virtually eliminated any possibility of CEPE being capitalised from traditional oil income sources.

As a result of these decisions, CEPE was deprived of substantial quantities of revenue that might otherwise have been used for
investment purposes. The following table summarises the downward trend in CEPE's share of public sector oil income.

Table 11.2: CEPE's Public Sector Oil Income by Source ($m)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Superficiary Rights</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Crude Exports</td>
<td>37.6</td>
<td>65.1</td>
<td>61.5</td>
<td>29.7</td>
<td>62.2</td>
<td>51.9</td>
</tr>
<tr>
<td>Income Tax</td>
<td>1.9</td>
<td>1.2</td>
<td>0.6</td>
<td>0.9</td>
<td>1.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Fuel Oil Exports</td>
<td>-</td>
<td>73.6</td>
<td>46.1</td>
<td>35.3</td>
<td>26.9</td>
<td>16.7</td>
</tr>
<tr>
<td>Derivative Price Increases</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>53.3</td>
<td>48.2</td>
<td>31.6</td>
</tr>
<tr>
<td>Royalties</td>
<td>-</td>
<td>2.0</td>
<td>-</td>
<td>3.4</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Pipeline Tariff</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>1.5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overlifting</td>
<td>-</td>
<td>4.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>40.3</td>
<td>146.9</td>
<td>108.9</td>
<td>126.7</td>
<td>139.0</td>
<td>101.9</td>
</tr>
</tbody>
</table>


During this period, CEPE's share of oil income fell from 23.7% in 1979 to just 12.7% in 1983. As a direct result, not of oil price fluctuations, but of government decrees, CEPE's percentage share of crude export income fell to 12.5% in 1981, while in monetary terms it fell by 54% from $65.1m to $29.7m. This was despite crude export income between these two years falling by only 12.7%. Although CEPE's income from its crude exports rose to $62.2m in 1982, its percentage share was still seven percentage points down on the 1979 level, at 17.7%.

Fuel oil export income between 1979-81 increased from $89.2m to $96.3m. However, the amount channelled to CEPE fell by half from $73.6m to just $35.3m, while its percentage share slumped from 82.5% to 36.6%. By 1982, CEPE was receiving a mere $26.9m (41%) of fuel oil export income.

It is possible to make a rough estimate of the income losses that CEPE incurred as a result of the decrees passed by the military and Congress in 1979. If CEPE had received the 28% share of its crude export stipulated in 1974 and if its share of fuel oil export income had remained fixed at the 1979 level of 82.5%,
CEPE's accumulated income from these two sources between 1979-82 would have amounted to $623.4m. Instead, CEPE received just $400.4m, representing an income loss of $223m.

CEPE was not the only state enterprise which was denied the opportunity to benefit from the oil price hikes. BEDE's percentage share of oil income fell from 18.2% in 1979 to 10.4% in 1982, while in quantitative terms its real oil income fell from $112.8m to $92.6m. And this despite the volume of Texaco and CEPE's crude exports - on which BEDE's revenue was largely based - increasing by 14.6%. INECEL also saw its share of oil income decline, from 12.1% to 8.3% following the government's decision to transfer part of the income from royalties to the state budget.

**Domestic Oil Prices**

Although the November decrees effectively ruled out the possibility of the government capitalising CEPE from traditional oil income sources, other options were available. CEPE had exerted pressure on the government to raise domestic oil product prices. This would have reduced the losses it incurred in the domestic market and, depending on the size of the price hike, provided CEPE with additional funds for investment. An opportunity to do just this occurred in 1981-83, when prices were raised on three separate occasions. The sums involved were substantial, even though the new price levels were still insufficient to cover CEPE's costs. In total, increases in the price of domestic oil products generated $519.3 worth of additional income.

The manner in which this additional finance was used neatly summarises the political priorities of the government and the manner in which the pursuit of these contributed directly to CEPE's financial crisis. Aside from CEPE, the income was used to: help finance the budget deficit; fund development projects in the frontier zones; fund the Ministry of Agriculture; and subsidise
student transport fares. Apart from financing 'social' and 'social development' objectives, a sizeable chunk of the income was channelled to the armed forces, presumably to ensure the goodwill of the officer corps.

The method used to calculate CEPE's share was also unsatisfactory, since the establishment of a ceiling of S/3,000m effectively ensured that this would be whittled away by inflation and devaluation. This method also disadvantaged CEPE in another way, as an analysis of table 11.3 below suggests.

Table 11.3: Distribution of Income from Domestic Oil Price Increases, 1981-83 ($m).

<table>
<thead>
<tr>
<th></th>
<th>1981</th>
<th>1982</th>
<th>1983</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEPE</td>
<td>53.3(32.0)</td>
<td>48.2(26.8)</td>
<td>31.6(18.3)</td>
<td>133.1(25.6)</td>
</tr>
<tr>
<td>JDN</td>
<td>38.4(23.0)</td>
<td>44.6(24.8)</td>
<td>47.8(27.7)</td>
<td>130.8(25.2)</td>
</tr>
<tr>
<td>Min. of Agric.</td>
<td>38.4(23.0)</td>
<td>44.6(24.8)</td>
<td>47.8(27.7)</td>
<td>130.8(25.2)</td>
</tr>
<tr>
<td>Frontier Zones</td>
<td>19.2(11.5)</td>
<td>22.3(12.4)</td>
<td>23.9(13.8)</td>
<td>65.4(12.6)</td>
</tr>
<tr>
<td>Other</td>
<td>17.4(10.5)</td>
<td>20.2(11.2)</td>
<td>21.6(12.5)</td>
<td>59.2(11.4)</td>
</tr>
<tr>
<td>Total</td>
<td>166.7</td>
<td>179.9</td>
<td>172.7</td>
<td>519.3</td>
</tr>
</tbody>
</table>

Note: The figures in brackets represent the income received as a percentage share of the revenue generated in each year by domestic price hikes.


The imposition of a sucre ceiling created a paradoxical situation: the higher the price increase and the revenue generated, the lower the proportion of the total allocated to CEPE. Thus, although the income generated by the price hikes increased to $179.9m in 1981, CEPE's income declined, both in real terms, to $48.2m and, in percentage terms, to 26.8%, and then fell further in 1983 to $31.6m, equivalent to 18.3%. All other participants saw their income rise, both in real terms and as a percentage of total income, since their shares were based on a fixed percentage of the income generated less CEPE's share of S/3,000m.
For these reasons, the hikes in the price of oil products did little to reduce the losses that CEPE incurred on the domestic market let alone provide it with additional finance for investment purposes.

The maintenance of non-market based prices for the crude delivered to domestic refineries also served to deprive CEPE of substantial quantities of revenue. For instance, while CEPE exported 24.2m barrels of crude in 1982 for $383.1m, it delivered 26m barrels to the refineries and received just $33.9m. As the table below also shows, despite the price per barrel delivered increasing from S/36.48 to S/81.84 in 1982 and then to S/156.75 in 1983, the potential benefits in dollar terms were largely offset by devaluation and inflation.

Table 11.4: CEPE's Income from Deliveries to Domestic Refineries

<table>
<thead>
<tr>
<th>Year</th>
<th>Barrels (millions)</th>
<th>Price per Barrel ($)</th>
<th>Total Income (in $ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>22.2</td>
<td>$0.90</td>
<td>$19.8</td>
</tr>
<tr>
<td>1980</td>
<td>24.0</td>
<td>$0.80</td>
<td>$19.6</td>
</tr>
<tr>
<td>1981</td>
<td>23.6</td>
<td>$0.70</td>
<td>$17.6</td>
</tr>
<tr>
<td>1982</td>
<td>25.8</td>
<td>$1.30</td>
<td>$33.9</td>
</tr>
<tr>
<td>1983</td>
<td>19.6</td>
<td>$1.65</td>
<td>$32.3</td>
</tr>
</tbody>
</table>

Note: The following exchange rates were used: 1979-1981 S/25; 1982 S/30; 1983 S/44.12. The dollars are expressed in constant 1972 price terms. The table relates only to the crude delivered from the Oriente fields.


The Rechannelling of Public Sector Oil Income

The chief feature of the period was the massive rechannelling of the country's oil income away from CEPE and other investment-orientated public sector entities and into the coffers of the state budget. In 1979, oil income had represented 15.9% of state budget income; three years later it had trebled to 45%. The state budget's percentage share of oil income tripled from 15.9% in 1979 to 39% in 1982, while in monetary terms it rose from
$98.4m to $346.4m, equivalent to almost half of its total budgetary income. In terms of specific sources of oil revenue, the state budget's share of crude export income during 1979-82 rose from 22.1% to 50.2%, while its share of fuel oil export income jumped from 17.1% to 58.6%. In 1979, none of the royalty income was channelled to the state budget; by 1982 one-tenth. Only in the case of oil income tax revenue did the state budget's percentage share fall, and that as a result of a new participant in the form of the municipal and provincial councils.

The second largest recipient of oil income was the military. Although the military's share of oil income remained at around 22% in 1978-80, the amount of income it received during this period jumped in real terms from $78.2m to $164.8m. Its income from crude exports subsequently fell, partly as a result of declining oil prices though primarily because of the introduction of new participants in royalty income (the state budget), oil income tax (the municipal councils) and crude exports (the municipal councils in 1981 and again in 1983). By 1982, the military was receiving 7.3% of CEPE's crude exports, 12% of income tax and 39.4% of royalty income.

The decline in the military's crude export income, however, was largely offset by the income it received from domestic oil price increases. By 1982, the military's share of oil income had recovered to reach $145.8m, equivalent to 16.4% of total public sector income. One year later, when CEPE moved to the verge of financial collapse, the military enjoyed a veritable 'windfall'. As a result primarily of the $47.8m it received from the domestic price hikes in March, the amount of oil income channelled to the armed forces increased by 73% to $175.3m, equivalent to over one-
fifth of total oil income. This was the largest amount of oil income that had been channelled to the military in the country's history as an oil exporter.

Table 11.5: Oil Income of the Armed Forces, 1978-83 ($m).

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Exports (CEPE)</th>
<th>Income Tax (Texaco)</th>
<th>Royalties</th>
<th>Domestic Oil Price Increases</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>15.2</td>
<td>13.8</td>
<td>49.2</td>
<td>-</td>
<td>78.2</td>
</tr>
<tr>
<td>1979</td>
<td>34.8</td>
<td>24.4</td>
<td>77.6</td>
<td>-</td>
<td>136.7</td>
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<tr>
<td>1980</td>
<td>57.9</td>
<td>18.5</td>
<td>88.4</td>
<td>-</td>
<td>164.6</td>
</tr>
<tr>
<td>1981</td>
<td>13.0</td>
<td>9.6</td>
<td>82.0</td>
<td>38.4</td>
<td>140.8</td>
</tr>
<tr>
<td>1982</td>
<td>25.7</td>
<td>15.0</td>
<td>60.3</td>
<td>44.6</td>
<td>145.8</td>
</tr>
<tr>
<td>1983</td>
<td>23.8</td>
<td>16.3</td>
<td>87.4</td>
<td>47.8</td>
<td>175.3</td>
</tr>
</tbody>
</table>

Source: Ministry of Finance, Estadística de Ingresos Petroleros, 1978-83, (Quito, June 1984), various pages. No direct reference is made to the military's share of oil income in the Finance Ministry statistics. It is euphemistically described as 'other.'

The military's future position as the second largest recipient of the country's oil income was also assured when a law was passed granting the military legal entitlement to a substantial portion of the income generated from the future operations of foreign companies: 12.5% of gross production from each contract area was to be sold on the international market by CEPE, with the income accruing entirely to the Junta de Defensa Nacional.

CEPE's Finances in 1983

Developments in 1983 further highlight the importance of domestic, rather than international, factors in the decapitalisation of CEPE. In this year, CEPE's net income slumped by 24.3% to just $228.2m, only 75% of the level on which CEPE's 1983 expenditure plans had been based. In view of the country's economic crisis this may not have been surprising - except for the fact that CEPE's gross sales income actually rose in real terms by 8% to $794.8m, the highest level reached at that time in the company's history. This rise can largely be attributed to a further hike in domestic oil prices.
A second point to note, is that while total public sector oil income fell by just 8.7% to $887.8m, CEPE's share slumped by 26.7% to $101.9m. Indeed, without the $31.6m that CEPE received from the price hikes, its share of public sector oil income would have fallen by 49.4% from $139m to $70.3m. Even with this additional income, CEPE's percentage share fell by three percentage points to 12.6%, the lowest level since 1978 and half that for 1979.

Two political decisions were taken in 1983 which affected CEPE's financial situation, the second of which proved to be one of the most damaging in CEPE's history and largely accounts for the rapid deterioration in CEPE's finances during the year.

The 'Ley de Regulación Económica y Control del Gasto Público'

The start-up of production from CEPE's fields in the Nororiente represented a further opportunity to channel additional income to CEPE that, at the very least, would help compensate for the drastic decline in its share of income from other sources. The additional production involved was not insignificant. In 1983, output reached 8 million barrels, enabling the country's total production to rise by 11.1% to 86.3m barrels and, with domestic oil demand falling, CEPE's exports to jump by 45.6% to 30.5m barrels. Here too government interference served to limit the financial benefits for CEPE. Just under one-third (3.1m barrels) of CEPE's production from the Nororiente was required for the domestic refineries. CEPE received S/330 per barrel, equivalent in nominal dollar terms to $7.47 pb, around $3 less than the production cost per barrel.

The potential financial benefits accruing to CEPE were further reduced by a government decree issued on 17 March 1983. The 'Ley de Regulación y Control del Gasto Pública', which outlined measures to control public expenditure, included clauses covering the distribution of income from CEPE's Nororiente fields. Article 6 did contain one important benefit to CEPE. This stated
that before distributing income from the Nororiente fields CEPE would be reimbursed for its production, marketing and transport costs and receive what it termed a 'reasonable' profit. Only when this had occurred would the military receive its legal entitlement to 8% of the value of exports, with the universities and polytechnics also receiving their, albeit small, share. The revenue remaining was then to be used to help service the public debt.\(^7\)

In 1983, CEPE received $13.5m of the $30.7m of revenue generated from the fields, with smaller quantities going to the universities ($0.1m), the Treasury ($0.2m), the military ($0.4m) and, from the S/5 tax imposed on each barrel exported, the state budget ($0.1m). In other words, $16.4m - over 50% - of the export income from the Nororiente fields was channelled towards the financing of the external public debt.\(^8\)

**Ley de Desarrollo de Viabilidad Agropecuaria y de Fomento de Mano de Obra (Law 138)**

The marginal financial benefits that CEPE received from its Nororiente fields was more than wiped out on 10 June 1983, when Congress passed the Izquierda Democratica-inspired 'Ley de Desarrollo de la Viabilidad Agropecuaria y de Fomento de la Mano.' Of all the government decrees that have reduced CEPE's income share, this was potentially the most damaging. Law 138 represented a further stage in the process of reducing in real terms the income of all revenue sharers - with two notable exceptions - and redirecting these funds to the state budget. It froze the exchange rate used to convert the country's dollar income from petroleum exports to sucres for distribution to oil income participants - with the exception of the JDN and universities - at S/44.\(^9\) In practical terms, therefore, a ceiling had thus been placed on the sucre oil income of revenue sharers, allowing it to be whittled away through inflation and devaluation.
The sucres generated above this exchange rate ceiling were to be used to fund road and bridge construction projects to open up frontier zones to agricultural development, provide new employment opportunities, improve the sanitary conditions of the rural poor and to finance a campaign of reforestation. Three funds were created for these purposes. The first, and largest, was the 'Fondo Nacional de Viabilidad Agropecuaria' (FONAVIA), which was to receive 70% of the oil export revenue generated above S/44 to improve the infrastructure and open up at least 1m hectares of new fertile land for agricultural development. A second fund, the 'Fondo Nacional de Saneamiento Ambiental' (FONASA) was to receive 25% of the sucres generated above the S/44 exchange rate ceiling to improve sanitary conditions in rural areas and extend the provision of drinking water facilities. The remaining 5% was to be channelled to the 'Fondo Nacional de Forestación y Reforestación' (FONAFOR) to reverse the process of deforestation that had been taking place at an annual rate of 180,000 hectares each year.¹⁰

The Financial Implications of Law 138 for CEPE

The decision to convert CEPE's share of oil income at a fixed exchange rate was not applicable to all of its sources of revenue. It did not apply, for instance, to the revenue from CEPE's Nororiente fields nor did it apply to CEPE's domestic sales, which formed the major part of the company's total income. The principal impact was on the revenue CEPE received from its share of the consortium's exports, fuel oil exports and from the $0.20 it received on every barrel of crude exported by Texaco. Nevertheless, the proportion of income affected was not insignificant, representing around 17% of total income.

How damaging the law would be for CEPE naturally depended on the movement in the exchange rate. In these circumstances, the progressive weakening of CEPE's financial situation became inevitable with the decision of the Monetary Board in March to implement a daily devaluation of S/0.05. By the third quarter of
the year, the official rate stood at around S/50 to the dollar; by the end of the year it stood at S/55. As a result $26.9m was generated for FONAVIA in 1983, rising to $54.2m.¹¹

The amount of oil income diverted to the three funds was expected to rise substantially over the next few years as the sucre progressively weakened against the dollar. In June 1983, the idista Hugo Caicedo predicted that from 1984 'probably around half of all the sucres income originating from oil exports' would be channelled to these three funds.¹² FONAVIA was expected to receive 10% of oil income, equivalent to $105.3m in each year and $526.5m in 1984–88. FONASA's income was expected to be $39.5m per annum, with total income during the five year period amounting to $197.4m. The smallest fund, FONAFAR, was expected to receive $42.1m during 1984–88. In other words, a total of $766m worth of oil income was to be diverted to finance these three funds from 1984 to 1988.¹³

Law 138 did not simply affect CEPE's income; it was also expected to lead to a significant increase in the company's costs, as the CEPE manager was at pains to stress:

'It is essential to indicate the disadvantageous situation in which CEPE finds itself. On the one hand, its income is converted [into sucres] at a fixed exchange rate. On the other hand, it has to obtain foreign exchange at the official and free market rate in order...[to purchase imports of equipment and materials]...to carry out its operational duties.'¹⁴

The combination of declining income and rising costs was expected to push CEPE into virtual bankruptcy over the next four years. The income and expenditure projections for 1984–88 cited at the start of the chapter were gloomy enough. However, they had been based on a fixed exchange rate for CEPE's income of S/44 and an exchange rate of S/55.05 for its expenditure. No account was taken of the progressive devaluation of the currency. While the exchange rate for calculating its income remaining fixed at S/44,
the daily devaluations ordered by the Hurtado government were projected to result in the value of the sucre relative to the dollar progressively falling from S/62.275 in 1984 to S/99.775 in 1988. As a result, CEPE's deficit was projected to be, not $679.8m, but five times that level.16

As a matter of urgency (but with no success), CEPE called on the government to:

'exclude from Law 138 the share of oil income available for allocation to CEPE..to remain faithful to the provisions within the Oil Law and the Law on Public Expenditure to ensure that CEPE can recover its production costs and the refining, transport and storage costs involved in supplying derivatives to the domestic market plus a reasonable profit..[and]..to revise the legislation covering CEPE's participation in the consortium's exports to also ensure that it can recover its production costs and receive a reasonable profit for its operations.'16

The Funding of Investment from External Sources

The inability of CEPE to finance investments from its own resources was not new. In the 1970's, only around one-third of the investments undertaken were financed from CEPE's own funds. At that time, however, access to credit was easy, particularly for an oil exporter, and interest rates low. The early 1980's, however, not only saw interest rates spiral but the availability of credit tighten to the point where lending by 1982 had been virtually curtailed. In the case of CEPE, the use of credit to fund investment work ground to a halt after 1980, when the company contracted $25.3m from commercial banks. No new loans were contracted in 1981-84, aside from a $0.9m loan in 1982. This largely explains why CEPE's external debt actually fell (in nominal dollar terms) from $145.7m in 1979 to $112.1m in 1983.17

CEPE was not entirely insulated from the rise in interest rates, since the loans contracted in the 1970's carried floating interest rates, which ranged from 1-1.25% plus LIBOR.
Nevertheless, after 1979 when one-fifth of expenditure was required to service its debts, the proportion fell to an average of 9%.

The market for credit to the oil industry has generally reflected the overall state of the world capital markets. However, CEPE's failure to obtain credit from the World Bank also resulted from its failure to satisfy the policy conditions attached to such loans. Since 1980, CEPE had sought to secure funds from the World Bank to finance its share of investment in field development work, expand the TransAndean pipeline and construct a liquid gas plant. These requests were refused, despite domestic oil prices being increased on three separate occasions and despite the adoption of a series of other economic measures that had, by all accounts, 'found favour' with the Bank.

International factors may have helped shape the Bank's response to CEPE's requests. At this time, the oil-lending policies of both the World Bank and the Inter-American Development Bank were the target of increasing criticism by the Reagan government. According to a National Petroleum Council Report, commissioned by the US Energy Secretary, their lending activities 'were competing directly' with private oil companies in upstream activities. The essential message of the Reagan government was that both Banks should stop funding exploration and development work in Third World countries.

How effective this pressure was is difficult to determine. But, for whatever reason, the amount of funding available for lending fell sharply. In 1982, the World Bank reported that lack of financial resources ruled out any significant increase in oil and gas funding in the short-term. In respect of the IADB, energy-lending for oil and gas projects fell, in nominal dollar terms, from $147m in 1981 to $31.4m in 1982, with the last representing a loan to Bolivia for an exploration and production project. In 1983, just $21.6m worth of loans to the petroleum sector were approved, the lowest level since 1979.
In these circumstances, and with both Banks receiving numerous requests for funding from other Third World countries, it is likely that the conditions attached to World Bank loans were substantially tightened. Ecuador was denied a loan until further steps were taken to introduce market-based prices for domestic products, reduce the public sector deficit and, crucially, improve the efficiency the CEPE. A key concern of the Bank was that, like a number of other Third World state enterprises was in danger of becoming 'a fossilised institution that was a burden on government and society as a whole..'23

This overview has so far looked at the collapse in CEPE's investment capacity by focusing on the constraints placed on its ability to generate sufficient revenue to fund its priority investment projects. However, as the statement of the World Bank implies, lack of investment capacity may reflect not only financial starvation but also operational inefficiency.

**The Escalation in CEPE's Costs**

The proportion of CEPE's expenditure used to cover operational costs increased significantly, from 55% in 1979 to 72% in 1984. Why this occurred was the subject of intense political debate within Ecuador in the early part of 1983. Attention centred in particular on CEPE's high production costs in the Nororienté - estimated in nominal dollar terms at $10 - and those of the Texaco-CEPE consortium, which were just $2.34. Conservatives seized on this as evidence of CEPE's inefficiency, a claim vigorously denied by the former CEPE manager Jorge Pareja:

'All the investments made by Texaco and which reflect today's costs were made between 1967 and 1972 when the costs of equipment, drilling, imported materials and salaries were substantially less than today. We would have to reduce the costs of today to those of 1972 or 1968 to be able to compare them...I am convinced that the current costs incurred by CEPE are perfectly comparable with those incurred by Texaco-Gulf in the years 1967-68 and 1972.'24
Even the Oil Minister felt it necessary to emphasise that specific production factors, rather than the level of company efficiency, largely determined the level of production costs. Costs, for instance, in the North Sea, exceeded $20 'not because English companies that have accumulated over 100 years of experience are inefficient' but because of the specific production conditions in which they were required to operate.25

There was some substance to this argument. Nevertheless, even CEPE recognised that its efficient development had been hampered by the imposition of a highly bureaucratic system of centralised control and by the overbearing presence of the Controller-General. As one future idista Oil Minister remarked, CEPE was in many respects 'an oil company in name only', which more closely resembled a bureaucratic appendage of the state.26

External Perceptions of CEPE's Efficiency

In a report issued in 1983, the World Bank expressed concern that CEPE's institutional structure could be conducive to increasing expenditures and disregarding efficiency. It was not required to pay dividends, or pressed to generate profits; its tax bill declined as its expenditures increased; and its domestic sales were controlled by government fiat. There was, the Bank concluded:

'no profit incentive to reduce costs and no fear of competition. The incentives for running an efficient and lean operation, then, are practically non-existent...Higher income may simply result in higher expenses.'27

The rise in CEPE's costs could not, in the Bank's view, be explained by inflation or increased oil production. While operational costs trebled between 1973–78 so too did CEPE's production, while its refining capacity more than doubled. The Bank concluded that real unit costs had not increased. However, in 1979–82, when there was little increase in its production or refining capacity, CEPE's real production costs more than
doubled. Although the indices in table 11.6 'are obviously quite rough one's', the Bank suggested that 'they do point to a drop in CEPE's efficiency.' If CEPE had saved even a quarter of its inflated current costs in 1982, 'it would have reduced the total public deficit by more than 15% - over 1% of the GDP.'

Table 11.6: CEPE Efficiency Indices (1975=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Operating Costs Nominal</th>
<th>Operating Costs Real</th>
<th>Crude Output</th>
<th>Refining Capacity</th>
<th>Real Operating Costs/ Crude Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>1976</td>
<td>122.9</td>
<td>110.0</td>
<td>116.6</td>
<td>100.0</td>
<td>94.3</td>
</tr>
<tr>
<td>1977</td>
<td>216.5</td>
<td>168.5</td>
<td>284.1</td>
<td>226.2</td>
<td>59.3</td>
</tr>
<tr>
<td>1978</td>
<td>422.7</td>
<td>307.4</td>
<td>312.4</td>
<td>226.2</td>
<td>98.4</td>
</tr>
<tr>
<td>1979</td>
<td>621.0</td>
<td>387.2</td>
<td>318.6</td>
<td>226.2</td>
<td>121.5</td>
</tr>
<tr>
<td>1980</td>
<td>958.6</td>
<td>506.1</td>
<td>315.9</td>
<td>226.2</td>
<td>160.2</td>
</tr>
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<td>1981</td>
<td>1185.0</td>
<td>554.8</td>
<td>324.1</td>
<td>226.2</td>
<td>171.2</td>
</tr>
<tr>
<td>1982</td>
<td>1625.2</td>
<td>650.0</td>
<td>322.8</td>
<td>226.2</td>
<td>201.4</td>
</tr>
</tbody>
</table>


Proposals to Restructure CEPE

Although the restructuring of CEPE had been regarded as a key policy objective by the Roldós government, the attention of the political elites since 1979 had been focused on more 'pressing' matters. A belated opportunity to raise the issue was provided by the oil reforms of 1982. During the 'consulta nacional' Izquierda Democratica had argued that, prior to the return of foreign oil companies, steps should be taken to develop CEPE into a strong, efficient oil company. This was seen as essential to ensure that the state had at its disposal an effective counter-weight to the oil multinationals. Only when this had been achieved, it was argued, should foreign oil companies be permitted to return.

In early 1983, a draft law containing proposals to reform CEPE's Constitution and enable CEPE to operate along the lines of an autonomous public sector corporation was presented to Congress. The CEPE Board was to be 'depoliticised' with ministers replaced by individuals with at least five years experience in the oil
industry who would work for CEPE on a full-time basis. Measures to allow the head of CEPE and his management team more autonomy were also proposed. These included allowing the CEPE manager to agree contracts up to a maximum of 0.2% of CEPE's budget. As part of a continuing move to enable CEPE to become self-financing, the draft law proposed that prior to the distribution of the income originating from CEPE's business activities - with the exception of royalties - CEPE would first deduct all the costs it had incurred and receive a rate of return equivalent to 15%.

In the event, no Congressional debate on the proposals took place. The idista representative Raúl Baca Carbo blamed conservatives for 'blocking the approval of said law' and anything else 'that represents the intervention of the state in the economy.' However, it seems likely that, with the attention of the political parties focused on the first round presidential elections in January 1984, few regarded discussion of the proposals as a matter of great urgency. Moreover, although the concept of a state oil company had not been entirely discredited, CEPE's image had been badly tarnished over the preceding years. Far from being the embodiment of national sovereignty, by 1983 it was viewed by many as a burden on society which was consuming - often wasting - scarce resources which could be better employed elsewhere. One might even go so far as to question whether there was any real concern as to whether CEPE developed into a successful company or not. After all, with foreign companies on the point of returning to the country and Texaco continuing to operate the consortium's fields the future of the country's oil future was hardly dependent on CEPE.

**CEPE's Role in the Consortium**

The debate over CEPE's efficiency appears to have been directly related to renewed calls to increase state control of the Texaco-CEPE consortium. With Texaco now undertaking secondary recovery work, and with the issue of Petroamazonas a distant memory, CEPE
was destined to remain the 'junior' partner in the consortium. However, in May 1983 the head of CEPE, Rear-Admiral Raul Jaramillo, suddenly announced that CEPE would replace Texaco as operator of the consortium from 1 January 1985. In support of this demand, Jaramillo pointed to a provision in the Napo Accord which had been signed between Texaco and Gulf in 1965. This stated that they would alternate as operator of the consortium every ten years. Gulf itself had decided not to take up its option in 1975. However, when CEPE acquired Gulf's share in 1977 it had apparently been agreed that the provisions of the Napo Accord would henceforth be applicable to CEPE. This would allow CEPE, if it so wished, to replace Texaco as operator from the start of 1985. In one sense, Jaramillo was merely implementing a policy objective laid down in the National Development Plan.

It was this demand that led conservatives to initiate a campaign to discredit CEPE as being inefficient and lacking the technical and managerial capacity to assume operational control of the consortium. Aware of the likely response to his demand for the implementation of the Napo agreement, Jaramillo claimed that:

'CEPE has undertaken exploration work, it has successfully developed fields, successfully constructed an oil infrastructure and successfully exploited its own fields...[In addition]...more than 95% of the professional staff and workers in the consortium are Ecuadorians, the same that will continue working efficiently in the consortium.'

There was, he argued, a practical as well as a legal and moral reason why CEPE should become operator. With just seven years to go until the termination of its contract, Texaco was unlikely to be interested in making any investments which it would be unable to recover before this date. Moreover, its primary objective would be to extract as much oil as possible in the shortest possible time, at whatever the price, 'since the only barrel of oil that is not profitable to Texaco is the barrel that remains in the fields after 1992.'
Jaramillo's letter to Texaco had been written 'without the knowledge of either the energy minister or of the President.' The response of Hurtado was decidedly lukewarm. According to one report he 'decided' that CEPE, on the basis of the Napo Accord, was 'legally entitled' to become operator. This however should be seen as a statement of fact, not a statement of intent. Texaco would undoubtedly have regarded such a move as unacceptable. Quite apart from the risk of Texaco halting any further secondary work, a dispute with the company would have badly damaged the country's international image at the very moment when the first round of bidding was underway. The final decision would, as Hurtado realised, lie with the next government. It was therefore the conservative president León Febres Cordero who took office in August 1984 who announced that CEPE would not be taking up its option to become operator. Nevertheless, aside from the labour movement, there was at the time little firm support for Jaramillo's demand among centre-left groups. Where support was indicated, as in the case of Izquierda Democrática, it was heavily qualified. In June, the party's spokesman Hugo Caicedo, emphasised that CEPE should only be permitted to become operator if it could show that it was in a position to be able to:

'administer the consortium as or more efficiently than Texaco...[and]...to operate the system of secondary recovery that was being implemented in the consortium's wells. Under these conditions ID will support CEPE becoming operator of the consortium.'

The implication was that such a situation had not been reached. Texaco's dominance of the consortium, apparently under threat from a government elected five years earlier, remained intact.

While Texaco was left in peace in the Oriente and oil policy was directed towards stimulating investor interest in the first round of bidding in June, CEPE's priority objectives in the upstream had narrowed considerably by 1983. With its role in 'risk' investment virtually ended, CEPE was left to concentrate its limited resources on developing its fields in the Nororiente. The
The marginalisation of CEPE in the country's upstream sector was now complete. Whether CEPE again undertook extensive exploration work would depend on the exploration results of those companies which decided to invest in Ecuador on the basis of 'service' contracts.
CHAPTER 12: OIL COMPANY RESPONSES TO THE FIRST BIDDING ROUND

With the first round of bidding set to open on 13 June 1983, Ecuadorian officials travelled to Western Europe and the United States to generate oil company interest. When Hurtado himself went to the United States in March to discuss Ecuador's debt crisis, he took the opportunity to meet or, more accurately, 'avidly pursue' US oil company officials. As this phrase suggests, Ecuador's need for foreign oil capital was somewhat greater than the desire of the companies to invest in Ecuador. The cautious response of companies was perhaps understandable, in view of the country's past history of acrimonious relations with oil companies. However, there were other factors that threatened to reduce any potential enthusiasm among companies to participate in the first bidding round. As one company spokesman explained:

'It's oil country, so I expect there will be a lot of oil company interest. But given the present oil market...we'll have to wait until we see the geological characteristics of what they offer.'

The government had hardly chosen the most opportune moment to invite companies back into the exploration play. With oil prices sharply declining, potential oil investors were having to re-examine their capital expenditure plans and investment strategy.

Trends in Oil Company Income and Expenditure

The decline in oil prices that had begun in 1981 had caused oil company earnings to fall sharply. In the case of BP, Exxon, Gulf, Mobil, Royal Dutch/Shell and Texaco, their combined earnings fell by 24.9% in 1981, from $11.6 bn to $8.7 bn, and then dropped by a third to $5.9 bn in 1982. Capital expenditure, after growing only marginally in 1982, dropped sharply, by 25% in 1983. Particularly badly hit by the depressed oil market were the independents. The experience of Texas International was not
atypical. Texas had been 'caught up in the euphoria of the oil
boom,' and borrowed heavily in the confident expectation that
oil prices would continue to rise. In 1981, for instance, the
company's capital expenditure had totalled $102.2m, equivalent to
137% of income in that year. Two years later, the company's debt
had topped $176.5m and capital expenditure fallen to just $23.2m.
In the short term, the company president James Kishpaugh
predicted, 'all of us are going to be a little gun-shy for a
while.'

The Slowdown in Exploration Activity

Particularly worrying for Ecuador was the scaling down, in many
cases drastically, of exploration expenditure. After rising by
39% and 16% in 1981 and 1982 respectively, the combined
exploration expenditure of the six majors slumped by 21% in
1983. A more detailed survey covering the top 22 oil companies
revealed a similar picture. Another, perhaps more accurate
indication of trends in exploration activity, can be obtained by
looking at the number of drilling rigs in operation. After
peaking at 5,821 in non-OPEC countries, the number of rigs in
operation fell in 1982 to 4,099. Early evidence for 1983
suggested that the slowdown in exploration activity was
continuing, with Parker Drilling reporting in April that just
one-third of its 78 rig-fleet was currently operational.

Other factors may have encouraged the reduction in exploration
work. Sagging demand, over-supply and the emergence of a buyer's
market may have given rise to a 'glut psychology.' There was also
evidence at the time suggesting that a number of companies were
opting to increase their proven oil reserves not through
exploration but through acquisitions, production enhancement and
development drilling.

Towards the end of 1982, however, increasing pressure was being
exerted on companies to give fresh impetus to the search for new
oil reserves. The International Energy Association in particular
called for vigorous energy policies to prepare for the expected shortfall in supplies at the end of this century.' This call was echoed by the Petroleum Economist:

'Though oil is at present a buyer's market, the common belief that fears of a coming shortage can now be set aside is a dangerously short-sighted one. While demand is temporarily constricted by severe economic depression, it will pick up before long - and it continues to eat into the world's oil reserves. What is consumed must be replaced if the future is to be safeguarded. In view of the length of time required for exploration and development there should be no slackening of exploration effort. We need new oilfields...''

The Potential Benefits of Low Oil Prices

The depressed oil market was not regarded by Ecuadorian officials - publicly at least - as necessarily a disincentive for companies to invest in the country. After all, it was argued, the decision on whether to invest would be based not on the current price level but on the expected price level in six to eight years following the signing of a contract. Indeed, some officials were convinced that the country had in fact chosen an 'opportune moment' to attract foreign oil investment.' With oil prices falling, companies could be expected to direct investment away from high cost areas and towards areas - like Ecuador - with low to medium exploration and operating costs. There was also a belief that the search for new oil reserves would be increasingly directed away from developed countries, where large-scale investment had failed to significantly increase OECD reserves, and towards potential oil-bearing zones in the Third World.

This was not an altogether unconvincing line to take, for two reasons. Since exploration activity had historically been concentrated in the developed countries, particularly the United States, there was a strong possibility that the petroleum still to be discovered might be largely situated in the Third World. No definitive figure exists on the size of their ultimate
recoverable reserves. However, Grossling suggested in 1985 that they could range from 1,000 to 3,000 billion barrels, with Latin America holding between 336 to 960 bn, Africa and Madagascar 350 to 1,000; South and South-East Asia 224 to 640; and China 75 to 220. Moreover, the evidence suggested that oil company exploration in the ten years to 1981 had consistently been more successful in the developing countries. According to one report, the amount of oil and gas (measured in terms of oil equivalent) discovered averaged 52.6m barrels per wildcat in the oil exporting developing countries, 5.2m barrels in the oil importing developing countries and only 0.7m in the industrialised countries. The same report also concluded that the cost per added barrel of oil or gas in the three categories worked out respectively (in nominal dollar terms) at $0.24, $1.15 and $4.48. There were, therefore, major commercial incentives for switching the search for new reserves to the developing countries.

In the early part of 1983, however, there was no real evidence that a shift in investment strategy of the type that could benefit Ecuador was taking place. On the contrary, major cutbacks were taking place in company exploration activity in Third World countries. For instance, Peru and Colombia, which had signed a number of contracts with foreign oil companies in 1979-81, now found themselves two years later struggling to maintain oil company interest. Both were to recognise that those countries which were able to adjust their contractual terms in line with the changes in the world oil market would be far better placed to maintain or attract the limited amounts of exploration capital available for non-priority investment targets.

**Foreign Exploration Activity in Peru and Colombia**

Peru's experience in 1983 showed that, under existing market conditions, the 'liberal' oil regulations that had initially
attracted companies were no longer adequately attractive to maintain, let alone attract, investment. In the first part of the year, the momentum of exploration activity slowed considerably, with a number of prospective deals with oil investors falling through. In mid-1983, Superior Oil company decided to abandon its wells in the northern jungle after having spent $70m in two years. Occidental announced a two-thirds reduction in drilling plans in the jungle and cancelled all drilling in the northwestern coastal fields. And yet, just over a year earlier, the company had claimed that its Peruvian operations were the company's most profitable world-wide, owing to a production sharing agreement that yielded better returns than, for instance, Libya and the North Sea.

Overall, foreign oil investment in Peru was expected to fall from $241m in 1982 to around $162.5m in 1983. With Petroperú in deep financial problems and with new reserves urgently needed, the government had little option but to:

'face up to the same challenge confronting all lesser developed countries: how to exercise flexibility in the adjustment of contract terms to keep pace with changing world market conditions.'

By September 1983, reports were circulating that the government was planning to introduce a more flexible exploration contract. This was expected to include a seismic option under which companies would not lose their bank guarantee if they felt that seismic surveys did not justify drilling exploratory wells. Steps were also to be taken to allow companies to participate in blocks originally assigned to Petroperú.

Exploration activity in Colombia at the start of 1983 also fell sharply, by around 50%, following the drilling of a record 73 wildcats in 1982. This occurred despite a number of highly promising discoveries by Occidental in the Llanos. However, a significant degree of oil company interest in Colombia was maintained and, in the closing months of 1983, actually
strengthened. Of the 25 association contracts signed between Ecopetrol and private companies in 1983 - an increase of 17 on 1982 - 10 were signed in the closing weeks of the year.\textsuperscript{23} Colombia had a number of advantages over other Latin American countries. The economic and political situation was reasonably good, it had a manageable external debt and was generally regarded as being one of the best credit risks in the region. Oil-specific factors also played a key role in revitalising oil company interest. A number of oil discoveries had been made in the Llanos and, more particularly, in Cano Limon. This was described by Armand Hammer as Occidental's 'most significant' discovery since the 'Claymore' and 'Piper' fields in the North Sea.\textsuperscript{24} Company interest was also maintained by offering more attractive terms that included allowing companies up to two years to conduct geophysical surveys prior to the start of drilling. This was one of the features:

'that have made the Colombian association contract preferred by the private sector compared with terms offered by other Latin American countries.'\textsuperscript{23}

The contractor could also relinquish an area after seismics, without any obligation to drill if the prospects were not considered promising.

The examples of both Peru and Colombia provided good and bad news for Ecuador. On the positive side, it was clear that oil companies had not entirely written off Latin America as a target for investment. On the negative side, Colombia in particular was successfully attracting scarce capital resources that might otherwise have been available for investment in Ecuador.

\textbf{Priority Targets for Exploration}

The problems likely to face Ecuador were compounded by the clear evidence that the main focus of company interest during this period was not on Latin America or developing countries in
general. Attention instead was centred on China, which had opened an international bidding process covering 150,000 km in the South China Sea and the Yellow Sea. There was, in the words of one oil expert, 'an almost hysterical interest' in the oil potential of China. By the close of bidding in August 1982, 102 tenders had been received from 12 consortia and eight companies that bid independently. One year later, a number of these including BP, Occidental, Exxon-Shell, Hispanoil and Idemitsu had signed risk contracts. Although exploration results were to prove disappointing - initial estimates had pointed to reserves in the South China Sea ranging from between 14 to 25 bn barrels - it was estimated at the time that as much as $10 bn worth of foreign investment would be channelled into exploration and development in the period up to the end of the century.

Oil company interest was also maintained in Alaska and the Gulf of Mexico. A succession of highly successful licensing rounds were held during 1983 for exploration rights in the Gulf. At the end of May, just under $2 bn worth of bids were received from 78 companies. Three months later, a further $1 bn worth of bids were received from over 100 companies for 436 blocks covering 6m acres.

Meanwhile, in one of the highest cost-producing areas in the world oil exploration was 'back in fashion.' Interest in the British sector of the North Sea had shown signs of waning in 1982, with some companies openly talking of diverting more of their exploration and production investment to other regions of the world - notably China - where costs were lower. The reason for this was lay in the maintenance of a tax system which, at a time of falling oil prices, served to reduce cash flow to an inadequate level and diminish any incentive to invest in small or medium sized fields which contained the bulk of unexploited reserves.

There appeared, then, to be some evidence to support Ecuadorian claims that low oil prices would force companies to redirect
their oil investment towards low cost regions. However, this argument implicitly assumed that governments in high cost regions would not revise their tax regulations to take account of the depressed oil market conditions. In the case of the British sector of the North Sea such revisions did take place. In March 1983, the British government responded to oil company pressure by issuing a series of tax amendments which were expected to save oil companies operating in the North Sea £800m in the period to 1987. As a result, the number of exploration wells drilled rose to a record 128 in 1983, resulting in 21 new oil and gas finds, only slightly lower than the record 28 discoveries made in 1975.

While priority investment targets in North America, the Gulf of Mexico, the North Sea and China were largely unaffected by the squeeze on profits and expenditure, the price declines did reduce the attractions of committing limited finance to more marginal exploration plays, particularly in countries noted for political instability. Whether Ecuador, as a proven though 'marginal' exploration play, secured a share of this limited finance depended on the terms on offer being as, if not more, attractive than those existing elsewhere and of potential investors being convinced their investments would be secure.

Ecuador: A Favourable Environment for Foreign Oil Companies

Government officials believed that Ecuador was well placed over other Third World countries in offering favourable investment conditions to foreign oil companies: production costs were situated in the low to medium range; the policy of reserving 'low risk' areas for CEPE had been dropped and a number of these, including Block 15, made available to companies; Ecuador was situated outside of the main areas of world conflict; its geographic position provided good access to the main oil consuming nations; major revisions had been made to domestic oil prices; and border tension with Peru substantially reduced. Most importantly, there was clear evidence of a consensus within
Ecuador on the need for foreign oil capital and on the contractual terms under which companies were being invited to explore.

These terms were, in the government's view, 'in line with the most up to date and progressive of their kind applicable to the petroleum industry.' Artificial barriers of entry in the form of superficiary rights or entry fees had been eliminated; and a more flexible payment system had been introduced which gave companies a secure access to crude oil supplies. The tax system was also regarded as a key incentive for companies. This, according to Wilson Pástor, ensured that incentives to explore for and develop fields were unaffected by adverse changes in the operating environment, either in terms of reduced revenues or increased costs. The tax system in particular was expected to give Ecuador the competitive edge over other developing countries.

The tax system was devised to offset oil company reluctance to invest when market conditions were depressed. According to Pástor, oil income tax in other countries was generally imposed on the difference between prices and real costs. This meant that if prices fell and costs increased, separately or together, company profitability would also fall. In these circumstances, there was a possibility that lower oil prices could be accompanied by higher income tax, which in turn would lead to wells that had previously been commercial becoming uncommercial.

Under the Ecuadorian system the profitability of a field was determined independently of income tax and related instead to the volume of non-amortized investment. It was on this basis that the contractor would receive a rate of return equivalent to the Prime Rate and to the level of risk involved in the block awarded. In addition, a premium was paid which was dependent on the size of income and the quantity of reserves found: the
greater the income and reserves, the larger the premium. In this way, Pastor concluded, the profit of the oil company:

'is guaranteed according to the rate agreed within the contract, regardless of income tax and, to a large extent, the movement in oil prices.'

Other features of the Ecuadorian 'service' contract appeared, at the very least, to be representative of what was on offer in other Third World countries. Clearly, from the contractor's perspective, oil contracts which provide for a smaller government take of the total revenue from the contract area will be more attractive. As the following table shows, the state's share in Ecuador would be higher than that obtained under the Australian Resource Rent Tax and the British Concession contract. It would, however, be lower than the share available under the Angolan and Indonesian production sharing contracts. Under the 'service' contract, the state's share was 75% compared to 80% in Indonesia and 76% in Angola.

Table 12.1: Analysis of Government Take (in nominal $m)

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Angola</th>
<th>Ecuador</th>
<th>Australia</th>
<th>U.K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenue</td>
<td>2529</td>
<td>2529</td>
<td>2529</td>
<td>2529</td>
<td>2529</td>
</tr>
<tr>
<td>Government Share</td>
<td>2014</td>
<td>1912</td>
<td>1894</td>
<td>1632</td>
<td>801</td>
</tr>
<tr>
<td>Contractors Share</td>
<td>306</td>
<td>408</td>
<td>426</td>
<td>688</td>
<td>1519</td>
</tr>
<tr>
<td>Investments</td>
<td>115</td>
<td>115</td>
<td>115</td>
<td>115</td>
<td>115</td>
</tr>
<tr>
<td>Expenses</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
<td>94</td>
</tr>
</tbody>
</table>

Note: The figures are based on a 50 million barrel field with $5,000/peak daily barrel development costs and an oil price of $29 per barrel and expressed in nominal dollars.


The size of the contractor's take in Ecuador was even more favourable vis a vis Indonesia and Angola as the level of
development costs increased for particular sizes of field, as table 12.2 shows.

Table 12.2: Estimated Government Take by Size of Field (in %)

<table>
<thead>
<tr>
<th>Development Costs/ Peak Daily Barrel ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td><strong>BARRELS</strong></td>
</tr>
<tr>
<td><strong>50 Million</strong></td>
</tr>
<tr>
<td>Ecuador</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Angola</td>
</tr>
<tr>
<td><strong>100 Million</strong></td>
</tr>
<tr>
<td>Ecuador</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Angola</td>
</tr>
<tr>
<td><strong>200 Million</strong></td>
</tr>
<tr>
<td>Ecuador</td>
</tr>
<tr>
<td>Indonesia</td>
</tr>
<tr>
<td>Angola</td>
</tr>
</tbody>
</table>


The Political Risk Factor

The government recognised that economic incentives alone would be insufficient to persuade oil companies to invest in Ecuador. There were reports that some companies had 'expressed concern' that:

'having signed a contract and been working for two or three years someone or other will appear and rescind the contract for missing a comma or something of this kind.'

Oil company fears can only have been heightened with the impeachment of Oil Minister Ortega and the cancellation of the Permago contract. In the view of the former head of CEPE Jorge
Pareja, the 'absurd' decision to dismiss Ortega was 'a political act unconnected to oil matters' which would prove highly damaging to Ecuador's attempts to attract foreign investment:

'As a result of this sad comedy foreign companies are going to think twice before coming to Ecuador because one of the basic concepts that multinationals require, be they state or private, is the security and sanctity of their contracts.'

Ecuadorian officials sought to assure potential investors that the 'rules of the game' would remain unaltered during the lifetime of the existing government and specifically pointed to the results of the 'consulta nacional.' They were also left in no doubt that the general state of the economy left Ecuador with little alternative but to seek an external solution to the country's energy and economic problems. Burdened by huge debt-servicing payments, with markets for its principal exports depressed, international reserves low and access to new loans virtually closed, the state was in no position to fund an extensive programme of exploration.

Moreover, the revitalisation of the oil sector represented the key to economic growth and recovery. Although non-oil exports were expected to recover from the effects of 'El Niño' in 1984, no further growth was expected with external demand remaining depressed. Manufacturing exports were expected to 'only fare moderately well' given the depressed nature of the Andean Market which remained - and was likely to remain - the primary market for these products. In these circumstances, Ecuador's future prosperity rested almost entirely on the ability of the government to maintain and increase the volume of crude oil exports. This, in turn, depended on dampening domestic oil consumption through further oil price hikes and boosting the
country's production capacity by intensifying exploration and development work. Time, according to the World Bank, was fast running out:

'With internal demand for petroleum products increasing at about 6% per year, oil production in Ecuador must be increased annually by at least 2 million barrels to maintain crude oil exports at the same level as 1983. Thus, sufficient reserves exist to permit slight increases of oil production through 1988: thereafter, a rapid decline of oil production will occur unless new fields are soon developed to offset the decline after 1988, to supply internal demand, and to increase oil exports.'

Aware that companies might be reluctant to bid with just one year of the Hurtado government's term of office to go, officials stressed that, given these economic realities, the new government would have no alternative strategies available to it other than to seek a massive infusion of foreign investment. Both candidates with the most significant chances of forming the new government in August 1984 were committed to securing foreign oil investment. León Febres Cordero, the champion of the business community, was strongly attached to neo-liberalism and the principles of the free market. Together with his close ties to the United States and foreign capital and his belief that state companies (in particular CEPE) were by definition inherently inefficient, Febres Cordero was favourably disposed ideologically towards foreign investment. That major economic imperatives necessitated the infusion of foreign investment was largely incidental: even in a more favourable economic climate, a government headed by Febres Cordero could be expected to attract substantial quantities of foreign oil investment.

Any concern at the future direction of oil policy under a new government thus centred on the Izquierda Democratica candidate Rodrigo Borja. He was expected to be more vigilant in ensuring that contractual obligations were carried out. However, concern at the prospect of a centre-left government was substantially
reduced by the knowledge that Izquierda Democrática itself had played a central role in drawing up a more attractive package of oil regulations for foreign investors.

**Oil Company Responses to the First Round of Bidding**

Within a week of the first bidding round opening, CEPE officials were reporting that 12 companies had expressed interest in participating in the bidding process. By the close of bidding in October, 25 oil companies had purchased the $50,000 information packages giving details of each of the 11 blocks on offer, seven of which were onshore. The degree of apparent interest was such, that Oil Minister Galinda suggested that contracts might be signed for all eleven blocks. Following the success of this bidding round, he fully expected that the next government would put up further blocks and initiate a second bidding round.40

Others adopted a more cautionary attitude, with former Oil Minister Ortega warning that the depressed state of the oil market had led companies to restrict their operations 'everywhere in the world, which also means a need to select the areas to be explored more carefully than ever.'41 A similar view was taken by Hugo Caicedo, who argued that, if just 3 or 4 contracts are signed during the present government, 'one can then speak of total success.'42 He was similarly opposed to Galinda's suggestion that the new government should open a second bidding round, though this stance presumably assumed that contracts would eventually be signed for the blocks currently on offer. It was, he said, 'preferable to wait four or five years to see the results of the first bidding round and then proceed from there'. It should not be forgotten, Caicedo added, that 'the opening to foreign capital is not unlimited but that it was conceived in order to complement our national effort through CEPE.'42

The number of actual bids received by 17 October 1983 was modest. Of the 11 blocks on offer, just four blocks (two onshore and two offshore) attracted bids. Belco was the only bidder for the two
offshore areas (blocks 1 and 2) immediately to the north of its Peruvian offshore fields. Block 15, situated alongside the giant Shushufindi field, drew competing bids from two consortiums, Conoco-Husky-Home and Idemitsu-Hispanoil, and from Occidental which finally won first option. The company had proposed to carry out 1,413 km of seismic lines and to drill four exploratory wells. A joint bid was made by Exxon and Hispanoil for Block 8, with the consortium offering to carry out 1,000 km of seismic lines and to drill two exploratory wells.

Table 12.3: Analysis of Oil Company Investment (in nominal $m)

<table>
<thead>
<tr>
<th></th>
<th>Occidental</th>
<th>Exxon</th>
<th>Belco(1)</th>
<th>Belco (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prospection</td>
<td>12.0</td>
<td>9.0</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td>Drilling</td>
<td>20.0</td>
<td>11.6</td>
<td>6.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Evaluation</td>
<td>-</td>
<td>3.8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Admin. Expenditure</td>
<td>5.1</td>
<td>3.6</td>
<td>0.6</td>
<td>1.1</td>
</tr>
<tr>
<td>Training</td>
<td>2.0</td>
<td>2.0</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Other</td>
<td>0.3</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Investment</td>
<td>39.4</td>
<td>30.0</td>
<td>8.8</td>
<td>15.3</td>
</tr>
</tbody>
</table>


The lukewarm response to the tender was understandable given the existing international market conditions and the major investment opportunities that were developing in other regions of the world. Although the political risk was considered small by many companies, it would be surprising too if Ecuador's acrimonious relationship with foreign companies in the past had not caused many potential investors to refrain from bidding. More recent events, most notably the conflict between Carvajal and the Oil Ministry, the dismissal of Ortega and Jaramillo's letter to Texaco could only have increased company concern.

The patchy response does highlight how assessments of the political risk, the geological attractiveness of the blocks on offer and even the contractual terms themselves can differ from company to company. One oil major, which purchased an information pack but did not bid for a block, still did not
believe the terms were sufficiently attractive. There was, in its view, no certainty that a company would get access to any oil discovered. The company claimed that the law still allowed the state to keep a sizeable portion of the oil discovered and limited a foreign investor's access to cash profits rather than to crude oil supplies. Concern was also expressed with the pricing concept on which cash payments were to be based. The valuation of the oil, it claimed, would be dependent on the 'whim' of CEPE and its ability or otherwise to sell its oil on the world market at good prices. Some concern was also expressed that the Oil Minister - and thus the head of the CEPE board - would arbitrate in any conflicts that arose between the contractor and CEPE.

State-Company Negotiations. 1983-85

Negotiations with Occidental and Exxon-Hispanoil initially proceeded at a brisk pace, with the Oil Minister predicting that contracts would be signed in February 1984. Occidental's first exploratory well was expected to be drilled in July, with Exxon's following one month later. However, a further year was to pass before the first contract was signed. Although the draft contract with Occidental was agreed in early 1984, any prospect of the contract being signed during Hurtado's term of office disappeared on 2 July 1984 when the Attorney-General objected to the draft contract. Some of the objections 'betrayed little understanding of tax legislation', with the report objecting to the fact that income tax was to be levied only on income and not on expenses. The key objection, however, was that the Special Bid Committee should not have accepted the bid from, or signed the contract with, Occidental Petroleum since exploration and development work was to be undertaken by a subsidiary company
Occidental del Ecuador. It was a point that was shared by a number of CEPE officials, one of whom offered the following parallel:

'Take the case of a father who describes his son to another father as having good professional qualifications and good prospects saying that his son would like to marry his daughter. It is a proposition that is mutually attractive to both sides. However, on arriving at the church the father finds that he is giving his daughter away to another son, who has no prospects and is generally unsatisfactory. The subsidiary issue was the same. While everything necessary to know about the parent company was known, nothing was known about the subsidiary or its financial, technical or managerial set-up.'

Hurtado could have overruled these objections since the Attorney-General's report was not legally binding but merely an opinion albeit one that could not easily be ignored. His administration, however, was already under fire from the government-to-be for signing too many last minute contracts. The resolution of the problem was therefore left to the Febres Cordero administration. Further delays were thus inevitable once the new government took office. According to one CEPE official:

'delays were bound to occur both during the elections and during the early period of rule by the new government when major changes in personnel are being implemented, for instance in the negotiating committees, the Oil Ministry and CEPE. The new Oil Minister himself would be suspicious of what his predecessor had been doing during the negotiations and would need a great deal of time to familiarise himself with what had been going on.'

The first step of the Febres Cordero government was to seek the new Attorney-General's opinion on the contract. He repeated the same criticism levelled by his predecessor. The impasse was eventually broken when Occidental announced that the company that had bid and signed the contract, namely Occidental Petroleum,
would undertake the agreed work programme. Soon afterwards, on 25 January 1985, the contract was signed.

Occidental’s rate of return ranged from 24.9% for production of less than 10,000 b/d to 15.9% for over 30,000 b/d. The government itself appeared confident that Oxy would be able to extract around 30,000 b/d within two years of exploration work beginning, rising to around 50,000 b/d thereafter. At the request of Occidental, the service fee was to be paid in cash not oil, a decision that reflected the cash flow problems the company was experiencing following its take-over of City Services.

The signing of the contract with Exxon-Hispanoil consortium was also delayed, mainly it appears because of the consortium’s decision to receive the service fee in oil rather than cash. This had not been opposed by the government, but it did involve the inclusion in the contract of clauses governing the delivery of the oil which the Occidental contract did not need. The contract was eventually signed on 3 April 1985. Exxon’s rate of return had a six step ladder compared to Occidental’s three, and ranged from 35% for under 10,000 b/d to 20% for over 100,000 b/d. The rates of return were higher than those accepted by Occidental, due to the more risky nature of Block 8.

Negotiations with Belco, which began in March 1984, were also prolonged, with the company seeking considerably higher rates of return than Occidental or Exxon. There was, as the government itself agreed, some justification for this. Although exploration and development costs were expected to be little different to those in the Oriente, offshore exploitation costs were projected to be almost three times higher. The fields that could be expected to be found in Belco’s contract areas were also likely to be far smaller than in the Oriente. Belco’s request for a rate of return of between 25-27% — another source placed it at 30% — was considered excessive by CEPE, which was prepared to offer between 20-25%. Nevertheless, a few weeks after a meeting in
April between Febres Cordero and Robert Belford, the president of Belco, it was reported in 'Hoy' that an agreement had been reached, with the rate of return set at 31%.56

Following the successful conclusion of these negotiations, the Febres Cordero government attempted to accelerate the influx of foreign oil capital by calling a further four rounds of bidding. By the middle of 1987, contracts had been signed with Texaco-Pecten, British Petroleum, Conoco, Elf, Braspetro, Tenneco and Petrocanada. A total of 43 exploratory wells were to be drilled, with total investment amounting, in nominal dollar terms, to $300m. The fact that all these contracts had been signed by a government deeply attached to neo-liberal ideology and dominated by representatives of the agro-exporting elite was, as developments in 1979-84 suggest, less significant than might initially have been thought. It is difficult to imagine, for instance, how the overall direction of oil policy could have been fundamentally different under another government, given the gravity of the oil situation, the lukewarm response of companies to the first bidding round, and the financial problems affecting CEPE and the economy. Disappointing exploration results by Occidental, Exxon and Belco, reinforced the necessity of attracting further large infusions of foreign capital. Indeed, the essential continuity in government oil policy, and the difficulty of explaining the 'open door' policy in party, class or ideological terms, was apparent when the Febres Cordero government appointed Wilson Pastor, oil advisor to Izquierda Democrata in 1979-84, to coordinate the opening of new bidding rounds and negotiations with oil companies.
CONCLUSION

It would be difficult to overstate the extent to which the attempt to give fresh impetus to the state-led development of the oil industry failed. Far from spearheading the search for new oil reserves, CEPE by 1983 was barely in a position to perform the supplementary role that was to have been assumed by foreign oil companies. Plans to restructure and capitalise CEPE were abandoned, the proposal to strengthen its role in the consortium were dropped and exploration activity in a number of highly prospective areas suspended and made available to foreign companies. There was no public acknowledgement that the main burden of exploration would be assumed for the remainder of the decade by foreign oil companies. This was, however, the implicit meaning of the decision in 1982 to link CEPE's capitalisation to the future revenue generated by companies operating under service contracts. This effectively ensured that CEPE would play, at best, a marginal role in exploration, at least until the 1990's.

Oil policy thus swung sharply in favour of drawing foreign oil capital into the country, with a succession of contracts being signed with oil companies during and after 1985. Although these were signed by the Febres Cordero government, the 'opening up' of the exploration sector to foreign capital cannot be explained in terms of the class or ideology of the Febres Cordero government. It resulted from the nature of oil policy-making during 1979-84, in particular the failure of both the Roldós and Hurtado governments to strengthen CEPE and provide fresh impetus to the state-led development of the oil industry.

The question that the thesis sought to answer is why attempts to give fresh impetus to the state-led development of the oil industry failed. The thesis points to a mix of geological, economic and political factors.
The Vagaries of Ecuadorian Geology

For a state oil company 'geology is often destiny.' In the case of Mexico, the oil discoveries of the early 1970's transformed the fortunes of the Mexican economy and the state oil company Petex, and effectively ruled out any future need for foreign investment.

CEPE proved less fortunate. Prior to 1980, it failed to make any significant oil finds, leaving the country totally reliant on discoveries made by Texaco-Gulf in the late 1960's. Although CEPE made a string of discoveries in the Nororiente over the next three years, the major oil find that could have transformed the fortunes of CEPE and render obsolete the need for large-scale foreign investment failed to materialise. CEPE may simply have been unlucky. However, exploration results since the late 1960's suggested that any oil left to be found was likely to be concentrated in small or medium sized fields, containing heavier crude and situated at deeper levels both offshore and onshore. A number of expensive exploration failures in highly prospective low-risk areas - most notably in the Gulf of Guayaquil - served to confirm that there was no 'easy' oil left. The realisation that Ecuador had no option but to pursue a fast-moving, extensive, and sustained programme of investment effectively ruled out a largely domestic solution.

The Economic Climate

Economic realities reinforced the logic of seeking extensive foreign collaboration. Plans for CEPE to assume the main burden of exploration may have been overly optimistic from the outset, but they certainly became so once CEPE was denied the financial resources necessary to accomplish this task. Despite initial indications, the international climate proved highly unfavourable to a costly and ambitious programme of investment. OPEC's price offensive and the shift in US monetary policy set in motion a chain of events that pushed the economy to the verge of economic
collapse. Under the economic conditions prevailing in the early 1980's, few governments would have been willing to transfer scarce resources to a costly activity in which there was no guarantee of success. The government's level of toleration in respect of exploration failures was probably never high, given CEPE's own poor past performance in the 1970's. Expensive failures of the type that occurred in the Gulf of Guayaquil undoubtedly pushed this tolerance to breaking point.

Beyond these general observations on the influence of the economic situation, there seems to be little direct link between the collapse in CEPE's investment capacity and the deteriorating international and domestic economic situation. As a result of decrees passed in November 1979, CEPE remained unaffected by the decline in crude and fuel oil export prices. Nor can CEPE's financial problems be linked to the rapid rise in interest rates. Indeed, its debt-service payments fell sharply during the period, both in real terms and as a proportion of total expenditure. The sudden curtailment in bank lending also affected CEPE only marginally. For the rest of the public sector, events in late 1982 led to the evaporation of a key income source. Not so CEPE, which contracted virtually no new loans after 1979. It does seem likely, however, that CEPE's attempts to obtain loans from the World Bank were adversely affected, not only by its failure to satisfy the policy conditions laid down by the Bank, but by US government opposition to the Bank's policy of advancing loans for exploration activities.

The Nature of State-CEPE relations

It was suggested in the introduction that an indirect link may have existed between the economic crisis and the decapitalisation of CEPE. During the early 1980's, even state oil companies whose financial and managerial autonomy had largely been respected by the state found their resources under increased pressure from governments struggling to cope with mounting economic problems. CEPE's resources similarly attracted such unwelcome political
attention. However, this cannot be linked to a particular time nor to a particular set of circumstances.

Like other Latin American state oil companies, CEPE has been required to carry out a multiplicity of functions, one of which was to provide funds to the state. However, in contrast to the more successful state companies in the region, CEPE's entrepreneurial functions have always been subordinated to wider political or macroeconomic objectives. Every government in Ecuador, military and civilian, progressive and conservative, has required CEPE to sell oil on the domestic market at a loss and regarded the company as an easy source of revenue to fund fiscal deficits, macroeconomic objectives and maintain the goodwill of the armed forces. To ensure compliance with these 'external' goals, the state imposed a highly bureaucratic structure of centralised control which subjected CEPE to constant political interference, stifled managerial initiative and reduced the decision-making process to a ponderous crawl. The resulting inefficiency - together with a number of costly operating errors - undoubtedly encouraged the spiralling increase in the company's operational costs and consequently served to reduce its investment capacity.

CEPE's misfortune was that the nature of its relationship with the state remained unchanged throughout the early 1980's. Both the Roldós and Hurtado governments, like their military predecessors, appropriated CEPE's funds with little, if any, regard for the corporation's investment needs or rising operational costs. The economic crisis of the early 1980's thus merely distracts attention from the domestic political origins of CEPE's failure to develop into a well-capitalised and efficient state oil company. Given the oil policy of the Roldós government and urban middle-class parties and their awareness of CEPE's problems and the solutions to them, why then were the company's needs still largely ignored?
Domestic Politics

The primary reason it seems lay in the domestic political sphere in the sense of concerning political priorities. These served, in the first instance, to divert attention from the needs of CEPE. That these needs were ignored by conservative groups and the business community was hardly surprising given their traditional hostility to CEPE and the state-led development of the oil industry. Their chief preoccupation was to protect the welfare of the private sector. In pursuit of this objective, all manner of strategies (including calls for military intervention) were used to undermine the authority of both Roldós and Hurtado and bring the policy-making process to a virtual halt. With neither president able to form a stable, pro-government coalition of centre and centre-left groups, conservative groups proved highly successful in ensuring the virtual absence during this period of anything dramatic or new in terms of policies. Viewed from this perspective, the absence of policy initiatives in respect of CEPE — and indeed the delay in creating a more attractive investment climate for foreign companies — can be attributed to the collapse in the process of policy formation and implementation generally. It is important to reiterate, moreover, that the primary concern of Roldós and Hurtado was not to effect radical change, but to consolidate multi-party democracy in Ecuador. The first, important step in this process was to ensure the smooth transfer of power to a democratically elected civilian government in 1984. This required the maintenance of amicable relations with the military and the avoidance of outright conflict with the business community.

As well as diverting attention away from the needs of CEPE, these priorities together with patronage politics and the government's emphasis on social welfare policies, also resulted in CEPE receiving political attention of a more unwelcome, but predictable kind. Rather than risk the political unpopularity (or worse) that would have accompanied tax reforms or substantial rises in domestic oil prices, the political elites opted to fund
welfare politics and current expenditure by siponing funds from CEPE and other investment-orientated state enterprises dependent on oil revenues. In so doing, the political elites effectively deprived CEPE of the resources necessary to fulfill its priority objectives.

The Obstacles to Strengthening CEPE

There was, it should be noted, no politically easy way in which CEPE could be capitalised. A particular problem was the extensive manner in which the country's oil income was earmarked. This not only reduced the latitude for flexibility or the prioritising of public funds to meet particular needs or changing circumstances. It also meant that any transfer of additional funds to CEPE, from whatever oil income source, could only be achieved at the expense of other public sector entities. As Philip states:

>'Once a government agency has been confined to the status of a Cinderella there will be considerable resistance on the part of others to any attempt, to improve its position, because such improvement will involve the diversification of financial or political resources away from themselves.'

In the case of Ecuador, the problem was heightened because the bulk of the country's oil income was channelled to the state budget and the armed forces. A reduction in the first would have substantially reduced the latitude for patronage and welfare politics, while a reduction in the second would have antagonised a conservative-dominated military which was not unwilling to raise the spectre of military intervention when Congress or the executive pursued policies that were regarded by senior officers as a threat to the interests of the military institution. In other words, the capitalisation of CEPE could only be achieved at the expense of other revenue sharers and the priority policies and objectives of the political elites.
As the concentration of the country's oil income in the hands of the state budget and military suggests, political power — actual or potential — rather than 'need' has determined the distribution of oil income. CEPE was hardly equipped to compete on equal terms with other pressure groups seeking additional funds from the state. Not only was it subject to tight political control from the centre, but it had no external political constituency which could have exerted pressure on the government on its behalf. Carvajal attempted to overcome CEPE's 'dependency' status by seeking, and finding, outside political support in the shape of Jaime Roldós. In different political circumstances, this might have brought important benefits for CEPE and its manager. The strategy failed, however, due to Roldós' weak political position. He had neither the power to dictate on his own the policies of the government, nor the power to choose the individuals to carry them out.

CEPE's lack of political clout vis-à-vis other groups in society not only prevented the company from increasing its share of income from existing oil income sources. It also prevented the company from accruing any significant financial benefits from new oil income sources. The $519.3m generated from domestic oil price hikes 1981-83, for instance, could have significantly reduced the losses CEPE incurred in the domestic market and provided a valuable source of income for investment. Here too, however, the financial benefits accruing to CEPE were limited by Congressional decree, with over two-thirds of the revenue transferred to the military and the state budget. Similarly, in the case of the income generated from CEPE's Nororiente fields, the company's share was marginalised by the decision to use half of the income to service the external public sector debt, with smaller quantities being channelled to the armed forces and the state budget.

There were other risks and costs in turning CEPE round which may have served to reduce the willingness of the political elites to reform and restructure CEPE. According to Saulniers, substantial
improvements in the efficiency of a state oil company will require major changes to the government-imposed environment within which it operates. Not only must a government clearly specify company objectives and relate them to financial and other constraints, but it must:

'examine the economic cost associated with each social goal and be willing to compensate the companies for meeting these goals. They must guarantee the companies sufficient political and economic autonomy to effectively insulate management from excess influence and interference.'

Such changes would have fundamentally changed the nature of the relationship between the state and CEPE, to the detriment of the former. The thesis has argued that the tight political control imposed on CEPE enabled the state, almost at will, to siphon funds from the company and subordinate its entrepreneurial functions to wider political and macroeconomic objectives. This suggests that a loosening of this control and a greater respect for the company's technical and organisational needs would constrain the ability of the state to impose other goals on management. Not only would the state find it more difficult to continue siphoning funds from CEPE almost at will, but it would also call into question the continued maintenance of non-market-based pricing mechanisms. Viewed from this perspective, one can understand why the nature of the relationship between the state and CEPE has remained unchanged for the last seventeen years: since it has been those groups which wield political clout which have benefitted most from this relationship they were hardly likely to seek to change it.

**Differing Perspectives on CEPE**

The secondary importance attached to CEPE's needs may not only have reflected the pressing nature of 'other' political priorities. A crucial feature of the more successful companies has been the existence of a broad consensus on the role of the
state oil company and the development of state-led petroleum growth. Such a consensus has been notable for its absence in Ecuador, with the entrance of the state into the oil industry sparking off a bitter debate that has still to be resolved. Indeed, it proved difficult enough to establish a consensus on whether or not the country was facing an oil crisis.

A central feature of the oil debate has been the stance of the agro-exporting elites. Their deep attachment to free market capitalism and their close links with Texaco have led them to adopt an uncompromisingly hostile attitude towards CEPE and the state's role in the oil industry generally. Demands for the privatisation of CEPE have, however, been confined to the agro-exporting elites. Nevertheless, even among those who support the continued role of the state in the oil industry, there was no consensus on the goals of CEPE, particularly in the area of risk investment. Even before the recession of the 1980's and CEPE's expensive failure in the Gulf of Guayaquil, there were strong doubts, even opposition, to CEPE's involvement in exploration work.

The continuous manner in which CEPE's needs have been ignored also suggests a lack of emotional and ideological attachment to the company. It is possible that CEPE may have benefitted from a dramatic, full-scale nationalisation of the type that occurred in Mexico or Peru. There was substantial 'emotional capital' invested in Petroperú following the nationalisation of IPC, while in Mexico the nationalisation of the oil industry endowed the policy of state-led development with a national mystique.

There was little that CEPE accomplished during its formative years that had caught the imagination of the people or generated a sense of national pride. Even the transformation of CEPE into the majority shareholder in the consortium proved to be a hollow victory for nationalists, since effective control remained firmly in the hands of Texaco. A costly error was made in the construction of the Esmeraldas refinery, and CEPE's attempt to
create a sense of national pride by making a series of 'successful' oil finds only served to damage the company's reputation further. Periodic fuel shortages also did little to enhance CEPE's image among consumers. This might have been balanced out by the existence of low domestic oil prices. However, CEPE could not even claim credit for these since they had been in force some twenty years before it was established. There was, in short, little in the country's oil past to grip the popular imagination of future generations.

It seems highly unlikely that CEPE's needs would have been so consistently ignored if there had been a strong, widespread commitment to CEPE - both ideological and emotional - and a consensus on its goals and objectives.

The Presence of Texaco

It has been argued that CEPE's needs were secondary to other objectives, first because of the political importance attached to the other objectives, second because there were costs attached to the 'domestic' strategy that the political elites were not willing to incur and third, there was little political risk involved in ignoring CEPE's demands. One is still left wondering, however, why the political elites appeared willing 'to kill the goose that lays the golden egg.' Were they so preoccupied with other more pressing political objectives that they were willing to bankrupt the very company on which they depended for existing and future oil revenues? That the answer to this is an emphatic no reflects not so much to the credit of the political elites, but to their perception of the nature of the oil industry in Ecuador and, in the upstream sector at least, CEPE's periphery role in it.

As they correctly perceived, there was little economic risk attached to ignoring CEPE's needs. The striking feature of the oil industry in Ecuador and, I would argue, the primary factor accounting for CEPE's weakness, was that the continued funding of
welfare politics (and the military) was not dependent on the existence of a financially strong and efficient state enterprise. Nor was it dependent on CEPE undertaking a costly and risky programme of exploration. It was dependent instead on the continuing presence of Texaco. By allowing Texaco to remain in the country and operate the country's main oil fields, the state faced no overriding necessity to ensure that CEPE was a success or to respond to its needs.

A number of powerful reasons combined to maintain Texaco's dominant role in the upstream sector. Not only did it have the expertise required to operate the consortium's fields but, again in contrast to CEPE, it had the technical knowledge to undertake a programme of secondary recovery work which promised, virtually at a stroke, to boost the country's oil reserves by over 500 million barrels. There were other factors that reduced the state's inclination to undermine Texaco's control of the consortium. Not only could Texaco count on the country's business community mobilising in defence of its interests, but the company's relatively high tax, royalty and other payments represented a valuable source of income for the state. When set against the problems involved in constructing an efficient and well-capitalised state oil company and the economic and diplomatic implications that conflict with Texaco would entail, there seemed little advantage to be gained in upsetting the 'status quo'. In the minds of the political elites, both military and civilian, the goose that laid 'the golden eggs' was not CEPE but Texaco.
APPENDIX 1: WORLD ECONOMIC AND OIL INDICATORS

Table 1: US and World Economic Indicators

<table>
<thead>
<tr>
<th>Year</th>
<th>GDP</th>
<th>RPI</th>
<th>Dollar 1</th>
<th>World 2</th>
<th>Vol. of</th>
<th>Nominal</th>
<th>Interest Rates (Real)</th>
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<tbody>
<tr>
<td></td>
<td>US</td>
<td>US</td>
<td>World 1</td>
<td>World 2</td>
<td>Trade</td>
<td>World</td>
<td></td>
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<tr>
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<td>6.5</td>
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<td>6.82</td>
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<td>-7.7</td>
<td>5.7</td>
<td>9.06</td>
<td>1.46</td>
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<td>-2.1</td>
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<td>13.5</td>
<td>0.1</td>
<td>13.4</td>
<td>1.0</td>
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<td>18.87</td>
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<td>8.66</td>
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<td>10.79</td>
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<td>1.2</td>
<td>9.0</td>
<td>12.04</td>
<td>7.74</td>
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</table>

Notes:

1. The percentage change in the effective exchange rate of the US Dollar.
2. The percentage change in world commodity prices, based on UNCTAD's indices of market prices of the principal commodity exports of developing countries expressed in current US dollars.
3. Nominal US Prime Rate. The figures in brackets represent the real, as opposed to nominal, rates of interest.


Table 2: World Oil Indicators (in million b/d)

<table>
<thead>
<tr>
<th>Year</th>
<th>OPEC</th>
<th>Non-OPEC</th>
<th>Total</th>
<th>Consumption</th>
<th>Stocks</th>
<th>Net Oil Imports</th>
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</thead>
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<td></td>
<td>OPEC</td>
<td>Non-OPEC</td>
<td>Total</td>
<td>Consumption</td>
<td>Stocks</td>
<td>Net Oil Imports</td>
</tr>
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<td>1974</td>
<td>30.7</td>
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<td>45.4</td>
<td>37.3</td>
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<td>48.6</td>
<td>40.5</td>
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<td>26.8</td>
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<td>45.1</td>
<td>37.6</td>
<td>0.4</td>
<td>23.2</td>
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<td>39.1</td>
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<td>38.2</td>
<td>34.6</td>
<td>0.1</td>
<td>17.1</td>
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Sources: Production figures, which exclude the centrally planned economies, are taken from OPEC, Annual Statistical Bulletin, 1984, Table 14, p 15. Figures relating to OECD demand are from various issues of the OECD Economic Outlook.'
APPENDIX 2: KEY DOMESTIC ECONOMIC INDICATORS

Table 1: The External Debt, 1972-84 ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>External Debt</th>
<th>% Owed to Commercial Banks</th>
<th>Debt Service Payments</th>
<th>Total Payments</th>
<th>% of Exports</th>
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<tr>
<td>1976</td>
<td>523.9</td>
<td>54.6</td>
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<tr>
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<td>1978</td>
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Source: Central Bank, Memoria (1987), table 74 p 278.

Table 2: Oil and Non-Oil Exports FOB ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Oil Exports</th>
<th>Fuel Oil Exports</th>
<th>Non-Oil Exports</th>
<th>Total Exports</th>
<th>Oil as % of all Exports</th>
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<tr>
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<td>-</td>
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<td>-</td>
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<td>312.3</td>
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<td>71.7</td>
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</table>

Source: Central Bank, Memoria, various years.
## APPENDIX 3: KEY DOMESTIC OIL INDICATORS

### Table 1: Key Oil Indicators (million barrels per annum)

<table>
<thead>
<tr>
<th>Year</th>
<th>Output</th>
<th>Direct Royalties</th>
<th>For Domestic Refineries</th>
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<tbody>
<tr>
<td>1972</td>
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(1) The figures in brackets represent total crude exports as a percentage of total output.
(2) Output required for the domestic market covers deliveries to the refineries plus compensation exports.


### Table 2: CEPE's Oil Data, 1972-84 (million barrels per annum)

<table>
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<tr>
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(1) The figures in brackets represent total crude exports as a percentage of total output.
(2) Output required for the domestic market covers deliveries to the refineries plus compensation exports.

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<th>Exports</th>
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**Source:** CEPE, *Informe Estadístico de la Actividad Hidrocarburífera del País, 1972-84* various pages.
**APPENDIX 4: DISTRIBUTION OF PUBLIC SECTOR OIL INCOME**

**Table 1: Public Sector Oil Income by Source, 1978-83 ($m)**

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**Table 2: Distribution of Public Sector Oil Income, 1978-83 ($m)**

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<th>INCECEL</th>
<th>Municipal Councils</th>
<th>BEV</th>
<th>Esmeraldas Province</th>
<th>PONAPAR</th>
<th>National Childrens Institute</th>
<th>Health Ministry</th>
<th>Employment Ministry</th>
<th>State Universities</th>
<th>Other</th>
<th>Total</th>
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**Note:** The oil income of the state budget in 1981-83 includes the income generated from domestic oil price increases with the exception of that accruing to CEPE and the JDN.

Table 3: Distribution of Principal Sources of Public Sector Oil Income by Recipient ($m)

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Table 4: Percentage Distribution of Principal Sources of Public Sector Oil Income by Recipient

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<td>16.0</td>
<td>19.7</td>
<td></td>
</tr>
<tr>
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<td>12.8</td>
<td>17.4</td>
<td>7.3</td>
<td>9.0</td>
<td></td>
</tr>
<tr>
<td>Municipal Councils</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FONAPAR</td>
<td>2.6</td>
<td>2.1</td>
<td>1.0</td>
<td>1.3</td>
<td>1.3</td>
<td>6.6</td>
</tr>
<tr>
<td>BEV</td>
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<td>2.2</td>
<td>1.0</td>
<td>1.4</td>
<td>2.1</td>
<td>1.7</td>
</tr>
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<td>Employment Ministry</td>
<td>1.8</td>
<td>1.6</td>
<td>0.8</td>
<td>1.1</td>
<td>1.0</td>
<td>1.3</td>
</tr>
<tr>
<td>State Universities</td>
<td>1.4</td>
<td>1.5</td>
<td>0.7</td>
<td>0.9</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Health Ministry</td>
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<td>1.1</td>
<td>0.5</td>
<td>0.6</td>
<td>0.6</td>
<td>0.8</td>
</tr>
<tr>
<td>Other</td>
<td>1.1</td>
<td>1.0</td>
<td>0.4</td>
<td>0.6</td>
<td>0.4</td>
<td>0.7</td>
</tr>
</tbody>
</table>

|                  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  |
| INCOME TAX       |        |        |        |        |        |        |
| State Budget     | 25.2   | 24.1   | 21.9   | 16.2   | 17.3   | 45.5   |
| BEDE             | 33.0   | 31.5   | 20.2   | 21.3   | 21.6   | 23.7   |
| JDN              | 17.2   | 28.5   | 22.7   | 9.4    | 12.0   | 13.7   |
| Municipal Councils | 100.0  |        |        |        |        |        |
| FONAPAR          | 8.2    | 4.4    | 2.8    | 3.1    | 3.0    | 7.1    |
| INECHEL          | 5.4    | 2.0    | 1.3    | 1.5    | 1.4    | 1.7    |
| BEV              | 2.5    | 2.4    | 1.5    | 1.6    | 1.7    | 2.1    |
| CEPE             | 2.4    | 1.4    | 0.7    | 0.9    | 1.0    | 1.1    |
| Employment Ministry | 1.9    | 1.8    | 1.2    | 1.2    | 1.2    | 1.6    |
| State Universities | 1.7    | 1.6    | 1.0    | 1.1    | 0.5    | 1.5    |
| Other            | 2.5    | 2.3    | 1.4    | 1.6    | 1.4    | 2.0    |

|                  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  | 100.0  |
| ROYALTIES        |        |        |        |        |        |        |
| State Budget     | 50.0   | 49.4   | 39.5   | 41.9   | 39.4   | 43.7   |
| JDN              | 47.0   | 46.4   | 37.1   | 36.8   | 47.0   | 41.0   |
| INECHEL          | 3.0    | 2.9    | 2.4    | 2.3    | 3.0    | 2.6    |
| Esmeraldas Province | 1.3    | 1.8    |        | 1.8    |        |        |
| CEPE             |        |        |        |        |        |        |

|                  |        |        |        |        |        |        |
| FUEL OIL EXPORTS |        |        |        |        |        |        |
| State Budget     | 17.1   | 29.8   | 63.4   | 58.6   | 60.8   |        |
| CEPE             | 82.5   | 45.9   | 36.6   | 41.4   | 38.4   |        |
| Municipal Councils | 24.3   |        |        |        |        |        |
| Other            | 0.4    |        |        |        |        | 0.8    |

|                  |        |        |        |        |        |        |
| DERIVATIVE PRICE |        |        |        |        |        |        |
| INCREASES        |        |        |        |        |        |        |
| State Budget     |        |        |        |        |        |        |
| CEPE             |        |        |        |        |        |        |
| JDN              |        |        |        |        |        |        |

Table 5: CEPE's Share of Public Sector Oil Revenue ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Oil Income</th>
<th>CEPE Oil Income</th>
<th>% share of total Oil Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>116.8</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>1974</td>
<td>375.9</td>
<td>3.8</td>
<td>1.0</td>
</tr>
<tr>
<td>1975</td>
<td>342.1</td>
<td>25.2</td>
<td>7.4</td>
</tr>
<tr>
<td>1976</td>
<td>338.2</td>
<td>28.1</td>
<td>8.3</td>
</tr>
<tr>
<td>1977</td>
<td>270.0</td>
<td>26.2</td>
<td>9.7</td>
</tr>
<tr>
<td>1978</td>
<td>343.3</td>
<td>40.3</td>
<td>11.7</td>
</tr>
<tr>
<td>1979</td>
<td>619.5</td>
<td>146.9</td>
<td>23.7</td>
</tr>
<tr>
<td>1980</td>
<td>753.7</td>
<td>108.9</td>
<td>14.4</td>
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<tr>
<td>1981</td>
<td>813.6</td>
<td>126.7</td>
<td>15.6</td>
</tr>
<tr>
<td>1982</td>
<td>887.8</td>
<td>139.0</td>
<td>15.6</td>
</tr>
<tr>
<td>1983</td>
<td>810.9</td>
<td>101.9</td>
<td>12.7</td>
</tr>
<tr>
<td>Total</td>
<td>5,671.8</td>
<td>749.1</td>
<td>13.2</td>
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APPENDIX 5: CEPE'S INCOME AND EXPENDITURE, 1973-84

A. 1973-79

Table 1: CEPE's Income, 1973-79 ($m)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation</strong></td>
<td>1.4</td>
<td>1.3</td>
<td>1.4</td>
<td>5.9</td>
<td>9.9</td>
<td>3.4</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Sales:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude/Fuel Oil</td>
<td>0.4</td>
<td>3.2</td>
<td>24.9</td>
<td>20.7</td>
<td>15.5</td>
<td>97.9</td>
<td>133.8</td>
</tr>
<tr>
<td>Derivatives</td>
<td>0.1</td>
<td>2.6</td>
<td>8.8</td>
<td>26.8</td>
<td>72.0</td>
<td>80.8</td>
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</tr>
<tr>
<td>Crude for Domestic Consumption</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.3</td>
<td>13.6</td>
<td>15.1</td>
</tr>
<tr>
<td>Other Income</td>
<td>0.9</td>
<td>7.1</td>
<td>7.2</td>
<td>9.6</td>
<td>11.7</td>
<td>15.8</td>
<td>61.9</td>
</tr>
<tr>
<td>Loans</td>
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<td>49.9</td>
<td>54.9</td>
<td>34.1</td>
<td>21.7</td>
<td>58.0</td>
<td>34.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
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<td>64.1</td>
<td>97.2</td>
<td>97.1</td>
<td>131.1</td>
<td>269.5</td>
<td>343.1</td>
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</table>

**Note:** 'Participation' income is composed of CEPE's share of superficiary rights, its legal entitlement to $0.20 for each barrel of oil exported by Texaco and 1.1154% of the revenue from Texaco's income tax payments.

**Source:** CEPE, Estadísticas Presupuestarias, 1972-87, Dirección de Economía y Presupuesto, (Quito, July 1988), p 12.

Table 2: CEPE's Expenditure ($m)

<table>
<thead>
<tr>
<th></th>
<th>Operational Costs</th>
<th>Investments</th>
<th>Debt Servicing</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>1.8</td>
<td>1.6</td>
<td>-</td>
<td>0.008</td>
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<tr>
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<td>5.3</td>
<td>26.9</td>
<td>30.4</td>
<td>0.1</td>
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<tr>
<td>1975</td>
<td>16.5</td>
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<td>15.1</td>
<td>0.04</td>
<td>94.1</td>
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<td>24.6</td>
<td>52.6</td>
<td>8.9</td>
<td>0.2</td>
<td>86.3</td>
</tr>
<tr>
<td>1977</td>
<td>59.0</td>
<td>59.2</td>
<td>9.9</td>
<td>0.3</td>
<td>128.5</td>
</tr>
<tr>
<td>1978</td>
<td>99.5</td>
<td>65.7</td>
<td>73.6</td>
<td>0.4</td>
<td>239.2</td>
</tr>
<tr>
<td>1979</td>
<td>133.1</td>
<td>60.4</td>
<td>45.9</td>
<td>-</td>
<td>239.4</td>
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Table 3: CEPE's Investments ($m)

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<th>Year</th>
<th>Prod/Explor</th>
<th>Industrial Projects</th>
<th>Transport Storage</th>
<th>Marketing</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
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<td>0.2</td>
<td>-</td>
<td>0.1</td>
<td>1.6</td>
</tr>
<tr>
<td>1974</td>
<td>3.3</td>
<td>17.4</td>
<td>3.1</td>
<td>0.1</td>
<td>3.0</td>
<td>26.9</td>
</tr>
<tr>
<td>1975</td>
<td>10.6</td>
<td>42.9</td>
<td>3.4</td>
<td>0.5</td>
<td>5.0</td>
<td>62.4</td>
</tr>
<tr>
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<td>27.1</td>
<td>7.7</td>
<td>1.2</td>
<td>4.9</td>
<td>52.6</td>
</tr>
<tr>
<td>1977</td>
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<td>13.2</td>
<td>0.2</td>
<td>10.2</td>
<td>59.2</td>
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<tr>
<td>1978</td>
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<td>2.8</td>
<td>22.5</td>
<td>-</td>
<td>5.9</td>
<td>65.7</td>
</tr>
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<td>1979</td>
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<td>41.6</td>
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<td>0.6</td>
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Table 4: Operational Costs ($m)

<table>
<thead>
<tr>
<th>Year</th>
<th>Operational Units</th>
<th>Transport</th>
<th>Marketing</th>
<th>Admin. Costs</th>
<th>Total</th>
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<tr>
<td>1973</td>
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<td>0.3</td>
<td>0.6</td>
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<tr>
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<td>0.8</td>
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<td>1.5</td>
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</tr>
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<td>1975</td>
<td>2.1</td>
<td>5.4</td>
<td>4.3</td>
<td>4.7</td>
<td>16.5</td>
</tr>
<tr>
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<td>6.2</td>
<td>4.8</td>
<td>7.7</td>
<td>24.6</td>
</tr>
<tr>
<td>1977</td>
<td>20.2</td>
<td>8.8</td>
<td>5.0</td>
<td>25.0</td>
<td>59.0</td>
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<td>3.3</td>
<td>28.2</td>
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<td>23.1</td>
<td>8.0</td>
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B. CEPE's Income and Expenditure, 1979-84.

Table 5: CEPE's Income, 1979-84 ($m)

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<th></th>
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<th></th>
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<tr>
<td>Participation</td>
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<td>1.7</td>
<td>1.9</td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Sales:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crude/Fuel Oil</td>
<td>133.8</td>
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<td>59.3</td>
<td>79.6</td>
<td>63.7</td>
<td>84.1</td>
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<td>144.0</td>
<td>130.9</td>
<td>95.4</td>
<td>120.8</td>
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<td>41.1</td>
<td>44.1</td>
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<td>4.2</td>
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<td>0.1</td>
<td>0.0</td>
<td>-</td>
<td>7.5</td>
</tr>
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<td>332.1</td>
<td>301.8</td>
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<td>293.3</td>
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Table 6: CEPE's Expenditure ($m)

<table>
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<tr>
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<th>Operational Costs</th>
<th>Investments</th>
<th>Debt Servicing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>133.1</td>
<td>60.4</td>
<td>45.9</td>
<td>239.4</td>
</tr>
<tr>
<td>1980</td>
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<td>56.1</td>
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<td>89.4</td>
<td>28.0</td>
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<td>60.1</td>
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<td>226.4</td>
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Table 7: CEPE's Investments ($m)

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<th>Prod/Explor.</th>
<th>Industrial Projects</th>
<th>Transport Storage</th>
<th>Marketing</th>
<th>Other</th>
<th>Total</th>
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</thead>
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<td>41.6</td>
<td>0.7</td>
<td>0.6</td>
<td>60.4</td>
</tr>
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<td>2.1</td>
<td>15.0</td>
<td>5.7</td>
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<td>56.1</td>
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<td>1981</td>
<td>84.7</td>
<td>3.5</td>
<td>7.9</td>
<td>3.3</td>
<td>2.2</td>
<td>101.6</td>
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<td>7.2</td>
<td>-</td>
<td>1.1</td>
<td>89.4</td>
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<td>14.9</td>
<td>0.1</td>
<td>1.9</td>
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<td>3.3</td>
<td>60.2</td>
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Table 8: Operational Costs ($m)

<table>
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<tr>
<th>Year</th>
<th>Operational Units</th>
<th>Transport</th>
<th>Marketing</th>
<th>Admin. Costs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
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<td>18.7</td>
<td>23.1</td>
<td>8.0</td>
<td>133.1</td>
</tr>
<tr>
<td>1980</td>
<td>84.4</td>
<td>36.5</td>
<td>37.7</td>
<td>14.0</td>
<td>172.6</td>
</tr>
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<td>29.4</td>
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<td>2.3</td>
<td>15.4</td>
<td>169.9</td>
</tr>
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<td>0.3</td>
<td>16.4</td>
<td>156.5</td>
</tr>
<tr>
<td>1984</td>
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<td>15.7</td>
<td>196.6</td>
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</table>


Table 9: CEPE's Investment in Exploration and Production, 1973-84 ($m)

<table>
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<tr>
<th>Year</th>
<th>Amount</th>
<th>% of Total Investment</th>
<th>% of Total Expenditure</th>
</tr>
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<tr>
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</tr>
<tr>
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<td>12.3</td>
<td>5.2</td>
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<tr>
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<td>10.5</td>
<td>16.9</td>
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</tr>
<tr>
<td>1976</td>
<td>11.7</td>
<td>22.2</td>
<td>13.5</td>
</tr>
<tr>
<td>1977</td>
<td>25.7</td>
<td>43.4</td>
<td>20.0</td>
</tr>
<tr>
<td>1978</td>
<td>34.5</td>
<td>52.5</td>
<td>14.4</td>
</tr>
<tr>
<td>1979</td>
<td>12.0</td>
<td>19.9</td>
<td>5.0</td>
</tr>
<tr>
<td>1980</td>
<td>27.5</td>
<td>49.0</td>
<td>10.8</td>
</tr>
<tr>
<td>1981</td>
<td>84.7</td>
<td>83.3</td>
<td>27.4</td>
</tr>
<tr>
<td>1982</td>
<td>76.3</td>
<td>85.3</td>
<td>26.5</td>
</tr>
<tr>
<td>1983</td>
<td>51.2</td>
<td>85.2</td>
<td>22.6</td>
</tr>
<tr>
<td>1984</td>
<td>44.8</td>
<td>68.5</td>
<td>16.3</td>
</tr>
</tbody>
</table>

APPENDIX 6: THE ECUADORIAN 'SERVICE' CONTRACT

Definition of a Service Contract: Contracts for hiring hydrocarbon exploration and exploitation services are those where juridical persons, national or foreign, undertake with CEPE to perform hydrocarbon exploration and exploitation services in the areas designated for this purpose, investing capital, equipment, machinery and technology necessary for the fulfillment of the contracted services.

Reimbursement of Investments and the Service Fee: Only when the provider of services for exploration and exploitation has found commercially exploitable hydrocarbons in the designated area, will they have rights to reimbursement of their investment, costs and expenditure and payment of a Service Fee.

The Service Fee is the annual sum that CEPE agrees to pay, in monthly installments, to the Contractor as compensation for his technical, financial and administrative services. Payment can be made in cash and/or kind, and is based on the following formula:

\[ TS = PR \times (INA) + (R) \times (P-C) \times (Q) \]

Where:
- \( TS \) = annual Service Fee in dollars
- \( PR \) = average US prime interest rate
- \( INA \) = non-amortized exploitation investments
- \( R \) = the biddable factor
- \( P \) = price
- \( C \) = production and transportation costs, per UOP.
- \( Q \) = annual production.

The 'R' Factor applies to a weighted, sliding scale average daily production. Under the contract signed between CEPE and Conoco for instance the following 'R' Factor was applicable:

<table>
<thead>
<tr>
<th>R Factor</th>
<th>Annual Production Increment ('000 b/d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1 = .39</td>
<td>0 - 10</td>
</tr>
<tr>
<td>R2 = .35</td>
<td>10 - 30</td>
</tr>
<tr>
<td>R3 = .25</td>
<td>30 - 50</td>
</tr>
<tr>
<td>R4 = .15</td>
<td>50 - 70</td>
</tr>
<tr>
<td>R5 = .10</td>
<td>70 - 100</td>
</tr>
<tr>
<td>R6 = .05</td>
<td>Over 100</td>
</tr>
</tbody>
</table>

Forms of Payment: These reimbursements and payments are made by CEPE in money from the gross revenue generated by deposits found in the contract area. Reimbursements for exploration, development and production shall be made in Dollars; reimbursements for operating costs and expenses to be made in Dollars or Sucres, however they were incurred.

However, if the interests of the State are better served these payments can be made in kind or by a combination of cash and kind. Where payments are made in kind, or a combination of cash and kind, these can only be made on part of the exportable balance of the production from the contract area. Where the
contractor is reimbursed or paid in cash he will have a preferential option to buy up to 50% of this exportable balance.

**Pricing:** In the event of payment in kind or the preferential option purchase scheme the price of the hydrocarbons will be fixed in accordance with the latest average monthly price for overseas sales for equivalent grade oils, as carried out by CEPE.

**Commerciality:** This is declared by the contractor once CEPE's Board of Directors and the Ministry of Energy and Mines have approved the development plan proposed by the Contractor. Reserves in the contract area must be sufficient to generate revenues for CEPE to recover marketing, production and transportation costs plus a 15% safety margin. (Article 22 of the Regulations covering Law 101 of 28 July 1982).

**Contract Area:** Each contract covers a maximum of 200,000 hectares on land and 400,000 hectares offshore.

**Number of Blocks:** Any company holding an onshore block in the Amazon and wishing to tender for a second contract could only do so for blocks in the coastal and offshore areas. Contractors that have signed Service Contracts are able to sign additional contracts to exploit free natural gas if they find commercially exploitable deposits within the area covered by their contract.

**Terms:** The exploration period lasts for up to 4 years and is extendable for a further 2 years. The exploitation period can last up to 20 years though this may be extended 'if it is in the interests of the state.' The Contractor will commence the period of exploitation when commercially exploitable reserves have been found, after obtaining prior authorization from CEPE. During the first 3 years of the exploitation period the Contractor is obliged to invest not less than $120 and $180 per year and per acre for the land and sea areas respectively. The investment in the following years are to be agreed between the parties.

**Payments by the Contractor:** A minimum, non-reimbursable, annual payment of $24,000 during the exploration period and $60,000 during the exploitation period, payable within 30 days of the start of each year, for the use of water and natural building materials situated within the contract area.

A non-deductible and non-reimbursable contribution, payable from the beginning of the period of exploitation, equivalent to 1% of the amount of the Service Fee, after deduction of the 15% Labour Participation Fee and income tax payments. This is to be used by the Ministry of Energy and Mines to promote research, development and scientific and technological services in the field of hydrocarbons and mining generally.

The Contractor is required to invest a minimum of 10% of its net profits, after taxes, in its own business or those of other hydrocarbon industries in Ecuador.
**Tax Regime:** The profits obtained by the contractor are subject to payment of income tax of 44.4%. The Contractor must also pay a sliding-scale production tax of 3% on production of 30,000 b/d, plus 1% for every 10,000 barrels in excess of 30,000 barrels up to a maximum of 30%.

This tax will apply to the Service Fee and will be deducted for purposes of calculating Income Tax. Crude oils of less than 15.0 API discovered are excluded from this tax.

The Contractor is exempt from the payment of: royalties, entry premiums, superficiary rights and contributions to any compensation payments.

**Training:** The Contractor is required to undertake a technical and administrative training programme so that when the first five years of the exploration period have elapsed the entire scope of the operations will be carried out by Ecuadorian workers and administrative staff and at least 90% of personnel working at the technical level will be nationals.

**Relinquishment:** On termination of the contract, for whatever reason, during the exploitation period the Contractor must deliver to CEPE free of charge and in good working order the wells that are active at that time, together with all the equipment, machinery and installations acquired for the purpose of the contract. If the contract terminates during the exploration period Contractor shall deliver to CEPE, free of charge and in good working order the wells, camps and infrastructure work.

**Administration Committee:** This is composed of two representatives from CEPE and two representatives from the Contractor. Its function is to coordinate and control relations between CEPE and the Contractor and to assess the fulfillment of annual operating programmes. Decisions are taken by unanimous vote, with each group having one vote.

**Bank Guarantees:** Prior to the contract being registered the Contractor is obliged to deposit a guarantee equivalent to 20% of the estimated Exploration investment negotiated. In case of non-fulfillment of obligations the guarantee shall be made effective. Otherwise it shall be returned to the Contractor. Similarly, within 30 days of the start of the exploitation period a guarantee of 20% of the Exploitation investment agreed in the first 3 years shall be deposited by the Contractor. This guarantee shall be reduced, in direct proportion to the total annual programme committed or it shall be returned upon termination of the contract due to lack of commercial production.

**Assignment:** None of the Contractor Parties may assign its interests, except to a related Company, without the consent of the Oil Ministry.

**Arbitration:** Only controversies of a technical and economic character can be the object of arbitration. The Arbitration
Committee will consist of three arbiters, one chosen by the Contractor, one by CEPE and the third chosen jointly by the other two arbiters.

**Insurance**: The Contractor shall carry all insurance required by Ecuadorian Law and consistent with generally accepted international oil industry practices through the use of worldwide policies. The Contractor shall require subcontractors and third parties to provide such insurance as the Contractor deems necessary.
NOTES

INTRODUCTION

4. Ibid., p 56.

CHAPTER 1: THE ECONOMIC CONTEXT

2. Central Bank, Memoria, various issues.
5. Ibid., p 46.
15. Central Bank, Memoria, various issues.
19. R. Lieber, Europe and America in the World Energy Crisis, in International Affairs (October 1979), p 535.
20. Ibid., p 535.
25. Quito Chamber of Commerce, La Deuda Externa del Ecuador, (Quito), 7 May 1979, p 5.
27. See Mohammed Abu al Khail (then Saudi Arabia Finance Minister), The Oil Price in Perspective, International Affairs (October 1979) and OECD, Economic Outlook (Paris, July 1979), p 57.
28. Around 60% of domestic oil products were consumed by the transport sector which had seen a 70% increase in the number of vehicles registered between 1975 to 1979. JUNAPLA, Ecuador: Estrategia de Desarrollo (Hidrocarburos), (Quito, July 1979), p 46.
33. See Weekly Analysis, 12 May 1980.

CHAPTER 2

10. The price of failure was considered high by international standards. A seismic programme in Ecuador required between 400 and 700 persons and the assistance of a helicopter and involved total costs higher than in any other country with the exception of Alaska. Taking into account the helicopter support, the average cost of a seismic party was estimated to be $150,000 per month, compared to $52,000 in Mexico, $60,000 in Argentina and $100,000 in Venezuela. See World Bank, The Current Economic Position and Prospects of Ecuador (Washington, 1973), Annex C, p 3.
19. Ibid., p 284.
23. Ibid., 20 February 1976.
25. Local observers noted that 'virtually overnight Expreso was transformed from a publication on the brink of closure to one capable of carrying out a costly change from tabloid to broadsheet format.' Colonel Levoyer, the government minister who revealed the documents, also accused a major US cigarette company of financing the press campaign against the radical Oil Minister, Gustavo Jarrín Ampudia. See Latin America, 18 June 1976.
31. Ibid., p 83.
32. Ibid., p 84.
41. Latin America, 30 April 1976.
44. Nueva, March 1979; Latin America, 13 August 1976.

49. According to Philip, René Bucaram 'had earlier worked in the government bureaucracy and continued to enjoy good relations with many of its members, some of whom deprived their whole knowledge of the industry from what they were told by the companies. Accordingly, it is possible that Texaco picked up the importance of the 1976 coup and the military's move to the right more quickly than did Gulf.' G Philip, Oil and Politics in Latin America: Nationalist Movements and State Companies (Cambridge U.P. 1982), pp 287-288.


CHAPTER 3: CEPE'S FORMATIVE YEARS

6. Ibid., p 418.
7. Ley de la Corporacion Estatal Petrolera (Corporación de Estudios y Publicaciones, Quito, November 1986).
10. Interview Data.

18. As early as 1976 the head of CEPE complained that 'the resources at the disposal of CEPE have hardly been sufficient to cover operational costs and keep up to date the payment of some projects under construction and consequently (CEPE) has had permanent recourse to the state for the financing of infrastructural schemes. But this takes account only of work in hand which will be completed in the next one or two years and does not take into account permanent projects such as exploration, exploitation, development, transport, research and other activities...which CEPE must develop if it is to accomplish the real objectives for which it was set up.' Quoted in H O'Shaughnessy, *Oil in Latin America* (Financial Times, London, 1976) p 101.


30. Interview Data.


32. JUWAPLA, *Ecuador: Estrategia de Desarrollo (Hidrocarburos)* (Quito, July 1979), pp 81, 85

CHAPTER 4


6. Ibid., p 42.

17. Ibid., p 74.

**CHAPTER 5**

8. Interview Data.
9. Interview Data.
12. Ibid.
24. CEPE's projected share of crude export income assumed that the corporation's exportable surplus would be 20.726m barrels (representing a production share of 45.232m barrels less 24.506m barrels for the domestic market) which would be sold at an average price of $37.08 pb. Molina's projections were represented in sures. I have changed these into US dollars at constant 1972 prices using the 1980 US GNP price deflator. Molina had projected that gross crude export income in 1980 would total S/19,586m.
29. Ibid., p 8.
31. Ibid.
32. Ibid.
34. El Comercio, 4 November 1980.
37. Ibid.

CHAPTER 6

8. Ibid.
9. Ibid.
16. Ibid.
19. Interview Data.
23. Interview Data.
34. The *Petroleum Economist* (February, 1981) described 1980 as 'one of the most productive discovery periods' since Texaco-Gulf's huge oil finds in the late 1960's.

CHAPTER 7

1. These findings are contained in Bernado Grossling & Diane T Neilson, *In Search for Oil*, (Financial Times Management Report), which is summarised in the Petroleum Economist, May 1985.
3. Ibid., p 104.


19. Interview Data.


22. Weekly Analysis,


24. Interview Data.

CHAPTER 8


8. Interview Data.


10. Interview Data.


13. Ibid., p 278.


16. Interview Data.

17. Interview Data.

19. Ibid., p 144.

20. Interview Data.


23. Ibid., p 207.

24. Ibid., p 212-213


26. Ibid., p 234.


28. Ibid.


30. World Oil, 15 September 1983.


35. Ibid.


40. Ibid., p 7.

CHAPTER 9


5. Ibid., p 207.


8. Ibid., p 276.


10. Interview Data.


12. Interview Data.

17. Ibid., p 64.
19. Ibid., p 27.
21. Ibid., p 27.
22. Ibid., p 27.
25. Interview Data.
36. Ibid., p 159.
50. Interview Data.
51. Interview Data.

CHAPTER 10

5. OECD, Economic Outlook, July 1983, p 150.
20. Ibid., p 127.
22. Ibid., p 69.
25. Ibid.
35. Financial Times, 10 February 1983.
36. Interview Data.
42. Andean Report, 24 June 1983.

CHAPTER 11

7. Ibid., p 49.
13. In 1984-88, FONAVIA was expected to receive S/50,000m, FONASA S/18,750m and FONAFAR S/4,000m. These projections are contained in Hugo Caicedo, Informe a las Bases, 1980-1984, (Quito, Luz de America), pp 11, 17, 18. I have converted these figures using an exchange rate of S/44.12. The dollars have then been expressed in constant 1972 price terms using the 1983 US GNP price deflator.
16. Ibid., p 46.
19. Interview Data.
23. Interview Data.
28. Ibid., p 35.
30. Interview Data.
32. Ibid., p 35.

**CHAPTER 12**

2. Ibid.
7. A Chase Manhattan Bank study found that their combined capital expenditure fell by 27% in 1983. Around 60% of the reduction occurred in the exploration and production sector. A summary of the survey findings are contained in the *Petroleum Economist*, December 1984.
10. Interview Data.
15. The study was undertaken by the Massachusetts Institute of Technology and published in C R Blitzer et al., Oil Exploration in the Developing Countries: Poor Geology or Poor Contracts?, a summary of which can be found in the Petroleum Economist, May 1985.


17. World Oil, 15 August 1983.


32. Ley de Hidrocarburos (Corporacion de Estudios y Publicaciones, September 1984).


34. Ibid., p 91.

35. Ibid., p 91.


37. Ibid.


39. Ibid., p 91.


42. El Universo, 3 July 1983.

43. Ibid.

44. Interview Data.

45. Interview Data.


47. Interview Data.

48. Interview Data.


51. Interview Data.

52. Interview.


54. Interview Data.


CONCLUSION

2. Ibid., p 492.
BIBLIOGRAPHY

Interview Data

Open-ended interviews were conducted lasting between one and two hours and recorded in written form. Most took place in Quito, Ecuador in May 1985 and May 1987. Although Texaco officials in Quito were approached during both visits, requests for an interview were refused.

Sonia Acoste (CEPE; formerly secretary to the Asociacion Sindical General de Trabajadores de CEPE-Matriz, Quito, May 1985 and May 1987).
Dr Rafael Almeida (CEPE; formerly head of the Asociacion Sindical General de Trabajadores de CEPE-Matriz, Quito, May 1985 and May 1987).
Italo Cedeño (Unidad de Contratación Petrolera, May 1985).
Rodrigo Carrán (Unidad de Contratación Petrolera, May 1985).
Rafael García, (manager of CEPCO, May 1985 and May 1987).
Dr Carlos Jaramillo (CEPE, May 1985).
Wilson Pastor (Unidad de Contratación Petrolera, Quito May 1985).
British Embassy (Quito, May 1985 and May 1987).
CEPCO (Quito, May 1985 and May 1987).
Clyde Petroleum (Quito, May 1985 and May 1987).
Conoco (Quito, May 1987).
Ministry of Energy (Quito, May 1987).
Occidental Petroleum (Quito, May 1987).

Official Documents

Central Bank, Ecuador en cifras, various years.
Central Bank, Memoria, various years.
Central Bank, Información estadística, various years.
Comisión Legislativa, de lo Económico, Agario, Industrial y Comercial, Consulta Nacional de Hidrocarburos, 1981-82:
Corporación de Estudios y Publicaciones, Ley de Hidrocarburos (Quito, November 1986).
Corporación de Estudios y Publicaciones, Ley de la Corporación Estatal Petrolera (Quito, November 1986).
Corporación de Estudios y Publicaciones, Ley de Seguridad Nacional (Quito, November 1986).

Corporación de Estudios y Publicaciones, Ley de Licitaciones (Quito, October 1986).

Corporación de Estudios y Publicaciones, Ley de Regulación Económica y Control del Gasto Público (Quito, February 1987).

Department of Employment, Employment Gazette (London)

Inter-American Development Bank, Economic and Social Progress in Latin America: The External Sector (Washington, 1982).

Inter-American Development Bank, Economic and Social Progress in Latin America: Natural Resources (Washington, 1983).


National Institute of Economic and Social Research, National Institute Economic Review (London), various issues.

OPEC, Facts and Figures, various issues.

OPEC, Annual Report, various years.

OPEC, Annual Statistical Bulletin, various years.


State Oil Company Sources


CEPE, El Petróleo y El Mundo (Quito, January 1989).

CEPE, El Petróleo en el Ecuador y el Mundo: Fases de la Industria Petrolera, (Quito, 1989)
CEPE, *Petróleo en el Ecuador y el Mundo: El Petróleo en el Ecuador*, (Quito, 1989)


CEPE, *Informe de CEPE*, various years.


**Newspapers/Journals**

Andean Report
Bank of London and South America (BOLSA) Review
Business International
Business Latin America
El Comercio
Economist
Financial Times
Guardian
Hoy
International Herald Tribune
Latin America
Latin American Economic Report
Latin American Weekly Report
Middle East Economic Review
Nueva
Oil and Gas Journal
OPEC Bulletin
Petroleum Economist
Petroleum Press Service
Petroleum Times
El Universo
El Telégrafo
Times
Vistazo
Voz de Quito (radio station)
Wall Street Journal
Newspapers/Journals (continued)

Weekly Analysis
World Oil

Published Works

Alberto Acosta E et al, Ecuador: Petróleo y Crisis Económica (Instituto Latinoamericano de Investigaciones Sociales, Quito, 1986)

Jorge Andrade Noboa, En la Lucha por el Crudo (Quito, 1981).

ASCEPE, Testimonio: Opiniones Relevantes de la ASCEPE sobre Politica Petrolera, 1984-86 (Asociacion Sindical General de Trabajadores de CEPE-Matriz, Quito, August 1986).

René Báez, Dialectica de la Economía Ecuatoriana (Central Bank, 1980).


Rodrigo Borja, Socialismo democrática, (Quito, 1983).


Hugo Caicedo, Hacia los Grandes Objetivos Nacionales (Quito, 1983).

Hugo Caicedo, Informe a las Bases, 1980-84 (Luz de America, Quito, 1984).

CEDIS, Los Grupos Monopolicos (Centro de Estudios y Difusion Social, Quito, November 1986).

Catherine M Conaghan, Restructuring Domination: Industrialists and the State in Ecuador (University of Pittsburgh Press, 1988).


Rudiger Dornbusch, On the Consequences of Muddling Through the Debt Crisis, World Economy, (June 1984, Volume 7, Number 2), pp 145-161.


Jaime Galarza, Petróleo de Nuestra Muerte (Centro de Estudios y Difusión Social, Quito, October 1983).

Robert Grosse, Resolving Latin America's Transfer Problem, World Economy, (September 1988).


Osvaldo Hurtado Larrea et al., Ecuador, hoy (Bogotá, 1978).


Kevin J Middlebrook and Carlos Rico eds., The United States and Latin America in the 1980's: Contending Perspectives on a Decade of Crisis (University of Pittsburgh Press, 1986).


Quito Chamber of Commerce, La Deuda Externa del Ecuador (mimeograph, 7 May 1979).


Carlos Romo Leroux, La Acción de CEPE a la Crisis Petrolera, in CEPE, El Ecuador Frente a la Crisis Petrolera, (Quito, August 1986), pp 27-44.

Fabian Sandoval Moreano, Luis Calero Hidalgo y Jose Gordillo Montalvo, Aporte de CEPE a la Economía Ecuatoriana (División de Comunicación y Relaciones Públicas de CEPE, February 1986).


Jorge Silva Luvecce, Nacionalismo y petróleo en el Ecuador actual (Editorial Universitaria, Quito, 1976).

Gary A Sjaastad, International Debt Quagmire - To Whom Do We Owe It?, World Economy, (September 1983), pp 305-324.

C E Solberg, Oil and Nationalism in Argentina (Stanford University Press, 1979).

Cyrano Tama Paz, Escándolas petroleros ecuatorianos (Universidad de Guayaquil, 1979).

United Nations, Petroleum Exploration Strategies in Developing Countries, (Natural Resources and Energy Division, 1982).


René Vargas Pazzos, Petróleo, desarrollo y seguridad (Quito, 1976).


José Vicente Zevallos, El Estado ecuatoriano y las transnacionales petroleras (Catholic University of Quito, 1981).