

THE ROLE OF THE GUAYANA DEVELOPMENT CORPORATION
IN VENEZUELAN INDUSTRIALIZATION:
Diversification or Vertical Integration.

by

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Submitted to the Department of Urban Studies and Planning
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ABSTRACT:

This thesis examines the Venezuelan Industrialization Process from 1936-1986 and the role that la Corporacion Venezolana de Guayana (CVG) played in this process. The study weight the relative position of the main players in this process: the government, the state-owned enterprises, and the private sector, in order to understand how these players interact, and help one to recognize the growing importance of the public sector.

The current economic crisis is seen as a consequence of the industrial strategy of import substitution followed by the Government since 1961, and the emphasis on resource based industrialization since 1973. CVG and its industrial program for Ciudad Guayana was found to have played a major role in both periods.

The thesis describes the political and institutional aspects of the industrial development coordinated by the state and base in Guayana since 1973. It explores the idea that the current industrial strategy is based on previous investments but does not satisfy the expectations of the private sector.

The thesis concludes that the role of the CVG has to be seen in close relation to the role of the Social Democratic governments. The Social Democracy will never abandon the development of Guayana, because its leaders formulated the idea, launched the program, and will always feel responsible for its progress. The party's goals are expressed by the industrial strategy used to overcome the current economic recession, while attempting to retain an public image of successful development.

The idea of the state as an engine of growth will not be sustained by the current strategy followed by CVG if it does not prove to be the best pathway towards progress and the production of capital goods.

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I) INTRODUCTION:

The purpose of this thesis is to explain the current and future role of the State's Guayana Development Corporation (CVG) in the industrialization of Venezuela. In order to understand the CVG's mission it is necessary to examine recent history, recognize the main players in the process, identify the players' strengths and weaknesses and understand how they interact.

We will concentrate on the Guayana Development Corporation, paying special attention to the political dimension of this industrialization process and trying to provide some insights into the strong links between the Social Democratic Party, "Accion Democratica", the democratic development of Venezuela and the Guayana Development Corporation. We will see how the success of Venezuela's democratic process and of the oil industry gave the Venezuelan government sufficient wealth and power enough to spur a regional development program in Guayana which went far beyond the scope of any conservative economic measure. The dimensions of the projects launched and the difficulties encountered in their implementation have prevented the region from becoming a major export center, as was initially projected for 1980. If it is to become such an export center in the near future, it will be at a very high cost to the nation.

Today, when financial resources have become scarce as a result of the decline in oil prices, Venezuelan industrialization has to accomplish two simultaneous tasks: advance into a next stage of import substitution and achieve vertical integration of the oversized Guayana complex. Even with diminished economic capabilities, the state seeks to promote the reinforcement of the state-owned enterprises, particularly in Guayana. The private sector, which supported the state in its industrial strategy of import substitution, seems skeptical at this point regarding the state's new strategy. In order to accomplish its industrial goals, CVG must convince the private sector that real opportunities exist in the development of Guayana. This would be proved by showing profits from installed plants, prioritizing and facilitating future projects, and providing business guarantees in order to reduce risks for private investors.

From the private sector's point of view, the magnitude of required investments is still so great that it tends to prefer diversifying its investments in alternative projects, where it has greater control and where it is not completely dependent on the state. In the midst of the worldwide economic uncertainty prevalent since the 1970's, there is a natural reluctance to place all investments in one concentrated sector. The Guayana project has yet to achieve the profitable results that would encourage the private sector to participate in the process. Also, CVG is in many ways limited by political factors that influence

the decision-making process in such a way that guarantees made to private investors remain insufficient, due to the uncertain nature of that political process.

The Guayana industrial program is also tied to labor movements, and flexibility must be considered not only in market terms but also in terms of the labor force. The industrial specialization mentioned before must also be seen in terms of its political risks. My research recognized the importance of the labor movements in Guayana but expressly excluded this variable as beyond the scope of the thesis.

The interest of this thesis is to point out that, as occurred in 1958 when an import substitution program gained impetus, strong new alliances must be formed in order to advance in a new era of capital goods production and vertical integration of the state-owned industrial complex with the private sector. This will lead to the completion of the great export center which Guayana was meant to be.

2) INDUSTRIALIZATION IN VENEZUELA:

What we expect to discover in this first part of the thesis is the historical interrelation between the state, the political parties and the private sector. Accion Democratica, the principal party in the Venezuelan democracy, sought to achieve its political program through the simultaneous promotion of social reforms (mainly a land tenure reform), through inspiring the labor movement, and also through fostering an environment in which the industrial sector could achieve progress. At the same time, based on nationalistic principles, the state has been progressively developing its natural resources.

As it became stronger through the success of the democratic process, the state took further steps, nationalizing gas, oil and iron ore mines. When oil prices increased dramatically, its main beneficiary was the state and its administrators, who channelled an important portion of these new revenues to their most prized project, the development of the Guayana region. The return on this investment was meant to be more than simple profit: it would be a signal of the state's ability, within the context of a democratic system, to provide a stable and prosperous economic future for Venezuela. Thus, Guayana is the crucible of Venezuelan democracy, a symbol and image of the democratic experiment. Its progress is integral to the progress of democracy in Venezuela.

Venezuelan industrialization parallels the history of the Venezuelan democratic process. The Guayana industrial program is a manifesto of the decision to manage Venezuela's natural resources, and the promise of a diversified economy.

2.1) Towards Democracy: 1936 - 1958.

2.1.1) Post J.V.Gomez-dictatorship: 1936 - 1945.

The period from 1936 to 1945 was characterized by an average Per Capita Annual Growth of 7 per cent and an average annual Real Gross Domestic Product growth of more than 3 per cent. This moderate rate of growth was principally based on the dynamic expansion of petroleum investments, production and exports.

After sluggish industrial growth Venezuela experienced in the late 19th century, Venezuelan industrialization process gained a renewed impetus in the second half of the 1920's and in the early 1930's. Researchers agree that an internal market was forming during the period previous to 1936, due to the impact produced by the development of the oil industry. This period also showed a reduced contribution of agriculture, and its social consequences (such as the growing migration from rural to urban areas).

After the death of the Dictator Juan Vicente Gomez, during the presidency of General Lopez Contreras (1936-1941), the State started to develop explicit policies on industrialization. In

1937 the State founded the Banco Industrial de Venezuela (Venezuelan Industrial Bank), attached to the Ministry of Development, which was geared to providing capital for industrial activity within the country. During this period, the most important sector was the commercial one, which was the initiator of contacts with foreign capital and closely related to banking interests. At roughly the same time (1936-45), the industrial sector was slowly growing in size and economic power. It further increased its volume and production capacity after 1940, when World War II certainly spurred the expansion of industry in the country.

Sonntag and de la Cruz (1985) have suggested that the constant growth of Venezuela's internal market in the years previous to 1936 provided the objective basis to start formulating an Industrial Plan for Economic Development. Such a plan would make lucrative certain economic activities that until then had been only crudely developed. Authors Sonntag and de la Cruz further suggest that the state seems to have understood the expectations of the growing industrial sector, and in consequence President Medina Angarita created a Production Council, whose direction was put into the hands of the private sector and had at its disposal 60 million Bolivars (Venezuelan currency 3.30 Bs/\$ at that time) for industrial and agricultural investment. This was one of the first verifiable measures of direct financing of industrialization by the State. Sonntag and de la Cruz (1985)

also point out that Venezuela's industrial sector increased its power but still experienced resistance from other areas, especially the commercial sector. It would be several years before the industrial sector would become dominant.

The industrial sector must be seen as a growing force which, during this period, was becoming more clearly defined and starting to make specific demands of the government.

2.1.2) The period 1945 - 1958:

During this period we will observe how the industrial sector was battling with the commercial sector to achieve hegemony. Its growing importance was vital in the attempt to establish a democratic government, with the common goal of fulfilling the job requirements. At the end of this period we will observe how political leaders as well as the industrial sector came together, collaborating in the effort to launch Venezuela into a new era of democratic government.

The struggle for hegemony: 1945 - 1952.

The Government of Medina Angarita was overthrown on October 18, 1945, and replaced by a military-civilian junta led by President Romulo Betancourt. During this political event, the middle-income sectors, led by military officers and "Accion Democratica" (the Social Democratic Party founded by Romulo Bentancourt), foresaw a "political reappraisal of the National

Plan of the dominant class," which led towards "making industrial development its goal, even when industrial activities did not appear to be the most dynamic" (CENDES, 1981).

Researchers agree that the first democratic experiment of 1945 was mainly spurred by the middle classes and conducted by Accion Democratica (AD). The leaders of that movement, and perhaps Romulo Betancourt more than any other, understood that a re-arrangement to stabilize the government and move towards a representative democracy required a redefinition of economic planning. The private sector was still at that time controlled by the commercial sector, and they remained indifferent, skeptical, even reticent throughout the three-year period, and finally participated in the conspiracy that culminated in the November 1948 military coup and a new dictatorship, when a triumvirate rise to power composed by M. Perez Jimenez, C. Delgado Chalbaud and Llovera Paez.

During these three years of the democratic experiment, the process of industrialization went beyond the initial phase of implementation. This process was reinforced by the acceleration of rural-to-urban migration that began in 1936. The growth experienced was primarily in the production of consumer goods, the same type of growth which would be recommended a few years later by the development and industrialization policies of the Economic Council of Latin America (ECLA). Clearly this was a type

of import substitution industrialization. For a better understanding of the government's actions during this period, we must review Betancourt's ideas.

Romulo Betancourt, leader of AD, recognized both that industrialization and agricultural reform were necessary to satisfy domestic demand. Understanding that the industrial process would be a dependant to foreign capital with the implied flight of national capital and the obstacles to developing a national consciousness, for him the most important issue was that industrialization would provide jobs. Also, he believed, oil revenues would accelerate the industrialization process in relation to other developing countries. Even though Betancourt recognized the importance of the industrial process in progress, this recognition was not enough to maintain AD in power. As we mentioned before, the strong commercial sector ultimately joined with the young military forces to conspire against democracy, in a partnership whose strength was impossible for Betancourt and Gallegos to overcome.

The most important measure taken during the civilian-military government was the founding of the Venezuelan Development Corporation (Corporacion Venezolana de Fomento - CVF) in 1946. Regardless of the political regime, CVF was the most important state entity financing industrialization. CVF's main purpose was to implement the industrial strategy conceived in

Betancourt's economic plans, providing a channel of financial resources from the central government to the Industry. Such economic plans envisaged four steps for industrial development:

First, the promotion of basic industries (principally energy) and consumer goods (import substitution).

Second, the development of industries complementary to the aforementioned.

Third, the development of semi-heavy industry.

Fourth, the production of machinery and heavy industry.

Of the 149 million bolivars handled by the Corporacion Venezolana de Fomento (CVF) in this period, 89 million were allocated towards financing industrial projects. This amount represented 3.8 percent of the Gross National Income, 2.26 percent of which was for promotion of industrialization. However, CVF was not the only entity in charge of financing industrialization, others were the "Banco Industrial" and the Ministry of Development itself.

The financing measures described above were flanked by protective tariff and tax relief policies. In addition, during this period the State began to participate more directly in industrialization by investing in various enterprises, a tendency that was to continue throughout the years of the dictatorship and

intensify with the advent of representative democracy after January 23, 1958.

The skepticism and distrust of the private sector towards in AD's economic plan contributed to shaping the events of the next several years. In November 1948 a coup d'etat preempted the model of representative democracy built in 1945. Although with the new regime the state became more rigid, the ensuing authoritarian government kept in motion the economic development plan that had been forming since the beginning of the 40's.

We have to emphasize again that the existing antagonism between the dominant classes traditionally related to commerce and land ownership, with an insurgent class promoting industrialization. Because the state's acceptance of new national objectives, proposed by those who were at the time committed to the industrialization process, would signify a shift in resources to those activities. State and industrialists encountered the resistance of the other sectors: commerce and agriculture to the proposed industrial plan. The struggle of those years was precisely here: An attempted rapprochement between the civilian leaders of Accion Democratica (AD), offering as a factor of stability for the government the benefits of the incipient industrialization to those who were able to undertake the task, and the new industrialists trying to develop their industrial plans, with traditional sectors (commerce and agriculture)

resisting change. The message was transmitted but it seems that the receptivity was not enough to maintain AD in power, perhaps because other reforms such as "oil nationalization", agrarian reform and various types of social reform announced by Romulo Betancourt compromised the possible gains of the industrialization process.

Although the Venezuelan state became much more politically rigid during the dictatorship of Colonel M. Perez Jimenez that followed the AD government, it should not be assumed that it was incapable of modernizing itself. In fact, the State progressed in its institutional structure, simultaneously allowing the industrialization process to advance. It is mistaken in this case to equate dictatorship with economic stagnation: the AD government had been rejected, but the wisdom of its economic goals remained clear.

The industrial plan in action: 1952 - 1958

The Perez Jimenez administration undertook the creation of several Regional Development Banks to promote private industrialization. As a result, the contribution of the manufacturing sector to the Gross Industrial Product (GIP) increased from 58.7 per cent in 1950 to 60.3 percent in 1957. At the same time there was a decrease of the construction sector from 38.1 percent to a 34.5 percent.

During this six-year period cumulated investments in manufacturing surpassed investments in commerce. The industrialists were gaining more and more power, particularly since at this time international interest groups were investing heavily in industry. The industrialization process was capital intensive, increasingly dependent on the import of inputs and machinery, and had a relatively high degree of oligopolization and monopolization.

At the end of these six-years the State initiated a plan for State capitalism; such a plan reserved for the State the development of Venezuela's natural resources, especially mineral resources, iron, steel, petrochemicals and the hydro-electric power from the Caroni river in the Guayana region.

2.2) The period 1958 - 1973: Rise and decline of the political pact.

This period extends from the installation of a democratic government in January 1958 until the rise of oil prices (first oil shock) in 1973. The new government led by Romulo Betancourt promoted the use of the Import Substitution and Tariff Protection policies in the national industries. These policies exhausted their capabilities at the end of this period, but then the government had at its disposal large financial resources steaming from the first oil boom that postponed the crisis to a later date.

This period saw two consecutive AD (Social democratic) governments and a final COPEI (Christian democratic) government. The first two governments suffered from political instability that ended during the COPEI government; this last government arrived to power thanks to divisions within AD just before the 1968 elections.

The political pact.

On January 23, 1958, the dictatorship of Marcos Perez Jimenez was defeated and replaced by a civilian-military junta which promised to establish a representative democratic regime. The private sector, guided by the industrialists and all the party leaders, came together to launch a second democratic regime; the main party AD was secure in the approval of the insurgent industrial class. The process culminated, towards the end of 1957, in a meeting in New York, where capitalists and politicians established a pact. Petroleum-based and international industrial capital quickly sealed the alliance.

Three documents summarize the pact between the different sectors: (1) The "Punto Fijo" Pact, (2) The "Statement of Principles and Minimum Program of Government" and (3) the Constitution of 1961.

In the 'Minimum Program of Government' all parties agreed on a model of development which gave the State the responsibility for economic planning, development of infrastructure, the pursuit of full employment, public housing for the poor, and continuing improvements in

health, education and social security. The constitution did not call for the nationalization of the oil companies or other developers of Venezuelan natural resources; it called instead for a limitation on further concessions and for greater participation in income. In addition it promised protection of domestic industry against foreign competition, and the support of domestic industry through a development corporation. (Scott, 1986)

Democracy and the Economic Plans:

The young democracy faced a decline in oil investments by international corporations. The development plan to be established called for retaining the historical rate of growth, which would be achieved through industrial development and diversification and through substantial new exports (Ganz and Blanco, 1969).

In addition, there was an urgent need for new productive employment opportunities, since petroleum accounted for 25 percent of the Gross National Product but supported only 2 percent of the nation's employment. Venezuela was thus experiencing the paradox of high unemployment in the midst of a booming economy.

The Plans of 1963-1966 and 1965-1968 set ambitious targets for economic growth, with fundamental changes in the structure of production and employment (Sonntag and de la Cruz, 1985). Production of goods and services were to rise at an annual rate of 7 per cent. Industrialization was to provide the main elements

for growth in production, productive employment opportunities, and net savings for investment. Public investments were expected to continue to support two fifths of the total industrial development.

There were to be two main beneficiaries of this national investment policy: The Venezuelan Development Corporation (Corporacion Venezolana de Fomento, or CVF) and the Guayana Development Corporation (Corporacion Venezolana de Guayana, or CVG). The former (CVF), was to be responsible for following a policy of import-substitution and the latter (CVG), for the development of new industrial center to produce enriched and pre-reduced iron ore, metals, chemicals, and metal fabrications.

The subsidies promised (1957) to the private sector came through the Corporacion Venezolana de Fomento. As was noticed, in discussion of the previous period (1945-58), this office was in charge of implementing the industrial strategy, providing financial resources for new enterprises and coordinating tariffs that implied a high level of protection to industry.

The Industrial State and the role of the Corporacion Venezolana de Guayana (CVG).

Romulo Bentancourt had achieved the necessary consensus for launching the new democratic regime; however, this time he measured the possible consequences of the aggressive petroleum

policies of the past. It is probable that the Government that he envisioned required a "leit motif" different from the one he had postulated a decade before, which was the control of oil exploitation. This necessary "leit motif" would be provided by the development of the natural resources of the Guayana region as a national enterprise.

The Guayana project was conceived as an integral part of the Venezuelan National Plan, created to help achieve national goals through the development of industry and power, and through the construction of a city in what was virtually an empty space. (Ganz and Blanco, 1969: 69).

The economic plans of the early 1960's predicted that new industries would make up one-fourth of Venezuela's exchange earnings by 1980. An important portion of these earnings was expected to come from the Guayana region. This region, which in 1965 already accounted for 7.5 per cent of Venezuela's manufacturing production, was counted on to provide one fifth of Venezuelan manufacturing output and almost a fourth of an expanded level of exports by 1980.

To accomplish such targets, the National Plans ("Planes de la Nacion") of the early 60's called for 10 per cent of the nation's investments, public and private, to be devoted to the Guayana-region program in the period 1963-1966. The Guayana share of the

national investment was substantially greater than 10 per cent in certain priority areas: 14 per cent of the investment in mining and petroleum, 21 per cent in manufacturing, and 34 per cent in electric power.

The main objective of the Guayana project was to transform the basis of the national economy. This new economy was to be based on heavy industry and power.

In the context of the resources available in the Guayana region, and taking the specific needs of and targets for the Venezuelan economy set down in the national plan, the planners designed a heavy industry complex with specific targets and programs for the production of steel, enriched iron ore, sponge iron, aluminum, chemicals, pulp and paper, metal fabrications, and electric power. The short term (1965-1968) and the long term (to 1980) regional development program was formulated around this heavy industry complex. From the beginning the major considerations in project selection included (1) modern technology that was related to Guayana's unique resources, (2) domestic and export demand, (3) economic scale to achieve competitive output and pricing, (4) integration and complementation with the Venezuelan economy as a whole, and (5) linkages, external economies, and transportation factors. (Ganz and Blanco, 1969: 66).

The Guayana industrialization plan established the upgrading of iron ore to enriched iron ore, sponge iron, and steel as primary targets. Following this would be the development of aluminum and pulp. These latter areas, however, had to be coordinated with the development of electric power and forest reserves respectively. Production of ammonia could take advantage of the availability of nearby natural gas. Later on, the metal

fabricating industry could be linked to iron and steel development.

As we have noted, the Guayana-CVG was a project of Accion Democratica; during Betancourt's government, AD started Guayana City, initiated the steel factory and constructed the bridge over the Orinoco river. When the COPEI party came into power in 1968, their leaders put a freeze on the development project. Basically, they reduced the budget of CVG, while at the same time increasing the budget for all the public enterprises controlled by CVG, such as EDELCA, the company in charge of the Caroni river development (see table 2.1). COPEI created a new platform for the development of the Guayana region from the Ministry of Public Works (MOP). This new program was called "La conquista del Sur" (the Conquest of the South). The COPEI government thus converted an AD Industrial Plan into an infrastructure program for the Guayana region.

In the last five years of the period, between 1958-1973, and during the COPEI government of 1968-1973, the import substitution policies originated in 1961 finally exhausted their capabilities. This was evidenced by a decrease in annual growth in manufacturing industry. At the same time, in 1972, oil prices experienced the first major increase. (see GNP table 2.2).

2.3) The period 1973 - 1983: Political Economy of Petrodollars.

TABLE 2.1 : CORPORACION VENEZOLANA DE GUAYANA * BUDGET 1965 - 1976 *
(IN MILLION BOLIVARS)

	NATIONAL INVESTMENT INSTITUT	CVG	EDELCA	SIDOR	Subtotal	% OF TOTAL INVESTMENT FROM THE INV INSTITUT
1965	NA	86.9	70.0	103.1	260.0	NA
1966	NA	62.5	70.0	169.5	302.0	
1967	1,306.0	124.3	30.0	80.0	234.3	19.00%
1968	1,388.7	124.3	30.0	80.0	234.3	16.00%
1969	1,494.1	122.9	45.4	25.0	193.3	13.00%
1970	1,306.5	128.7	5.0	NA	133.7	10.00%
1971	1,819.2	74.0	33.0	34.0	141.0	8.00%
1972	1,494.8	70.0	30.5	40.0	140.5	9.00%
1973	1,517.5	58.0	50.0	40.0	148.0	10.00%
1974	5,122.0	267.9	130.5	598.8	997.2	19.00%
1975	4,248.1	310.5	24.6	840.0	1,175.1	28.00%
1976 (Ley)	3,489.7	400.0	NA	NA	400.0	11.00%
Total		1,777.9	601.9	1,970.3	4,350.1	
	23,186.6 (b)				4,787.1	16.00%(b)

(a) Including : "modificacion a la ley de presupuesto".

(b) Including 1967-1976 period

SOURCES: Ministerio de Hacienda, Direccion Nacional de Presupuesto.
en: Izaguirre, Maritza. "Cuidad Guayana y la estrategia
de desarrollo polarizado". Ed SIAP-Planteos
Table 36. Pg 90.

TABLE 2.2 : GROSS DOMESTIC PRODUCT AT MARKET PRICES BY SECTOR 1970-1983
(billions of bs at 1968 prices) (1).

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983
TOTAL GDP	50.7	52.1	53.9	57.3	60.7	64.4	70.1	74.8	76.4	77.4	75.8	75.6	76.1	72.5
		2.76%	3.45%	6.31%	5.93%	6.10%	8.85%	6.70%	2.14%	1.31%	-2.07%	-0.26%	0.66%	-4.73%
Petroleum	11.2	10.6	9.7	10.3	9.1	7.1	7.2	7	6.9	7.4	6.8	6.6	6.1	5.9
		-5.36%	-8.49%	6.19%	-11.65%	-21.98%	1.41%	-2.78%	-1.43%	7.25%	-8.11%	-2.94%	-7.58%	-3.28%
Nonpetroleum	39.5	41.5	44.2	47	51.6	57.3	62.9	67.8	69.5	70	69	69	70	66.6
		5.06%	6.51%	6.33%	9.79%	11.05%	9.77%	7.79%	2.51%	0.72%	-1.43%	0.00%	1.45%	-4.86%
PRIMARY SECTOR	13.2	12.9	12	12.7	12.2	10.8	10.5	10.5	10.5	11.2	10.9	10.6	10.1	9.8
		-2.27%	-6.98%	5.83%	-3.94%	-11.48%	-2.78%	0.00%	0.00%	6.67%	-2.68%	-2.75%	-4.72%	-2.97%
Agriculture	3.5	3.6	3.5	3.7	4	4.2	4.1	4.4	4.5	4.7	4.8	4.7	4.8	4.9
		2.86%	-2.78%	5.71%	8.11%	5.00%	-2.38%	7.32%	2.27%	4.44%	2.13%	-2.08%	2.13%	2.08%
Crude petroleum	9.1	8.7	7.9	8.3	7.3	5.8	5.7	5.5	5.4	5.9	5.5	5.3	4.8	4.5
		-4.40%	-9.20%	5.06%	-12.05%	-20.55%	-1.72%	-3.51%	-1.82%	9.26%	-6.78%	-3.64%	-9.43%	-6.25%
Mining	0.6	0.6	0.6	0.7	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.5	0.4
		0.00%	0.00%	16.67%	28.57%	-11.11%	-12.50%	-14.29%	0.00%	0.00%	0.00%	0.00%	-16.67%	-20.00%
SECONDARY SECTOR	11.1	11.6	12.8	13.9	14.5	15.8	17.9	19.5	20.7	20.8	20.3	20.1	20.4	20
		4.50%	10.34%	8.59%	4.32%	8.97%	13.29%	8.94%	6.15%	0.48%	-2.40%	-0.99%	1.49%	-1.96%
Manufacturing	6.2	6.6	7.2	7.6	8.3	9.3	10.4	10.8	11.4	11.9	12.3	12	12.5	12.3
		6.45%	9.09%	5.56%	9.21%	12.05%	11.83%	3.85%	5.56%	4.39%	3.36%	-2.44%	4.17%	-1.60%
Petroleum refining	2	1.9	1.8	2	1.8	1.3	1.5	1.5	1.5	1.5	1.4	1.3	1.3	1.4
		-5.00%	-5.26%	11.11%	-10.00%	-27.78%	15.38%	0.00%	0.00%	0.00%	-6.67%	-7.14%	0.00%	7.69%
Electricity and water	0.9	0.9	1	1.1	1.3	1.5	1.6	1.7	1.7	1.9	2	2.3	2.5	2.7
		0.00%	11.11%	10.00%	18.18%	15.38%	6.67%	6.25%	0.00%	11.76%	5.26%	15.00%	8.70%	8.00%
Construction	2	2.2	2.8	3.2	3.1	3.7	4.4	5.5	6.1	5.5	4.6	4.5	4.1	3.6
		10.00%	27.27%	14.29%	-3.13%	19.35%	18.92%	25.00%	10.91%	-9.84%	-16.36%	-2.17%	-8.89%	-12.20%
TERCIARY SECTOR	25.7	27.3	29.4	31.1	34.7	39.3	43.6	47.4	48.3	48.3	46.9	48.3	48	46.1
		6.23%	7.69%	5.78%	11.58%	13.26%	10.94%	8.72%	1.90%	0.00%	-2.90%	2.99%	-0.62%	-3.96%
Commerce	5.4	5.5	5.7	5.9	6.4	7.4	8.3	8.7	8.7	8.2	6.9	6.7	6.9	6.8
		1.85%	3.64%	3.51%	8.47%	15.63%	12.16%	4.82%	0.00%	-5.75%	-15.85%	-2.90%	2.99%	-1.45%
Transport and com	5.2	5.5	6.1	6.3	7	7.7	8.7	9.6	10.4	9.9	9.8	10.2	10.5	8.8
		5.77%	10.91%	3.28%	11.11%	10.00%	12.99%	10.34%	8.33%	-4.81%	-1.01%	4.08%	2.94%	-16.19%
Financial inst	7.2	7.7	8.3	9	10	11.7	13.1	14.3	14.2	14.5	14	15.1	14.6	15
		6.94%	7.79%	8.43%	11.11%	17.00%	11.97%	9.16%	-0.70%	2.11%	-3.45%	7.86%	-3.31%	2.74%
Government	5.1	5.5	6	6.2	7.2	7.9	8.6	9.3	9.4	10.1	10.5	10.6	10.6	10.4
		7.84%	9.09%	3.33%	16.13%	9.72%	8.86%	8.14%	1.08%	7.45%	3.96%	0.95%	0.00%	-1.89%
Other services	2.8	3.1	3.3	3.7	4.1	4.6	4.9	5.5	5.6	5.6	5.7	5.7	5.4	5.1
		10.71%	6.45%	12.12%	10.81%	12.20%	6.52%	12.24%	1.82%	0.00%	1.79%	0.00%	-5.26%	-5.56%
Subtotal	50	51.8	54.2	57.7	61.4	65.9	72	77.4	79.5	80.3	78.1	79	78.5	75.9
		3.60%	4.63%	6.46%	6.41%	7.33%	9.26%	7.50%	2.71%	1.01%	-2.74%	1.15%	-0.63%	-3.31%
Less imputed bank charges	1	1	1.3	1.6	2	3.3	3.8	4.7	4.8	5.2	4.8	5.7	4.9	4.8
		0.00%	30.00%	23.08%	25.00%	65.00%	15.15%	23.68%	2.13%	8.33%	-7.69%	18.75%	-14.04%	-2.04%
Plus customs duties	1.5	1.3	1.1	1	1.5	1.9	2	2.1	1.7	2.4	2.6	2.3	2.3	1.3
		-13.33%	-15.38%	-9.09%	50.00%	26.67%	5.26%	5.00%	-19.05%	41.18%	8.33%	-11.54%	0.00%	-43.48%
Population (2).					11,632	12,665	13,119	13,590	14,071	14,552	15,024	15,485	15,940	16,394
						8.88%	3.58%	3.59%	3.54%	3.42%	3.24%	3.07%	2.94%	2.85%

(1) Source: Scott-Venezuela 1986 adapted from Banco Central de Venezuela

(2) Source: Ministry of Energy and Mines.

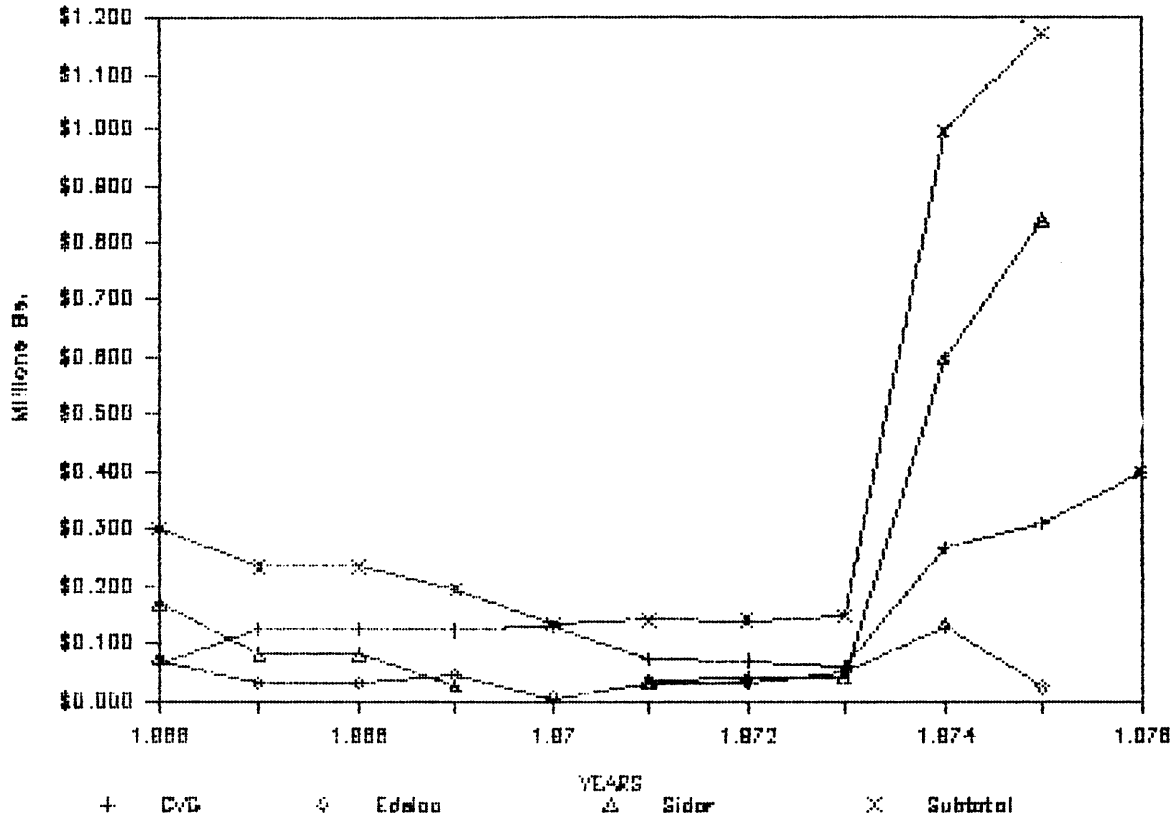
The election of Carlos Andres Perez of AD to the Presidency in December of 1973 brought into power someone with the will to innovate, delegate and spend. The now-rich government, thanks to the rising oil prices of the early 70's, purchased the iron mines from their foreign owners, and likewise the oil concessions. It also provided the funds for a vastly expanded effort to develop Venezuela's resource-based industries ("La Gran Venezuela", launched by Perez), all through state-owned corporations.

The oil bonanza had an impact on the Venezuelan economy in two waves, 1974 and 1980, which should be differentiated one from the other. The first and decisive wave was channelled into the Guayana program (see graph 2.1 indicating the jump in CVG investments), and in consequence the hydro-electrical Guri dam and the SIDOR steel plant were brought forward by more than a decade. The aluminum smelter of Venalum was raised from 100,000 to 250,000 tons. New projects were announced, among them a 1 million ton state-owned alumina plant and a 3 million ton state-owned bauxite mine. Investments in pulp, diesel motors, cement and gold were discussed. The original 1965 projection for 1980 of transforming the Guayana complex, not only into a center for substituting imports of key industrial products, but also into a major export center could now become a reality. The decisions made during those years were based on projected exports of 3 million tons of steel, 200,000 tons of aluminum and 350,000 tons of alumina, as well as many other products. Cement was to be

GRAPH 2.1

BUDGETS

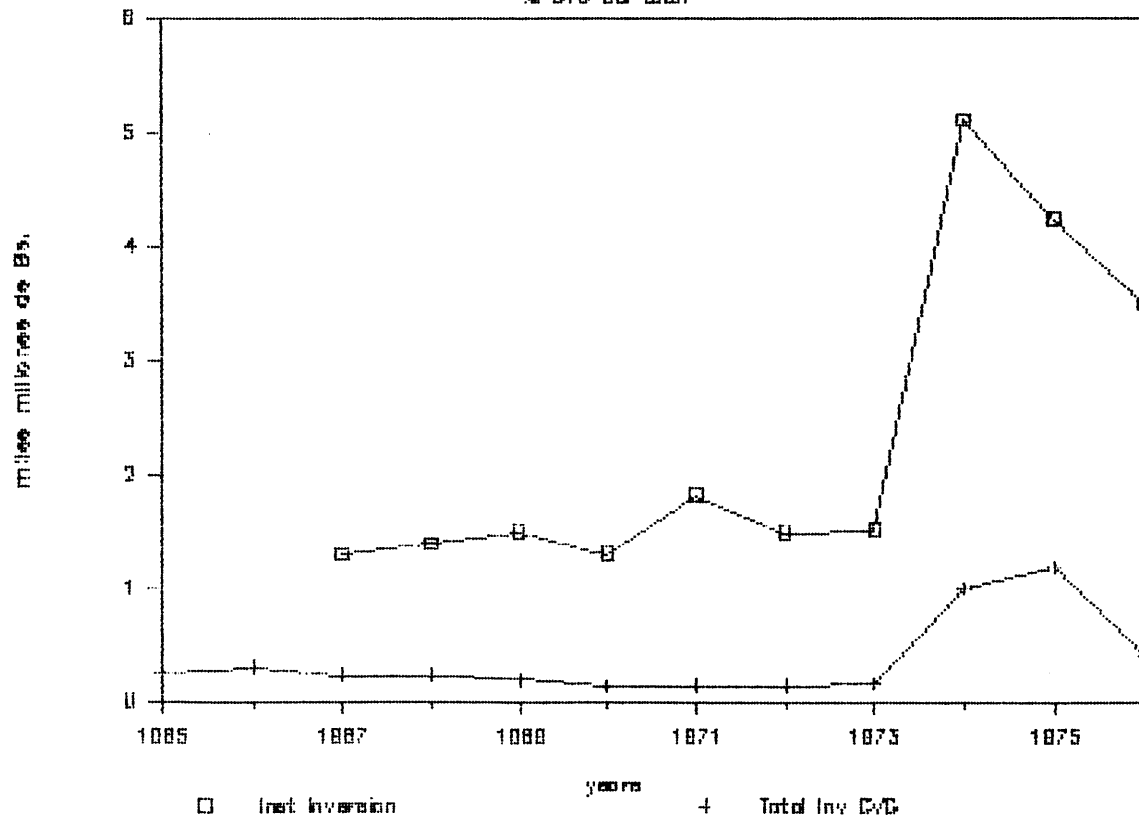
CVG (1965-1976)



TOTAL INVESTMENT AND CVG

SHARE OF TOTAL CVG (1965-1976)

% CVG del total



provided for the construction of the Guri dam and electricity to light the whole central area of the country. The main question which arises from these projects and projections is, what has the return of these investments been, and what is their actual contribution to exports today?

2.4) The period 1983 - 1987: Crisis and devaluation.

This period is significant due to three major events which took place at this time in Venezuela: the first devaluation of the Bolivar in February 1983, presidential elections in December 1983 (which were won by AD), and a second devaluation of the bolivar in December 1986, when additional exchange controls were introduced.

The Venezuelan economy during this period remained stagnant, as the GNP did not grow after 1980 (in December 1986 it was announced that the non-oil sector grew 3.5 per cent during that year). The crisis of this period is partially explained by reduced private investment and flight of capital, consequences of a lack of confidence in the economy, higher interest in foreign capital markets (1980-82) and the overvaluation of the Venezuelan currency (until December 1986).

Venezuelan unemployment is now the highest in forty years (the Central Bank puts the figure at 12 per cent and the unions argue that it is around 20 per cent), and inflation is also into

double digits. These figures are surprising after the annual growth experienced from the early 50's until the mid-70's, when Venezuela was seen as one of the few economic success stories in Latin America. This state of affairs is not only serious because of the economic recession it entails, but also because it involves the very viability of the country's scheme of development both political and economic. Venezuela's leaders are responsible for having set over-ambitious targets and miscalculated their implementation, and it is the Guayana project which cast a shadow over these figures.

The drop in oil prices contributed to a large extent to Venezuela's economic crisis, but this crisis appears to have had its origins much earlier, involving most if not all of the economy, rather than oil alone. Paradoxically, the decline actually appears to have begun in 1978, during the period referred to as the "oil bonanza", and to have continued despite the second oil price rise; the fall of oil prices has only accelerated the process.

It is important to note the strong economic performance in the period prior to 1973, when non-oil growth was 6.5 per cent per year in comparison to the period 1973-84, when it grew only 3 per cent. Examining these figures since 1978, we have a 1.1 per cent annual growth. It is important to note as well that real income grew more than 3 per cent prior to 1973, and rose briefly

upwards from 1973 to 1977, only to sink in 1985 to lower than the 1973 levels. Private sector investment went off 75 per cent between 1977 and 1982. The creation of jobs, which had averaged about 150,000 per year in the 70's, fell sharply in 1978 and by 1983 was negative.

The private sector, with a utilized capacity of around 60 per cent, since the first evaluation was demanding changes in order to overcome the crisis. Some private groups had proposed a new strategy. These groups asserted that if Venezuela wished to regain its forward momentum, the government would have to abandon its strategy of import substitution based on the State as the engine of growth, in favor of a strategy which relied more on the private sector, to achieve a more diversified group of exports, notably manufactured exports. These initiatives are embodied in a book, 'Proposal to the Nation (E. Quintero and others, 1985): the proposed initiatives were to be supported by a sharp devaluation, as well as reduction in protection and control of the domestic industry, "to open a way for the creation of new, export-competitive activities in manufacturing" (Scott, 1986).

The recent deterioration of oil prices (especially since January 1986), the efforts made since 1983 to pay off foreign debt, and the high demand for foreign currency at the preferential rate of 7.50 Bolivars per US dollar established in 1983, combined to put enough pressure on the balance of payments

to motivate a new economic strategy and a second devaluation of the Bolivar in December 1986. A new exchange rate of Bs. 14.50 per US dollar was established for all imports and exports of goods and services, with some exceptions. (The Bs. 7.50/\$ rate remains unchanged for all imports and exports of the oil and iron-ore industries).

This new exchange rate was supported by other measures in order to reduce its effect on national investment, mainly the foreign investment regulations which had been relaxed in order to promote future foreign exchange contracts. The new laws gave investors clear-cut guidelines on the exchange treatment to be accorded to their investments and the remission of dividends abroad.

At the same time, in order to stimulate domestic investments, the Venezuelan Development Fund ("El Fondo de Inversiones de Venezuela") had announced that it would finance certain private investment projects through shareholder participation in mixed enterprises, and open overall lines of credit for the financing and development of specific high-priority sectors such as agriculture, industry, and construction of tourist infrastructure.

The effects of the most recent devaluation and the implementation of some measures which were announced

simultaneously are a source of current debate. Pedro Palma, a Venezuelan economist, gave a presentation to the Mason Fellows at Harvard University (Kennedy School of Government) on March 14 1987 about the short term effects of such a second devaluation. In his opinion, the devaluation would "generate earnings for exporters and reduce those of importers". In Venezuela, the principal exporter by far is the public sector, while the private sector is basically a net importer. Palma's estimate indicates that the recent measures would add approximately Bs. 35 billion to the Central Government (principally originating from exchange profits). The private sector would face a more difficult situation, the new exchange rate reducing the bolivar earnings from private exports and increasing the cost of imports and foreign debt service.

In Palma's national accounts, he forecasts a positive balance of 9,896 billion bolivars for the public sector and a negative balance for the private sector of 35,295 billion bolivars. Even if the government is capable of returning a large portion of this transfer to the private sector, while estimating that the government has at its disposal only 9.9 billion bolivars to invest, the private sector will undergo a net loss of income on the order of Bs. 25 billion. In order to continue stimulating public spending in the internal economy at the levels of the two previous years and to compensate for the transfers to the public sector, the Government must provide some additional Bs. 20

billion or more. Such resources will have to come from new credit sources in an amount equivalent to the country's public foreign debt service outlays.

It is in this perspective that the Guayana project has a national role to play. The Guayana region, under the administration of CVG, is being offered as a channel for investment and reactivation of the national economy, especially in attracting foreign capital. In chapter 3 we will observe why these required new investments tend to keep going to Guayana, and in chapter 4 we will see how CVG is facilitating these transfers to the region.

3) THE OUTCOME OF THE INDUSTRIALIZATION PROCESS:

As we have seen in the preceding chapter, it has become clear that important changes are taking place in Venezuela at this time, and new strategies must be provided in order to spur economic growth. These new strategies must take into consideration the relative positions of the main players: government, state-owned enterprises, the private sector and the labor force. The study of the industries associated with the Guayana Development Corporation can't be separated from analysis of the role of the other players.

In this chapter I have made a special effort to reexamine Venezuelan industrialization from an economic rather than a political point of view. This would help us to determine which economic variables are more important for the analysis of Venezuelan industrialization and to weigh the relative position of the main players in the economic arena. Understanding which are the more important economic variables will help us to define the relative position of the players and will allow us to make a better assessment of this case.

We can easily recognize that Venezuela has been a primary exporter since the beginning of the century (table 2.2 provides information for 1970-83). Today, as it was 25 years ago when the industrialization process and the Guayana project started, the

economy is still highly dependent on oil exports. Why has Venezuela been unable to reduce its dependence on oil revenues? How has Venezuela performed in relation to other countries which were primary exporters 25 years ago? How has Venezuela performed in relation to other oil-exporters in the last decade?

Studying the experience of other developing countries may help us understand the deficiencies of Venezuela's industrialization process. For the developing world, "different factors seem to suggest a balanced investment in heavy as well as light industry and a reduced share of manufactured imports in the gross national product". (Chenery, pg 2, 1986).

Venezuela, as we noted in Chapter 2, began its process of industrialization under the influence of specific economic theories. During the decade of the 50's Presbisch and Singer were advocating industrialization in order to offset the supposed disadvantages of specialization in primary production and the associated secular deterioration in the terms of trade. This ideology was based on two fundamental points: The clearly limited world demand for exports of primary products and the rising domestic demand for manufactured goods. These realities promoted a general import substitution strategy among Latin American countries that called for a balanced growth of the industrial and primary sectors.

Venezuela, like other Latin American countries, practiced an import substitution policy. It can be argued that such a policy would conflict with the neoclassical concept of comparative advantages, which suggests that Venezuelan advantages were in the oil industry (World Bank report of 1961) or in iron related industries as suggested after the appraisal of the Guayana region. This economic concept of comparative advantages and the progressive appraisal of the natural resource endowment of the Guayana region has been tremendously influential among policy makers during the entire democratic period.

Referring again to economic theory, any evaluation of an industrial process must take into consideration not only the natural resources available, or the allocation of human and capital resources in order to exploit them or to produce manufactured goods, but also the global changes in demand and supply as ways of guaranteeing transfers of modern technology.

In addition, trade policies have proved to be an important factor of economic growth among the more successful developing countries. Venezuela can't escape the temptation of referring to these successful countries to reexamine its industrial strategy. What Venezuela must keep in mind is that these trade-oriented economies have faced a completely different world economy and have arisen from different historical backgrounds. The international economy those countries dealt with in the period

1950-70 was a world of expansive international trade. Venezuela today faces a radically altered world, one where restrictions and protectionism are the order of the day. For example, in recent years the US and Spain have imposed a voluntary steel quota on Venezuela.

The argument for shifting from an inward-oriented to an outward-oriented strategy has been strengthened by the success of a small group of "newly industrialized economies", particularly by the four East Asian economies in this group: Hong Kong, the Republic of Korea, Singapore, and Taiwan.

Although these successful outward-oriented policies have received great attention in recent years, they have been only one of several ingredients in successful development strategies. Japan for example has been more notable for attaining a great increase in productivity than for having a particularly open economy (the "microchips-war" in March 1987 is a clear example). Venezuela is different from these successful super-exporters because it owns this natural resource endowment which includes oil, iron ore, cheap energy, gas and others. The general tendency of countries such as Venezuela, which have large resource endowments and primary-exporter economies, is to follow strategies of delayed industrialization, where, after a late start, manufacturing increases rapidly in response to the growth of domestic demand. It is important to notice that at the same

time Venezuela has the power to decide when to develop such resources. The timing and scale of such resource base developments would be a fundamental issue in the analysis of the general development and industrialization of Venezuela. What was in the hands of international corporations two decades ago, is today in hands of many independent producers such as Venezuela.

In addition to natural resource endowments and trade, other important factors such as the role of the Government and human resources have also to be considered in evaluating the actual and future capabilities of the Venezuelan economy.

We would expect Venezuela, like any other developing economy, to experience structural changes in its economy during the process of industrialization. In a neoclassical approach to evaluating the industrial process, we would only focus in the relative contribution of different sectors to total growth. However, using a broader perspective, should further take into account the failure to reallocate resources efficiently in order to increase exports or replace imports.

STRUCTURAL TRANSFORMATION:

Structural transformation analysis takes into consideration not only changes in agriculture, industrialization and demographic transformation, but also incorporates the

transformation of demand, trade, production and employment into a single framework. The structural approach focuses on differences among sectors of the economy which may inhibit equilibrium adjustments in resource allocation as implied by neoclassical theory. Neoclassical theory assumes that equilibrium is maintained over time, which limits the sources of growth to factors on the supply side. The evidence seems to suggest that Venezuela is a good example of the failure to achieve an efficient allocation of resources as implied by the neoclassical theory.

In an equilibrium growth perspective as suggested by Chenery,

competitive equilibria that underline neoclassical theory are a convenient starting point for growth analysis because they permit any group of inputs to be aggregate on the basis of their marginal productivity (Chenery, 1986: 16).

In equilibrium growth theory, all primary inputs are categorized as either capital or labor. Each of these can then be consolidated on the basis of its share in the total product. The difference between the growth of total output and the weighted average growth of capital and labor serves as a measure of the increase in Total Factor Productivity (TFP) for the economy as a whole.

Comparative studies designed to measure the importance of capital, labor and productivity, have been carried out for several economies, including Venezuela. These studies indicate

that the growth of capital, labor, and productivity are of comparable importance for the whole, but vary significantly with the structure of a specific economy and the effectiveness of its policies.

In his comparative study of different economies, Chenery analyzed the different contributions to growth; analyzed the growth of outputs, inputs, and Total Factor Productivity (TFP); and elaborated a table from which I extracted the averages given for different groups of countries: developed, developing and centrally planned economies. We can compare these values with the Venezuelan figures.

Table 3.1

The Growth of Output, Inputs, and Total Factor Productivity.

Economy	Years	Growth value added (Gv)	TFP		Total Factor input		Growth of capital (Gk)	Growth of labor (Gl)
			Growth rate (Ga)	share	Growth rate (Gf)	share		
Developed		5.4	2.7	49.0	2.7	51.0	5.2	1.1
Centrally planned		8.2	2.5	35.0	5.7	65.0	8.0	4.5
Developing		6.3	2.0	31.0	4.3	69.0	5.5	3.3
Venezuela	50-60	7.85	2.15	27.4	5.7	72.6	7.2	3.7
	60-74	5.1	0.6	11.8	4.4	88.2	4.5	3.3

Source: Extracted from Chenery, table 2-2, (1986).

From the averages given, developed economies are characterized by the small growth of labor inputs (1.1 per cent), moderate growth of capital (5.2 per cent) and output (5.4 per cent), and a relatively large contribution of TFP to aggregate

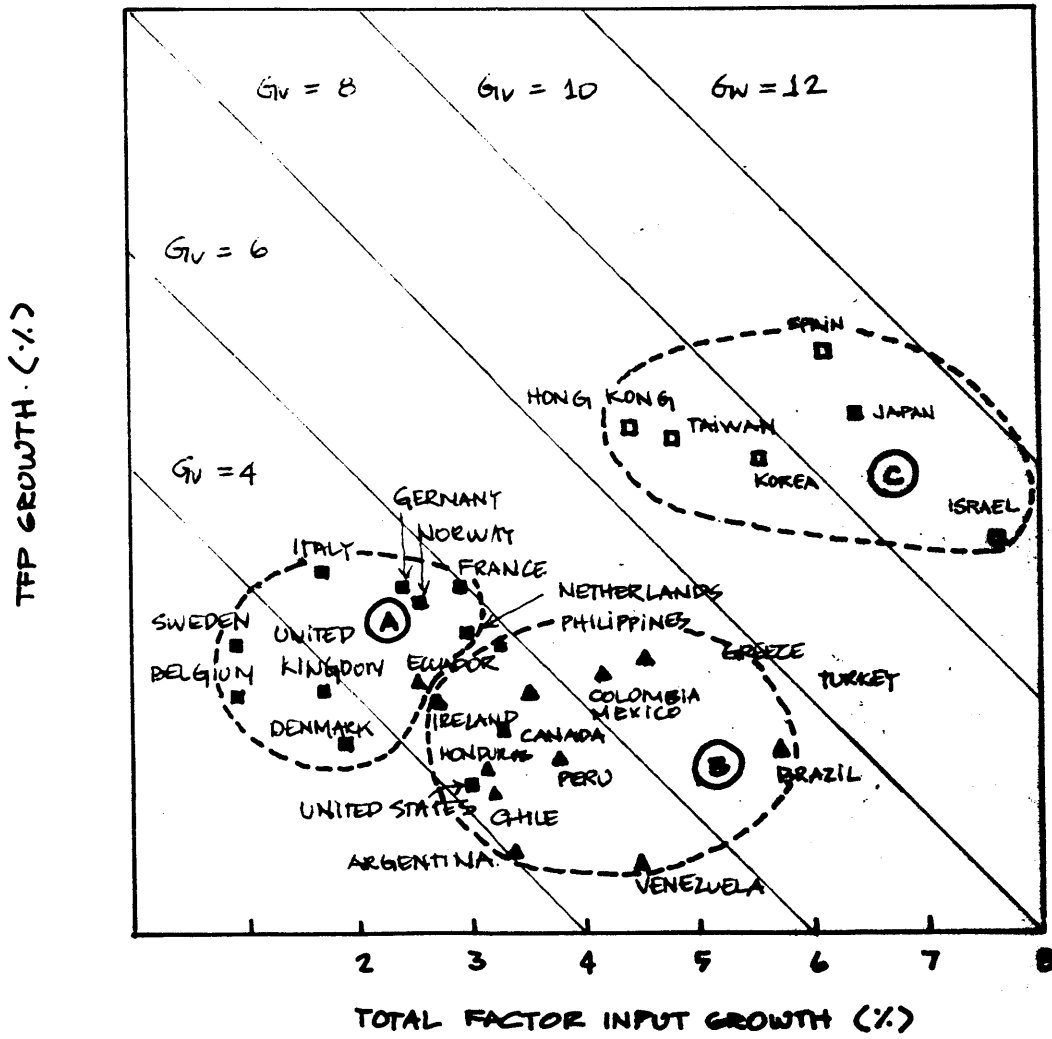
growth (50 per cent). The developing economies, in contrast, have a high growth of labor inputs (3.3 per cent), a higher total factor growth (4.3 per cent) and a relatively small contribution of Total Factor Productivity (TFP) to aggregate growth (30 per cent).

The Venezuelan experience is remarkable in its relative position between the countries studied. Figure (3.1) shows the relationship between total factor productivity growth and total factor input growth. We see here that the developed countries fit within a smaller cluster, A, defined by relative low factor growth, with TFP accounting for between 50% and 70% of overall growth. Developing countries are divided into two clusters: the large one, B is characterized by TFP growth between 0.5 and 2.0 percent. The smaller one, C, is composed of five developing economies plus Japan, with aggregate growth (Gv) of more than 10 per cent. (See Figure 3.1). Venezuela stands with a total growth of 5.1 per cent, where such growth was basically spurred by total factor input growth (4.4 per cent), and where increase of TFP contribution to total growth was practically insignificant (0.6 per cent).

Grouping the countries in those categories mentioned before, and performing a regression analysis, we arrive at Figure (3.2). It is interesting to note that both sets of regressions point to the relative inefficiency of the growth processes of the typical

FIGURE 3.1

RELATIONSHIP BETWEEN TOTAL FACTOR PRODUCTIVITY GROWTH AND TOTAL FACTOR INPUT GROWTH.



SOURCE: CHENERY AND OTHERS. "INDUSTRIALIZATION AND GROWTH" (1986) PG 25.

developing country in cluster B (where Venezuela stands with one of the lowest productivity rates). In terms of the production functions represented in Figure (3.2) a typical developing economy with relatively high factor input growth of 5 per cent can expect aggregate growth of 6 per cent, whereas developed countries or efficient economies predict growth of about 9 per cent.

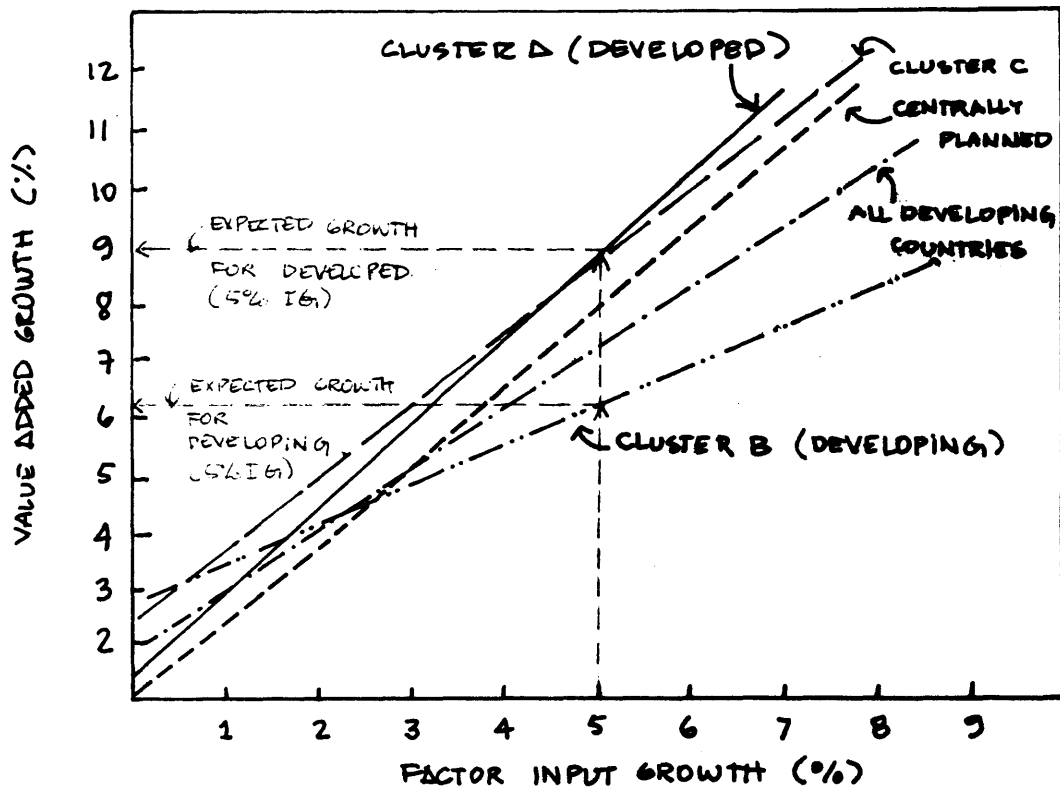
The question that immediately arises is, how do we explain such inefficiencies in the Venezuelan economy? Having had an important increase in its total factor input growth, why didn't Venezuelan economy increase proportionally? Equilibrium growth can't explain this imbalance.

Several factors suggest the importance of incorporating the effects of disequilibrium into the study of Venezuela's growth. The structural variables we should look to in explaining growth rates are: (1) Reallocation of labor and capital; (2) Growth of exports; (3) Capital inflows; and, (4) Level of development. It would seem that one of these variables, or a combination of them, can help us to explain Venezuela's disappointing performance.

The structural transformation approach used by researchers to evaluate the performance of a specific economy proposes studying the structural transformations of an economy in a time series. This approach provides both the aggregate data available for a

FIGURE 3.2

RELATIONSHIPS BETWEEN VALUE ADDED GROWTH AND FACTOR INPUT GROWTH.



large number of countries and the detailed time series of individual countries.

We can define the structure of an economy by its supplies of productive factors - labor, capital and natural resources - and their employment in different sectors. We can then define the structural transformation of a developing country as,

the set of changes in the composition of demand, trade, production, and factor use that takes place as the per capita income increases. A main thesis is that to understand country differences in sources and rates of growth, the transformation as a whole must be analyzed. More specifically, changes in demand and trade may affect the sources of growth as much as the changes in factor supply (Chenery, 1986: 32).

Cross-country studies between developing and developed countries yield two general results: First, they identify several aspects of structural changes that affect the rate of growth and that have a varying importance at different levels of development. Secondly, the structural factors in the cross-country regressions are all more significant for developing countries than for developed ones. Investment is the only source of growth shown to be important for both groups.

In order to compare different countries, Chenery and his colleagues have proposed to break down the supply-side analysis by sectors first and then to combine it with a corresponding breakdown of demand and trade. The result is a demand side view

of the factors leading to structural change and growth that is consistent with the supply-side analysis.

An analysis of the Venezuelan economic structure and the role of the Guayana regional economy in the global economy will require the use of input-output analysis, which will describe inter-industry relations. Including demand and production functions which depend on relative prices, we will have a general equilibrium approach as proposed by Johansen's 1960 study of the Norwegian economy.

PATTERN OF TRANSFORMATION:

Growth processes of a developing country can be best understood as a part of the overall transformation of its economic structure. This interdependence works in both directions: income growth causes changes in the composition of domestic demand and production, and conversely, rising investment rates and the reallocation of labor tend to increase aggregate growth (Chenery, 1986: 37).

Taking into account both demand and supply analysis for growth, and applying this approach to the analysis of a small developing economy such as Venezuela, we would expect to see many of the structural changes observed in other developing countries.

The most common feature of industrialization among developing economies is the shift from agriculture to other, more productive

sectors, such as manufacturing. This process, which is always related to urbanization, has been observed in Venezuela during the last three decades. The Guayana project foresaw the absorption of part of this global phenomenon. The urban population has reached 80 percent of the total population in recent years.

Another characteristic of Venezuelan industrialization is the high level of its exports, and in consequence the high level of its imports. This is a common pattern among small countries which are rich in natural resources; they tend to have a high level of trade and this high level of trade would tend to reduce with population size increase. Increased income from favorable terms of trade would shift domestic demand.

In the case of Venezuela, with respect to domestic demand, one reason for changes in the productive structure is the decline of the share of food in private consumption as income rises. This shift in the overall pattern of demand allows all other components to rise. In Venezuela, domestic demand definitely increased after the first oil boom, and there is some evidence that the second oil boom was absorbed mainly by increased demand. After the effect of declining oil prices and the agricultural policies which followed from this decline, agricultural prices increased dramatically. We would expect domestic consumption to be affected in such a way that the private capacity to save will

probably be affected; the capacity for private investment for other sectors must also be diminished by implication.

A basic concept to be remembered in order to analyze the Venezuelan industrialization experience is that industrialization is commonly measured by the rise in the share of manufacturing in GNP. In a general equilibrium context, as presented by Chenery in his comparative study (1986), industrialization is a property of the system as a whole, in which the fall in the share of primary production is offset by a rise in social overhead as well as in manufacturing. Generally the causes of the rise in manufacturing differ considerably from those of the decline in primary output. Venezuela is a good example of this independent process, with the increase of primary exports we saw an increase in manufacturing, as well as a decrease in the primary exports without an increase in manufacturing. In today's world, unlike Presbich's world, volatility also affects primary production.

As we have shown, Venezuela has comparative advantages in the production of crude oil, energy production and iron related industries, and we would expect that through import substitution and the expansion of manufactured exports, Venezuela would move away from the specialization in primary products that is characteristic of early stages of development. Although the tendency towards shifts in comparative advantages ultimately affects all developing countries, their magnitude and timing vary

greatly. As we mentioned before countries with small populations such as Venezuela have relatively specialized economies and a high share of trade in GNP, and we would expect that trade share to decline markedly with increasing population.

In a country like Venezuela, with access to large amounts of natural resources, the way in which these resources are exploited has a substantial impact on the country's comparative advantages.

To show the importance of size and resource endowments in trading patterns, Chenery and Syrquin proposed a two-way classification of countries, based on their population size and their relative specialization in primary or manufactured exports.

The typical small and primary-oriented economy such as Venezuela's, seems to maintain a strong comparative advantage in primary exports throughout the transformation of its domestic demand, while exports make little or no contribution to the rise of industry. In these cases industrialization is largely the result of increased demand produced by rising income. The shift in the composition of output with rising income reflects the reallocation of labor and capital from primary production to manufacturing and services. In a dynamic analysis of the structural transformation of this type of economy, manufactured imports are replaced much more slowly. The comparative advantages

in primary production delays the development of manufactured exports.

TYOLOGY OF INDUSTRIALIZATION.

In the comparative analysis presented by Chenery (1986), special emphasis is placed on trade strategies rather than internal policy (resource mobilization). This emphasis leads to a three-way classification pattern of specialization (large - L; small, primary oriented - SP; and small, industry oriented - SM). This typology of semi-industrial economies recognizes the effect of structural features such as size and resource endowment as well as trade policy.

If we take trade policy into account, we can say that Venezuela is an outward primary-oriented economy, taking as evidence the importance of primary exports in total exports. Following a policy of industrial protectionism, Venezuela has tried to accelerate growth while at the same time making exports earnings entirely dependent on primary products. The negative impact on the industrial share in output associated with the enormous rise in the price of energy in the 1970's (Dutch disease) will be apparent in Venezuela.

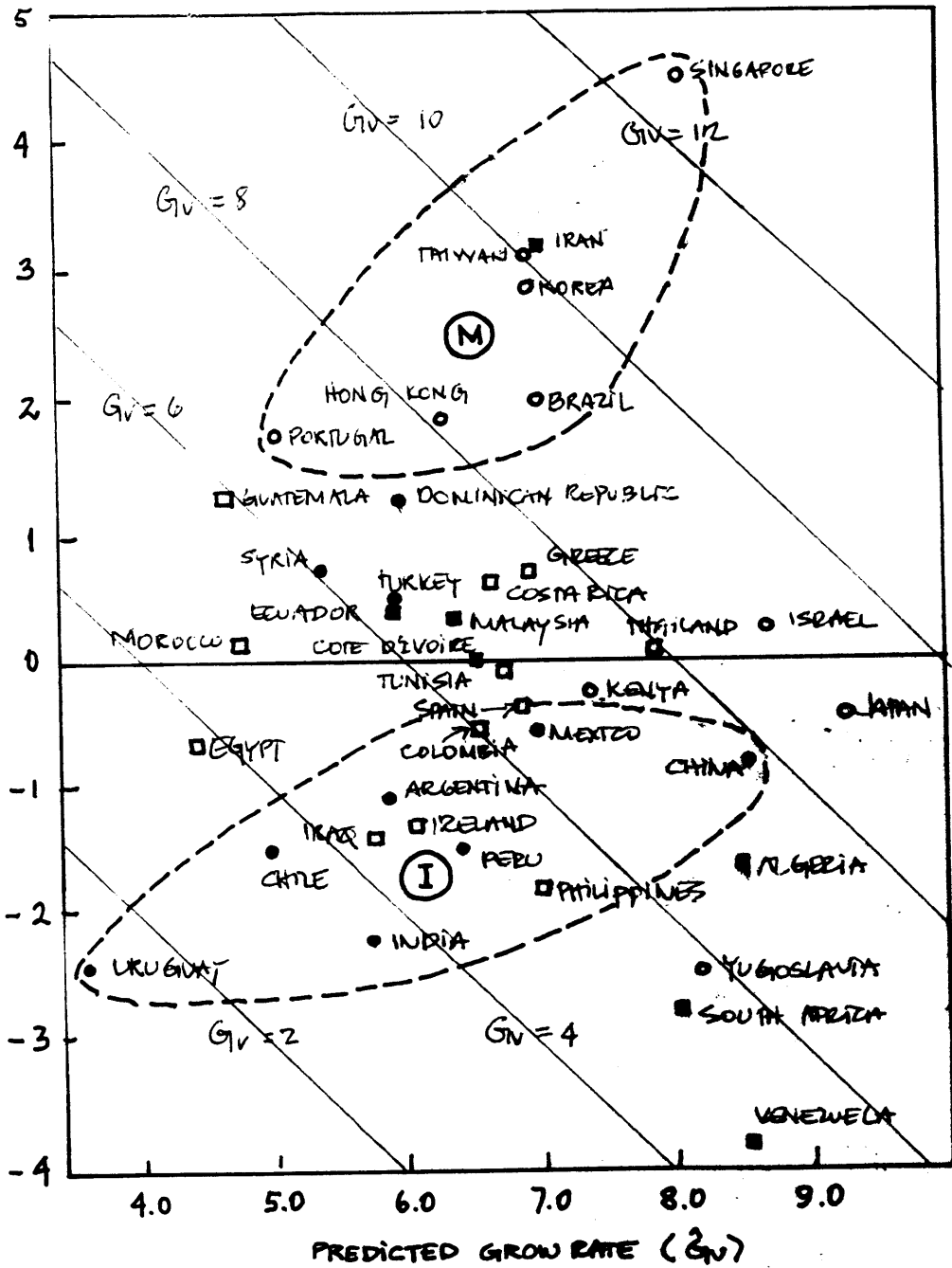
Chenery (1986) points out that, "development strategies try

to accelerate growth either through increasing the supply of labor and capital, or through a more efficient use of resources". As we noticed before, Venezuelan growth is explained basically by the labor and capital input growth, where TFP has had an insignificant contribution to growth. Chenery and his colleagues constructed figure 3.3 to show how trade strategies could be associated with differences in levels of efficiency, and the relative importance of growth in factor inputs, and the importance of efficiency in explaining differences in growth rates among countries. Using both time series and cross-country estimates of sources of growth, the efficiency of an economy is measured by the difference between its observed growth rate and that predicted from the growth of its factor inputs. This comparative analysis shows us that Venezuela is not only below the average efficiency of the entire sample but also below the group average (I) of the inward oriented economies. In short, the relative efficiency of the Venezuelan economy in relation to what could have been expected from its factor inputs growth is very low.

To aid explaining the differences in sectoral sources of growth between countries, it has been established that the principal sectoral sources of growth are: shifts in final demand, increased use of industrial products, and shifts in comparative advantage away from primary production. In case we are concerned within Venezuela, as in other primary-oriented economies,

FIGURE 3.3

FACTOR INPUTS AND RELATIVE EFFICIENCY OF SEMI-INDUSTRIAL ECONOMIES.



KEY: ■ PRIMARY-ORIENTED
 ● INWARD-ORIENTED
 □ NEUTRAL
 ○ INDUSTRY-ORIENTED
 G_v GROWTH RATE IN PERCENT
 M, I MEDIAN

SOURCE: CHENERY AND OTHERS, (1986), CHAP 9.

manufacturing uniformly contributes less to growth than is typical for other countries at the same income level. "But the inhibited effects of the growth of primary exports on manufacturing (the Dutch disease) are outweighed by the accelerated growth of domestic income". (Chenery, 1986: 99).

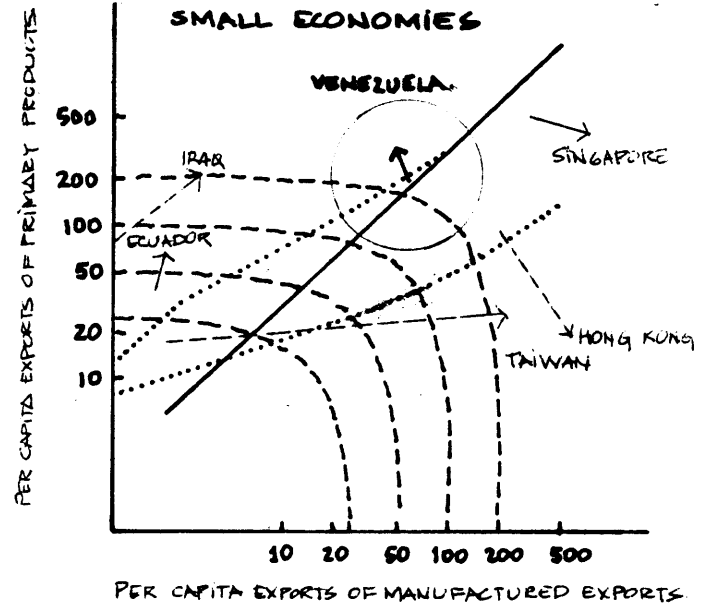
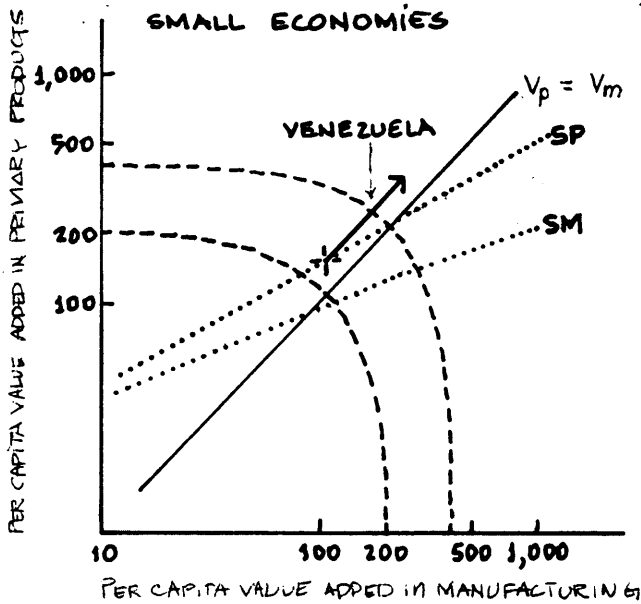
Timing also will affect virtually all aspects of development strategy. As in the Venezuelan case, "the exploitation of natural resources for exports tends to slow down the development of other tradable goods" (Chenery, 1986: 99). If this is a general tendency, we can imagine what will happen if the exploitation of those natural resources is done in excess of the estimated requirements.

TRANSFORMATION OF PRODUCTION IN VENEZUELA.

Because industrialization is characterized by a rising share of manufacturing in the production, exports, and employment of the tradable sectors, the figures shown concentrate on these dimensions.

Figure 3.4 Per capita value added primary products vs manufacturing Transformation of production and exports during period 1953-73.

Figure 3.5 Per capita exports



Source: Chenery, (1986), pg 104 and 105.

Venezuela's transformation (1953-1973) is particularly characterized by a large increase in per capita value added in manufacturing (see figure 3.4). At the same time, Venezuela has maintained a constant structure (value added) in its production. But for the same period it seems that Venezuela has intensified its per capita value added in primary products in comparison to the average for small-primary exporters (dotted line SP), which shows a shift toward higher manufacturing shares of production, exports and employment. This bias in Venezuela's case is explained by increasing dependence on oil revenues that intensified after 1973. Due to improved terms of trade for primary exports (oil), the composition of exports in Venezuela

has temporarily reversed the tendency to shifts towards manufactured exports. (see figure 3.5).

In general we observe a somewhat slower transformation of production in primary oriented countries such as Venezuela, and a rapid transformation in most of the manufacturing-oriented countries. The mentioned slower transformation among primary-producers is known as the "Dutch Disease" (DD). Venezuela is not exempt from this phenomenon. In 1973, Venezuela had a tremendous capital inflow (10% of 1972 non-oil GNP) that could have spurred a corresponding GNP growth. In order to explain why this didn't happen, we have to observe where Venezuela invested the income from its oil exports. This case is important because the success of the OPEC oil cartel is not paralleled by any of the primary-producer countries.

The first objective in order to evaluate the importance of the "windfalls" produced by higher oil prices is to divide the economy between mining and non-mining, rather than oil and non oil segments. This approach is proposed by Alan Gelb (1986). Following table 3.2, Gelb gives us an indication of the base absorption structures of seven oil economies and compares them to Chenery-Syrquin norms for countries at a similar level of non-mining income per capita. Venezuela, Iran and Algeria "with large and long-established oil sectors", stand out as the most mineral-dependent. The breakdown of extra absorption indicates

particular strong investment biases in Algeria, Venezuela and Trinidad. What kind of investment biases is Gelb referring to, and how important are they in relation to the entire economy?

Table 3.2

Composition of absorption: 1970-2 in relation to the Chenery norm

	Algeria	Ecuador	Indonesia	Iran	Nigeria	Trinidad	Venezuela
Pri C							
A/N-M	64.5	75.5	83.5	72.2	80.2	80.9	62.8
Norm	66.0	68.0	75.0	64.0	70.0	78.0	62.0
Pub C							
A/N-M	18.0	10.6	9.8	23.4	8.6	n.a.	16.4
Norm	14.0	14.0	12.0	14.0	14.0	n.a.	15.0
Invest							
A/N-M	40.8	20.6	17.5	27.0	22.1	31.0	36.6
Norm	20.0	19.0	15.0	22.0	17.0	22.0	23.0
Absor							
A/N-M	123.3	106.7	110.9	122.7	111.0	119.0	115.8
Norm	100.0	101.0	102.0	100.0	101.0	100.0	100.0

Breakdown of extra absorption (%)

Pri C	-6	132	96	36	102	24	5
Pub C	17	-60	-25	41	-54	n.a.	9
Inves	83	28	28	44	51	76	86
%oil/ex	79	77	51	90	82	78	91

A/N-M = Actual /non-mining GNP

%oil/ex = Share of oil in exports (1972).

Pri C = Private consumption.

Pub C = Public consumption.

Inves = Investment.

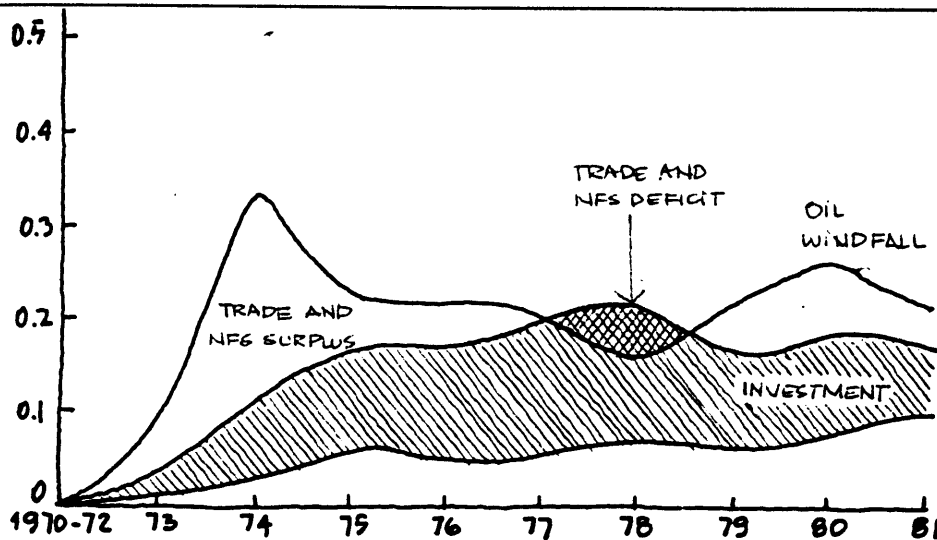
Source: Gelb, Alan. (1986), Table 2.3

The Venezuelan oil windfall of 1974-78 represented 11 per cent of Venezuela's non-mining GNP, while the oil windfall of 1978-81 represented 8.7 per cent. After 1979, slower real growth of oil sectors reduced the impact of the price windfall. Figure 3.6 indicates the average time profile during 1973-1981 of the

windfall as measured above for six countries, expressed relative to their non-mining economies each year.

Figure 3.6

The oil windfall and its use, 1973-1981. (Unweighted average: Algeria, Ecuador, Indonesia, Nigeria, Trinidad and Tobago, and Venezuela)



Source: Gelb, Alan (1986), figure 2.1.

In Venezuela, the impact of the oil windfall was reflected in fiscal revenues, and we find that central government revenues jumped from 25% of non-mining GNP to 36%. Total revenues in terms of the percentage of non-oil GNP accrued to the government progressed as follows:

From 25.2% in the period 1970-72, to
42.1% in the period 1974-1978, to
36.3% in the period 1979-1981.

Public oil income in Venezuela had led the state's role to gain importance over a long period of time. As in the case of other oil exporters, Venezuela experienced an "unparalleled growth in the size of the public sector after 1973 and this sector most experienced a considerable extension of its role, towards direct participation in industrial production". (Gelb, 1986).

In this chapter we have sought for a better sense of how to explain the success or failure of Venezuelan industrialization. The evidence shows us that in spite of having had tremendous capital inflows, Venezuela did not use them efficiently to further its economic growth.

Two main explanations for this problem can be advanced: First, that exchange rates made manufacturing non-competitive and promoted flight of capital. Second, that policies regarding utilization of capital inflows were mistaken; the figures suggest that such investments were placed principally in energy-production, steel and aluminum -- all of them over-concentrated in the Guayana region -- without allowing resources for other sectors. Although non-oil private investment boomed in Venezuela, increased investment was overwhelmingly public. In the period 1974-78 public investment absorbed about half of windfall surpluses. In the next period of 1978-81, the use of windfall was generally similar except that private consumption increased at the expense of domestic investment.

As predicted by the Salter-Swan neoclassical model (Gelb, 1986), exchange rates appreciated, and with the shift in production structure towards the non-traded sectors, dependence on oil for foreign exchange increased. At the same time, we can expect that "the impact of higher public spending on growth may be low if the quality of investment projects declines with accelerated spending" (Gelb, 1986: 76).

The impact of expanded investment on Venezuela's growth has been, at first glance, disappointing compared to the record of other oil-producers, as we see in the table following:

Table 3.3

GROWTH TRENDS (%) in the oil exporters, 1967-81.

	Non mining GNP		Domestic investment		Goods and non-factor serv Exports Imports			
	67-72	72-81	67-72	72-81	67-72	72-81	67-72	72-81
Algeria	9.5	8.6	17.7	10.8	5.7	(1.0)	11.6	10.8
Ecuador	4.7	7.6	3.2	10.2	15.9	6.0	6.0	9.7
Indonesia	8.5	8.2	24.3	13.0	15.7	4.3	16.7	19.1
Iran (a)	10.1	13.3	10.2	21.1	12.9	(0.3)	17.7	23.7
Nigeria	9.2	5.3	(b)	8.7	(b)	(4.2)	(b)	15.3
Trinidad	5.3	5.4	6.1	9.3	2.5	(6.5)	6.6	8.4
Venezuela	6.5	5.1	11.9	3.5	(1.3)	(8.7)	7.7	12.8
MEAN (d)	7.3	6.7	12.4	9.3	7.7	(1.7)	9.7	12.7
Middle income oil importers	5.8(c)	5.1(c)	8.2	5.6	6.7	4.0	7.4	1.5

(a) 1967-72 and 1972-7

(b) Deflated data unreliable before 1970.

(c) GNP

(d) Excluding Iran

Source: World Bank in Alan Gelb's "Adjustments to windfall gains"

On average, real private consumption and public investment were larger than public consumption in the period 1974-78. For the next period a further rise in consumption aggregates implied a substantial cut in investment. The non-oil growth performance of Gelb's example was exceptional in the 1967-72 period. At 7.3 per cent, it was some 1.5 per cent higher than the average growth of GNP in middle income developing countries. Also, average non-oil growth after 1972 was still 0.6 per cent more rapid than oil-importing developing countries through the favorable period the 1970's.

In the case of Venezuela non-oil growth was 6.5 per cent during the period 1967-72 and 5.1 per cent for the period 1972-81. During the latter period economic growth was the same as the average for middle-income countries, and it should be noted that domestic investment for the period 1972-1981 was on the average 3.5 per cent not only lower than other oil producers but also lower than middle income oil importers.

As we studied before, in examining Chenery's comparative analysis of developing countries, growth in income is associated with a shift from primary production to industry and services, and later on from the sectors conventionally considered as tradable -agriculture and manufacturing- towards services and construction. In table 3.4 we can see that Venezuela had one of the most severely skewed economies in sectoral terms before the

oil price rise, that is skewed in terms of the size of the service sector (67 per cent in 1972).

Table 3.4
Sectoral Structure. Initial conditions 1972.

	Alger		Ecuad		Indone		Iran		Niger		Trinid		Venez	
	A	N	A	N	A	N	A	N	A	N	A	N	A	N
Agriculture	11	25	23	26	45	46	22	18	39	38	6	16	8	14
Manufacturing	16	20	20	19	11	11	18	25	5	15	22	26	19	27
Construction	13	5	5	5	4	3	6	6	11	4	8	6	6	7
Services	60	50	52	50	39	40	53	51	45	43	64	52	67	52
(MI)	18	4	2	4	12	6	28	3	15	5	9	2	20	2

Source: Gelb (1986). pg 81. A = Actual N = Norm (Chenery, 1975)

Venezuela, with Algeria and Indonesia, managed to strengthen their non-oil tradable sectors. These three countries also managed to raise domestic food and agricultural supplies. Despite a policy objective of reducing oil-dependence, non-oil exports contracted on average 1.7 per cent annually during the period 72-81. Venezuela, Nigeria and Trinidad did not experience a sharp decline in agriculture and manufacturing.

As we noted several times before, Venezuela, like most of the countries studied by Gelb, channelled windfall gains into petrochemicals and heavy metals, as well as developed transport and communications systems. Public projects tended to be large and complex and frequently were highly capital-intensive (see following table).

Table 3.5
Macroprojects in oil-exporting countries (a).

Country	No. of proj.	Cost (\$b)	Aver. Cost (\$m)	Cost 1980 GNP	Cost 1980 wind fall countries.	Rank amo. devel.	Hydro carbon	Metal	Other Ind.	Infra structure.
Iran	108	119.6	1,107	1.57	10.2	2	30	7	9	54
Algeria	69	38.7	561	1.07	4.2	5	36	7	33	23
Venezuela	27	27.4	1,015	0.51	5.4	10	33	41	7	19
Mexico	59	26.0	441	0.18	5.1	.2	46	17	12	25
Nigeria	19	14.4	758	0.17	0.9	15	26	11	16	47
Indonesia	44	14.4	327	0.23	1.1	16	41	18	16	25
Trinidad(b)	7	6.9	983	1.35	4.5	--	61	29	--	--

(a) Projects with costs exceeding \$100 million.

(b) Gas-based industrial projects only. Includes Tenneco-Midcon LNC project proposed for 1988.

(c) 1977 GNP and oil windfall.

Sources: Murphy (1983) table 2.5; Auty and Gelb (1984) and table 2.13 in Gelb's "Adjustments to windfall gains" (1986).

Venezuela's investment program placed heavy emphasis on metals (steel and aluminum), representing five times its 1980 oil windfall or half its 1980 GNP. Where are these investments? Principally in the Guayana region. Why have those investments accumulated in this region?. The answer to this question was partially put forth in chapter 2, where we studied the linkages between the Accion Democratica party, which was the recipient of the first and decisive oil windfall, and the Guayana Development Corporation. In my opinion these huge investments previously described set the precedent of the current large investments in the region (Black-hole effect), which in turn caused institutional arrangements within CVG in order to achieve the

industrial support required by the industries already in place.
This restructuring will be the focus of chapter 4.

4) CORPORACION VENEZOLANA DE GUAYANA (CVG):

In order to understand fully the significance of this chapter we should briefly recapitulate what we have seen thus far.

Chapter Two covered the following points: First, we outlined the progress of a successful import substitution process, from the end of the 40's up to mid-70's, and how this model seems to have become exhausted. We also saw how the Venezuelan government and industry collaborated during the democratic era. Second, we observed how the government, in an attempt to diversify the Venezuelan economy and balance economic growth in the country, launched the Guayana development. We noticed the ideological linkages between AD and Guayana's development, the latter becoming a strong image for the former. The linkages between Guayana and AD explain the large investments in Guayana since 1973. Third, we observed the current situation of the Venezuelan economy, where the Government is faced with reduced incomes and, in its urgent necessity to reactivate the economy (no real growth from 1980 to 1985), it seeks investment from private or foreign investors or through added new debt. These additional investments have many prospective clients who wait a share in these scarce new funds: the state-owned enterprises which require more investments in order to get out of the red, and the private-sector partners.

Later on, in the third chapter, we took note of the importance of the investments made in the heavy metal industries complex of Guayana in relation to the gains from the oil price increases. These investments help explain why Venezuela has performed so poorly in comparison to many other developing countries.

In this chapter I will explain how CVG is implementing an import substitution industrial strategy designed to support the installed industrial complex. This is not a simple import substitution policy for consumer goods as it was in the 60's. This time CVG is attempting a more difficult and delicate one: the substitution of industrial inputs and capital goods for this complex. For this next period, CVG is depending on the participation of the private sector, but the private sector has alternative investments and distrusts having the state-owned enterprises as a principal client.

This key variable of alternative investments for the private sector is the dilemma that CVG has to solve in order to promote the integration of the state-owned enterprises with the private sector. This chapter will investigate the steps CVG is taking to accomplish this delicate task. In doing so we must remember that the expectations in 1965 for the Guayana region in 1980 were that it would be a main export center. With this in mind we will then

enter into the conclusions of this thesis with regard to Venezuela's economic crisis.

4.1) Introduction.

The implementation of CVG's new industrial objectives cannot be fully understood without presenting the internal restructuring of CVG and the evolution of its previous goals within a historical framework.

4.1.1) Original Objectives:

The Guayana Development Corporation was created by presidential decree No. 430, enacted on December 29, 1960, in the form of an Autonomous Institute of the Venezuelan State, attached to the Office of the President of the Republic. Said decree assigned to the CVG the following objectives:

- a) To study the resources of Guayana, both within the zone of development and outside of it when required by their nature.
- b) To study, develop and organize the exploitation of the Caroni river's hydroelectrical potential.
- c) To program the development of the region in accordance with, and within the scope of, the National Plans.
- d) To promote the development of the region in both the private and the public sector.
- e) To coordinate the economic and social activities carried out in the region by various official organizations.

- f) To contribute to the organization, planning, development and operation of the public utilities required for the development of the area.
- g) To carry out, by fiat of the National Executive, any other task which may be connected to operations outside the zone, in cases where there exists a close relationship to those being performed within the zone.

4.1.2) Goals:

The activity of the Guayana Development Corporation is set out by the guidelines of the VI National Plan and by Decree of Regionalization No 478, which expanded the spatial scope of the action of the Corporation to the Federal Territories of the Amazon and Delta Amacuro. In this sense, CVG participates in the formulation, coordination, and evaluation of plans and programs and in the execution of projects related to physical infrastructure, urban regulation, mining, agricultural and forest developments, promotion and execution of technical improvements and training programs.

According to Decree number 2, issued by the Presidency of the Republic on February 2, 1984, CVG is entrusted with the coordination of the State enterprises located in the Guayana region. It was necessary to amend its organic statutes to adapt its organization and operation to this new mandate. To this end, CVG work through two kinds of managerial units: the enterprises

and the Office of the Vice President for Development. Through these two units, CVG fulfills its responsibilities: the integral development of the region, the coordination of the public sector agencies and the coordination of the State Enterprises.

4.1.3) Industrial Development:

The Guayana region has at its disposal of resources which, by their variety and quantity, are ideally suited for the development of a good part of the industries needed by the country for a first rate development:

- a) Abundant water, both for the production of energy and for industry, navigation, agriculture and human consumption.
- b) A port, capable of handling an intense river traffic of more than 700 ships per year, through the use of the existing wharves in Ciudad Guayana.
- c) High content of iron and bauxite ores as well as other minerals; abundant and low-cost hydroelectric power, oil and gas in the neighboring Eastern region which includes the Orinoco bituminous oil belt, and the most extensive forest reserves in the country. Moreover, its advantageous location on the Orinoco navigation channel gives products from Guayana a ready access to international markets.

The Guayana program was conceived as an important contribution to the diversification of the Venezuelan economy by means of the development of an industrial complex based on these

extraordinary resources, and this is its main objective. A second goal consists of the creation of a pole of development, in competition with Caracas and other cities of the country, as a center of attraction for population, so as to lead to a more balanced national development and to incorporate into the Venezuelan economy an immense region which, although historically important, has remained underpopulated and practically marginal. When speaking of the Industrial Development of Guayana, one must take into account that it has been oriented not only towards the national market, but also towards the full realization of its export potential.

To reaffirm the importance of the Guayana program, it suffices to mention the investment plans carried out during the 1975-1979 period both by the public sector and the private sector, which exceeded 42 billion bolivars. The Plan IV steel production expansion represents by itself only a 15 billion bolivar investment while the investment in the aluminum production increase amounted to 3.5 billion bolivars. These are only to quote two outstanding examples, without mentioning investments in specialty steels, ferrosilicons, cements, forging, castings and other products.

The 240 meter drop of the Caroni - which is Venezuela's second largest river - in its last 210 kilometers before its confluence with the Orinoco river, represents a hydroelectrical

potential of more than 17 million kilowatts, one of the largest of any river in the world.

A general perspective of the main achievements and plans of CVG is given in table (4.1).

4.2) Organizational evolution.

CVG has progressed from a corporation in charge of an industrial program, to a Regional Development Corporation and coordinator of the State enterprises located in the Guayana region. Since its creation, the Corporation had gone through various stages; at the beginning it was mainly in charge of the development of the Caroni River hydroelectrical plant, the steel plant and the new city. During the last Christian Democratic Government (1978-83), CVG suffered from a certain degree of financial constraints. One reason for these financial constraints may be that the Guayana project has never been a priority for the leaders of this party. This is demonstrated by the actions of the Ministry of Public Works in the previous Christian Democratic government, which was mentioned in Chapter 1. Having no political support, CVG had three different Presidents during that government (1978-83).

The reduced income from the oil industry has moved public opinion against the actual government. As we noted, the resources

TABLE 4.1

 GUAYANA DEVELOPMENT CORPORATION (CVG)

Program of developments

RESOURCE FOR 1960		FOR 1986	FOR 2010
ENERGY	Macagua I 360,000 KW	Guri 10,000 MK	Bajo Caroni Macagua II Tocoma Caruachi 18,000 MK
ALUMINUM	Non existant	Capacity 400,000 tons	2nd plant + 3th complex Capacity 2,000,000 tons
STEEL	Sidor 1,000,000 tons	Sidor 4,800,000 tons Pellets 6,600,000 Direct reduction 4,000,000 tons	Sidor 4,800,000 tons Pellets FMO 10,000,000 tons New modul-recov. 5,500,000 tons
GOLD	Free explotation	Minerven 1,500 Ks.	Minerven new plant & ref of 3,000 Ks.
WOOD & PAPER	Free explotation	Caribe pine 190,000 Has. Pulp plant proj.	Caribe pine 400,000 Has. Pulp plant CTMP 200,000 tons. Pulp plant Kraft 200,000 tons. Lumber mill
ORINOCO	Chanel up to Pto. Ordaz Ferry boat between: Bolivar-Monagas in Los Fajardos Bolivar-Anzoategui in Soledad	Widening of the chanel to Pto Ordaz Widening and signalization of the chanel from Pto. Ordaz to el Jobo (Bauxiven)	Buxiven project- terminal P. Ordaz- El Jobal project Navegation: - Middle Orinoco - High Orinoco - Apure - Orinoco
CARONI	Utilization of hydroelectric resources Ferry boat betwween Pto. Ordaz y San Felix	Widening hydroelectric resources	Widening hydroelectric resources

URBAN	Integration of urban centers. Roads Ferry boats	System of roads and avenues Bridges: - Two bridges over Caroni river	Widening of road system Angosturita bridge (mix vial and rail Express system between S.Felix-Guayana City.
INTRA-REGION	Ferry boat: - Rio Aro - Rio Caura - Rio Cuchivero Railroad: - El Pao-Palua - Piar City-Pto. Ordaz	Widening of road Highways: C. Bolivar-P.Ordaz S. Felix-Upata Ferry boats: Rio Caura R. Cuchivero Bridges: Rio Aro Rio Caura & Rio Cuchivero (const) Bridges & asphalt: El Dorado-S. Elena Caicara-Pto Ayacucho	Highways: S. Felix-Upata Integrated road sy Conclusion Dorado-Sta. Elena and Caicara-P.Ayacucho Bridges: Caura and Cuchivero (conclusion) Express system (S. Felix P. Ordaz)
INTER-REGION	Ferry boat: Bolivar to Monagas between San Felix-Los Barrancos Bolivar to Anzoategui between Bolivar-Soledad Bolivar to Guarico between Caicara-Cabruta	Integrated vial system. Bridges: Angostura-Orinoco between C. Bolivar and Anzoategui Ferry boats maintained between: S. Felix-Los Barrancos Caicara-Cabruta	Widening of the vial system. Bridges: IInd bridge over the Orinoco river. IIInd bridge over the Orinoco (rail) Railroad system joining Bolivar st with the rest of the country.

POPULATION

Guayana	115,000 habs	978,068 habs	2,300,000 habs
Guayana		350,000 (1979)	1,200,000 habs
Guayana City		554,704 (1985)	

Sources:

CVG - Oficina para el nuevo enlace sobre el Orinoco
Maria Engracia de Delgado (1986)



 ZONA DE DESARROLLO ESTABLECIDO POR EL ESTATUTO C.V.G.

 CAPITALES DE ESTADO

 LIMITE DE ESTADO

 LIMITE DE DISTRITO

 VIALIDAD PRIMARIA

 VIALIDAD SECUNDARIA

 CARRETERA DIQUE

 DIQUES

 DIQUES EN PROYECTO

 OLEODUCTOS

 GASDUCTO

 AEROPUERTOS


DESARROLLO AGROPECUARIO ZONA DELTA

PROYECTO ISLA GUARA

RECURSOS AGROFORESTALES

ZONA DE MANGLARES

 PETROLEO

 HIERRO

 DIAMANTE

 ORO

 CARBON


 SAL

MANGANESO

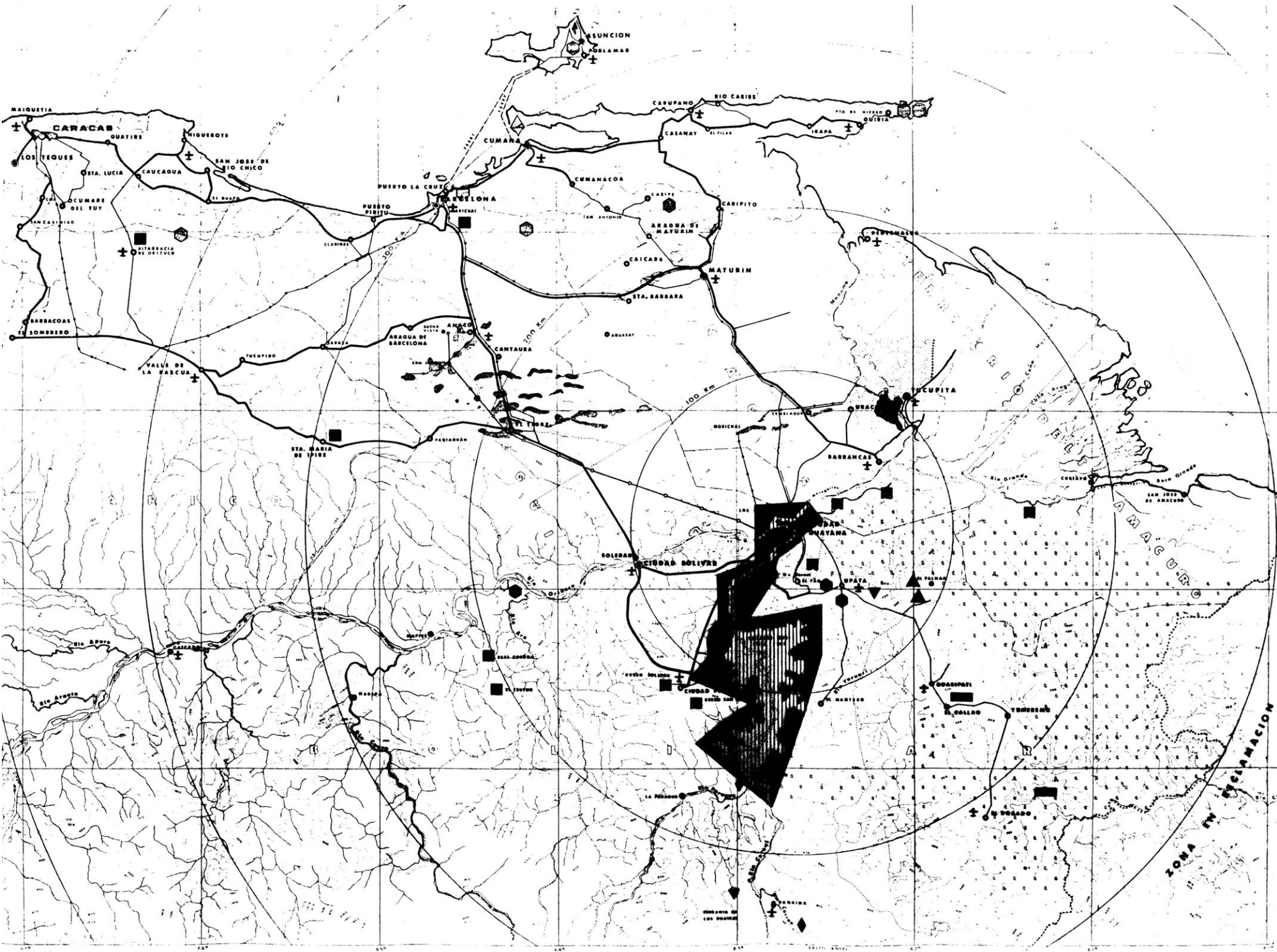
 MAGNESITA

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to achieve economic growth at the State's disposal are the public industries (basically oil and the Guayana complex) and the private sector (industry and agriculture).

The new AD government (1983-1988) has again given priority to the Guayana project, and some changes have been made in order to increase CVG's autonomy in relation to the executive branch of government. One of the major changes made in 1984 was the decision that the President of CVG will also be a Minister of the Government. This means that the President of CVG will report directly to the President of Venezuela, bypassing previous difficulties that arose when CVG was subordinated to the Ministry of Development. At the same time, CVG coordinates the State enterprises located in the Guayana region, since some of the state-owned enterprises had major equity participation by the Venezuelan Development Fund (for example, Alcasa).

At present, after the institutional changes and the renovated political commitment to the Guayana project, funds are coming directly from the Inter-American Bank and the Venezuelan Development Fund through the Industrial Credit Fund (FONCREI). These resources have been principally addressed to the aluminum industry, for projects such as the opening and exploitation of the "Los Pidiguaos" bauxite mine, the expansion of the aluminum smelters of ALCASA from 125,000 to 200,000 tons, and the amplification of VENALUM from 250,000 to 400,000 tons.

4.3) New leadership - Leopoldo Sucre Figarella.

Now that Lepoldo Sucre Figarella has become the new leader of CVG, the corporation will pursue its goals to advance from mere promotion of an industrial park to acquiring responsibility for the development of the entire region and coordinating all the activities. Figarella, whose leadership skills are indisputable, is a native of the Guayana region. His family are descendants of a group of Corsican families who have played a strong role in the economy and leadership of the region from Bolivar City (Ciudad Bolivar) through its history. Figarella was also Minister of Public Works throughout the AD period from the dictatorship until the Christian Democratic government of 1969-1973. This position provided him with local support and the support of the national technocracy. His leadership since 1983 is evident in the rapid achievements and broad-based local support for the regional programs. The institutional changes achieved and the financial resources set aside for the region since 1983 are examples of Figarella's executive abilities.

4.4) Recent economic objectives:

There is no doubt that the Guayana region must play an important role in the industrial reactivation of Venezuela in order to keep pace with the new job requirements added each year and even to absorb some of the present unemployment. The region

offers the resources (principally natural resources) to help achieve a diversified economy, which may reduce dependence on oil.

The decline of oil revenues and the economic situation that promoted devaluation in 1983, have obviously required a reexamination of the national industrial strategy. In terms of the Guayana region, the first available document from the CVG redefining the industrial strategy came from the previous government, nine months after devaluation and one month before new elections. The new strategy proposed:

- Linking the basic industry to the medium and small industries.
- Reducing the vulnerability of basic industry by import substitution.
- Expanding present regional development to include new territory.
- Use of industry to take advantage of the primary sector.
- Complementing the industrialization process with a commercialization process.

Linking basic industry to medium and small industry:

At the end of 1982 CVG was aware that commercial and other industries were closely related to basic-industry activity. The fact that such a dependency between the two exists does not necessarily mean that it is a correct model to follow. At the

time it was projected that harmony would occur when small and medium size industry produced the majority of the inputs required by basic industry.

Reducing the vulnerability of industry by means of import substitution.

The next step in industrial promotion results from the opportunities which arose when the bolivar was devaluated. Currently, it could be cheaper to produce locally some of the inputs for industry. Large amounts (60 per cent) of inputs to the Guayana complex were imported in 1982, and the first challenge was to reduce such imports. For example, the aluminum industry will no longer import as much bauxite, once the development of the bauxite mines is completed (BAUXIVEN).

Integrating regional development with regional spatial development.

The industrial process in the Guayana region must not only take advantage of the large resources of the region but also promote the extension of this development to marginal areas, even those regions where there is no significant State presence. For these reasons it seemed necessary to flank the economic and financial decisions with considerations of regional strategy.

Use of the industry in the development of the primary sector.

This was understood as the development to a certain degree of agriculture and agro-industry, and also the development of certain organizational models for the exploitation of precious minerals in an industrialized and profit way.

Complementing the industrialization process with a commercialization process.

The purpose of this step was to establish support for those industries which, because of their size, could not develop a commercialization process themselves. Its goal was to allow such industries to place their products abroad. In this way, the small and medium sectors will benefit even though they do not have their own international sales organizations. At this time the import substitution model started to show the possibility of exports.

4.5) Division of Industrial and Mining Promotion (Gerencia de promocion Industrial y Minero).

Especially after the devaluation of 1983, the strategy explained previously, needed a channel for its implementation. In consequence the division of Industrial and Mineral Promotion was created (or reformulated its previous goals).

One of the first ideas developed by this division was to create an information service to be used by all of CVG,

especially by the industry promotion division itself and to be offered to the public (SIDI or Servicio de informacion para el desarrollo industrial). Such an information system was designed to cover the following subsystems:

- 1) Access and information recovery.
- 2) Aluminum (SIMA); including all the information related to Bauxite, alumina and aluminum.
- 3) Industrial inputs (Subsistema de insumos industriales SII).
- 4) Legal information (Subsistema de informacion legal SIL).
- 5) Financial information (Subsistema de informacion financiera SIAF), related to mechanism, financial entities disposable for industrial promotion.
- 6) Industrial projects and information register (Subsistema de informacion y registro de proyectos industriales). This subsystem includes a project bank which was initially the Industrial Development Division. This bank has now become public. At that time, an initiative to identify potential new industrial projects called project-ideas was also promoted to consider the characteristics of the region and to take advantage the potentially become industrialized.

Also, the Division of Industrial Promotion proposed a serious effort to initiate an industrial input survey, not only covering basic industry, but also the whole industrial complex of the region. All these new ideas led to the promotion of the Division of Industrial and Mineral Promotion (Gerencia de

promocion industrial y minero) as the responsible agent for the new strategy in the government.

4.5.1) Import substitution committee and the promotion of new industries:

There will be two focuses of the new division: first, import substitution for the Guayana complex, and second, promotion of new industries. In the context of Guayana, the trade-off between import substitution and export-oriented industries is a crucial issue. Most of the actual effort by CVG is oriented towards the appraisal of the input requirements of the Guayana heavy industrial complex. The corporation is collaborating with other state-owned enterprises such as PDVSA (oil corporation) in order to measure an aggregate demand and develop a coordinated import substitution strategy in such industries.

The CVG objective is that the industries which they will promote, could have a certain export capacity. In other words, the state has defined certain areas where private investors can obtain definite guaranteed sales to CVG industries, and from there excess capacity can be transferred to exports. Even though there have been no policies for specific export industries, some export industries have appeared. What does not seem to be defined is a strategy for promoting export oriented industries per se.

4.5.2) Import substitution committee:

Since the first attempts to evaluate the demand of basic industry, there has been resistance from the purchase departments of the Guayana industries to the provision of requested information about the inputs; such complaints have come principally from the Regional Chamber of Private Industries. These private industries increased their claims when devaluation (1983) made evident the necessity to produce locally the basic-industry input. The private industries demanded information in order to address their efforts to supply the requirements of basic industry. The reality is that the import substitution policy since 1983 in the Guayana complex has had relatively little success.

It is from this perspective that we must analyze the import substitution strategy for the Guayana complex. In September 1985 the Import Substitution Committee (Comite de Sustitucion de Importaciones) was created with representatives from all of the CVG industries. This committee's principal goal is to coordinate actions in order to achieve a progressive and effective import substitution. The committee's main goals were determined as:

- 1) - Diminishing the dependency on foreign supplies of raw materials, machinery, equipment, spare parts and technology.
- 2) - Joining efforts to diminish the negative effects related to the flight of foreign currency.
- 3) - Contributing to the increase of the private industrial

park, through consolidation of the installed facilities and the creation of new investment opportunities.

In 1986, the achievements of this committee could be summarized as follows:

- Creation of a unique register of suppliers, in order to achieve common technical standards for imported inputs.
- Disseminate the import substitution policy.
- Evaluation of metal-related industries installed in the region, in order to estimate their capacities for import substitution.
- Exchanges among the different import-substitution committees in the different CVG-industries.
- Evaluation of the progress/status of the import substitution program for each CVG-industry.
- Development of product specifications for common products in the basic industries.
- Presentation of a list of project-ideas to the "Gerencia de Promocion Industrial".
- Presentation of the achievements to different governmental agencies, chambers of commerce, PDVSA (oil corporation), and Engineers' professional association.
- Establishment of guidelines for an information register for each industry.
- Utilization of common experience and specific information to evaluate common objectives, such as qualification of suppliers.
- Organization of a forum with local and national entrepreneurs interested in import substitution.
- Support of a special South-West trade (Guayana-Andean) for the experimental transport of metallurgic coke to the Guayana complex via the Orinoco river.
- Establishment and utilization of a continuous process of providing information among national agencies in order to facilitate information on the exchange of common objectives and experiences.
- Provision of a list of requirements for

parts and pieces actually imported to the local chambers of commerce.

- Attendance by the import substitution committee and the personnel of the basic industries at a presentation organized by PDVSA to present the unified register of PDVSA-suppliers to the oil and petrochemical industries.

- Coordinate meetings with the CVG-Corporative Planning Vice-presidency and the import substitution committee, for the purpose to analyzing import substitution problems and studying possible alternatives to advance in the process.

4.5.3) Identification of new investment opportunities, promotion of new industries and the implementation strategy.

The promotion of new industries can not be seen separately from the implementation strategy. As was noted before, at the beginning of 1983 CVG initiated a compilation of the project-ideas that the Corporation had accumulated since 1960 and decided to amplify this project-idea-register (pre-investment). Then, with the creation of the Industry and Mineral Promotion Division, CVG selected seven of the largest Venezuelan engineering consulting companies (Inelectra, Technoconsult, Vepica, Otepi, Marshall y Asociados, Cavein, and Proyecta) and proposed the financing of feasibility studies to be done by one of these companies (sharing the expenses and the risks).

Once the project-idea is identified, the consulting company makes a proposal for a feasibility study at market prices. Once an agreement on such a study is achieved, CVG then gives 50 per cent of costs of the study to the consulting firm. The other 50

per cent is covered by the consulting company. The modality practiced by the consulting firm is not important to CVG; CVG places capital and the firm can participate with its labor, utilities, or money. Then, if the study is favorable, the consulting company will be a stockholder in the new industry. This project-idea does not have to come exclusively from CVG, it can come from any source.

The most important result is that in this way an efficient use of the local "know-how" is guaranteed, because no one else has a better understanding of the national engineering capacities than these firms.

This practice manages to combine two worlds, one with the financial resources and one with the resources of information and "know how" (Interview with Rafael Pena, Manager of la Division de Promocion Industrial y Minero, January 1987).

This practice was well received by the Consulting firms, most of them having been in precarious situations prior to this initiative.

In 1984 CVG signed two important agreements: One with CORPOINDUSTRIA (in charge of promoting medium and small enterprises) and the other one with FONCREI (Industrial Fund). The interest of these agreements is to reinforce collaboration between CVG and the small and medium size industries, and to grant resources to the Guayana region. Such agreements were previously accorded with the Venezuelan Development Fund. Also,

collaborative activities were undertaken between CVG, CI and other industries without formal written agreements. Examples are the industrial park survey realized in 1986 and the exchanges with the Industrial Chamber of the Zulia region.

After all this effort on the part of CVG, which is the outcome of the strategy of import substitution, the next table gives us the value and quantities substituted in by the different enterprises:

Table 4.2

Results in the process of import substitution in CVG's state owned enterprises.

Concept	1983		1984		1985		1986	
	A	B	A	B	A	B	A	B
Quantity (1) (accumulated)	503	-	964	-	2,538	3	3,514	6
Amount (M bs)	74		119		190		312	
at Bs 7.5/\$	\$9.9		\$15.9		\$25.3		\$41.6	
at Bs 14.5/\$	\$5.1		\$8.2		\$13.1		\$21.5	
increase			60%		60%		64%	

(1) Quantity of inputs substituted.

A = Material and spare parts

B = Raw materials

Source: Committee on Import Substitution (1986).

Firms: Sidor, Venalum, Alcasa, Interalumina, Fesilven, and Ferrominera del Orinoco (Iron ore mines).

This table is the only information available to evaluate the action of the new strategy. The information provided is useless since we can not refer to the total amount of imports to

TABLE 5.1 : TOTAL AND PER CENT EXPORTS (in millions of dollars)

Year	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Commodity breakdown:													
- Aluminum						18	135	309	347	287	411	361	405
per cent of total exports						0.2%	1.2%	2.1%	2.0%	1.9%	3.0%	2.3%	2.9%
interannual change							650.0%	128.9%	12.3%	-17.3%	43.2%	-12.2%	12.2%
- Iron ore						109	108	114	143	75	75	79	106
per cent of total exports						1.5%	1.0%	0.8%	0.8%	0.5%	0.6%	0.5%	0.8%
interannual change							-0.9%	5.6%	25.4%	-47.6%	0.0%	5.3%	34.2%
- Oil						6,881	10,431	13,889	16,008	14,017	12,609	14,433	12,668
per cent of total exports						94.8%	95.2%	94.9%	94.6%	94.8%	92.5%	92.7%	90.7%
interannual change							51.6%	33.2%	15.3%	-12.4%	-10.0%	14.5%	-12.2%
- Other						247	285	326	432	414	536	704	784
per cent of total exports						3.4%	2.6%	2.2%	2.6%	2.6%	3.9%	4.5%	5.6%
interannual change							15.4%	14.4%	32.5%	-4.2%	29.5%	31.3%	11.4%
TOTAL						7,255	10,959	14,638	16,930	14,793	13,631	15,577	13,963
interannual change							51.1%	33.6%	15.7%	-12.6%	-7.9%	14.3%	-10.4%
SHARE OF EXPORTS IN GNP (4)				30.3%	27.9%	24.6%	30.5%	32.2%	29.7%	24.3%	22.3%	27.5%	24.8%

Source: (1) "Balance of Payments Statistics". International Monetary Fund, Volume 37, Yearbook, part I, 1986.

(4) Ministry of Energy and Mines, Lagoven "Data on Petroleum and Economy of Venezuela".

TABLE 5.2 : NET EXPORTS OF THE GUAYANA REGION (in million of US dollars)

Year	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
EXPORTS:															
Aluminum: Amount (1)	10.6	7.9	10.5	14.3	10.4	11.3	6.3	17.0	102.7	209.1	233.9	208.6	292.2		
Value (1)	6.7	5.0	5.8	14.0	10.1	11.4	7.6	18.7	143.7	335.3	366.1	275.4	386.0	370.0	411.0
														(3)^	(3)^
Steel: TAP [MT] (1)	924	1,127	1,063	1,031	1,069	941	868	696	1,495	2,077	2,030	2,278	2,320		
Value (2) & (3)								21.3	54.3	113.1	159.7			134.0	192.0
								(2)^	(2)^	(2)^	(2)^			(3)^	(3)^
Iron Ore: TAP [MT] (4)					24,772	18,685	13,683	13,600	15,260	16,103	15,531	11,200	9,449	13,310	15,481
Dom Cons [Bs] (4)					9,106	8,457	6,338	6,500	12,400	11,800	13,600	12,900	12,250	16,107	19,850
Exports [Bs] (4)					250	575	250	600	700	2,900	2,900	4,000	3,542	4,686	5,102
Exports[\$] (1)	154.3	138.7	179.3	281.5	274.5	229.4	171.7	149.7	138.1	279.1	334.4	186.8	161.6	81.0	108.0
Check ratio Bs/\$ Exports					0.9	2.5	1.5	4.0	5.1	10.4	8.7	21.4	21.9	(3)^	(3)^
TOTAL:								189.7	336.1	727.5	860.2			585.0	711.0
IMPORTS:															
Bauxite: Amount Gross [MT] (1)			2.3	6.6	3.5	9.2	12.6	6.0	66.7	34.3	32.7	67.0	1,121.0		
Amount Al [MT] (1)			0.7	2.3	0.8	2.2	2.2	1.4	15.3	7.9	7.5	15.8	264.5		
Imports[\$] (1)			0.1	0.5	0.3	0.3	0.4	0.6	6.9	3.3	4.4	6.1	5.3		
Alumina: Amount [MT] (1)	15.5	15.3	17.1	41.2	31.2	60.0	52.0	75.5	191.9	251.9	348.3	323.0	330.0		
Imports[\$] (1)	2.6	2.6	3.0	7.6	6.7	13.4	11.6	26.5	70.0	94.5	141.5	129.4	122.9		
TOTAL:			3.1	8.1	7	13.7	12	27.1	76.9	97.8	145.9	135.5	128.2		
TOTAL DIFFERENCE:								162.6	259.2	629.7	714.3				

Source: (1) Yearbook of International Commodities Statistics (1985), United Nations.

TAP = Total Amount Produced

(2) Trade Statistics - Yearbook, 1984, Volume I.

(3) EIU, Venezuela 86-87, Country profile. Original source Banco Central de Venezuela.

(4) Ministry of Energy and Mines, Lagoven "Data on Petroleum and Economy of Venezuela".

evaluate the success or failure of the policy. Knowing that CVG industries are capital intensive, with large amounts of foreign technology, and judging the action of the import substitution committee and the new industrial strategy by these numbers, it would seem that the substitution has been quite modest in real terms. In my understanding, the actual implementation appears to be somewhat effective. But even though the implementation might be the right one, that does not mean that the strategy itself is correct; again the question is, at what price we are going to substitute? Are we certain that these inputs are going to be produced cheaply in the country?

Assuming that the amounts substituted are not significant, we can explain the failure of this strategy in one of three ways: (1) the strategy is so recent that it hasn't had time to show results; (2) the strategy has not been directed towards solving the main problems confronted by the goal to be accomplished (import substitution); (3) it is a right implementation but a wrong mandate (import substitution).

Exploring the second and third options together, we saw that CVG industries were oversized and the logical interest of CVG is to reduce foreign dependence in its industries; at the same time, the private sector is mainly interested in export-oriented industries. This will explain why CVG is not promoting export-oriented industries and why the private sector is not

collaborating more intensively with the government in import substitution. Also, this strategy suggest to me that the Venezuelan government is entirely biased towards capital intensive industry development against light manufacturing. This preference for capital intensive industries was acquired in its relation with the oil industry, where it was easy for them to allocate the resources among a few industries, and reap the benefits from one or two of them.

5) CONCLUSIONS:

How should we analyze the performance of Guayana's industrial program? We can express our evaluation in political terms, in economic terms, in financial rentability or in social terms.

Starting with the political approach, we can say that CVG played an important role in the strengthening of AD and in the democratic process. A strong government, in turn made a strong CVG possible; when conditions permitted the government was generous with the program. Today, even with scarce resources the state is giving additional funds to the CVG program. If the period 1974-79 was biased towards the Guayana Industrial program, today this tendency is maintained.

Even with the political support enjoyed by the Guayana program, what are the financial and economic gains of the investments accumulated there? We should first look at the proportion in which Guayana is contributing to total exports and compare these figures with projections made in 1965. The figures provided by IMF (table 5.1) show that oil still contributed 91 per cent of export earnings, although in 1965 planners promised that the Guayana region would account for 25 per cent of exports earnings by 1980.

I have made an estimate of actual investments and how they relate to actual exports. The total accumulated investments in Guayana are 70,000 mm Bs, which equals 16,3 billion US dollars. From this total 45,000 mm Bs were spent in the 1974-79 period distributed in the following way:

Steel (Plan IV Sidor)	15,000 mm Bs / \$3,5 billions
Aluminum	3,500 mm Bs / \$0,8 billions
Electricity	30,213 mm Bs / \$7,0 billions
- Guri Dam	22,019 mm Bs / \$5,1 billions
- Transmission	8,194 mm Bs / \$1.9 billions

These figures are the ones normally provided by CVG; overruns suggest higher amounts.

In relation to power generation, EDELCA, the operator of the Caroni River hydroelectric dams of Macagua and Guri (10MK), is not covering the power generation costs. The Guri dam expansion decided on during the oil bonanza optimistically assumed domestic demand doubling every six years, but the dam is now being utilized at mere 60 per cent capacity mainly for problems in the construction of the distribution system.

In relation to the Aluminum industry we can say that the original investment estimates for the three aluminum projects was \$1.2 billion (Auty, 1986) that would have an value added of \$400 millions. However, the implementation of those projects doubled the capital cost, eroding competitiveness of all plants. Despite

the experiences of the first expansions, further growth is foreseen in order to absorb additional Guri power.

As for steel, the worst investment, the planned expansion from 1 million to 15 millions tons over the period 1975-1990 has been contained at the present capacity of 4.8 million tons provided by Plan IV. This design capacity reached 2.32 million tons in 1983, and today, eight years after the initiation of the expansion, output has yet to reach half of the 4.8 target despite an expenditure of \$ 5 billions, which represents an overrun of 50 per cent.

We can easily say that the Guayana development has temporarily drained the diversification possibilities of the country. And there is a risk that such tendencies will remain through the current industrial strategy of import substitution and vertical integration of the industries in place. For example, we can mention the following current investments to be directed towards the region:

ALUMINUM:

Bauxite mines total cost	\$460 mm (2)
foreign exch. requirements (IDB)	\$108 mm (2)
ALCASA	
- Expansion 120 m to 220 m ton	\$640 mm (1)
- 5th line of smelter	\$720 mm (1)
- Purchase of Belgian mill	\$15 mm (1)
VENALUM	
- 110 m ton expansion	?
- Purchase of US downstream facilities.	?
CONARE, wood industry development	\$86 mm (2)
foreign exchange req. (IDB)	\$34 mm (2)

EDELCA, expansion of electric syst.	\$1,750 mm (2)
foreign exchange req. (IDB)	\$350 mm (2)
	<hr/>
TOTAL	\$3,671 mm
Orinoco Bridge	1,500 mm Bs. or \$100 mm (3)

- Sources: (1) EIU, Venezuela Country report No 1, 1987.
(2) Interamerican Development Bank.
(3) El Universal, Caracas. Assuming 14.5 Bs/US\$

Assuming that these will be the final costs and that they will not be overruns, we can see that once oversize investments in energy production are in place, all related industries (steel and aluminum) become oversize in consequence. The steel industry ambitioning 15 million tons. The aluminum industry pursuing forward linkages, and minimum sizeable plants pushed up the size of the entire chain (aluminum smelters, alumina production and bauxite exploitation). From a minimum of 3 million tons for the bauxite mine, CVG is immediately tempted to increase alumina production. Making less questionable further increase in alumina production, and in consequence aluminum.

Other reasons for the voracity of the Guayana region are: One, the miscalculation of cost and scheduling in the implementation process, due to a lack of adequate international partners and the overconfidence of the local ones. CVG's state-owned enterprises are characterized by a very low level of participation of foreign capital that will would provide modern technology and efficiency during the implementation phase, and would compensate for domestic gaps in technical, managerial and

marketing skills during plant operations. Second, a similar overconfidence in the stability of high oil prices, which led our policy makers to think that the development of Guyana was justifiable even at high costs, because there would always be available funds derived from oil exports.

The most dramatic element at present is that, in my understanding, the private sector prefers to participate with the oil sector instead of investing in joint ventures with CVG, in spite of the great emphasis that CVG is giving to the implementation of an innovative import substitution strategy.

The new exchange measures taken by Venezuela since 1986 and the improved climate for foreign investments (Nov 1986) might improve the actual trends, but there is no doubt that the success of the new strategy will depend on convincing of the private sector the opportunities offered by CVG.

We can easily see through this thesis that the Venezuelan industrial strategy (1973-87) is based on a few capital-intensive, resource-based industrial projects. This strategy of resource base industrialization was inefficient and concentrated in Guayana; preventing resources from diversifying in smaller projects or in other manufacturing industries. I am convinced that I gave sufficient reasons to explain why that happened, mainly the political input in the decision making process that

launched overambitious targets, "overestimating the potential benefits and underestimating difficulties" (Auty, 1986).

It is clear to me that a major political input was vital to the launching of the Guayana project and that without this input it would have been impossible to create this completely new pole of development, building an entirely city which now houses and employs half a million inhabitants and scores of industrial plants. However, the time has come for a changing of the guard: the political component in the decision making process must now give way to a managerial style less encumbered by the political power accumulated by the Venezuelan government.

It is not merely a question of the government stepping back, it is also that the private sector must step forward and assume responsibility for the future growth of the Venezuelan economy.

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ANNEX 1.

List of interview realized in Ciudad Guayana and Caracas.

ALCASA:

Martinez, Celestino - President.

Rodriguez Pulido, Rafael - Vicepresident for Marketing and Development.

Hermoli, Victor - Construction Division.

Escobar, Victor Hugo - Project of extension.

BANCO DEL ORINOCO:

Useche, Aurelio - Vicepresident.

COMISION PARA LA REFORMA DEL ESTADO (COPRE):

Gabaldon, Arnoldo - President.

Sosa, Carlos - State Enterprises.

CORPORACION VENEZOLANA DE GUAYANA:

Presidency:

Arreaza, Roberto - Vicepresident.

Gerencia de Promocion Industrial y Minero:

Pena Alvarez, Rafael - General Manager.

Vicentelli de Mago, Elba

Ing. Suarez, Veira

Ing. Ortiz, Daniel

Soc. Sanz, Maria A.

Lic. Morillo, Marbelia

Gerencia de Planificacion fisica:

Chemello, Andres - Gerente General

Oficina para el nuevo puente sobre el rio Orinoco:

Delgado, Maria Engracia.

INTERALUMINA:

Ing. Robles - President.

SULFORCA:

Monteverde, Jose Antonio - Site engineer.

List of interview realized in Cambridge.

Sosa, Carlos - February 3th, March 18th, 1987.

HARVARD INSTITUT FOR INTERNATIONAL DEVELOPMENT (HIID):

Auty, Dr. Richard - March 17th, March 30th, 1987.

ANNEX 2

List of abbreviations

AD.	Accion Democratica, Social Democratic Party.
ALCASA.	Aluminum smelter, previous a 50%-50% joint venture with Reynolds Aluminum.
BAUXIVEN.	CVG-Company in charge of the exploitation of bauxite mines of "Los Pidiguaos".
CONARE.	CVG-Company in charge of the exploitation of the planted Cariba pine areas in Monagas State.
CARONI.	River, that cross Ciudad Guayana.
COPEI.	Christian Democratic Party.
CORPOINDUSTRIA.	Institut in charge of developing small and medium size enterprises.
CVG.	Corporacion Venezolana de Guayana.
CVF.	Corporacion Venezolana de Fomento.
ECLA.	Economic Council for Latin America.
EDELCA.	CVG-Company in charge of the development of Caroni river Hydroelectricity. Macagua I & II, Guri dam.
FONDO DE INVERSIONES DE VENEZUELA.	Fund created to invest the oil windfall.
FONCREI.	Industrial Fund (Fondo de Credito Industrial).
IDB.	Inter-American Development Bank.
INTERALUMINA.	Interamericana de Aluminios. Alumina producer.
MINERVEN.	CVG-Company in charge of the exploitation of "El Callao" gold mines.
SIDOR.	Steel producer. Participation of CVG.
VENALUM.	Aluminun smelter. Joint venture Japan-CVG-Fondo de Inversiones de Venezuela.