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<td>This thesis consists of two reports on Venezuela's petroleum sector. The first report, Analysis of the Linkage Effects of Venezuela's Petroleum Sector, analyzes the main linkage effects of petroleum, using Professor W.W. Rostow's &quot;Take Off&quot; theory of economic growth as the analytical framework. The main linkage effects have their greatest impact in the public sector, industry, agriculture, foreign exchange, and human resources. The second report, Political Risk Analysis of Venezuela's Petroleum,</td>
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Analysis of the Linkage Effects of Venezuela's Petroleum Sector

Political Risk Analysis of Venezuela's Petroleum Sector

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Final Report, December 1983

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ANALYSIS OF THE LINKAGE EFFECTS OF VENEZUELA'S PETROLEUM SECTOR

POLITICAL RISK ANALYSIS OF VENEZUELA'S PETROLEUM SECTOR

APPROVED:

Lawrence S. Graham

w.w. Barton
DEDICATION

I dedicate these reports to my parents, Richard M. Whalen and Theresa M. Whalen.
ANALYSIS OF THE LINKAGE EFFECTS OF VENEZUELA'S PETROLEUM SECTOR

AND

POLITICAL RISK ANALYSIS OF VENEZUELA'S PETROLEUM SECTOR

BY

JOHN FRANCIS WHALEN, B.S.

REPORT

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Analysis of the Linkage Effects of Venezuela's Petroleum Sector
ANALYTICAL FRAMEWORK

The purpose of this paper is to analyze the main linkage effects of a leading sector, as defined by W.W. Rostow, on other sectors of the economy of a developing country. Rostow identifies the economic dimensions of societies as falling within the following stages of growth: the traditional society, the preconditions stage, the take-off, the drive to maturity, and the age of high mass consumption.¹

Succinctly stated, the take-off is the stage when a society moves into sustained economic growth. However, it can be more precisely examined through three criteria:

1. A rise of productive investment from approximately 5% to 10% of net national income.

2. The existence of a political, social, and institutional framework to exploit expansion.

3. The development of manufacturing/raw materials industries, whose leading sectors have a high rate of growth. This process of leading sector growth sets in motion "...a chain of further modern sector requirements and that its expansion provides the potentiality of external economy effects, industrial in character."² I will be focusing on this leading sector aspect of the take-off.

As a leading sector's growth accelerates, it stimulates a chain of requirements for new production functions in other sectors, such as more specialized workers, more goods and services to support them, and further industrial expansion. The rapid rate of leading sector expansion plays the crucial role in maintaining the momentum of the economy. In a
disaggregated analysis, the leading sector(s) with a high rate of growth can be isolated. Venezuela's leading sector during its take-off was petroleum. I will analyze how this leading sector affected other sectors of Venezuela's economy.

As an extractive leading sector, petroleum's general requirement is to increase productivity by the most accessible and resourceful means. Generally, this means the application of a backlog of innovation, accessing techniques and greater investment from the higher productivity extractive sector. Extractive leading sectors can also supply foreign exchange for capital formation. Finally, an extractive leading sector can promote development by direct payments from foreign concessions. These payments can be in the form of purchasing domestic goods and services, and the provision of local labor wages and social services. These payments can help set up a series of forward and backward linkages and also increased demand for domestic output.

National economic growth is based on the unique factors of geography, history, culture, and natural resources of each country. Applying the extractive leading sector framework to Venezuela's unique factors, four distinct growth periods become evident: 1) up to 1958 when the economy was completely dependent on oil and virtually all oil revenues were spent on current public expenditures, 2) 1958 to 1973, when the popularity-elected governments used oil revenues to realize limited economic progress over a wide front, 3) 1974 to 1977, when the increased oil revenues from the quadrupling of the oil price in 1973/74 were used to generate economic development, and 4) 1978 to the present, when the huge increases in oil revenue created great distortions in Venezuela's economy.
Applying the extractive leading sector framework within each period, there are several variables that emerge that show the effects of the petroleum sector. To analyze the main linkage effects of Venezuela's leading sector, I will focus on petroleum's effects on these variables. They are the public sector, industry, agriculture, foreign exchange, human resources, and non-economic changes.

PRE-OIL VENEZUELAN ECONOMY

Until the ascent of the petroleum industry in the 1920's, Venezuela was a generally a traditional society. It was the stereotype of a poor agricultural country run by a military strongman for the benefit of a landed elite at the expense of the peasantry. However, Venezuela produced most of its own food and exported some tropical products, such as coffee and cacao.

Agriculture was the main industry and it was conducted at just above the subsistence level. Most of the people were farmers and worked on large haciendas or on small plots. This sector had little capital, primitive technology, and low productivity.

There was very little industrial development before the advent of petroleum. The extreme poverty of the subsistence level farmers meant that Venezuela's internal market was virtually non-existent. Besides coffee and cacao exports, the only industrial activity was that of small-scale artisans.

During the century after independence from Spain in 1821, four dictators - Jose Antonio Paez, Antonio Guzman Blanco, Cipriano Castro,
and Juan Vincente Gomez - were in power for more than 70 years. Gomez usurped power in 1908, and under his absolute rule to 1935, Venezuela experienced limited economic growth.

The presence of petroleum in Venezuela has been known for centuries. Local Indians used petroleum from oil seepages for medicinal purposes. Early conquerors used it to waterproof their ships' hulls. However, petroleum was of no economic value until the end of the nineteenth century, when the machinery of the industrial revolution needed oil for lubrication and energy.

As the uses for petroleum increased, North American and European petroleum countries increased their exploration and extraction efforts. In Venezuela, the first oil well was drilled in 1912 and, by 1917, oil exports appeared on the export statistics. In cooperation with General Gomez, the oil companies exploited Venezuela. The petroleum industry grew rapidly, but low taxes and limited linkages confined the benefits to the foreign owners and General Gomez' elite. The latter skimmed off oil money and built up huge personal fortunes.

By 1928, Venezuela was the largest exporter of petroleum and the second largest producer in the world. In 1929, petroleum exports accounted for 45% of total export value. By the 1940's, petroleum exports were over 90% of total export values, the petroleum sector represented 25% of the GNP and over 50% of government income. By this decade, the dependence of Venezuela on petroleum was complete. The petroleum sector dominated the economic, social, and political life of the country.
Petroleum Sector

The successes and failures of development have been linked to the production of oil and its earnings. Oil has been the crucial variable of economic change for Venezuela.

Under General Gomez, there was limited growth. For the oil companies, there were large profits. For Venezuela, there were only limited linkages to the domestic economy from the petroleum sector. The concept of "sowing the petroleum" was promulgated by Dr. Arturo Usler Pietri in 1936 as a strategy to spend petroleum revenues on economic and social infrastructure to encourage broad-based growth. However, until the revolutionary government of Betancourt from 1945 to 1948, sowing the petroleum showed few results: agriculture was prostrate, education and health facilities were lacking, and there was virtually no industry. Betancourt's short-lived regime maintained steady pressure on the petroleum companies for more government revenue for economic development and for social welfare measures such as schools and job training.

Petroleum's increasing output after World War II and especially in the 1950's was the strongest force in the promotion of economic growth of that era. Output is shown on Chart 1, Venezuelan Crude Production. During the 1950's, petroleum was Venezuela's leading sector and it imparted growth to the rest of the economy. Under Colonel Perez-Jimenez, sowing the petroleum meant spending the increased petroleum revenues on construction, public works, utilities, and only a limited amount for social welfare. From 1950 to 1957, the Venezuelan economy grew at an annual
rate of 9.4%.  

However, the results of the increased petroleum activity in the 1950's were not entirely satisfactory. The economy was still backward and the vast majority of the people were poor, unhealthy, and illiterate. Under Perez-Jiminez, the petroleum had not been used intelligently - too much had been wasted on the armed forces, the bureaucracy, public works, and by corruption. Corruption had reached new heights because of the increased petroleum revenues available to unscrupulous officials. One estimate is that under Perez-Jiminez, at least 50% of government funds were either stolen or squandered.

There were both positive and negative linkage effects from the petroleum developments up to 1958. On the positive side: development had not cost one bolivar; Venezuela was mapped by the oil companies; some infrastructure, such as roads and railroads, was completed by the oil companies to link their operations with export facilities; some Venezuelans were hired and received high wages and social welfare benefits; oil revenues were used for some development and services; the oil companies trained some locals in modern managerial and administrative techniques which later contributed to other sectors; a central banking system was established to handle oil revenues; and some related sectors prospered. The related sectors are those tied to the forward or backward linkages of petroleum. Some sectors benefitting from the forward linkages were electricity and some limited natural gas production. Some backward linkage effects were in those industries that supported petroleum, like metal products, construction, and worker services.

There were also many negative effects associated with the
petroleum sector. Overall, the oil companies profited enormously but few benefits went to Venezuelan communities. Venezuela became dangerously dependent on a single, foreign-owned industry which responded to demands of a capricious world market. Other negative effects were: only a small number of workers benefitted; labor was drawn from agriculture, which then suffered; uncontrolled urbanization occurred; petroleum's high wages had an unfavorable demonstration effect to other sectors, such as industry; and petroleum wealth contributed to maintaining corrupt dictatorships. Tied to the export sector, the oil industry grew in enclaves. It had more external than internal contacts, and so its linkage effects for Venezuelan development were minimal. Benefits from a spillover of managerial skills and industrial techniques did not really take root.

The foreign-owned extractive industry, instead of promoting prosperity by increasing real income, diversifying production, and stimulating economic development, actually caused high prices and reduced the output of domestic industry and agriculture. It sapped the very life of the economy.

Public Sector

Taxes - Venezuelan tax policies show a slow evolution from the early days under Gomez of oil company domination and manipulation to the 50-50 splitting of profits in 1948 to Venezuelan nationalization in 1976. Gomez imposed only very modest tax conditions on the petroleum companies and, in turn, enriched himself with their payments. Gomez allowed the oil companies to write the early Venezuelan concession and tax laws. Naturally, the resultant laws were very favorable to them!
Among the many advantages which the oil companies had assigned to themselves when they wrote their law of 1922 was the exoneration of tariff duties for everything which they imported from abroad...The national treasury lost a far greater amount through being unable to tax their imports than the amount which the companies paid altogether for the taxes affecting the industry.

Under Gomez, there was no income tax and oil companies had to pay only .41 bolivares per barrel extracted. (See Table 1, Petroleum Tax Rates.) Royalties were also very low - between 8% and 15%.¹⁰

Since Gomez' death in 1935, all Venezuelan income tax reforms have been aimed at increasing tariffs applicable to oil companies and decreasing the regressive tax burden to Venezuelan workers. By 1936 the Venezuelan government began to assert itself for more influence and revenues. It increased the per barrel tax to .50 bolivares and it became more vigorous in enforcing tax collection.¹¹

Up to 1943 there were various tax reform laws which increased the per barrel revenue from the oil companies. However, the tax system was similar to what had always existed - a heavy reliance on indirect taxes, such as import duties and petroleum taxes. The import duty taxes were regressive because they equally applied to all purchasers of imported goods. Also, the petroleum taxes were linked only to output, not petroleum company revenues. In 1943 there was a tax reform with a progressive income tax, both on individuals and the oil companies. This reform shifted more tax burdens to the oil companies and reduced the share of indirect, regressive taxes paid by Venezuelans. The income tax burden on the
The final major tax action in this period was the 50-50 split of oil revenue between the oil companies and the Venezuelan government as prescribed in the 1948 Tax Law. The revolutionary government placed heavy pressure on the oil companies for more revenue, as it needed additional funds to support its social reforms.

Income - Government income has been very unstable and petroleum accounted for its volatility. Petroleum's percentage of total government income rapidly rose from the first petroleum exports in 1917 to comprise approximately two-thirds of government income in the 1940's. This figure has remained at approximately this percentage since then. Chart 2, Oil Receipts as a Percentage of Government Income, depicts this erratic movement. Total government revenue is shown on Chart 3, Total Revenue. Petroleum's large proportion of total government revenue meant that Venezuela was critically dependent on petroleum for income and any fluctuations in the oil market would have a great effect on Venezuelan income.

Expenditure - How government spends its revenues shows its priorities. Before 1935, there was only slight government action for economic development. Expenditures were not channelled to increase productivity as virtually every governmental department expanded its activities. After Gomez' death in 1935, there was some increase in economic development by the government. It financed some highways and infrastructure construction, but this was generally limited to Caracas, the

low-salaried worker was very light, however. 
oil-producing areas, and the ports, with the result that vast areas of Venezuela remained closed to modern economic life. In fact, these investments in Caracas and the ports actually served to increase the relative advantage of imported products, which enjoyed modern transportation and marketing facilities.

The increased government income due to increased taxes facilitated a higher level of public expenditures without indebtedness. Under the revolutionary government from 1945 to 1948, the increased revenues from petroleum were used to improve education and agriculture. More revenues also went for an expansion of the transportation system, electrification, irrigation, and lending.

Due to increased oil production, government revenues doubled under Pérez Jiminez, 1953 to 1957. He concentrated on transforming Venezuela's physical environment with expenditures on highways, seaports, monuments, hotels, and a lavish officer's club. Social welfare needs were largely ignored in face of the the dictator's desire for massive public works and other "showcase" spending projects.

With the increased construction activity in urban and oil-producing areas, Venezuela in 1957 had a facade of modernity, but little substance. Government buildings, hotels, and monuments make excellent showplaces, but are of little economic importance. Very little of the income went to capital formation. Government expenditures up to 1957 did little overall to alleviate structural problems, such as dependency on petroleum, illiteracy, and income distribution inequities. Government expenditures had not really "sewn the petroleum" - its petroleum income was really considered ordinary income, which it is not! Petroleum income
is actually based on the liquidation of an asset, which is finite and will eventually lapse.

Agriculture

By the 1920's, petroleum had replaced agriculture as the top income producer in Venezuela. By the 1940's petroleum's dominance was complete. During the first decade of this century, before petroleum exports occurred, agricultural products such as coffee, cacao, and livestock accounted for 85% of Venezuela's export earnings. However, by the 1940's, petroleum accounted for 94% of the export earnings and agricultural products fell to 4%.

Agriculture quickly stagnated as petroleum industry progressed and developed. The high wages of the petroleum sector, prescribed by Venezuelan law, attracted many agricultural workers, most of whom were peons on large haciendas or had a small plot for subsistence-level farming. Farm workers migrated to the oil-producing and urban areas with the goal of working in the petroleum sector. In hand with this labor migration, the little capital that was in agricultural sector fled into the industries and services which were linked to petroleum. So, agriculture suffered with the loss of labor and capital in the form of higher agricultural wages, lower output, and lower productivity. With the deteriorating agricultural sector, Venezuela had to import more foodstuffs, paid for by the increased export earnings from petroleum.

The government invested very little in the agricultural sector before 1958. At times, agricultural funds were moderate, but they were confined to the commercial farming sector, where the few landed elite
benefitted. The vast majority of farmers, the subsistence-level farmer, received little attention. Agricultural funds were not used to finance new investment programs nor to disseminate new agricultural methods, like equipment and fertilizer, that could substantially improve productivity.

Despite frequent government rhetoric, it made virtually no effort to change the land tenure system, to redistribute land, to increased cultivated land, nor to increase production. For example, despite a great need for irrigated land, the government invested only 15 million bolivares per year on irrigation up to 1953. The results of this small investment are shown by a comparison of the total irrigated lands of Venezuela in 1961 (218,000 hectares), with Cuba (456,000 hectares) and Mexico (3,700,000 hectares), neither of whom had access to the large export earnings like Venezuela.14 Chart 4, GDP/Capita and Agricultural Production, shows the much lower production of agriculture compared to the higher GDP/Capita. The higher GDP/Capita is due to the large earnings in the petroleum sector. Chart 5, Relative Growth Indices (GDP and Agricultural Production), shows the relative stagnation of agriculture compared to total GDP on an index. Agriculture consistently fell behind during this period.

The situation of agriculture in 1958 was that of depression. Except for a brief attempt to improve agriculture under the revolutionary regime of Romulo Betancourt from 1945 to 1948, agriculture had been deteriorating. It was still at the subsistence level and was a drag on other sectors of the economy, as food had to be imported. Many structural problems remained: lack of infrastructure, land tenure inequities, lack of credit, lack of agricultural research, and backward marketing organization.
Industry

Extreme poverty and minute domestic markets prevented the development of industries in Venezuela before the era of petroleum in the 1920's. The rapid rise of the petroleum industry and the quick dependence of Venezuela on petroleum's foreign exchange forestalled Venezuelan industrialization because of the attractiveness of cheap imports. World War II helped industrial expansion, as wartime exigencies cut off some imports and resulted in a small expansion of Venezuelan foodstuff, textile, and other light consumer goods' industries.

In the 1950's, petroleum earnings brought enlarged markets and higher demand in Venezuela. So, the manufacture of some industrial became more attractive. As Chart 6, Relative Growth Indices (IP and GDP), shows, industrial production grew slightly faster than the rest of the economy from 1950 to 1958. A disaggregated analysis shows that the increases were in such areas as light, non-durable goods: construction, petroleum refining, and electrification. To a lesser degree, local industrialization was stimulated through local purchases by the petroleum industry.

With the increased demand and larger market from the petroleum sector, services developed to cater to petroleum's high wage earners. The first industries were those which required little capital and whose products were relatively easy to manufacture - the light, consumer, non-durable goods. Beer, soft drink, textile, leather, and rubber industries all advanced. The growth of these sectors compared to that of industrial production is shown on Table 2, Indices of Consumer's Goods Growth. However, these products catered to a small market (the petroleum workers)
and their manufacture required no great technological nor productivity increases.

In the 1950's, the construction industry advanced rapidly. Funded by the revenues of increased oil production and fueled by a desire for prestige and recognition, dictator Perez-Jimenez increased Venezuelan construction. Statistics for cement production are an accurate measure of local construction and, as Chart 7, Relative Growth Indices (IP and Cement Production), shows, cement production grew rapidly up to 1958.

The petroleum refining industry had a slow start in Venezuela. Under General Gomez (1908-1935), petroleum companies refined virtually all of Venezuela's oil at nearby Curacao and Aruba. General Gomez did not want refining done in Venezuela because he feared that the petroleum states might become too economically powerful for him to control. Also, the petroleum companies chose not to press for refineries in Venezuela because they feared the possible results to their capital-intensive refineries from political upheaval when Gomez would fall from power.

The lack of refineries in Venezuela under Gomez deprived Venezuela of a series of economic, social, and fiscal advantages that instead went to the refining countries. A domestic Venezuelan refining industry would have had the following beneficial effects: to diversify exports beyond just crude petroleum, to increase employment opportunities, to bring in more taxes to the government, and to bring in advanced technology and modern management skills that would eventually affect other Venezuelan industries.

Domestic refining of petroleum was finally prompted by the 1943 Petroleum Law. This statute encouraged domestic refinery construction
through incentives such as: permitting 50-year concessions on oil fields, exemption from some import duties, and tax reductions. This statute also required oil companies to refine an increasing percentage of Venezuelan oil in domestic refineries. The implementation of this statute stimulated the growth of the petroleum refining industry. Chart 8, Relative Growth Indices (Petroleum Refining Production and IP), captures the acceleration of domestic refining since the 1940's.

Starting from almost a zero base in 1950, electrification has grown substantially. Also funded by the increased petroleum earnings, electrification of cities and industrial areas made modest growth up to 1958. Electrification supported the increased industrialization and increased construction activity that the petroleum revenues had sponsored. Chart 9, Relative Growth Indices (Electricity Production and IP), shows its modest growth to 1958.

Finally, industrialization was stimulated on a small scale by the local purchase of goods by the petroleum industry. Goods such as food-stuffs, beverages, and construction materials were purchased in support of the increased petroleum activity in the 1950's. As Venezuelan industries grew in diversity and productivity, they were better able to support petroleum activities. Local purchases by the petroleum industry accounted for only 10% of purchases in 1948, but this figure increased to 20% by 1958.

Industrial growth made modest gains during this period. It grew slightly faster than industrial production and its development was affected by the petroleum industry. Despite this modest growth, industrialization has been retarded by: the high costs of raw materials, the small domestic market, the high costs of wages, and inefficiencies from over-protection,
paternalism, and poor local management procedures.

Foreign Exchange

Other South American countries encouraged import substitution industries because of an inability to import due to foreign exchange constraints. This situation was not the case for Venezuela. It had an abundance of foreign exchange from its petroleum earnings and only started the import substitution industries as a means of economic diversification.

Venezuelan crude production increased dramatically from early in the century, with just a few barrels, up to 1957, when over 2,770,000 barrels per day were extracted.\textsuperscript{19} Petroleum dominated the exports and its share of export earnings increased to over 90\% by 1941.\textsuperscript{20} In 1957, the value of oil produced was more than 8 billion current bolivares.\textsuperscript{21}

The increasing foreign exchange accumulated by Venezuela for its petroleum had generally negative effects for growth. The petroleum earnings went to purchase imports. In face of abundant foreign exchange and cheap imports, local agricultural goods couldn't compete and there was little incentive for local industries to start up operations. The foreign exchange should have been used towards the development of intermediate industries, not consumer imports.

Human Resources

Before the domination of oil in the Venezuelan economy, most of the population lived in rural areas and had no public services, such as education and health clinics. After the advent of oil, the lure of a better
life in the cities and petroleum-producing areas brought about a change in urbanization patterns.

The oil-based economy has produced a highly-mobile population. They have moved to the higher paying oil and industrial jobs. The high wages and social benefits of the oil sector attracted many agricultural sector workers who had hopes of a better life in the oil sector than from the meager opportunities in rural areas.

However, petroleum's economic stimulus gave rise to a migration of workers far greater than needed. As a capital intensive industry, petroleum required relatively few workers. For example, in 1950, the petroleum sector employed 45,000 workers, which was only 2.6% of the economically active population. Even though there was little job opportunity in the oil sector itself, most migrants remained in the oil-producing regions and either worked in the oil service sector or remained in a marginal status.

The great influx of workers to oil-producing areas and the oil service areas, like Caracas, resulted in massive urbanization. All of the oil states - Anzoategui, Managas, Falcon, and Zulia, experienced high population increases. The transformation of Maracaibo is illustrative of this phenomena. Maracaibo, in the state of Zulia, was a sleepy town in 1920, but by 1940 it was the oil metropolis, Venezuela's busiest port, and Venezuela's largest city after Caracas. Table 3, Maracaibo and Venezuelan Population Growth Rates, shows Maracaibo's growth against Venezuela's as a whole for the early years of the petroleum industry. This table shows that Maracaibo's growth rate increased 4.4% from 1920-1926, when the petroleum industry started its growth. During the same years, Venezuela's growth increased only 0.5%. The continuing urbanization trend
for more recent years is shown on Table 4, Urbanization Trends. In total, between 1936 and 1947, the oil states experienced a 42% increase in population, compared to an increase of 20% for Venezuela as a whole.²⁴

Besides the population increases in the oil-producing areas, petroleum also affected Caracas' population growth. Caracas was the main service center of the oil industry. It was the central administrative headquarters of the oil companies and was the main beneficiary of oil company purchases and tax receipts. Between 1936 and 1947, Caracas' population increased 47%, as compared to 20% overall for the country.²⁵ This massive urbanization meant a heavy burden on municipal and national governments to provide facilities and basic services to meet the needs of the urban masses. These needs were largely unmet during the time period up to 1958.
Non-Economic Change

In 1958, the dictatorship of Perez-Jiminez was replaced by a system of elected government. This change of leadership brought new directions in economic strategy and economic policy. The new government's strategy was to increase its participation in petroleum revenues and to have a greater voice in petroleum decision-making. The general change in policy was to re-allocate economic resources among the developmental and social sectors. The aims of the National Plan of 1963-1966 reflected this change in policy: 1) to achieve a high growth rate, 2) to diversify the economy, 3) to increase employment, and 4) to increase social welfare measures. The petroleum sector was expected to continue to lead the economy to achieve overall high growth. Increased employment and some diversification would be achieved by the development of manufacturing and construction as key sectors, with agriculture as a minor sector for expansion. Social welfare measures would increase in such areas as increased expenditures for education, housing, and public health measures. Key to all development would be the increased earnings from petroleum.

Petroleum Sector

Petroleum production's rate of growth decelerated during this period. Chart 1, Venezuelan Crude Production, shows the leveling-off of production, beginning in 1958. This decline was due to a diminishing of readily-available reserves and reduced investments by the petroleum
companies. Investment was lower because of a lack of confidence in the new government, its policy of no new concessions, and the excess oil supplies after the resolution of the Suez Crisis. However, Venezuela was still dependent on petroleum - over 90% of export values and over one-half of government income came from petroleum.

In accordance with the new government's strategy, it took steps to fulfill its implementation. First, it decided to grant no more concessions to the oil companies. Under this action, oil lands would gradually be returned to the government. Also, the government took action to become more involved in other facets of the oil industry besides production. In 1960 it formed the Corporacion Venezolana del Petroleo (CVP) to be a state company to engage in all petroleum operations - exploration, production, refining, transportation, and marketing. Finally, the Venezuelan government was instrumental in the establishment of OPEC in 1960. OPEC's goal was to translate its oil wealth into the general welfare of its people. This goal was to be attempted by measures to increase oil prices and to use the revenues for economic development.

There were limited new linkage effects since the previous period. The main forward linkage effects were in refining, natural gas, and petrochemicals (fertilizers). These industries continued to expand. Backward linkages included purchases of domestic goods and services by the oil companies. These purchases were small in comparison to the large payments made to the government by the oil companies. Overall, the petroleum industry played a limited role in transforming the economy because of structural barriers - low agricultural production, grossly unequal income distribution, and lack of a developed industrial base.
Public Sector

Taxes - Taxes on the petroleum companies continued to increase during this period. The per barrel tax increased from 2.08 bolivares in 1957 to 5.80 bolivares in September of 1973.26 (See Table 1, Petroleum Tax Rates). Petroleum's share of government income by taxation increased from 46% in 1958, to 64% in 1973.27

As crude production failed to grow at the rate of the 1950's, oil revenues also failed to expand at a growing rate. The government recognized the long-term declining prospects for petroleum taxation, as reserves would inevitably be depleted. So, in the 1960's, the government broadened its tax base by reducing minimum taxable income of the income tax table. Other sectors of the economy had to bear an increasing (although very small) tax burden. However, individual tax rates were very light. The highest tax bracket for individuals was only 10%.28

Venezuela's tax system has become more progressive as indirect taxes continued to decline in relative value of total taxes. Indirect taxes were 20% of total income in 1959 and declined to only 7% of total income by 1974.29

Although there have been several tax reforms to make the system more progressive, tax administration and enforcement have lagged. Many taxpayers, citing the possibility of more oil taxes, do not report their incomes or falsify their tax returns. Government efforts have not been able to show a need for all taxpayers to do their share nor have they been able to tighten enforcement.
Income - Government income continued to be unstable, due to the volatility of the petroleum market. However, income continued to rise due to the favorable world oil market and governmental pressure for increased oil taxes. The proportion of petroleum earnings in total government income moved erratically forward from 54% of income in 1958 to 69% in 1973. This movement is depicted on Chart 2, Oil Receipts as a Percentage of Government Income. Total government income increased almost four-fold during the same period. Chart 3, Total Revenue, shows this movement. The increase in revenue, primarily from the petroleum sector, was able to impart modest growth and development over a wide front in the rest of the economy.

Expenditures - Since the change in economic policy in 1958, petroleum revenues have been used to bring about more balanced development. This development has occurred via the public sector. It has been the chief agent of growth.

Unlike most other countries, Venezuela didn't have to worry about where its revenue would come from - its problem was the allocation of resources from the petroleum income. As the agent for the expenditure of petroleum income, the public sector has grown since 1959 to satisfy public needs in education, health, transportation, employment, and housing. However, the state hasn't been able to meet all needs, as evidenced by the continued income distribution inequities, slow agricultural growth, and a general lack of economic opportunities.

After 1959, a larger share of petroleum revenues went towards building the social infrastructure and welfare services, which gave impetus
to the growth to the construction and service sectors. Chart 10, Government Expenditures, and Table 5, Government Expenditures, capture the movements of government expenditures. Although the percentages of government expenditures of each government function are erratic, there are definite trends. Chart 11, Government Expenditures (Trends), shows the trend movements from the "smoothed" data from Table 5. Overall, since 1959, political expenditures fell as social expenditures rose. This trend chart clearly shows the dramatic rise in social welfare expenditures as a percentage of the increasing pie of government income. The percentage of economic development expenditures has fluctuated, but considering the four-fold increase in government income during this period, a static percentage function represents a large increase indeed.

Agriculture

Agriculture made some small gains during this period, although, overall, it was still the weak link in the economy. It was still adversely affected by the petroleum sector by its high wages which drew agricultural labor and resulted in lower output. Petroleum's foreign exchange earnings continued to allow Venezuela to import foodstuffs.

This sector grew slightly from 1958 to 1965 as a result of a larger share of public resources allocated to agricultural investment and credit. Agriculture received 6.0% of government expenditures in 1959 and this figure increased to 10.4% by 1965.\textsuperscript{31} The government also instituted basic reforms in rural areas, such as land redistribution, extension services, and social overhead facilities (market roads, storage facilities). Up to 1965, 20% of the rural population had benefitted from the land redistrib-
The growth of agriculture slowed after 1966, as a result of smaller increases in agricultural expenditures. Chart 5, Relative Growth Indices (Agricultural Production and GDP), shows that after narrowing their gap in the early 1960's, agriculture fell behind GDP more dramatically. This increasing gap was due to the relative stagnation of agricultural production compared to the larger GDP from the increased oil revenues.

Industry

The new economic strategy of the post-1958 governments included the plan to industrialize as a means to diversify the economy and to increase employment possibilities. Like other developing sectors, industry was to be funded by the petroleum revenues. Industrial investments increased from 2.3% of government expenditures in 1964, to over 5.8% in 1973. This revenue was primarily used for industrial credit and for the creation of an industrial infrastructure.

The increased earnings from the petroleum activity brought enlarged markets and higher demand. Chart 6, Relative Growth Indices (IP and GDP), shows that industrial production grew at about the same rate as GDP up until the huge increases of petroleum income in the early 1970's. The fastest growing industrial activities were import substitution industries and capital-intensive industries, like petrochemicals, electricity, and heavy metals.

Foreign exchange from petroleum was still used to purchase imported manufactured goods. The government began an import substitution
drive in the early 1960's to diversify the economy. This program affected
the production of consumption goods (rubber, textiles, beverages, and
leather) and some intermediate goods in the steel, petroleum, and auto
sectors. The import substitution effort was mainly responsible for the
higher growth of the industrial sector up to the late 1960's. Manufacturing's percentage of the GDP increased from 14% in 1958 to 18% in
1965. After 1966, the import substitution industries reached maturity
and their growth began to wane. This slowdown was caused by the small
domestic market, high labor costs, inefficiencies from overprotection, and
an overvalued exchange rate. Petroleum was central in import substitution
industry's decline — its high labor costs had a demonstration effect
throughout other industries and large oil exports maintained the bolivar in
an overvalued exchange position.

Most of the progress of industry was in the capital-intensive
areas. Labor's high wages had encouraged industries to become more
capital-intensive. Under government auspices, large-scale industrial
operations developed in forward linkage sectors, such as petrochemicals
and refining; and backward linkage sectors, such as electricity, iron, steel,
and construction.

The Instituto Venezolano de Petroquimicas (IVP) was founded in
1956 as a state agency to develop one of the neglected forward-linkages
of petroleum — petrochemicals. The production of nitrogen fertilizer was
one of the largest operations, but other downstream petrochemical indus-
tries that started were sulphuric acid, ethane, methane, and propane.
Centered in the industrial area of Ciudad Guyana, the petrochemical
industry grew rapidly. Chart 12, Relative Growth Indices (IP and Nitrogen
Fertilizer Production), shows that this industry grew from 1962 until the early 1970's. Its temporary decline was due to some common problems with state-owned enterprises — political intervention, faulty planning, and mismanagement.

Petroleum refining slowed in the 1960's mainly because of the slower rate of extraction of crude. Refining had limited effects because it is capital-intensive and it required specialized imported capital equipment. Also, industrialized countries preferred to buy crude oil and refine it at home. Chart 8, Relative Growth Indices (IP and Petroleum Refining Production), shows its movement.

Funded by petroleum and linked to the high-priority industrial sector, electricity continued its rapid growth from its beginning in the 1950's. More industrial and urban areas were linked in the national electrical grid. Chart 9, Relative Growth Indices (IP and Electricity Production), depicts the very rapid growth of the electrical sector during this period.

Cement production, representing construction, grew rapidly in the 1950's because of Perez-Jiminez' public works programs. However, cement production increased during this period in support of construction activity in the other industrial sectors and the infrastructure. Chart 7, Relative Growth Indices (IP and Cement Production), depicts its growth.

Under the auspices of the Corporacion Venezolana de Guayana (CVG), the iron and steel industries made dramatic progress in the 1960's. These two industries were the foci of the government's efforts for economic diversification. As basic industries, iron and steel were key links in the progress of other Venezuelan industries, especially construction. Chart 13, Relative Growth Indices (IP and Steel Production) and Chart 14,
Relative Growth Indices (IP and Iron Production), show the rapid growth of these industries after 1960. Both accelerated until the early 1970's, when growth stagnated. This "quick spurt" pattern growth was characteristic of many import substitution industries, as cited earlier.

Foreign Exchange

Petroleum continued to provide abundant foreign exchange for Venezuela. During this period, petroleum accounted for over 90% of Venezuela's export earnings. In 1973, it represented 94% of export earnings.

The large influx of foreign exchange served to forestall domestic industrial expansion. In concert with Venezuela's high tariff protection, the high levels of foreign exchange led to an overvalued rate of exchange. This overvaluation meant that Venezuelan exports were more expensive, so industries other than petroleum were less likely to develop world markets for their products.

Besides affecting import substitution industries, the overvalued rate of exchange, in concert with Venezuela's low tariff for capital goods and high labor costs, meant that Venezuela's limited demand for capital goods would be met by imports. Therefore, Venezuela's output of capital goods was lower, which affected employment and diversification of the economy.

Human Resources

Employment - As a capital-intensive industry, oil required relatively few workers. Petroleum's productivity was increased not by
more workers, but by more investment in capital equipment and, as a consequence, its employment opportunities declined. The oil industry employed 44,000 workers in 1958, but only 24,000 in 1969.\textsuperscript{36} Although other industries grew during this period, many were also of the capital-intensive nature and did not absorb many workers. The industrial sector's total percentage of the workforce only increased from 18\% in 1958 to 23\% in 1969.\textsuperscript{37} The unemployment rate rose from 6.2\% in 1950 to 12.7\% in 1960, however, it gradually fell to 6.6\% by 1969, as the service sector absorbed more labor.\textsuperscript{38}

The lure of a better life in petroleum areas and in its service areas in the cities continued to attract rural migrants. Urbanization continued during this period, though at a declining rate. Urbanization increased at 4.8\% from 1960 to 1970, but it slowed to 4.2\% from 1970 to 1980.\textsuperscript{39} There were few job opportunities in the petroleum and manufacturing industries, but the service sector increased its employment. Service sector jobs increased from 36\% of the working force in 1958 to 46\% in 1969.\textsuperscript{40} With the natural increase in population, rapid urbanization added each year to employment problems, housing shortages, and other facilities needed for the urban masses.

The shifts in the structure of labor caused by the capital-intensive industries reflected an increasing need for skilled workers and a corresponding decreasing need for unskilled workers. In fact, the lack of human skills was a bottleneck in all sectors during this period.

To combat this bottleneck, the government recognized the need to invest in human capital: health, housing, and especially education. The government used the increased revenue from oil for more social expendi-
35

tures. Chart 11, Government Expenditures (Trend), shows the increasing trend of social expenditures. These social expenditures were largely for health and education. The petroleum wealth has fallen short of meeting many rural and urban development needs, but it has made progress in health services. Health's percentage of government expenditures increased from 1.8% in 1960 to 8.4% in 1973. All health-related factors improved during this period. For example, from 1960 to 1977, the population per physician decreased from 1430 to 930 persons, many diseases, such as malaria, had been wiped out, and life expectancy increased from 59 to 66 years.

Educational expenditures also increased in this period. Table 6, Education Percentage of Government Expenditures, shows education's larger share of government expenditures. Education represented only 6% of the 1959 budget, but it increased to 19% by 1974. There was educational emphasis at all levels, but the priority went to secondary schools and adult education. The main purposes were to generate skills needed in the market and to increase the potential for greater worker productivity. This emphasis had encouraging results - from 1950 to 1970 the literacy rate increased from 52% to 77%.

In addition to an increased educational budget, there were also structural reforms. Universities changed their curriculum from the traditional law/humanities base to more technical and scientific fields, such as petroleum engineering. So, university graduates were better prepared for the employment needs of Venezuelan industries.

The petroleum sector also affected Venezuela's distribution of income pattern, which is one of the most unequal ones of industrializing
nations. In 1970, the bottom 20% of the population received only 3% of the national income, while the top 20% received 54% of the income. The sowing of petroleum's wealth has not produced an adequate basis for social and economic progress.

Petroleum workers are in the top 10% of Venezuelan income earners. However, nonmarket forces explain this sector's high wages - Venezuela's labor laws required high wages and generous benefits for petroleum workers.

By the demonstration effect of petroleum's high wages to other sectors, industrial wages were high. However, low-productivity agriculture's wages were still very low. For example, in 1960, the average wage-earner in Caracas received 15,000 bolivares/year, while the average rural worker received only 1,500 bolivares/year. This inequality of income distribution had the effect of preventing a mass market from developing in Venezuela, with its negative effects for industrial expansion that I explained above. Additionally, this socio-economic dual structure can aggravate social and political problems into issues of a much larger order magnitude, such as guerrilla and class warfare.
Petroleum Operations

Two events have overshadowed all others in the petroleum sector from 1973 to 1978 - the quadrupling of oil prices in 1973/74 and the nationalization of the petroleum industry in 1976. The outbreak of war in the Middle East in October of 1973 led to the control of oil prices by OPEC and its quadrupling of oil prices in late 1973/74. The government took over the private oil companies with the 1976 nationalization, under the newly-formed, state-owned petroleum company, Petroleos de Venezuela (Petroven).

Due to lower reserves, Venezuela's crude oil production continued its decline that started in the mid-1960's. Chart 1, Venezuelan Crude Production, shows this movement. This decline in production caused budgetary problems up until the Autumn of 1973, when the four-fold price increases took effect and brought in substantially greater income. Chart 3, Total Revenue, shows this increase in revenues after 1973. As Chart 2, Oil Receipts as a Percentage of Government Revenue, shows, oil's contribution to government income fluctuated, but remained very high. The petroleum earnings provided the government with the means to develop the economy, but the earnings also increased Venezuela's dependence on oil. After 1973, government income and economic progress depended even more on decisions and events in consuming countries.

The increase in government revenue from the oil "bonanza" caused an expansive phase in the general economy from 1974 to 1977. After its relative decline in the previous period, petroleum again became the leading sector of the economy. Its expansion, in the form of increased
revenues, set in motion a chain of requirements in all domestic sectors, except agriculture. Substantial overall progress was made up until 1977, when distortions became evident in the economy. The major forward linkages were in natural gas, petrochemicals, tanker fleet, and construction. As in the previous period, backward linkages were limited because the local purchase of goods and services was small compared to the revenue provided to the government by the oil operations.

Public Sector

Taxes - Taxes on the petroleum companies continued to increase up until nationalization took effect in January 1976, when the government took control of the foreign oil companies. Presently, the individual tax rates are progressive and low. These low rates mean that more income is released for individual consumption. Table 7, Individual Tax Rates, shows the applicable rates. For example, an income of up to 80,000 bolivares is taxed at less than 11%.

Income - The quadrupling of the oil price in 1973/74 caused Venezuelan income to skyrocket. Chart 3, Total Revenue, shows the jump in revenue from 19 billion current bolivares in 1973 to 46 billion current bolivares in 1974, after which, revenues stagnated due to a decline in Venezuelan oil production. Petroleum revenues continued to constitute a high percentage of government income. Chart 2, Oil Receipts as a Percentage of Government Income, shows the result of the 1973/74 price increase as oil receipts composed a greater percentage of revenue - 85% in 1974.

Expenditures - By its expenditures from the increased oil revenues, the state continued to be the chief agent of economic growth
during this period. The flood of petroleum monies after 1973 had a profound effect in providing more funds for development plans and in forming new institutions to channel the funds for best use. In "sowing the petroleum" during this period, the government’s plans were essentially the same as the previous period: 1) the construction of a social and economic infrastructure, 2) the provision of social services, and 3) the support of the private sector.

The trend of the allocation of government expenditures was generally the same as in the previous period. Chart 11, Government Expenditures (Trend), shows the general movements. Chart 10, Government Expenditures, and Table 5, Government Expenditures, capture the yearly fluctuations. The relative fall in the percentages of social and political expenditures and the sharp rise in economic expenditures in 1974 indicate that most of the increased oil revenues from the 1973/74 price increase immediately went for economic development. However, political expenditures (defense, the bureaucracy, and the police) soon caught up and got their "share" of the increased financial assets. Likewise, after a drop in the percentage of social spending (education, health, social security, and housing), it soon rebounded to recapture its former percentage of expenditures.

More funds have gone into development plans for social welfare and the economic infrastructure. The exact amounts spent on each sector have fluctuated, but together they have accounted for about 65% of government expenditures. (See Table 5, Government Expenditures.) Social sector spending included monies for education, health, social security, and housing. Economic spending included monies for industry, the infrastructure, and agriculture. Infrastructure expansion included projects for the
railroad, port improvements, communications, and electricity.

The increased oil revenues also were used by newly-created state financial institutions to channel oil funds for best use. The largest institution was the Fondo de Inversiones Venezolana (FIV) or the Venezuelan Investment Fund. It was organized in 1974 to receive oil monies and to identify priorities for development and has received at least 50% of all oil income since its conception. FIV's initial plans were to expand the economic infrastructure, the merchant fleet, petrochemicals, oil refining, steel, iron, aluminum, cement, and mining. Even with this ambitious lineup, there were still excess funds! The FIV invested these funds abroad in an attempt to cool inflationary pressures. These funds went to organizations such as the IMF and the World Bank. With declining oil production and oil revenues in 1975, Venezuela then called these funds home for domestic use. Oil monies also went to other newly-created organizations, such as the Instituto Nacional de Vivienda (National Housing Institute), the Banco de Trabajadores (Worker's Bank), Corporacion Venezolana de Guyana (Venezuelan Corporation of Guyana), and the Empresa Nacional de Pesca (National Fishing Enterprise). As will be analyzed in the next chapter, Venezuela's development plans turned out to be too ambitious and resulted in severe distortions of the economy.

Agriculture

In spite of greatly enlarged funds for agriculture provided by the petroleum earnings, agricultural output has continued to stagnate. The government allotted funds for grain storage facilities, irrigation, market roads, and credit funds. However, agricultural production increased only a
minimal amount. Chart 4, GDP/Capita and Agricultural Production, and Chart 5, Relative Growth Indices (GDP and Agricultural Production), show that agricultural production constituted only a small proportion of the GDP. Their gap widened considerably after the increase in GDP from the 1973/74 oil price rises.

There has been a continued reliance on imported foodstuffs – almost half of domestic consumption was imported during this period. Agriculture generates only 6% of the GDP, yet it employs 20% of the work force in this low-productivity, low-wage sector. Why have the petroleum revenues been unable to transform agriculture? In spite of the massive funds allocated for this sector, the structure of the economic system has not changed. The funds have not been able to erase the structural differences between this rural occupation versus the lure of high wages, generous social benefits, and greater economic opportunities of the oil sector and its services in urban areas. So, agriculture suffers from an acute labor shortage. To increase productivity, the agricultural sector needs a consistent policy that will provide for technical aid, an increase in cultivated land, rural infrastructure, a domestic market, easy credit, more storage facilities, follow-up of government funds, and better administration.

Industry

The government’s economic policy in the 1970’s helped to promote industry by: 1) the construction of an economic infrastructure, 2) government purchases from industry, and 3) financial measures, like loans and subsidies. Industrial expenditures by the government increased in percentage from 6.5% in 1979 to 8.0% in 1977. Sowing the petroleum”
the 1970's for industry meant using these increased revenues for diversification to reduce dependency of the economy on oil revenue. So, industrial development was a big priority after 1973 as the government formed huge, state-owned companies with large capital investments. As a result, industrial development grew rapidly (11% per year) up until 1978.  

The four-fold increase of oil prices and consequent increase in oil revenue had a profound impact on the industrial sector. The increase in income had the effect of creating instant demand. Industry suffered from this rapid distortion of the structure of the economy. The limited industrial expansion of the previous period could only satisfy a small part of the newly-created demand, so this demand went towards imported industrial products. Manufactured imports increased 5% from 1968 to 1973, 27% from 1973 to 1976, and 57% in 1977! The beneficial linkage effects from this movement went more to foreign manufacturers, not to Venezuelan industries. Also, industrial expansion was again limited by familiar problems: lack of skilled labor and insufficient infrastructure (ports, electricity, transportation) to support any great expansion.

Although not directly linked to petroleum, one event did set up the structure to enlarge Venezuela's small market - Venezuela's entrance into the Andean Pact in 1974. This provisions of this pact removed some limitations on Venezuela's small domestic demand and consumption. With a larger market, industries would have a greater economy of scale. However, the beneficial effects of this agreement have been damped by political maneuverings.

The revenue from the oil price increases generated many linkage effects in the industrial sector. The main forward linkage effects were in
natural gas, petrochemicals, oil tanker fleet, and construction. Under the state-owned oil company, Petroleos de Venezuela (Petroven), Venezuela developed its natural gas industry and began work on the development of a Venezuelan merchant marine to take advantage of its oil that goes abroad in foreign tankers. Under the national petrochemical company, Petroquimica de Venezuela, the government has given high priority to more diversification within this sector. Representative of this sector, nitrogen fertilizer's statistics show a rapid increase in growth. Chart 12, Relative Growth Indices (IP and Nitrogen Fertilizer Production), depicts the great increase in petrochemical production. Petroleum monies facilitated an increase in construction up to about 1976. To provide more services for the urban migrants that the oil industry and related services had attracted, public housing was high on the government's list of priorities, and between 1972 and 1976, the public construction rate doubled. Chart 7, Relative Growth Indices (IP and Cement Production), shows the increase in cement production in the early 1970's.

In other areas, those sectors associated with the economic infrastructure, like the telephone, electrical, and railroad industries, continued their expansion. Centered in the industrial area of Ciudad Guyana, heavy metal's growth slowed while aluminum's increased. The heavy metals, iron and steel, still stagnated from the "quick spurt" growth effect of the previous period. Petroleum refining continued to mirror the decline in crude production. Chart 1, Venezuelan Crude Production, and Chart 8, Relative Growth (IP and Petroleum Refining Production), depicts their similar curves.
Foreign Exchange

Petroleum continued to provide massive amounts of foreign exchange for Venezuela. During this period, the petroleum sector continued to provide over 90% of Venezuela's export earnings. Chart 15, Oil's Foreign Exchange Earnings, shows the big jump in foreign exchange earnings from 18 billion bolivares in 1973 to 45 billion bolivares (constant 1973 bolivares) in 1974 as a result of the oil price increases.

In earlier periods, foreign exchange limited industrial growth, but the massive influx of foreign exchange in this period had a great effect on domestic manufacturing. As explained under "Industry", the abundant foreign exchange served to stimulate industrial expansion.

Human Resources

Since the great rise of oil income in 1973/74, vast government resources have gone into the social services. In fact, Venezuela has moved from primary (oil) to tertiary emphasis (services) in production and employment. In 1980, social services had the largest piece of the government pie - 38%.

Education - Petroleum revenues have continued to fund educational reforms. Education's share of government expenditures decreased from 19% in 1974 to 14% in 1977, however, total spending increased from 4.2 billion bolivares to 5.9 billion bolivares (constant 1973 bolivares) in those same years. Educational reforms continued from the previous period, but problems still remained. Venezuela's educational system has not produced enough skilled managers, technicians, and workers to meet the demands of national industries, particularly the petroleum industry. The
rapid economic growth since 1973 has exasperated the human resource bottlenecks to economic growth. For example, between 1975 and 1980, Venezuela needed 3000 petroleum engineers, but the schools produced only a few.56
The increased oil revenues after 1973/74 provided massive funds for genuine economic development. President Perez used these funds for general expansion and diversification of the economy via public sector spending. The sudden wealth was used to finance an overnight industrialization program, called CORDIPLAN, that was to develop large-scale industries like steel, aluminum, hydroelectricity, and automobiles. However, the plan was too ambitious. It called for faster rates of growth than were possible. The lavish spending had created distortions (large foreign debt, inflation, and unemployment) which were evident by 1977 and have continued to affect the economy up to the present.

After the four-fold rises of 1973/74, the price of oil slackened in 1975 (See Chart 16, Oil Prices). This was caused by an oil glut, as producing countries increased output to take advantage of the increased prices. However, Venezuela could not easily increase output as her easily-accessible reserves were low. Chart 1, Venezuelan Crude Production, shows this decline in Venezuelan oil production. Other reasons for the oil glut were: conservation measures and efforts towards alternate energy sources by consumer countries, the beginning of the world-wide recession, and increased Venezuelan domestic consumption of oil. The increased oil earnings after 1973/74 had stimulated domestic industries, which now needed more electricity and fuel oils. These effects served to increase domestic oil consumption. However, this increase cut into oil available for export, so oil exports declined. Table 8, Venezuelan Oil Consumption, shows
these movements. So, for Venezuela, lower oil prices and lower oil exports meant lower earnings.

Petroleum earnings stimulated the growth of the economy from 1973 to 1977. The flood of monies after 1973/74 helped to increase the GDP/capita. Also, the stagnation of oil earnings after 1976 (See Chart 15, Oil's Foreign Exchange Earnings) affected GDP/capita's growth. Table 9, Per Capita GDP Growth Rates, shows the increase in GDP/capita up until 1976 and its decline to the present. Besides the worsening economy due to lower oil earnings, GDP/capita is, of course, affected by the population growth. Venezuela has a very high rate of population growth - 3.7%, which puts additional pressure on the maintenance of economic growth.57

In spite of the the stagnation of total revenues, the government was committed to a high level of expenditures, so it borrowed from foreign sources to keep up its commitments. Imports increased greatly after the 1973/74 oil price rises. Fueled by the increased petroleum earnings, there was an increased demand for consumption goods and for expensive capital goods imports for developmental projects. Demand for imports increased 5.1% from 1968-1973, 27% from 1973-1976, and 56% in 1977.58 Venezuela required regular oil price increases to meet the rising costs of imports, but the stagnation of the oil price and Venezuelan oil exports brought lower revenue and, consequently, balance of payments difficulties. The gap between revenues and expenditures as shown on Chart 17, Total Revenues and Expenditures, was met by foreign borrowing. Table 10, Foreign Debt, shows the great increase in foreign borrowing by Venezuela since 1976. The oil price increases of 1979/80 significantly improved Venezuela's balance of payments and helped to reduce borrowing needs.
In addition to substantial foreign borrowing, inflation was also a result of the increased oil revenues after the 1973/74 and 1979/80 oil price rises. From 1970 to 1973, the economy's stable situation from the preceding years still prevailed and, as shown on Table 11, Evolution of Domestic Prices, the average annual increase in consumer's prices was less than 4%. In 1973/74, government revenues increased three-fold from the increase in oil prices (see Chart 3, Total Revenue). Although part of this new income was frozen in foreign accounts, government expenditures more than doubled from 1973 to 1974 (see Table 5, Government Expenditures). These expenditures greatly increased the money supply and consumer demand, which could only be partially satisfied by the limited expansion of domestic industries and by the importation of foreign goods. As a result of this process, domestic prices increased sharply in 1974 and 1975.

The government attempted to hold back this inflation by a series of monetary and price controls. In fact, the government had some success, as domestic price inflation waned up to 1979 (see Table 11, Evolution of Domestic Prices). However, the 1979/80 oil price rises again increased government revenues and corresponding government expenditures (see Chart 17, Total Revenues and Expenditures). This resulted in another bout with an inflationary spiral. Unlike the limited government success in rolling back inflation after 1974, inflation continued to worsen after 1979 because of political pressures. Labor union pressure on the legislature in late 1979 caused the legislature to grant across-the-board wage rises from 5 to 30 per cent. 59

The effects of the battle against inflation are compounded by the resulting tight monetary policy and high interest rates, which hold back
economic growth. This effect is seen on Table 9, Per Capita GDP Growth Rates, as the economy has registered negative per capita GDP growth since 1978.

The third distortion created by the bonanza of petroleum monies from the two price rises is that of unemployment. The sudden wealth after 1974 was used to finance an overnight industrialization program. These efforts went into capital-intensive projects, like steel and aluminum, that created few jobs. There is no lack of lower level personnel available, but the need is for experienced management and technical personnel.

The battle against inflation has caused unemployment to rise. First, the 1979 across-the-board wage hikes led to a rise in unemployment as firms chose not to fill job vacancies. Also, as the oil price dropped (see Chart 10, Oil Prices) the slow growth policy implemented by the Herrera government during 1979 and 1980 shelved or postponed construction projects and other government contracts. Thousands of jobs were lost in this slowdown. So, the lower economic growth, led by the drop in petroleum earnings, has resulted in fewer jobs. These movements are shown in Table 12, Unemployment.
CONCLUSIONS

Viewed as either a blessing or a curse, petroleum was Venezuela's leading sector and brought about the development of the Venezuelan economy in four distinct phases: 1) up to 1958, when the economy was still backward and oil revenues were spent on current public expenditures, 2) 1958 to 1973, when the new political leadership re-allocated petroleum revenues among the developmental and social sectors, 3) 1974 to 1977, when the increased oil revenues generated economic development over a wide front, and 4) 1978 to the present, when the huge increases in oil revenue created distortions in the economy in the form of a large foreign debt, inflation, and unemployment.

The analysis of the main linkage effects of Venezuela's leading sector now brings me to draw several conclusions. Under the impact of oil revenues, the Venezuelan economy has undergone a quantum change in dimension and complexity. However, the economy is still dependent on oil. The most recent demonstration of this dependency was the basing of COROPLAN on expected oil revenue, which didn't materialize, with the resultant negative growth for Venezuela in per capita terms since 1978. The scope of the state in the economy, via public sector spending, has been greatly enlarged. The catalytic role of the government brought about a carry-over of linkage effects from the petroleum exports to other sectors of the economy. As evidenced by the distortions after 1978, the performance of the public sector is crucial in determining the progress of economic development. However, there is still a need to keep public
expenditures in line with actual fiscal revenue.

With an eye towards the future, besides the need to resolve the problems of the large foreign debt, inflation, and unemployment, there are other bottlenecks to overcome: Venezuela lacks a diversified economy, public sector management must become more adroit, the agricultural sector still lags, there is a need for a more skilled workforce, income distribution inequities must be balanced, and advanced technology will be needed to reach the presently-inaccessible petroleum reserves.
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Source: Appendix A
## Table 2

Indices of Consumer's Goods Growth (1953=100)

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Source: Appendix A
TABLE 4

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Source: Appendix A
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Source: Appendix A
TABLE 7

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* Estimate

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Source: Appendix A
### TABLE II

**Evolution of Domestic Prices**

Variation between annual averages in consumer prices in Caracas

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<td>1980</td>
<td>6.2</td>
</tr>
<tr>
<td>1977</td>
<td>4.5</td>
<td>1981*</td>
<td>10.0</td>
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<tr>
<td>1978</td>
<td>5.0</td>
<td>1982*</td>
<td>12.0</td>
</tr>
</tbody>
</table>

* Estimate

Source: Appendix A
CHART 1

VENEZUELAN CRUDE PRODUCTION
(000'S BARRELS/DAY)

YEAR

SOURCE: APPENDIX A
CHART 2

OIL RECEIPTS AS A PERCENTAGE OF GOVERNMENT INCOME

SOURCE: APPENDIX A
TOTAL REVENUE
(MILLIONS OF CONSTANT 1940 BOLIVARES)

SOURCE: APPENDIX A
CHART 4

X GDP/CAPITA AND AGRICULTURAL PRODUCTION

LOG 10 (GDP IN CONSTANT 1968 BOLIVARES)

GDP/CAPITA

AGP PRODUCTION (1948=100)

YEAR

SOURCE: APPENDIX A
CHART 5

RELATIVE GROWTH INDICES
(1948=100)

(GDP INDEX FROM CONSTANT 1968 BOLIVARES)

SOURCE: APPENDIX A
RELATIVE GROWTH INDICES

(1948=100)

(GDP INDEX FROM CONSTANT 1968 BOLIVARES)

SOURCE: APPENDIX A
CHART 7

RELATIVE GROWTH INDICES

(1946=100)

SOURCE: APPENDIX A
Chart 8

Relative Growth Rates

(1948 = 100)

Source: Appendix A
CHART 9

RELATIVE GROWTH INDICES
(1948=100)

SOURCE: APPENDIX A
CHART 10

GOVERNMENT EXPENDITURES
(PERCENTAGES)

SOURCE: APPENDIX A
CHART 11

GOVERNMENT EXPENDITURES (TREND) (PERCENTAGE)

YEAR

SOURCERE: APPENDIX A
CHART 12

RELATIVE GROWTH INDICES
(1973=100)

SOURCE: APPENDIX A
RELATIVE GROWTH INDICES
(1973=100)

SOURCE: APPENDIX A
RELATIVE GROWTH INDICES
(1973=100)

SOURCE: APPENDIX A
CHART 15

OIL'S FOREIGN EXCHANGE EARNINGS
(BILLIONS OF CONSTANT 1973 SOLIVARES)

SOURCE: APPENDIX A
OIL PRICES

(CURRENT US $/BARREL)

SOURCE: APPENDIX A
CHART 17

TOTAL REVENUES AND EXPENDITURES
(MILLIONS OF CURRENT BOLIVARES)

SOURCE: APPENDIX A
APPENDIX A

Table 1, Petroleum Tax Rates.


Table 2, Indices of Consumer's Goods Growth.


Project Mulhall.

Table 3, Maracaibo and Venezuelan Population Growth Rates.


Table 4, Urbanization Trends.


Banco Central de Venezuela, *La economia venezolana en los ultimos 35 anos*, p. 11.

Table 5, Government Expenditures.


Table 6, Education Percentage of Government Expenditures.

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Table 7, Individual Tax Rates.

Andrade, *Business Yearbook of Brazil, Mexico, and Venezuela*, p. 86.

Table 8, Venezuelan Oil Consumption.


Table 9, Per Capita GDP Growth Rates.


Table 10, Foreign Debt.


Table 11, Evolution of Domestic Prices.
Table 12, Unemployment.


Chart 1, Venezuelan Crude Production.


Chart 2, Oil Receipts as a Percentage of Government Income.


Chart 3, Total Revenue.


Economist Intelligence Unit Ltd., *Quarterly Economic Review of Venezuela, Surinam, Netherlands Antilles, Annual Supplement 1979*.


Salazar-Carrillo, *Oil in the Development of
Venezuela, pp. 41, 76, 102, 133, 162.

Chart 4, GDP/Capita and Agricultural Production.

Banco Central de Venezuela, La economia venezolana en los ultimos 35 anos, p. 49.

Project Mulhall.


Chart 5, Relative Growth Indices (GDP and Agr Prod).

Banco Central de Venezuela, La economia venezolana en los ultimos 35 anos, p. 49.

Project Mulhall.

Salazar-Carrillo, Oil in the Development of Venezuela, p. 112.

Chart 6, Relative Growth Indices (GDP and IP).

Project Mulhall.

Salazar-Carrillo, Oil in the Development of Venezuela, p. 112.


Chart 7, Relative Growth Indices (IP and Cement Production).

Project Mulhall.


Chart 8, Relative Growth Indices (IP and Petroleum Refining).


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Chart 9, Relative Growth Indices (IP and Electricity).
Project Mulhall.


Chart 10, Government Expenditures.

Table 5, Government Expenditures.

Chart 11, Government Expenditures (Trend).

Table 5, Government Expenditures.

Chart 12, Relative Growth Indices (IP and Nitrogen Fertilizer).

Project Mulhall.


Chart 13, Relative Growth Indices (IP and Steel).

Project Mulhall.


Chart 14, Relative Growth Indices (IP and Iron).

Project Mulhall.


Chart 15, Oil's Foreign Exchange Earnings.


Chart 16, Oil Prices.


Banco Central de Venezuela, La economia venezolana en los ultimos 35 anos, p. 82.


Chart 17, Total Revenues and Expenditures.


FOOTNOTES


2. Ibid., p. 39.


8. Lieuwin, p. 73.


10. Allen, p. 61.


17. Lieuwin, p. 97.


23. Lieuwin, p. 53.


25. Ibid.


27. Ibid.


28. Harris, p. 66.


36. Torrealba, p. 185.

37. Ibid.

38. Ibid., p. 184.

40. Torrealba, p. 184.


45. Harris, p. 66.


50. Andrade and Barrow, p. 311.


52. Blutstein, p. 158.


56. Blutstein, p. 129.


58. Bitar and Troncoso, p. 1213.
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Political Risk Analysis of Venezuela's Petroleum Sector
EXECUTIVE SUMMARY

Venezuela's democratic system is well-established, strong, and viable. It is characterized by a multiparty system dominated by two moderate parties which do not have distinctly different outlooks. Political campaigning will dominate the political life until the December 1983 presidential elections, when the opposition candidate from the Accion Democractica Party, Jaime Lusinchi, is expected to win. However, current policies are unlikely to change significantly.

The economy is dominated by oil. It contributes most of the government revenue, export earnings, and a large portion of the GDP. The world recession and the softening of oil prices have hurt Venezuela's economy - 1982 was the fourth consecutive year of stagnation. The major economic issue is the rescheduling of the $30 billion foreign debt, with $13 billion maturing this year. The IMF's conditions for rescheduling the debt include several belt-tightening measures. Other problems are: inflation, lack of economic growth, and unemployment. Heightened by the upcoming elections, these problems will require that politically difficult decisions be made.

Venezuela will expand its oil investments to ensure that its productive capacity can be sustained in the future. Long-term prospects for foreign investment in the oil sector look good. However, in the short-term, profits will be impaired by an expected tax increase, devaluation, increased wage costs, and uncertain government policies. Potential investors should avoid new commitments until these conditions improve.
Environmental Risk Analysis

THE RECENT PAST

In 1959, after more than a century of political struggle, revolution, civil war, and military dictatorship, Venezuela established a democratic regime which has functioned with relative smoothness. Since that time, critical factors in the institutionalization of this political system have been the pragmatism of political parties and the distribution of petroleum earnings to satisfy group demands. The two dominant political parties, Accion Democratica and the Cristian Democratic Party (COPED), have supported the democratic system and have alternated control of the presidency.

During the 1970's, significant events affecting overall performance were: the oil price rises of 1973/74, the nationalization of oil companies operating in Venezuela in 1976, and a second round of oil price increases in 1979/80. Increased revenues from the oil sector allowed Venezuelan governments to avoid difficult tradeoffs by being able to satisfy demands from different groups.

Under Carlos Andres Perez, the Accion Democratica president from 1973 to 1978, Venezuela lavished nearly 50 billions dollars of oil revenues on a wide variety of developmental projects.\(^1\) There were some gains up to 1977, as the GNP rose, prices remained steady, and unemployment fell. But mismanagement, corruption, and overly-ambitious development plans led to a large foreign debt, inflation, and high unemployment by 1978.\(^2\) In 1978,
Luis Herrera Campins was elected president and inherited a host of economic, political, and social problems from his predecessor. He pledged a government of austerity and discipline, with the basic strategy of cooling down the economy while promoting a gradual recovery based on increased oil revenues. The oil price rises of 1979/80 helped finance this program, but the oil price stagnation and decline of 1982 again brought to the fore such problems as the size of the foreign debt, inflation, and unemployment. In the meantime, support for Herrera and his political party, the Christian Democrats (COPEI), has waned due to their inability to solve these huge problems. Inflation has increased from 11% in 1981 to over 25% in 1983, unemployment rose from 10% in 1981 to 13.5% in 1982, and the short term foreign debt reached 13 billion dollars in 1983. Overall, Herrera's administration has failed to make any real social or economic progress during its first four years in office.

INFLUENCE GROUPS

General - The most important influence groups in Venezuela are the political parties, the private sector, labor, the military, the bureaucracy, the Church, and the urban poor. The main mechanism for pursuing demands and reconciling conflicts is the political party system, so the political parties are the most powerful and influential of the groups. As the December 1983 presidential elections approach, all groups, but especially the parties, are
maneuvering for increased influence.

Political Parties

Accion Democratia (AD) - Starting from leftist origins, AD has moved to a more centrist position on the political spectrum. In fact, both major political parties (AD and COPED) have similar positions on several issues: a large state role in Venezuela's mixed economy, economic diversification away from oil, and a more equitable distribution of national income. However, there are some differences: AD's leftist origins mean that it traditionally has the support of labor, it is more supportive of policies to subsidize the poor, and it is suspicious of private business and foreign investors. Although AD experienced three internal splits since 1960, it is today a strong organization that reaches from the national level down to all towns. The party has united behind the candidacy of Dr. Jaime Lusinchi for president. His nomination was the result of some political trade-offs engineered to garner the support of the labor. If AD wins the upcoming election, labor is likely to play a large role in the policymaking process. Lusinchi's economic policies are expected to be more expansionist, with heavier borrowing abroad and higher labor costs.

Christian Social Party (COPE) - Starting from a more conservative point with support from the Church and private business, COPEI, like AD, has moved towards the center. It has worked to penetrate labor unions and peasant organizations to develop a national, grass-roots organization. COPEI differs from AD in that COPEI is
generally more sympathetic of business interests and more favorable to foreign investment. COPEI currently has internal divisions that will undermine its chances of staying in power beyond the 1983 elections. President Herrera backed the candidacy of Rafael Montes de Oca, while the other faction, under Rafael Caldera and Eduardo Fernandez, backed Rafael Caldera. Although the party settled with the nomination of Rafael Caldera, Montes de Oca's aggressive bid for the nomination created a serious rift in the party ranks. In addition to this internal division, the general dissatisfaction with Herrera's government and the current economic problems mean that Caldera is the underdog in the elections. He has already begun to dissociate himself from the economic policies of Herrera, but, if elected, he would favor foreign investment and private business.

Movement Toward Socialism (MAS) - This party is the strongest of the fragmented parties that constitute the political left. MAS is a radical, non-Marxist leftist party that advocates nationalism, class struggle, and social revolution. It tries to portray the image of a non-Communist party that is open and flexible. Although it appeals to Venezuela's "have-nots", MAS has not done well in elections - it received only 4% of the vote in the 1978 presidential elections. There are many low-income voters who would ordinarily be attracted by MAS's policies, but the growth of oil-generated income in Venezuela has expanded such that virtually all the important groups have a reason to support the system. However, the careless spending and blatant corruption of
recent AD and COPEI governments provides a footing for radical change. The possibility of a weak oil market and harsh conditions to re-finance Venezuela's foreign debt could contribute to an improved showing of MAS at the polls this December. MAS's standard bearer for this year's election is its founder, Teodoro Petkoff. It is very unlikely that MAS would win this year's presidential election, but if MAS should come to power, it would seek to nationalize more industries and impose tighter regulations for foreign investors.

Other Political Parties - Historically, the minor parties of the left have had little influence and it is unlikely any party would be able to challenge AD or COPEI. There are several parties of the left with little popular backing. Some are the People's Electoral Movement (MEP), the Nationalist Civic Crusade (CCN), the Democratic Republican Union (URD), the Communist Party of Venezuela (PCV), the United Communist Vanguard (VUC), and the Movement of the Revolutionary Left (MIR).

Private Sector

Federacion de Camaras y Asociaciones de Comercio y Produccion (FEDECAMARAS) - This group is the most powerful and influential business group in Venezuela. It is a generally unified voice of the entire private sector and has over 200 affiliated associations, such as livestock, heavy industry, commerce and services. It regulates the affairs of its sectors and represents the private sector's interests to the state and the public. It is closely tied to
the two major parties and is regularly included in their discussions. However, FEDECAMARAS has not had much success in gaining its demands. For example, it opposed Venezuela's entry to the Latin American Free Trade Association (LAFTA) and the Andean Pact. President Herrera's uncertain leadership and confusing and contradictory economic policies have alienated FEDECAMARAS and other private business groups. The exchange controls have led to a scarcity of dollars. Continued inflation, along with price controls means less profits. Import controls mean less foreign competition, but also a critical shortage of raw materials and industrial components. The high interest rates and the huge foreign debt mean that virtually no local credit is available. FEDECAMARAS feels that its businesses are being forced to bear the brunt of the country's economic crisis. It favors a two-tiered exchange control system as the vehicle for starting to straighten out Venezuela's economic problems (also an IMF condition for restructuring Venezuela's foreign debt). In the upcoming election, FEDECAMARAS is concerned about the role that labor would play in Lusinchi's administration, and would prefer to see Caldera as president. FEDECAMARAS is generally supportive of foreign investment.

Family Entrepreneurial Groups - As the Venezuelan economy expanded in the 1940's, a small number of family entrepreneurs, already established in land-based wealth, also expanded their activities into industries. Today, these families (Mendozas, Vollmers, and others) control much of the Venezuelan economy. These family
groups are not represented by any particular organization, but
they influence the political process through their political and
economic connections. There is personal and economic rivalry
between these families, and so this group is not a monolithic
block. Generally, these entrepreneurs are conservative and
support COPEL however, they have a pragmatic, business outlook
toward the political process and towards perceived threats to
their family's welfare.

Pro-Venezuela - Much smaller and less influential than FEDECAMARAS,
Pro-Venezuela represents mainly medium-sized businesses. It is a
nationalistic and anti-foreign organization that supports govern-
ment plans and tends to discourage foreign investments.

Labor Unions
Confederacion de Trabajadores (CTV) - After the political parties, labor
unions are the most organized forces in Venezuelan politics. The
labor movement is strong and comprises over 60% of the
workforce of 3.5 million. The CTV is the largest union and
represents almost all of the 5000 legally recognized unions in
Venezuela. With unemployment at a level of 13%, the CTV has
recently been concerned with job security rather than excessive
benefits. The CTV has been traditionally allied with AD and it
certainly supports AD for the December 1983 elections. In return
for labor's electoral support, AD selected CTV's Manuel Penalver
as the Secretary-General of the party. Should AD win the
upcoming elections as expected, CTV's influence will reach an
unprecedented high. The CTV can be expected to push for an immediate 40% boost in wages, wage indexation, more price controls, a freeze on layoffs, and faster economic expansion. CTV's influence will be a major conflict in government efforts to bring spending in line with income. The CTV is neutral on the issue of foreign investment, however, CTV's initiatives for worker compensation will increase business operating costs.

Other Unions - Other than the CTV, there are few unions and they wield little influence. One union is affiliated with COPEI and another is connected to the Communist Party of Venezuela.

The Military - The armed forces of Venezuela have historically been a key political player. Although the military has governed Venezuela much of the time since it became independent from Spain, it has demonstrated a consistent commitment since 1958 to civilian rule. The total strength of the armed forces is 44,000 men. Military expenditures represent 4.5% of the national budget and Venezuela ranks 70th in the world in military expenditures as a percentage of GNP. It is very unlikely that the military would return to political power. Since 1958, the civilian governments have dealt carefully with the military - consulting it on important questions, providing it with modern equipment, and leaving military affairs to the military professionals. Additionally, the military played the crucial role in the control of the guerrilla insurrection of the 1960's. The military is concerned with internal security, the boundary disputes with Colombia and Guyana, and the potential threat of communist insurrection in the Caribbean. Most recently,
the government purchased advanced F-16 aircraft from the U.S. These aircraft would allow Venezuela to help deter communist activism in the area. The military is already providing for greater anti-communist security in the Caribbean as it has trained a battalion from El Salvador. The military is neutral on the issue of foreign investment.

The Bureaucracy - The size of Venezuela's public sector has grown considerably since the 1973/74 oil price hikes. The ever-increasing oil revenues allowed the government to become more involved in the economy. Public sector employment provides 1.2 million jobs out of a total population of 15 million and 3.5 million employed. There are more than 200 state enterprises in existence, with the largest in petroleum, steel, aluminum, and iron. Some organizations such as the petroleum company, PETROVEN, are well-run, while others are very inefficient. Most state-owned industries fail to make a profit. Even PETROVEN's once-sacrosanct money reserves were recently "raided" to cover current expenses and PETROVEN had to seek foreign financing just to carry out its own operations. Public sector employment has traditionally been used as political patronage by the party in power. Some high level bureaucrats are well-trained, but many middle and lower level workers lack the training and experience to make the sector productive. With the December 1983 elections approaching, the public sector will most likely increase in terms of financial resources and as a source of political patronage.

The Church - Although Venezuela is a Catholic country, the Church's
influence on political life has never been strong. It is traditionally allied with the upper classes and so poses little threat to social stability. Recently however, some of the Church hierarchy has been actively promoting moves for social change.

The Urban Poor - The urban poor comprise approximately one-third of the population and are potentially a strong influence group. Living in relative poverty, with underemployment and without essential social and welfare services, the urban poor might expected to be an effective, united pressure group. However, such is not the case in Venezuela. All the political parties are represented in the barrios, but the urban poor are generally unorganized and without any strong links to the political parties. Generally, the urban poor do have some modern appliances and there is widespread optimism in the barrios that conditions will improve. They feel that they have a definite stake in the future economic progress of the country. Additionally, the large number of illegal immigrants from Colombia who take low paying and low status jobs serve to elevate the Venezuelan urban poor to a higher status. However, should the oil-based Venezuelan economy continue to worsen, and with cutbacks in government services for the urban poor, they could definitely be a potential trouble spot for the government. Business related government policies are not expected to be affected by the urban poor.

CURRENT POLITICAL SITUATION
Herrera's Government - President Herrera inherited a host of economic problems: a growing debt, inflation, and high unemployment. The recent softening of the international oil prices, with the resultant loss of oil income for Venezuela, has aggravated Venezuela's problems. Herrera's government has had to pare down its development plans to accommodate the lower oil income. There is the perception that President Herrera is weak and vacillating, without any concrete idea of the direction he wants to lead the country. In face of the lower income, economic mismanagement, and the world recession, the government has not been able to achieve any significant social or economic gains and its standing in the local popularity polls has fallen. A poll conducted in February 1983 showed that the AD candidate, Jaime Lusinchi, was well ahead of COPEI's Rafael Caldera. There have been negotiations with the IMF to restructure Venezuela's short term debt, but faced with an imminent rout of his party in the forthcoming elections, President Herrera has sidestepped the IMF curbs on current expenditures, wage restraints, new taxes, elimination of price controls, and a devalued bolivar. These actions would certainly be disastrous for COPEI at the polls. Although confidence in the government has fallen, Venezuela is not beset by other problems that frequently cause governments to be ousted - guerrilla warfare, political unrest, and blatant corruption.

Impact of US Relations - Venezuela's most important bilateral relationship is that with the United States. The essence of this relationship is economic, in that the US is Venezuela's largest customer of oil.
In addition to strictly economic affairs, US-Venezuelan interests coincide in several areas: 1) Venezuela is a fellow democracy and actively promotes democratic institutions in the Hemisphere, 2) the US favors Venezuela’s drive toward promoting regional economic integration that leads to economic growth, and 3) both nations coincide on many policies for Central America - bilateral aid, supporting the elected government in El Salvador, and supporting pluralism in Nicaragua. However, Venezuela has increasingly supported the Contadora Group position for a negotiated settlement of all parties in El Salvador, in contrast to the Reagan administration’s desire for military defeat of the guerrillas. Any significant increase in US military activity in Central America, such as US advisors, could prod the Venezuelans to distance themselves from collaboration with an imperialist power. As US-Venezuelan relations have been based on common objectives and self-interest, bilateral relations have never been seriously troubled. As demonstrated by the stoning of Vice President Nixon’s motorcade in Caracas in 1958, there is a strong anti-Yankee undercurrent. There are some disagreements between the two nations: 1) the US initially disapproved of OPEC’s oil price hikes (though the US now favors a stable price), 2) the US support for Great Britain in the Falklands conflicted with Venezuela’s solidarity with Argentina, and 3) against US desires, Venezuela has considered joining the non-aligned movement.

Relations with Neighbors - Venezuela has numerous regional disputes with its neighbors. The major problem concerns a border dispute with
Colombia in the Gulf of Venezuela, which is believed to have substantial petroleum deposits. A tentative agreement was reached in 1980, but the Venezuelan government failed to consult with the opposition party, to prepare public opinion, or to involve the armed forces. Consequently, this agreement was shelved and it remains a sensitive political issue. An outbreak of hostilities is unlikely, but Venezuela's purchase of US-built F-16's could precipitate an "arms race" with Colombia. The other border dispute is with Guyana. Venezuela has a long standing claim to the section of Guyana west of the Essequibo River. Both nations are currently trying to resolve the issue at an international level, such as with the UN.

In the 1970's, much of Venezuela's oil-based wealth was used to enlarge its sphere of influence in Central America and the Caribbean. Venezuela extended approximately 2.5 billion dollars annually for credit and development loans.18 Venezuela has also pushed strongly within OPEC for greater aid to the Third World. Recently, Venezuela and Mexico agreed to an extension of the San Jose agreement, which helps other Latin American countries develop their oil resources. Consequently, Venezuela's standing in Central America has become more powerful. Venezuela's general view of Central American problems generally converges with that of the US. The present COPEI government supports the elected government in El Salvador and has been giving training support to some El Salvadorian armed forces. AD opposes such support for El Salvador and if it gains
the presidency, Venezuela's active role could change to a more "hands-off" policy. Relations with Cuba are cool and Venezuela supports the anti-Sandinista forces in Nicaragua.

CURRENT ECONOMIC SITUATION

General Data

National Economic Goals - Herrera's administration established a period of economic transition from 1978 to 1980, during which time restrictive fiscal and financial policies were applied to slow the growth of the overheated economy inherited from the Perez regime. With the 1981-1985 Sixth National Plan, the government intended to stimulate the economy and had several objectives: 1) diversification away from oil, 2) develop new oil supplies, 3) create 200,000 new jobs per year, 4) alter income distribution, and 5) improve education, housing, and public services. Critics of the plan are concerned that it is too ambitious. Like earlier plans, it set its sights too high and every major project would feel the impact of the shortage of trained personnel, raw material shortages, industrial inefficiencies, and the political pressure to "inaugurate" a job before the next elections. In retrospect, the critics were correct.

Economic Overview - 1982 saw the fourth straight year of economic stagnation for Venezuela. The adverse impact of reduced petroleum earnings caused a decrease in the real GDP. In spite of the
stagnation of revenues, the government was committed to a high level of expenditures, so it borrowed from foreign sources to keep up its commitments. The total foreign debt has now climbed to 30 billion dollars. Increased expenditures fueled inflation (now at 25%), while unemployment suffered (now at 14%) as developmental funds went into capital-intensive industrial projects, that created few jobs. Despite this trend, imports rose by 10% in 1981 and 1982, while capital flight depleted foreign exchange reserves. With an overvalued currency and large foreign exchange losses, the government stopped foreign exchange trading in February 1983 and instituted exchange controls, tighter price controls, and import restrictions. It is an understatement to say that the Venezuelan economy is entering a difficult period.

Petroleum Developments - The petroleum industry is the cornerstone of the Venezuelan economy. The economy's dependence on oil, which generates about 25% of the GDP and 75% of the government's revenues, and 95% of export earnings has dictated its performance. The glut in world oil supplies, OPEC's limitation on Venezuelan production quotas, and the recent rollback in oil prices have reduced Venezuelan oil income and have forced the government to lower its spending goals. Petroleum will continue to provide the bulk of Venezuela's foreign exchange, but the petroleum sector's short-term outlook is uncertain. The government expects to earn 13.3 billion dollars in 1983 from petroleum exports, down from 20.5 billion in 1981 and 17% less than the original projections. Planned investment outlays for the
petroleum sector have been cut by 40%, affecting construction, engineering, foreign petroleum service firms, and PETROVEN's long-term ability in terms of production and revenue.

Trade - Although oil has dominated the export trade statistics, the government has given priority towards the development of a more diversified export structure, with special emphasis on petrochemicals and industrial production. However, petroleum exports constituted 94% of export earnings (18 billion dollars) in 1980. With these large earnings and, up to 1983, rising oil prices, Venezuela has had a favorable balance of payments, but with the current debt and exchange crises, the government has restricted imports to 65% of 1982's imports. However, it is doubtful that this goal can be achieved, as more than 80% of imports are essential foodstuffs, industrial raw materials, and capital goods not produced in Venezuela. As in previous years, the import restrictions will continue to retard industrial growth. Venezuela has one free trade port, on the Island of Margarita in the Caribbean.

Major Exports - Venezuelan exports are primarily petroleum products (94%), with iron ore, aluminum, coffee, and cocoa constituting the remainder.

Major Imports - The major exports are: machinery and transport equipment (65%), chemical products (18%), and foodstuffs, beverages, and tobacco (17%).

Trade Partners - The main trade partners are the US (who provides almost 50% of Venezuela's imports), Japan, Canada,
Italy, and West Germany.  

Balance of Payments - Since the 1979/80 oil price hikes, Venezuela has had an increasingly favorable balance of payments, however, with the current world recession, OPEC oil export quotas, Venezuelan conservation, and the oil price fall, this surplus will diminish. In any case, this surplus will be wiped out by the debt servicing requirements. Most likely, the current account will be in deficit this year, but should be manageable. The great danger is that devaluation fears will feed on themselves, creating capital flight.

International Debt - Venezuela is negotiating with the IMF to reschedule its 30 billion dollar foreign debt (13 billion dollars matures this year). International bankers are insisting on two conditions: the provision of guarantees for private debtors and the acceptance of IMF conditions. IMF conditions would involve further cuts in government spending, currency devaluation, new taxes, and the elimination of multiple exchange rates, price controls, and import restrictions. The government wants to reschedule the debt, but without any conditions. Faced with an imminent rout of his party in the December elections, President Herrera has rejected the linkages of this tough IMF program. Any further budget restraints and spending cuts would be catastrophic for COPEI's election chances. In the meantime, Venezuela has announced a moratorium on most principal repayments. Venezuela's debt service ratio of 14.2% compares favorably with those of Mexico (34%), Brazil (42%), and Argentina (24%), and if Venezuela's debt could be
consolidated, it should be perfectly manageable. Regardless of which party wins in December, most of the IMF's conditions will probably have to be implemented soon after the election. In addition to IMF and government restraints, another critical factor to watch for the long term is the inevitable world economic recovery and the strengthening of the oil price.

GDP and Its Composition - Venezuela has the highest per capita GDP in South America - 3,675 dollars (for 1981). As income distribution is not symmetrical, this figure is subject to wide variation in distribution. Sectoral contributions to the GDP are: petroleum and mining - 24%, manufacturing - 16%, transport and communications - 10%, commerce - 8%, agriculture - 6%, construction - 6%, and other - 30%. High population growth and lower than expected petroleum earnings have resulted in negative per capita growth rates since 1978. Election year spending may result in a faster growth rate for 1983, but for the longer term, the rate should stagnate until the world economy and oil prices pick up.

Industrial Production - Due to the increased oil earnings in the 1970's, government investments in manufacturing yielded expansion in large scale resource-based industries such as iron, steel, aluminum, chemicals, and metal engineering. With the current slump conditions, the government has shelved many industrial expansion projects because of their great cost. Manufacturing grew 8% per year between 1974-1978, but less than 1% since then. This sector is suffering the effects of the economic slowdown. In the wake of the petroleum sector cutbacks, engineering and
 consulting firms are the casualties. Additionally, capital goods, construction, steel, iron, and automobiles all suffered as inflation and unemployment reduced purchasing power and demand. Without increased oil revenues, little or no growth is expected for 1983.

Agricultural Production - The presence of high wages, social benefits, and greater economic opportunities of the oil sector have depleted agriculture of productive workers with the result that agriculture is the low-productivity, low-wage sector. Venezuela depends on foreign food sources for its food supplies. It imports more than 65% of all food consumed. Venezuelan agriculture has suffered from inefficient management and marketing, lack of capital, old fashioned techniques, and counterproductive government policies. Agricultural production increased 4.5% in 1982, primarily due to good weather, but results in 1983 will be less favorable. Exchange controls and the currency devaluation mean higher production costs, while price controls mean reduced profit margins. The main products are: rice, corn, sorghum, peanuts, cotton, and sugar cane.

Inflation - By Latin American standards, Venezuela has traditionally been a low-inflation country, with inflation averaging less than 3% up to 1973. By 1980, inflation reached 20% and it is expected to be 25% for 1983. Due to the increased oil earnings after the 1973/74 and 1979/70 oil price hikes, government expenditures rose. These expenditures greatly increased the money supply and consumer demand, which could only be partially satisfied by the limited expansion of domestic industries and by the importation of
foreign goods. Thanks to tight monetary policies and organized labor's desire for job security in face of rising unemployment, inflation eased slightly in 1982, but as the December 1983 presidential elections near, fiscal expansion could increase the general price level. All groups favor actions to control inflation, but with AD's expected presidential victory, labor will surely push for job security, wage increases and wage indexation. Inflation is expected to be at least 15% for the next few years.

Currency Outlook - The sudden plunge of oil prices in 1983 (and anticipated government revenues) precipitated rumors of devaluation and exchange controls. Faced with a deteriorating balance of payments and capital flight, Venezuela recently adopted a three-tier exchange rate system. Its aim is to isolate certain transactions for a less favorable exchange rate. The preferential rate of B4.3:$1 is for the amortization of the national debt, buying essential imports, and dollar transactions of the oil and iron industries. A second rate of B6:$1 is for nonessential imports. A third rate will freely float the bolivar against the dollar and is for travel-related expenditures and for the payment of other goods and services. The free rate is currently about B10-12:$1. This system has caused a great deal of confusion, as the difference between "essential" and "nonessential" imports was not adequately defined. It may be difficult for the bureaucracy to maintain this segregation in face of a demand for "cheap" dollars, and the next outcome may be an outright devaluation, as favored by the Central Bank president and the IMF. A devaluation would
push prices up more rapidly. Devaluation would also mean a
rescheduling of the debt, so hard currency would become more
scarce, resulting in even fewer purchases of imports. The government will avoid devaluation at all costs. FEDECAMARAS opposes this three-tier system and has argued for a two-tier system. Businesses short-term private debt is generally excluded from the preferential rate, so working capital will be a major problem.

Reaction from political parties and the CTV has been mild.

Unemployment - After 1974, the government tried to use the sudden oil wealth to finance an overnight industrialization program. Much of the money went into capital-intensive projects - steel and aluminum plants - that created few jobs. The 1981-1985 Sixth National Plan had provisions to create 200,000 jobs per year, but the current recession, rigid contractionist policies, the abandonment and slowdown of major projects, the influx of illegal laborers from Colombia, and the exchange controls have combined to create an unemployment problem. Unemployment rose from 7.1% in December 1982 to 13% in March 1983. The current price freeze, lack of import parts, and bureaucratic delays at the foreign exchange office have forced several operations to shut down, increasing unemployment even more. Unemployment will continue to be high until Venezuela's oil-based economy begins to grow. Venezuelan workers have learned to value job security, but with the labor-backed AD expected to gain power in December, it should welcome almost any foreign enterprise that will bring jobs.
Interest Rates - Credit has been tight since 1978, and until 1981, the government set maximum/minimum interest rates. The surge in capital flight in 1981 prompted the Central Bank to eliminate all interest rate ceilings. Current interest rates are 19%, up from 12% before the elimination of ceilings in 1981.42 Closely related to inflation and de facto devaluation (exchange controls), high interest rates are an obstacle to economic growth. Business groups have pushed for easier credit, but for 1983, it will remain tight. There will be little business investment at least until after the December elections.

Income Distribution - Venezuela has one of the most concentrated income distribution pyramids in Latin America. 3% of the income is received by the bottom 20% of the population, while 54% of the income is received by the top 20%.43

Human Resource Base

Trainability of Workers - The concentration of unskilled workers in urban areas results in high unemployment, with corresponding urban and social problems. The literacy rate is 74%, but it is lower in rural areas.44 In spite of increased government expenditures for education, the lack of a skilled workforce has been a setback for the industrial development of the country.

Distribution of Labor - Labor distribution is: 20% in agriculture, 27% in industries, and 53% in services.45 The proportion of the labor force in low-productivity agriculture remains high. The major
export industry, petroleum, is not a large employer of labor.

Rate of Population Growth - Venezuela's annual population growth rate is 3.7%. This is a relatively high rate and its effects are compounded by the concentration of population in urban areas. This concentration in urban areas has strained the government's ability to provide social services.

Natural Resource Base

Infrastructure - Venezuela has a good network of freeways, highways, and public roads, with the result that most transportation is by truck and automobile, to the detriment of the railroad system. There are no major bottlenecks in the transportation system.

Roads - The total road network increased from 44,000 km in 1972 to 61,000 km in 1979, of which 22,000 km are first-class paved highways, 24,000 gravel surfaced, and 15,000 km dirt. Caracas is the hub of the road system. It is linked with the airport, industrial centers, and the ports by excellent highways. In the 1981-1985 Plan, it is proposed to add 7,000 km of new roads.

Railroads - The railroads have been neglected and declining for many years, but ambitious plans have been drawn up for their expansion up to 3,000 km. The state-owned railroad company runs 197 km of track. The main line connects Baraquismeto with Puerto Cabello.

Air - Air transport in Venezuela is generally good and
the rates are not prohibitively high. The main airline is the state-owned company, Viasa, which has 70 aircraft. There are 108 permanent surface runways, and 9 have runways over 2,500 meters long.

Ports - Venezuela has 33 ports, 12 of which are large. However, these ports face serious congestion. The national shipping line, CAVN, has 400 vessels and is currently being rejuvenated.

Telecommunications - Venezuela has attained significant development in telecommunications. Its installations are now on a par with those of other modern countries. It has access to satellites, submarine cables, telex service, and international telephone direct dialing.

Energy Resources - Although Venezuela's short term economic prospects look bleak, its long term outlook is very bright, due to the existence of abundant petroleum reserves. Although an oil based country, Venezuela's development strategy emphasizes the development of other energy resources, like natural gas and hydroelectric power.

Oil - Venezuela's proven oil reserves are approximately 20 billion barrels, enough to last 25 years at 1981 production rates (2 million barrels per day). Most of the oil output comes from the Maracaibo basin, whose reserves are dwindling. However, Venezuela has a potentially richer field in the Orinoco Tar Belt, estimated to contain 700 billion barrels. Its extraction will be delayed by the recent cutbacks in PETROVEN's explora-
tion and drilling and the lack of technology.

Natural Gas - Venezuela has abundant natural gas resources. 1981 production was 1.2 billion cubic feet. At this rate of extraction, the reserves of 47 trillion feet will last 82 years. In the course of recent exploration for oil, large deposits of natural gas have been discovered in the Paria peninsular in eastern Venezuela.

Hydroelectricity - Venezuela has ample hydroelectric potential. 1980 production was 7,728 megawatts and the completion of the Guri dam (to be the largest dam in the world) in 1985 will yield an additional capacity of 9,000 megawatts. This capacity will be used to provide cheap electric power to the steel and aluminum plants in the southeast. Hydroelectric power is expected to grow at 12% annually through 1990.

Impact of the International Environment

World Economy - As with most developing countries, Venezuela's dependence on trade with the industrialized world makes it vulnerable to the economic downturns of industrialized countries. In response to the international oil glut, oil's soft prices, OPEC's oil production quotas, and Venezuelan oil conservation measures, the government has been forced to reduce its budget to accommodate the lower oil income. This called for drastic belt tightening on current expenditures and for reduced expansion of development projects, such as the Orinoco heavy oil deposits.
IMF/Foreign Banks - The easing of the interest rates in 1983 will help ease the burden of Venezuela's foreign debt.

Vulnerabilities to External Shocks - Venezuela's economic dependence on oil, which generates 25% of GDP, 75% of government revenues, and 95% of export earnings, means that the only "shock" that could affect Venezuela would be a continued drop in the price of oil.58

KEY ISSUES

Elections of 1983 - The December 1983 elections are the major issue and will affect many of the other issues. The government's failure to achieve any tangible social or economic gains thus far has eroded its standings in the polls. In order to help COPET's candidate, Rafael Caldera, Herrera's government will resist IMF demands to stabilize the economy and it will attempt to refait the economy, thus driving down the unemployment rate. Caldera has an impressive image among Venezuelans but he will not be able to overcome the feeling of no confidence in COPET's ability to govern. He is supported by FEDECAMARAS. AD's candidate, Jaime Lusinchi, is supported by labor and is the clear favorite. Other influence groups are split in their support for these candidates. Lusinchi's economic policies will most likely be expansionist with heavy borrowing and increased labor costs. If elected, Caldera would probably continue present economic restrictions, but favor business and welcome foreign investment.
As both parties are moving towards the political center, whichever party is in power can be expected to: 1) maintain current foreign policies, 2) take a more nationalistic stance, 3) continue Venezuela's pro-Western and pro-US orientation, 4) maintain close relations with South American nations, especially its Andean Common Market partners, and 5) maintain its role in OPEC.

State of the Economy - The 1983 economy is beset by several problems that directly affect the voters: no real growth, large foreign debt, inflation, and unemployment. 1982 saw the fourth straight year of economic stagnation. The adverse impact of reduced petroleum earnings has caused a decrease in the real GDP. In spite of the decreased revenues, the government was committed to a high level of expenditures, so it borrowed from foreign sources to keep up its commitments. The foreign debt is now 30 billion dollars and it rescheduling conditions with the IMF may be hard to swallow - further spending cuts, currency devaluation, new taxes, and the elimination of the multiple exchange rates, price controls, and import restrictions. Increased government expenditures during the 1970's fueled inflation (now at 25%), but with the approach of the December elections, fiscal expansion could increase the price level. All groups favor actions to control inflation, but with AD's expected victory at the polls, labor will surely push for wage increases and wage indexation, which would set off another round of inflation. Unemployment has risen to 13% recently because of: the current recession, rigid contractionist policies of Herrera's government, the slowdown and abandon-
ment of major projects, and the influx of illegal workers from Colombia. Unemployment will continue to be high until Venezuela's oil-based economy begins to grow. If the labor-backed AD party gains power in December as expected, it will probably have expansionist policies to increase employment.

Social Progress - Intimately linked to the state of the economy, the advancement of social progress first requires real economic growth. Real growth is needed to rectify Venezuela's unequal distribution of income, high unemployment, inflation, and to provide essential social welfare services to the one-third of the population that live in urban barrios. All groups, but especially the political parties, will strive to advance social progress.

BUSINESS OPERATING ENVIRONMENT

General - There is little expected change in the business environment. This means that the economic problems will not be resolved quickly, but it also means that Venezuela will continue to offer a stable environment for foreign investment, especially in petroleum-related sectors.

Attitude Towards Foreign Investment - Throughout most of its history, Venezuela maintained an open door towards foreign investment. In the mid-1970's however, the government became much more nationalistic and selective, having adopted the restrictive Andean Common Market (Ancom) foreign investment code. During the 1970's oil boom, government planners believed that the flood of
petroleum monies eliminated the need for foreign investment—whatever additional resources needed could be borrowed on the international capital market. Herrera’s administration has been sending mixed signals to the international business community since it came to power in 1979. On one hand, the mistrust and fear of foreign economic penetration are deep-rooted; on the other, the need for foreign capital, management, and technology is clearly recognized. Recently the Superintendency of Foreign Investment (Siex) has eliminated much red tape for foreign investors. There are several difficulties the foreign investors typically encounter: strict price controls, labor problems, and confusing economic policies. All major groups except AD, MAS, and Pro-Venezuela are supportive or neutral of foreign investment. Either Lusinchi or Caldera may will choose an openly nationalistic or positive treatment of foreign investment. However, in this era of economic difficulties, their positions will probably become less rigid towards enterprises that provide employment, worker training, and high technology. Overall, foreign investment will be sought in areas which meet Venezuela’s needs: petroleum, agro-industry, capital and intermediate goods, basic metals, and petrochemicals.

Investment Regulations - Siex controls the foreign investment policy, essentially enforcing Decision 24 of the Ancom Investment Code providing for three different types of foreign participation. Foreign companies can be set up without a national investor, but must agree to convert to a mixed or national company within 15
years. Some companies avoid Venezuelan investment because of this "creeping expropriation." Foreign companies do no have to convert to local ownership if at least 80% of their production is exported to third countries. Mixed companies must be at least 51% owned by national investors. National companies must be owned at least 80% by national investors. Venezuela is flexible in enforcing these guidelines and gives preference to companies offering manpower training. Although the Ancom Investment Code has stringent parameters on acquisition, technology transfer, incentives, ownership requirements, and financial requirements, some executives believe that Decision 24 should be viewed as an incentive to investment, because it defines the rules of the game and thus provides stability to foreign investors. In any case, the rules are extremely complex and prospective investors should seek advice from a Venezuelan attorney.

Incentives - Venezuela offers several types of investment incentives: 1) tax exemption of up to 100% for 10 years and investment capital at favorable rates for investments in remote locations, 2) exemption from Venezuelan income tax on the interest on loans for various activities, 3) export subsidies of up to 30% and export credits that vary with the amount of national value added, 4) special tax credits for investment in fixed assets in other sectors, and 5) various regional incentives within different states in Venezuela. These incentives must be negotiated for on a case-by-case basis with the government. There is also a free trade zone on the island of Margarita.
Price Controls - Price controls have been in effect in various forms for more than 25 years. They apply to goods and services considered to be of prime necessity and social importance. Price controls have been maintained for automobiles, iron, cement, foodstuffs, pharmaceuticals, and livestock. In response to labor's demands (especially if AD wins the election) companies should expect a hardening of the price structure. Prices are controlled by the Development Ministry and it can take up to several months to review any planned price increase. With inflation and rising production costs, price controls may squeeze profit margins. Price controls will remain in effect at least until the December elections, after which, they may be discarded for some goods and services.

Profit Repatriation - In accordance with Andean Pact rules, annual profit and dividend remittances are limited to 20% of authorized and registered capital. Higher remittance ceilings may be authorized, or companies may invest surplus profits in several financial instruments, such as certificates of deposits and mortgage bonds. In case of the sale or liquidation of an investment, the foreign investor can repatriate his capital. Repatriation limits are not expected to change under Caldera or Lusinchi.

Exchange Controls - Exchange controls were already addressed under "Current Economic Situation" but they have an additional impact on the foreign investor - profit remittance is based on a percentage of the direct investment registered in bolivares. There is currently much confusion as to the status of profit remittan-
ces, but if they do not qualify for the preferential rate (B4.3:$1), then dividend payments will be virtually halved by using the free float rate of B10-12:$1. Exchange controls will remain in effect at least until the elections, at which time outright devaluation may occur.

Import Restrictions - The government's goal of restricting 1983 imports to 65% of 1982's level will affect domestic production. Locally produced goods will have an advantage as they will be favored over imports.

Labor - Venezuela's labor force is characterized by a shortage of skilled labor, high absenteeism, high turnover, and low productivity. About one-half the labor force is unionized and, in the current recession, they have learned to value job security over wages. Venezuelan labor is protected by extensive labor legislation covering unionization, profit sharing, fringe benefits, termination of employment, and social security. With AD's expected victory in the December elections, there will be more protective labor legislation, and labor costs will rise.

Nationalization Risks - President Perez nationalized the foreign-owned oil companies in 1976. In line with constitutional requirements, the Venezuelan government offered compensation based on net book value to the foreign companies. In total, Venezuela has experienced 19 nationalizations since 1958. None were politically or ideologically motivated. Legal resource ownership was the question and no firms lost money. Due to strict investment guidelines of Ancom, nationalization is probably over in Venezuela.
Taxes - Venezuelan taxes are among the lowest of the major Latin American countries. Revenues generated by corporate taxes comprise only a small part of the total receipts, but faced with declining oil income and the need for more revenue, the government may decide to increase corporate taxes. At least until the world price of oil begins to increase, a tax increase could be a real possibility.

Capital - External borrowing requires approval by the Superintendent of Foreign Investments, Sien. Domestic borrowing may be done for short and medium terms only and amounts are limited by the Central Bank.

Insurance - Political risk and commercial risk insurance is available through the Export-Import Bank of the United States and the Foreign Credit Insurance Association. However, these companies do not insure against an exchange risk. Should profit remittances lose their preferential exchange rate status (B4.3:$1) or should outright devaluation occur (as is likely after the elections), then profit remittances will virtually be cut by two to three times, as explained "Exchange Controls." Other insurance companies, such as Lloyds, may insure against exchange risks, but at a high cost.

Investment Opportunities - Venezuela's reliance on oil exports means that, in spite of the current lull in oil exploration, Venezuela must soon expand its drilling program to ensure that the country's productive capacity of oil will be sustained through the remainder of the century. What is badly needed is foreign technology in heavy oils, and maybe foreign capital. US technology and project
management ability should continue to give US firms a strong competitive position. Devaluation and restrictions on some imports may make this the time for some US exporters to Venezuela to consider establishing manufacturing operations in the oil sector.

SCENARIOS

These scenarios represent possible events for the next five years.

Most Likely - Political campaigning will increasingly dominate national life as the December elections draw near. AD's Jaime Lusinchi will be the winner. Labor will achieve higher wage settlements, but otherwise, current policies are unlikely to change significantly. The debt will be rescheduled after the elections, with the implementation of some of the IMF's present conditions. Oil will remain Venezuela's dominant export. As the world economy begins to pick up, the oil glut and soft prices will give way to a seller's market, signalling more oil income for Venezuela, possibly by 1985/86. Inflation and unemployment will remain high, and real GDP growth will be stagnant until the oil market changes. The government will continue to send mixed signals to foreign investors, however, no significant regulatory changes are expected. In fact, Venezuela's need for technology may prompt the government to stimulate the private sector and foreign investment.

Pessimistic - Overall there will be a temporary recovery of the world economy, followed by an even deeper recession with more protec-
tionism and a decline in world trade. The oil price will remain stagnant, or may even fall slightly. Decreased government income would prompt more borrowing and more "raiding" of PETROVEN's profits to fund current expenditures. Negative real growth, high inflation, and high unemployment would accompany protective measures such as controlled interest rates, price controls, more subsidies, and devaluation. Continued economic deterioration may inspire the lower and middle classes towards political upheaval, or at least to increase their support of the leftist political parties.

Optimistic - The world economy will boom through the decade, bringing higher oil prices and more government income. The healthy economy will provide more capital for Venezuelan development and social programs. All groups would receive a larger portion of the increasing economic pie, increasing general confidence in the political system.

Disaster - The only disaster scenario for Venezuela involves a major breakthrough in the development of synthetic fuels that would trigger a fall in the oil prices.
ANNEX A

Petroleum Sector Risk Analysis

Introduction - This annex addresses the risks and opportunities of the Venezuelan petroleum sector from the point of view of a fictitious US manufacturing company. As the petroleum sector is large, comprising the gamut of activities from research, to drilling, to sales at the gas pump, this sectoral study analyzes the broad opportunities/risks of each major activity in the Venezuelan context. These major activities are: customs and regulations, Venezuela's market size, PETROVEN's policies, research, exploration, production, refining, and domestic production of equipment.

World Petroleum Outlook - Although the current world recession and soft prices for oil mean a buyer's market, the world economy will eventually blossom again. Factories will increase production, homes will be built, and automobiles will be sold, all necessitating additional petroleum energy. Immediate prospects for alternative sources of energy are remote, so it will be up to oil and natural gas to continue to carry the main energy load. Assuming economic growth of 3-4% until the end of the century and petroleum maintaining its current 70% of the world's energy supply, the petroleum industry must discover about 19 billion bbl/year to satisfy demand. The petroleum industry's chore is to replace production from declining oil wells and to expand it with new reserves, often found in remote and hostile locations, where dril-
ling and production costs dwarf those of earlier wells. This effort will require more wells, expensive equipment, and advanced technology.

Customs and Regulations - Venezuelan laws do not permit direct foreign investment in the petroleum sector, but foreign firms may do business with the petroleum industry by providing oil field services and equipment, manufacturing oil field equipment locally, and providing other technical and consultative services. Foreign participation in the oil sector may occur via the complex regulations outlined under "Investment Regulations" in the environmental risk analysis.

Most imports of petroleum industry equipment and materials from the US are subject to duties of 25-80%. An import license is sometimes required, generally when domestic production of the equipment already exists. However, tariffs and import licenses are currently of little practical concern to suppliers of the oil industry. The industry is of such importance that the operating companies of PETROVEN can usually obtain the necessary import licenses and do not object to paying the import duties. However, given the increasing capabilities of Venezuelan manufacturers, the threat of third-country manufacturers making joint venture "deals" to manufacture equipment locally, and Venezuela's need to cut back on imports (evidenced by the current import restrictions on some items which may extend to some oil equipment that can be produced in Venezuela), tariffs and import licenses may later become a significant barrier to US exports.
Venezuela's Market Size - The 1981-1985 Sixth National Plan envisaged enormous sums for the development of oil supplies - 25 billion dollars. The recent slump in oil prices and resultant government income have forced a reduction in oil industry investment, but substantial growth is expected in the long term for equipment sales. The following table shows the total Venezuelan market for petroleum and natural gas exploration, production, and refining equipment in constant 1980 dollars.

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<tr>
<td>Domestic Production</td>
<td>154</td>
<td>265</td>
<td>449</td>
<td>749</td>
</tr>
<tr>
<td>Imports</td>
<td>376</td>
<td>654</td>
<td>875</td>
<td>1081</td>
</tr>
<tr>
<td>Exports</td>
<td>-</td>
<td>-</td>
<td>11</td>
<td>32</td>
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<tr>
<td>Net Market</td>
<td>530</td>
<td>919</td>
<td>1313</td>
<td>1798</td>
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Table 1 shows that, in constant 1980 dollars, the net market is expected to grow 239% over the period, or 19% per year. Domestic production uses older technology and its products are of a high volume nature. As shown on Table 1, its share of purchases is expected to increase from 29% of the total market in 1978 ($154 million) to 42% of the total market in 1985 ($749 million). Some domestic products will even be exported to other Ancom countries. However, most sophisticated equipment will continue to be imported.

US equipment manufacturers have a substantial share of this expanding market. Over the years, the Venezuelan oil industry purchased the bulk of its equipment from the US, as the concession-
aires were US-based companies. Generations of equipment now in use came from US manufacturers, and as such, will require spare parts and additional equipment from the same source. US manufacturers are the dominant suppliers to the Venezuelan petroleum industry - 81% of import value in 1980.67 This high share will be difficult to maintain with the diversification of domestic producers and increased foreign competition for the growing market. However, the familiarity with the use of US equipment, geographical proximity of US suppliers, and the fact that many Venezuelan executives were educated in the US mean that US suppliers will continue to be the favored source for equipment. US companies that offer high technology, competitive pricing, quick deliveries, and reliable service can expect to develop/maintain a market in Venezuela.

Although the Venezuelan market will grow, especially when the world economy improves and the price of oil increases, its market is not big in absolute terms. Chart 1, Drilling Activity, shows that in 1981, Venezuela drilled 950 production wells. In the same year, there were approximately 65,000 wells drilled in the US!68 For the short term in Venezuela, some industries may find that its 1000+ wells are not a large enough market to merit domestic production.

PETOVEN's Policies - The Venezuelan petroleum industry generates 25% of the GDP, 75% of the government income, and 95% of export earnings, so it is certainly the cornerstone of the Venezuelan economy.69 One of the objectives of the Sixth National Plan is to diversify the economy away from oil revenues, but the continual
oil price increases up to the recent past and domestic structural problems make Venezuela more dependent than ever on oil. Venezuela's proven oil reserves of 20 billion barrels will last about 25 years at 1981 production rates. However, it has a potentially richer field in the Orinoco Tar Belt, estimated to contain from 700 billion to 3 trillion barrels. The exploitation of oil from this belt will be hampered by technical and economic barriers as the oil has a low API specific gravity (4-15 API) and substantial quantities of sulphur and metallic elements. Venezuela's refineries are geared towards processing lighter oil than the 4-15 API and the sulphur and metallic impurities will require special refining techniques. To be able to process this heavy crude from the Orinoco Tar Belt, PETROVEN is implementing a series of new policies:

- Preservation of current light oils and their extension through better recovery methods.
- Increased exploration to find more light crudes.
- Development of effective processing systems for the heavy crudes to upgrade them to produce higher quality products.
- Replacement of light crudes with heavy crudes wherever possible.

These policies have led to an ambitious development program in research, exploration, production, and refining that are of crucial importance in PETROVEN's long-term ability in terms of
production and revenue. These development programs will present sales opportunities for US firms.

Research - The technical research institute of PETROVEN, Intevep, has the role to provide commercially useful technological assistance to the petroleum industry. In its 7 years of existence it has acquired advanced laboratory and research facilities. The 1982 research budget was 47 million dollars, with 10 million used to purchase new equipment. About half of this equipment is imported and includes geochemical, sedimentological, and stratigraphical instruments. Its major research projects are: 1) heavy oil production, transport, and upgrading, 2) offshore geophysics, 3) refining flow modifications, and 4) tertiary recuperation techniques. Intevep is an active partner with other research facilities of many foreign governments, including the US. Although Intevep isn't a large purchaser of equipment, its close ties to US research facilities will give US companies an advantage when the time comes to implement its research in terms of US-supplied equipment in exploration, production, and refining operations.

Exploration - PETROVEN has built up its exploration effort from almost nothing at nationalization in 1976 to a huge operation today. The oil companies, knowing that nationalization was imminent, had no interest in exploration in the 1970's. Since then, PETROVEN has initiated a program of increased exploration to offset the decline in productive capacity. In 1981, PETROVEN invested 627 million dollars in exploration, up 23% from the previous year. In the same year, 240 exploratory wells were drilled. Drilling activity
is projected to increase at an average rate of 5.5% per year. Short
term political and financial factors could cause drilling activity to
deviate from this expected trend (like the 1983 total oil industry
investment cutback from $4.4 bn to $3.5 bn), but the long term
outlook is bright, as Venezuela relies so heavily on the revenues
from oil.\(^78\) It needs to continue oil exploration to meet its
financial needs.

PETROVEN's exploration efforts in the future will concen-
trate on several tasks: 1) developing in-depth knowledge about the
Orinoco Tar Belt, 2) finding additional reserves of lighter crudes, 3)
finding additional gas fields, and 4) adding to the knowledge of
Venezuela's offshore reserves. For US company opportunities,
PETROVEN is interested in the following equipment, systems, and
technology:\(^79\)

- Drilling equipment and technology for deep wells.
- Offshore exploration technology, including rigs and support
  services.
- Environmental protection technology, such as water treat-
  ment plants, corrosion control products, and oil spill
  clean-up devices.
- Data analysis equipment, especially seismic equipment
  with its own power sources.

Production - As shown on Chart 2, Oil Production, Venezuelan oil produc-
tion peaked in 1970 at 3.7 million barrels per day (MMB/D), but
has since declined due to a depletion of reserves. Venezuela's long-range production goal is 2.2 MMB/D, but this goal will be difficult to achieve because: 1) the average output per well has declined (240 B/D in 1977 to 173 B/D in 1980), and 2) most remaining reserves are heavy crudes, which require special recovery and refining techniques.

To maintain production at 2.2 MMB/D, PETROVEN has embarked on a program of new drilling and secondary recovery projects (recovering more of the oil in existing wells). Chart 1, Drilling Activity, shows the past drilling activity and expected growth. Secondary recovery, using steam injection techniques, already accounts for 45% of Venezuela's production and is expected to increase. Oil production investment has increased from 347 million dollars in 1978 to 2.07 billion dollars in 1982.

There are opportunities for US companies that can provide the following assets:

- Secondary recovery technology, especially steam generation technology.
- Offshore production technology, including rigs and support services.
- Compressors, pumps, and separators for heavy oils.
- Laborsaving equipment and techniques in the installation and maintenance sectors, like welding and tube inspection.

Refining – Venezuela's 12 refineries were built in the 1950's with technol-
ogy from the foreign concessionaries. Recently, refining has been a focus of activity as the refineries have been gearing modifications to process heavier crude and to produce greater quantities of gasoline and other high revenue products. Refinery investments increased from 38 million dollars in 1977 to 930 million dollars in 1983. Investments should stay at a high level until about 1986, when the new projects should be completed.

There are opportunities for US companies in providing refining equipment, technology, and services. As the refineries were built by US companies, they will be the preferred suppliers in areas such as:

- New desulphurization and demetallization technologies.
- Refining systems with catalysts for heavy oils.
- Steam stripping distillation columns.
- Evaporators.
- Separators.
- Burners and combustion units.
- Chillers.
- Condensers.
- Process pumps.

Domestic Production - Table 1, Total Market, shows that the expected share of domestically-manufactured products will increase from 29% in 1978 to 42% in 1985. The fast-growing Venezuelan oil industry will serve as a spur to domestic manufacture. PETROVEN
is committed to favoring domestic products in its purchasing - provided that they meet its quality standards. Also, under the Ancom accords, Venezuela has been assigned many manufacturing responsibilities: 1) drilling rigs and diamond bits, 2) electric transformers, 3) centrifugal and vertical turbine pumps, 4) dispensing pumps, 5) valves, 6) steel tubing, 7) small compressors, 8) tanks for gases, 9) digging, trenching, and shoveling equipment, 10) diesel engines, and 11) geophysical equipment. Since Ecuador, Bolivia, and Peru all have some petroleum activities, Venezuelan manufacturers should become Ancom leaders in petroleum equipment manufacturing.

US companies may be better able to increase their share of the Venezuelan market through joint ventures and licensing agreements with the Venezuelan petroleum industry. Domestic manufacture would give a US company an edge over the increasing competition from local producers and third-country suppliers. However, besides enlarging the market, domestic manufacture under Ancom rules would entail a "fade out" within 15 years and the "loss" of any technology involved. High technology companies with sole control of high technology may desire to continue to export in order to retain control. Companies with less exclusive technology, or technology that they can afford to lose within 15 years, may want to set up domestic manufacture. In the long run, the latter are likely to find greater sales opportunities by local manufacture than by just exporting.

An additional benefit of domestic production is that of
buyer's preferences. Often, a buyer may be attracted to producers who have local plants and can guarantee delivery without the delays of ocean shipping and an exchange risk. Also, domestic production shows a commitment to the host country, as the producer's enterprise is likely to stimulate local employment, which may be important to a nationalistic Venezuelan buyer.

There are some drawbacks to domestic production besides the loss of technology. Some companies have had a difficult time trying to find a suitable partner with similar business objectives. Also, by the "fade out" to a national company in 15 years, the US company may inadvertently be setting up a potential competitor for its other markets.

The three-tiered exchange rate system currently gives most petroleum-related products the preferential rate of B4.3:$1. The current import restrictions do not apply to most petroleum-related products. However, given the likelihood of devaluation after the elections and the uncertainty of preferential treatment of petroleum-related imports in face of the growing domestic manufacture ability, now may be the time for some US exporters to consider establishing manufacturing operations in Venezuela.

Conclusion - For the short-term (up to 1985/86) local manufacturing of oil industry equipment in Venezuela is not recommended. The world price of oil will probably remain stagnant until then, affecting government income and its oil sector investment. The relatively small domestic petroleum operation will not grow enough to justify the huge initial capital expenditure required by a manufacturing
operation. Short-term economic problems also discourage domestic manufacturing. Companies should be wary of the possible negative effects of current problems: the implementation of the IMF conditions (cuts in government spending, devaluation, and new taxes), debt problems, continued inflation, price controls, labor problems, changing of profit repatriation limits with devaluation, and the lack of insurance for exchange risks.

Until the price of oil increases and questions on the course of Venezuela's short term economic problems are answered, most companies should only continue to export. By 1985/86 the world economy should be healthier and oil prices should increase, so Venezuela's long-term prospects will be better. However, until conditions improve, US companies should "keep their foot in the door" to maintain a good relationship with PETROVEN and the Venezuelan government. As conditions improve, it will be a matter of timing to fight Venezuelan and third country competition to take advantage of Venezuela's growing petroleum market.
CHART 1

DRILLING ACTIVITY
(PRODUCTION WELLS)

CHART 2

OIL PRODUCTION

FOOTNOTES


7. Lajoie, p. 23.


8. Lajoie, p. 23.


11. Ibid.


15. Lentz and Howard, p. 62.


21. Ibid.


24. Ibid.


29. Ibid.


32. Ibid.


36. Alberto Consalvi, p. 5.


42. Lajoie, p. 20.d


44. Kurian, p. 1545.

45. World Bank, p. 147.


49. Ibid., p. 1545.
50. Ibid.
51. Ibid., p. 1544.
52. Ibid.
55. Lagoven, p. 2.
60. Lajoie, p. 21.
64. Department of Commerce, International Marketing Series, "Market Summary: On/Offshore Petroleum & Natural Gas Exploration, Production, Pipeline,


66. Ronai and Asociados, p. 3.

67. Ibid., p. 13.

68. Interview with John P. Walter, Dresser Industries, Houston, Texas, 77005, 3 August 1983.

69. Ronai and Asociados, p. 44.

70. Lagoven, p. 2.

71. Ronai and Asociados, p. 45.


73. Ibid.


75. Ronai and Asociados, p. 47.


77. Lagoven, p. 8.


81. Ibid., p. 24.

82. Ronai and Asociados, p. 55.


83. Ronai and Asociados, p. 8.


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Ronai and Asociados, pp. 9-10.

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