

VIABILITY OF GROWTH WITH LOW INFLATION  
IN LATIN AMERICA AN ECONOMETRIC  
STUDY OF THE VENEZUELAN CASE  
May 1986

Pedro A. Palma and  
Domingo Fontiveros

May 1986

VIABILITY OF GROWTH WITH LOW INFLATION IN LATIN AMERICA.

AN ECONOMETRIC STUDY OF THE VENEZUELAN CASE. (\*)

Pedro A. Palma and Domingo Fontiveros(\*\*)

(\*) Paper presented at the Seminar "Policies for Growth Without Inflation in Latin America" held on May 9, 1986 at the Wharton School, University of Pennsylvania, under the sponsorship of the Lauder Institute of the University of Pennsylvania, the Center for International Management Studies of the Wharton School, the Global Interdependence Center and CISI-Wharton Econometrics.

(\*\*) Palma: President of MetroEconómica, and Professor of Economics at the Institute of Higher Studies of Administration, (I.E.S.A.), Caracas. Fontiveros: General Director of MetroEconómica, and Assistant Professor at Universidad Católica Andrés Bello, Caracas. We are grateful to Richard Melman, Carlos van Maanen, Salomon Frieder and other members of MetroEconómica's staff for their support.

VIABILITY OF GROWTH WITH LOW INFLATION IN LATIN AMERICA.  
AN ECONOMETRIC STUDY OF THE VENEZUELAN CASE.

Pedro A. Palma and Domingo Fontiveros

Introduction

During the last few years, it has become common to assert the need for economic policies designed to bring the Latin American countries out of their prolonged recession, in ways which also cope with their chronic external disequilibria and do not generate additional inflationary pressures.

One of the recommended measures contemplate the increase of wages, by means of some sort of institutional arrangement (government law, social pact and the like), in order to raise internal demand and thus stimulate production. For this policy approach to be successful, however, it would be necessary to find a way to prevent the transfer of higher labor costs to final prices; otherwise the resulting inflation would neutralize a large part of the nominal wage increase and block the achievement of the desired "consumption-led growth".

To prevent this sort of cost-pushed inflation the government may decide to provide by itself low interest loans for the absolute amount of the increase in salary bills --or to subsidize interest costs if these loans are channelled through commercial banks -- to private firms that raise wages. Such credit facilities would offset the immediate impact of increased salaries on costs; as a counterpart benefited firms would commit themselves not to pass the labor cost increase along to prices of

their goods or services.

This paper will analyze the effects of the application of a policy of that kind on the Venezuelan economy, through the simulation of two alternative scenarios with the help of the MODVEN VI econometric model, developed by the authors and frequently used in MetroEconómica's forecast exercises.

(1) A Frame of Reference (1979-1985)

For easier understanding of the likely behavior of the Venezuelan economy that can result from the application of any given economic policy, it is convenient to briefly summarize the evolution of some of the basic features that are relevant to the purpose of this paper, over the recent past, particularly during the period from 1979 to 1985. (\*)

(1.1) Recession, Income and Consumption

Since 1979 the Venezuelan economy has been in a state of uninterrupted recession. During this time the purchasing power of the population has declined, through a combination of substantially higher unemployment and a contraction of the real value of workers' earnings.

During the period from 1979 to 1985, the real gross domestic product of the Venezuelan economy contracted by an average of approximately 1% per year. The loss of output was even more pronounced in the last three years of this period, reaching an annual average of 2.5% for total real GDP, and 2.4% for non-oil

-----  
(\*) For more details, see Palma, P., The Venezuelan Economy 1974-1983: From Bonanza to Stagnation and Crisis, Caracas, 1985 (mimeograph). Banco Central de Venezuela, Informe Económico, Caracas, several editions. MetroEconómica, Monthly Reports, Caracas, several.

real GDP. At the same time, unemployment grew substantially, from a mere 4.3% in 1978 to approximately 14% in 1985.

Nominal wage rates in the secondary and tertiary sectors grew at an average of 8.2% per year between 1978 and 1985; but when that wage is deflated by the cost of living index, we find that the average real wage rate contracted during the same period by a cumulative 28% (See Graphs No. 1 and 2).

The non-wage component of real personal disposable income, for its part, also contracted in the 1983-1985 period, though less severely than salaries.

Consequently, total real private consumption scarcely grew from 1979 to 1982 (in fact, per-capita private consumption declined in real terms) and contracted by 2.9% per year on the average from 1983 to 1985. Real personal disposable income followed a similar path, remaining stagnant in the 1979-1982 period, and then contracting from 1983 to 1985 by a slightly higher rate than consumption (3.0%)(\*).

The fact that consumption has declined more slowly than disposable income as indicative of a situation similar to the one posited by Friedman (1957) in his Permanent Income theory, or the one proposed by Duesenberry (1952) in his Relative Income hypothesis, according to which the population tends to react to a transitory reduction in income by maintaining its accustomed standards of consumption, reducing consumer spending less than the loss of income.

---

(\*) MetroEconómica estimates, based on Central Bank of Venezuela statistics.

FIGURE No. 1

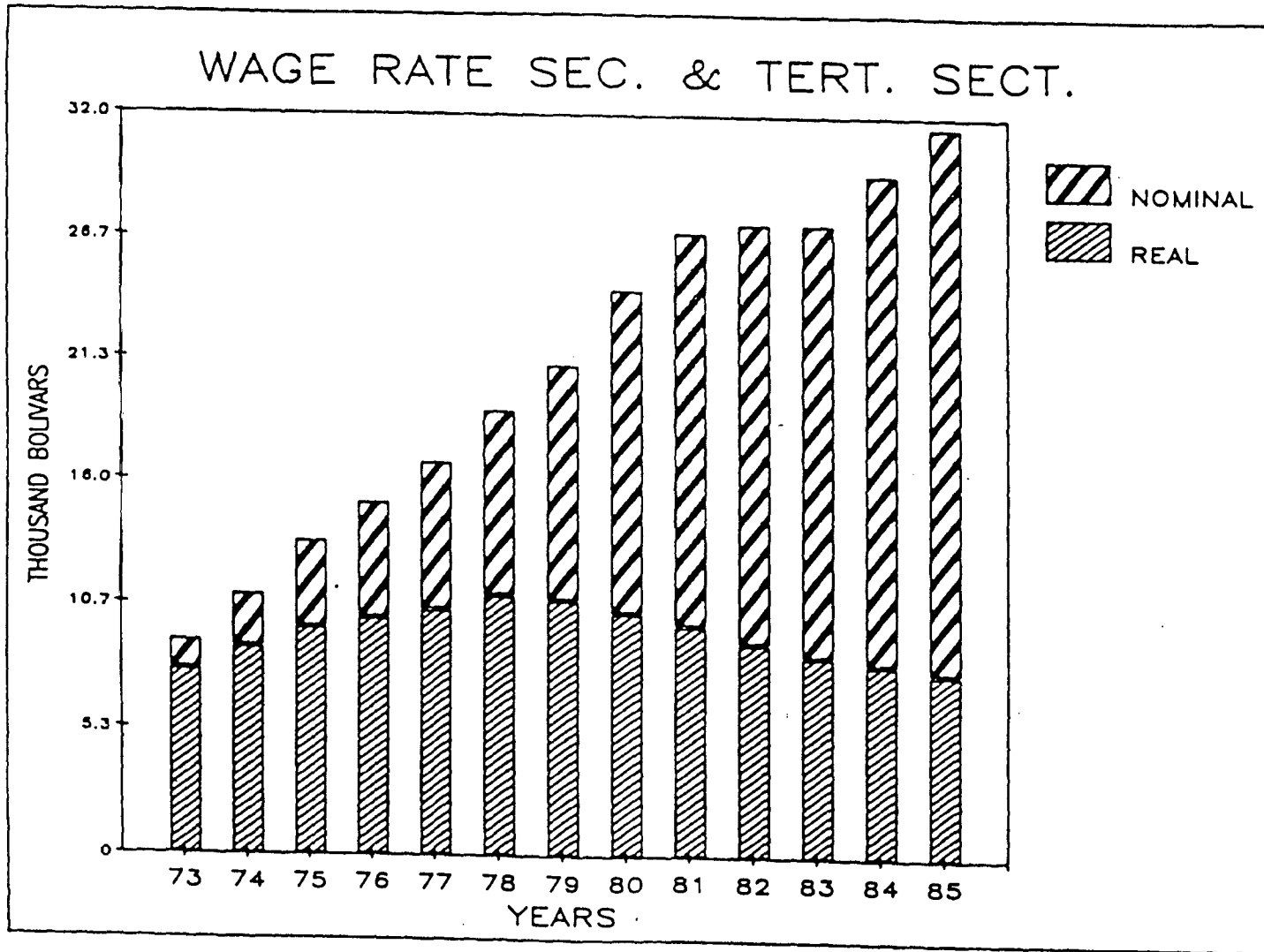
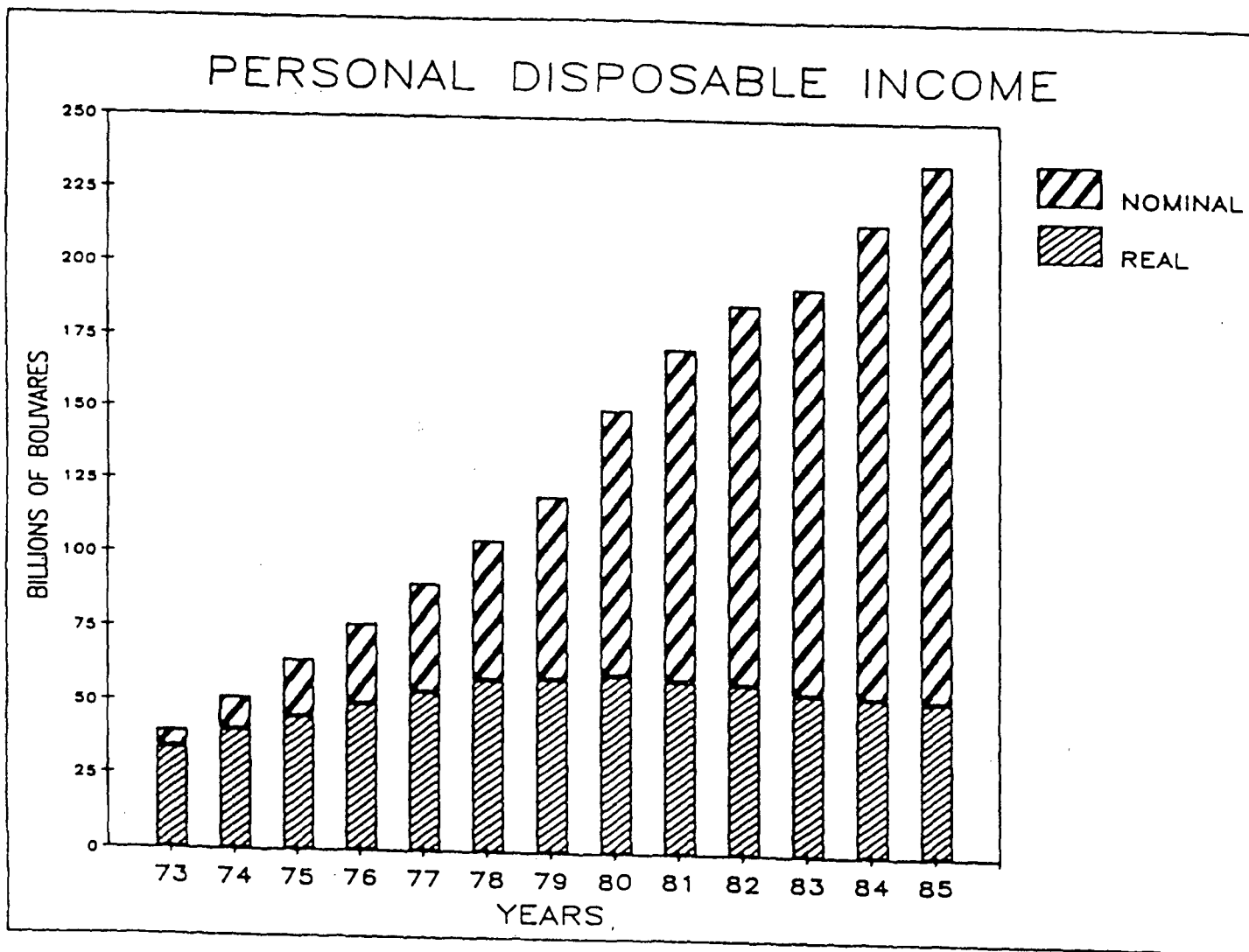


FIGURE No. 2



During this period, expenditures on food contracted less than those for other components of consumption, reflecting the normal relative low elasticity of food consumption to variations in both prices and income. Expenditures on durable goods have also contracted less than the overall average, due to the inflationary expectations prevailing during most of the period, in response to which the population tends to maintain its demand for this type of goods as a way of protecting itself against future inflation.

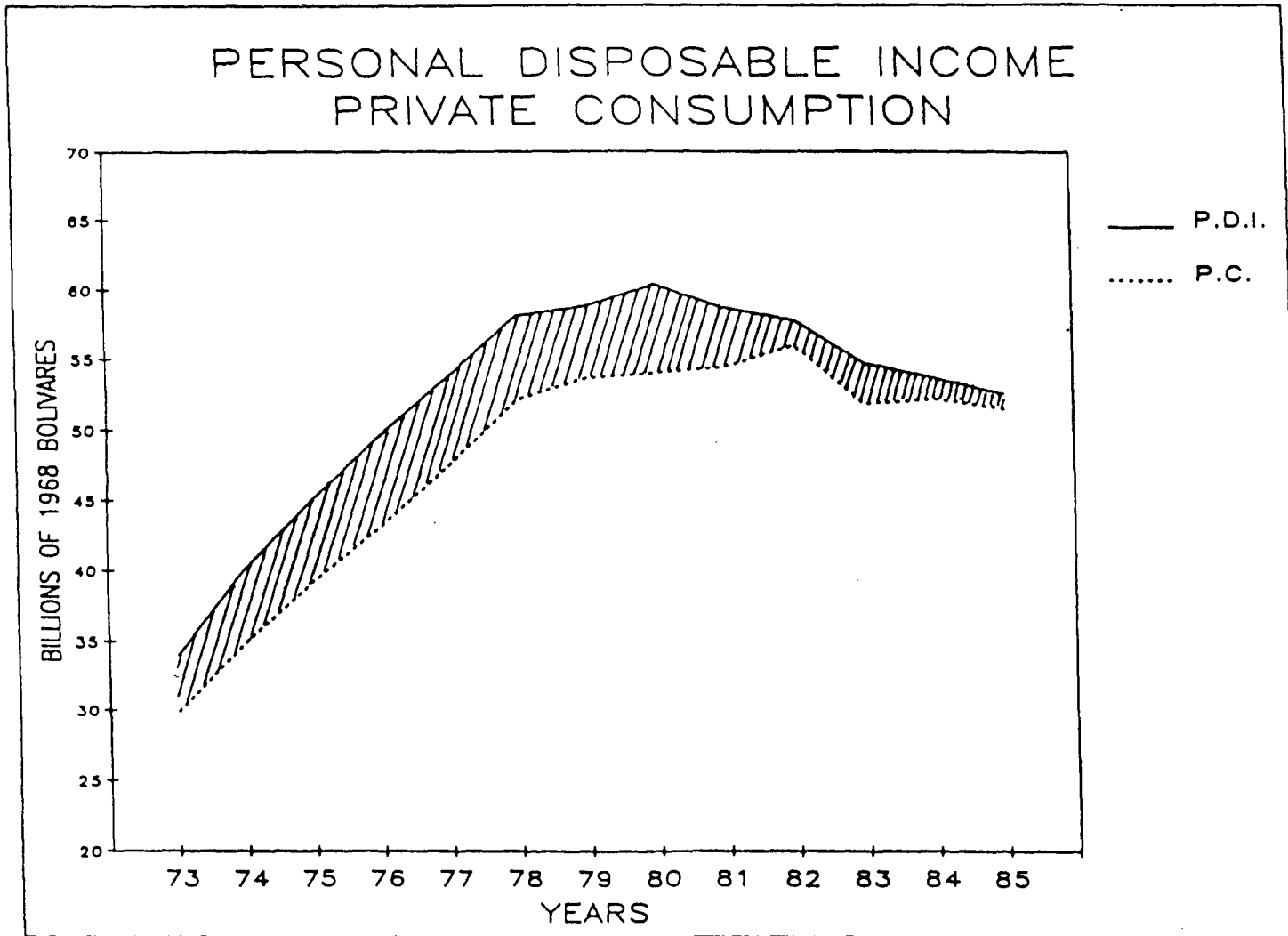
Another consequence of the decline of real income and maintenance of consumption standards is that the percentage of personal disposable income spent on consumption has risen steadily. According to Rodríguez (1985), the average propensity to save fluctuated around 0.13 during the oil boom from 1974 to 1977. That figure has declined continuously since the late 1970s to the very low level (approximately 0.03) observed at the present time (See Figure No. 3).

#### (1.2) A Period of Higher Inflation

The Venezuelan economy has traditionally had one of the lowest inflation rates in Latin America; during the 1950s, 1960s and early 1970s, the average inflation rate was less than 3% per year. That situation began to change after the oil boom of the mid-1970s when expansionary fiscal and monetary policies adopted by the government at that time, brought about a sustained and abrupt expansion of income across all classes of the social spectrum which led to the appearance for the first time in recent history of a inflation triggered by excess-demand.



FIGURE No. 3



Still, unlike what happened in certain other countries of Latin America, Venezuela's very high external purchasing power, generated by its oil exports and later compounded with external borrowing, allowed a steady and substantial increase of the volume of imports, which in turn proved to be essential for compensating for the deficiencies of internal supply. As a result, inflation in tradeable goods remained quite moderate, even though higher than in the country's historical experience. This kept the overall average inflation rate for the 1974-1978 period under 10% per year. But prices of non-tradeable goods rose very rapidly, at between 50% and 60% per year, in what later was to be recognized as a typical feature of oil booming countries.

Another factor that helps to explain the moderate overall inflation rate at that time was the imposition of a policy of strict price controls and the provision of abundant subsidies, which had the effect of repressing underlying inflationary pressures.

This system of price controls raised questioning from the private sector, which argued that it threatened to lead to serious disequilibria in the country's productive capacity, since investment tended to concentrate in the sectors least affected by the controls. Stagnation would thus result in in the growth of productive capacity for such essential goods as foods, medicines, and other heavily controlled items.

In response to these claims, the new Administration of President Herrera Campíns relaxed price controls after August

1979. The immediate result was an acceleration in inflation for the rest of that year and for all of 1980; in fact, the inflation in that period was the highest in many decades.

Among the reasons for this inflationary outburst are the materialization of the repressed inflation of the preceding years, and speculation motivated by the widespread assumption that price controls would be reimposed after a short time; this latter factor led a great many businessmen to attempts to raise prices to an exaggerated degree in order to protect themselves against the expected next stage of controls.

Also, by the end of 1979, and as a reply to the new price policy and accelerating inflation, the political opposition in Congress approved a law that made mandatory salary increases beginning in 1980 of up to 30% benefiting all workers. This factor may have made the inflationary effects of the initial suspension of price controls more lasting than otherwise.

The ensuing inflation, high to Venezuelan standards, did not hurt private consumption levels due in part to the relative price inelasticity of consumer demand at the time; consequently, the price increases did not lead to a significant contraction of sales volume. The maintenance of consumption standards in spite of the price increases was made possible by the fact that the population still had substantial purchasing power as a long-term consequence of the oil boom of the preceding years.

Investment on the contrary, particularly in the private sector, suffered a severe contraction that continued for most of the subsequent years. There were different factors at play that

explain investment depression and low real growth rates of output thereafter (including large idle capacity, real appreciation of the foreign-exchange rate, the introduction of a stabilization policy package since mid-1977 and strengthened in 1978-1980, and some others), but that fall out of the scope of this paper(\*).

Inflation tended to moderate in 1981 and thereafter, as a result of a number of conditions which came into being at that time:

1. The revaluation of the dollar, and in consequence, of the bolivar,\*\*) against the European and Japanese currencies.
2. The declining inflation rates in the countries which supplied most of Venezuela's imports.
3. The moderation in salary demands, combined with growth in labor productivity and a reduction in absenteeism.

This situation persisted throughout 1982, in which the inflation rate was substantially lower than in the previous years, in spite of the deregulation and subsequent increase in internal interest rates after August 1981, and the reduction of subsidies.

### (1.3) Devaluation with Low Inflation (1983-1985)

Exchange controls were imposed in the second half of February 1983, following twenty years of complete freedom in the foreign exchange operations and the existence of a fixed exchange

-----  
(\* ) For further reference on this respect, see Palma, op.cit.

(\*\*) At that time, the exchange rate of the bolivar to the dollar was fixed (Bs./\$ 4.30), so that the bolivar floated along with the dollar against the European currencies and the Japanese yen.

rate. That measure was taken in response to the substantial reduction of the country's international reserves, brought about by a combination of declining foreign exchange income coming from oil exports and external indebtedness, and a massive capital flight between 1978 and early 1983. The latter factor was due to expectations for devaluation in 1978 and the first half of 1979 as a result of the weakness of the oil market, to the high interest rates in the international financial markets in the second half of 1979, 1980, and most of 1981, and then, in 1982 and early 1983, to the resurgence of expectations for devaluation in the face of a new deterioration of the world oil market.

A structure of differential exchange rates was created parallel to the system of exchange controls. The Bs./\$ 4.30 rate was left in force for essential imports and public sector foreign currency operations, and a rate of Bs./\$ 6.00 was established for the rest of the country's imports, while financial transactions and non-essential imports were to be subject to a free exchange market.

In spite of the devaluation of 1983, the country had the lowest inflation rate in the preceding ten years (1974-1983). That was achieved through a general price freeze imposed at the same time as the adoption of the exchange control system, and the subsequent tightening of price controls.

When the new Administration of President Lusinchi came into office in February 1984, a number of adjustments were made in the exchange control system. The preferential rate of Bs./\$ 4.30 was restricted to a narrower range of essential imports and to

principal payments on the officially recognized net private foreign debt; the Bs./\$ 6.00 rate was applied only to the foreign currency operations of the oil industry. A new rate of Bs./\$ 7.50 was established for the rest of the country's imports, while financial transactions and non-essential imports remained subject to the free exchange market.

From that time up to the end of 1985, imports favored with the preferential rate of Bs./\$ 4.30 were gradually reduced, and the items eliminated from that preference were transferred to the Bs./\$ 7.50 rate. This policy of gradual transfer from one exchange rate to the other helped to keep inflation relatively moderate throughout 1984 and 1985.

Other factors tending in the same direction were the very strict price controls in force and, perhaps most important, the high price elasticity of demand which had emerged by that time.

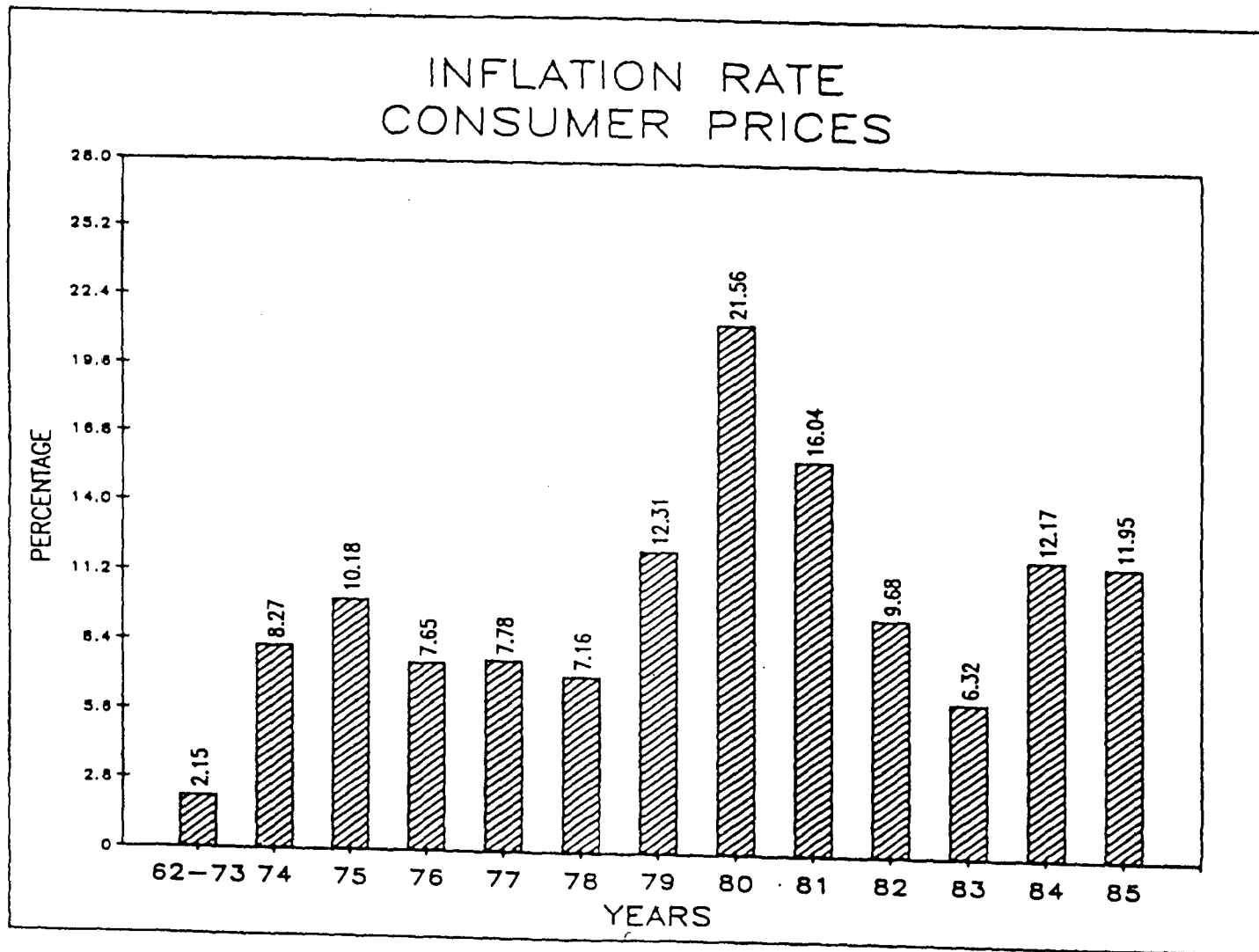
The demand for a wide range of staple consumer products, such as milk, beef, corn flour, and others, contracted violently in response to price increases made necessary by the rise in production costs which had taken place during the preceding years, largely as a result of the devaluation of the bolivar.

This increase in the price elasticity of consumer demand was essentially a response to the sustained decline in the population's purchasing power; as a result, the consumer has come to be highly sensitive to price variations and firms very cautious to introduce higher prices.

#### (1.4) A Plan for Economic Recovery

In the context of the situation described above, a number of

FIGURE No. 4



proposals and suggestions were generated, aiming at the promotion of a general economic recovery. All of these recommendations were of a Keynesian orientation, sustaining the need to create new purchasing power and thus generate a substantial increase in private consumer demand, which, in turn, would stimulate the growth of productive activity.

One proposal along these lines was made by the Confederation of Venezuelan Workers (CTV), which formally petitioned in 1985 a general wage and salary increase in combination with a program of stimulative public spending to increase aggregate demand and so to initiate the long-awaited economic recovery(\*).

An argument in support of this proposal was the fact that the country's manufacturing industry had a very large idle productive capacity, built during the years of the oil boom (1974-1977) with the expectation that growth rates of demand would continue well into the 1980s.

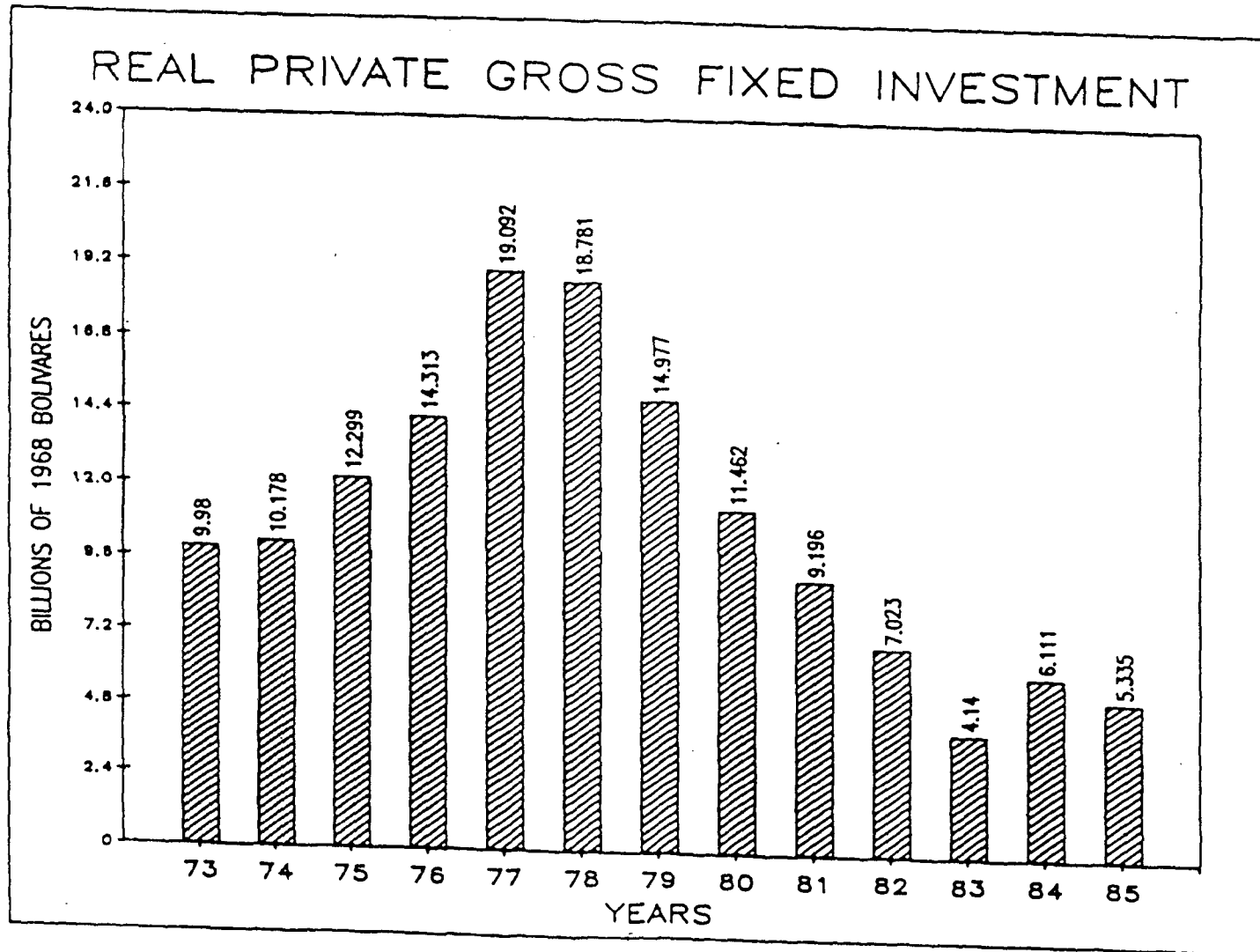
In fact, the culmination of those investments and the consequent materialization of expansion in the productive capacity of national industry coincided with the stagnation and subsequent contraction of consumption. As a result, a great many companies found themselves with a very large productive capacity at a time of depressed demand. This explains why, in spite of the sustained contraction in real private investment from 1979 to 1984 (see Figure No. 5), in part motivated by the substantial idle in-

---

(\*) See Confederación de Trabajadores de Venezuela, Planteamiento de la Confederación de Trabajadores de Venezuela, Sobre los Ajustes Salariales a ser Presentados a la Comisión Tripartita Nacional. Caracas, October 1985.



FIGURE No. 5



stalled capacity, some 36% of that total capacity still went unused in 1985(\*).

This implied that the conditions existed for a rapid response to increased demand by domestic production, minimizing the risks of demand-pull inflation resulting from higher wages and public expenditure.

#### (1.5) The export-led Growth Option

Reference has frequently been made in the last few years to the new potential for the development of non-traditional exports and for the substitution of imports, as a consequence of the severe devaluation of the bolivar.

But for that potential to be effectively realized, it is necessary, in the first place, to adopt a flexible exchange-rate policy aimed at maintaining the undervaluation of the bolivar permanently; that will assure the businessmen of the conservation of the conditions justifying investments for exports or substitution of imports.

In the second place, an export mentality, not traditionally present in Venezuela, will have to be created. The country will have to start from scratch in that regard, since for decades, more than 95% of the Venezuela's total exports have been accounted for by the oil sector, and the non-petroleum exports have been marginal in volume, with a few exceptions such as aluminum. It will not be easy to change this situation, and it certainly cannot be substantially changed in a short time.

---

(\*) See Banco Central de Venezuela, Encuesta Cualitativa Trimestral del Sector Industrial Manufacturero Privado, Caracas, Third Quarter 1985.

Export operations are very complex, requiring an extensive knowledge of the different international markets and of the legal limitations and requirements in the areas of packaging, sanitary conditions, etc.

Furthermore, almost all countries, not only those of Latin America, are engaged in active policies of export promotion, in the context of import restrictions imposed, for the most part, by the developed countries with the largest markets. Under such conditions, it is quite difficult to develop an important export industrial sector in a relatively short time.

Still, Venezuela has considerable potential for the substitution of imports. This needs to be stimulated by a flexible exchange policy, and if successful, could give rise to new investments and the expansion of productive activity.

#### (1.6) The Three-Year Investment Plan and 1986 General Salary Increase

An outcome of these proposals and a response to the high priority given to the reactivation of the economy, is a stimulative plan based on increased public spending above budgeted levels, announced originally in 1984.

Additional expenditures of Bs. 18 billion(\*) were first announced in 1984. The plan and its accompanying figures have since that time been revised on a number of occasions to take account of the decline in oil income; it was finally announced in the second half of 1985 that a plan of additional public expenditures for Bs. 6.5 billion would be put into effect, but in fact,

---

(\*) See CORDIPLAN, Lineamientos Generales del VII Plan de la Nación, Caracas, 1984.

only half that amount was spent by the end of the year.

Yet another off-budget public spending plan was announced, for implementation from 1986 to 1988, with a spending target of approximately Bs. 45 billion over and above the regular budget totals, with the aim of providing further stimulus for economic activity (\*).

Simultaneously, and in response to the demands of the CTV, salaries of less than Bs. 6,000 per month were required to be increased according to a sliding scale, by percentages varying inversely with the pre-existing salary levels. This general increase affected public and private sector employees, with the exception of workers who benefit from collective bargaining.

The salary increases mandated by the government were substantially lower than the CTV had asked for, the difference being explained on the basis of the financial restrictions created by the deterioration of the world oil market, and the negative impact which a larger general salary increase might have on overall economic activity by leading to increased unemployment and inflation.

## (2) 1986: The Drastic Fall of Oil Income

As a country highly dependent on oil exports, Venezuela is extremely exposed to the trends in the international oil market; the violent fluctuations in that market exert very strong influ

---

(\*) This Plan is known as "The Three-Year Investment Plan for 1986-1988". It includes a series of investment projects, a large number of which are aimed at the maintenance of existing physical infrastructure and the completion of public works projects already under way. According to official announcements, somewhat more than Bs. 15 billion will be spent in 1986 in the context of this plan.

ence on the country's internal economic activity.

For every dollar of decline in the annual average export price of Venezuelan crudes and refined products, the country loses approximately \$ 500 million, while for every reduction of 100,000 barrels per day in its annual export volume, it loses from \$ 800 million to \$ 1 billion.

Consequently, a drop in the average price of between \$ 10 and \$ 12 per barrel in 1986 will inflict a loss of from \$ 5 billion to \$ 6 billion on Venezuela's export income, representing a contraction of almost 40%.

Since the oil sector is the source of the bulk of the public sector revenues, it should be apparent that a serious contraction in hydrocarbon exports must inevitably be reflected in the State's revenues collections and, consequently, must depress the overall level of public spending. For every billion dollars of decline in export income, the public sector loses approximately Bs. 7.5 billion. Thus, in 1986, the income generated by the oil industry might fall between Bs. 40 billion and Bs. 45 billion, a sum which represents about 25% of the total revenues of the consolidated public sector. The central government alone would lose from Bs. 25 billion to Bs. 30 billion, its revenues contracting by approximately 30%.

Obviously, such a decline will exert a restriction on public spending and will undermine the viability of the planned stimulative fiscal policy.

However, at the time the most recent world oil crisis came into being --at the beginning of 1986-- Venezuela had a large

stock of foreign reserves: approximately \$ 16 billion, equivalent to more than 24 month of import requirements. It also had substantial internal fiscal reserves, accumulated during the preceding two years as consequence of the adjustment policy then implemented to support the negotiations for the refinancing of the country's public foreign debt. These reserves help to mitigate the negative impact of the oil crisis in the short run at least.

### (3) The Viability of Economic Recovery

It should be readily apparent that it will not be easy for Venezuela to achieve a general economic recovery in a context of substantial contraction of its main source of public revenues and foreign exchange, reinforced by a climate of negative expectations and uncertainties created by the international oil crisis and by absence of an integrated and coherent internal economic policy.

One of the recommendations which has been put forward to bring the economy out of its prolonged recession is another general increase in wages and salaries, combined with some mechanism to prevent the transmission of the higher labor costs to final prices. The desirability of the public sector's providing financial assistance to companies which raise their salary levels in order to offset that cost increase has been suggested; such assistance would be conditional upon their promise not to raise their prices in response to the labor cost increase.

To test the viability of such a policy, two scenarios were simulated with the help of the MODVEN VI econometric model. Both

alternatives are based on the assumption of an average oil export price on the order of \$ 15 per barrel for 1986, followed by a sustained but very gradual recovery in the price level, to approximately \$ 17.00 per barrel in 1988.

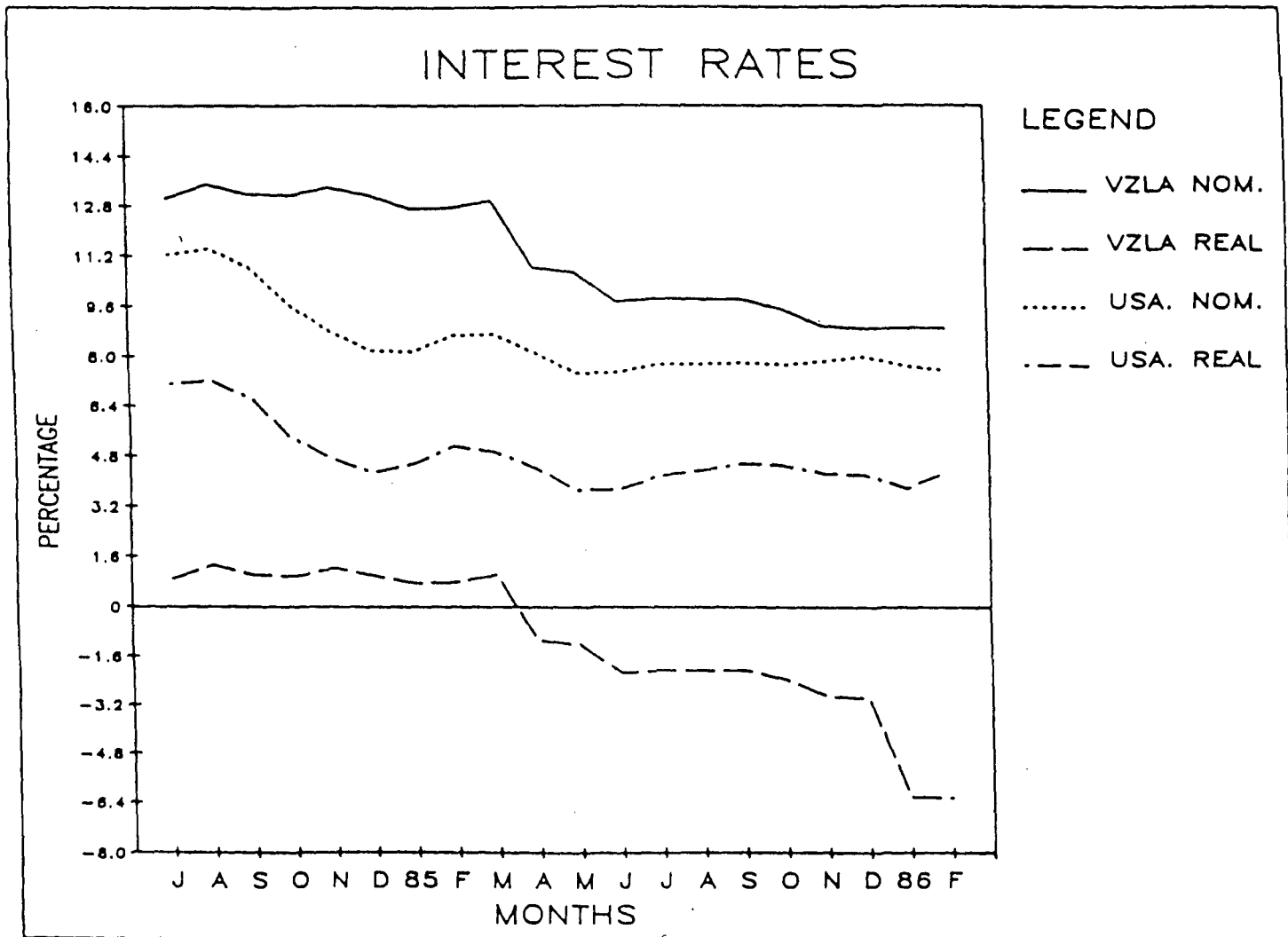
Simultaneously, it is assumed that the public sector will continue to carry out its policy of relatively expansive spending to prevent unemployment from growing even larger and in spite of the increasing deficits which that policy would imply.

An accommodative monetary policy for the years to come is also assumed, along the lines of the one applied during the last few years. Such a policy would be characterized by the unilateral determination of artificially low (negative in real terms) interest rates by the monetary authorities, in the attempt to stimulate demand activities, especially investment.

Taking advantage of the decline in international interest rates, the Central Bank has decided to reduce internal interest rates several times since 1984; it has maintained only a small differential between the external and internal rates. As a result of that policy, the real interest rate is negative at the present time, approximately -4%. If local inflation should accelerate and international interest rates continue to decline, it is possible for the real interest rate in Venezuela to deteriorate to as much as -6% to -8%.

Alternatively, a scenario containing the basic assumption of an average increase in nominal wages on the order of 25% in 1986 was simulated. Such a policy would imply a significant increase in real income if inflation remains at current levels.

FIGURE No. 6





It is assumed that this increase in wages would be accompanied by an expansion in State financing for enterprises of both the public and the private sectors, but mainly directed toward the latter, with the aim of covering the larger financial requirements generated by the salary increases.

Such financing would be provided by local financial institutions in the form of interest free loans. For that, it is assumed that the Central Bank would give interest free discounts to commercial banks plus a reasonable differential, for an amount equivalent to the loans these banks would give to private organizations to compensate higher salaries.

Unlike many other countries of Latin America, Venezuela cannot afford to experiment with a substantial reduction of interest rates as an incentive for the grant of financing of this kind, due to the already low levels of interest rates prevailing in the economy.

### 3.1 Results of the Simulations

A brief analysis of the most relevant aspects of the two simulated scenarios for the 1986-1988 period will be made in this section. The first of these exercises is identified as the "base" scenario, and the second, which incorporates the general wage increase discussed above, will be treated as the "alternative" scenario. In this scenario a simplifying assumption is that the wage hike would be put into effect as of January 1st.

It is important to keep in mind that none of these exercises pretend to be a forecast of the possible evolution of the Venezuelan economy; they are simple simulations that were made with

the only purpose of testing the viability of an economic policy proposition, and the possible effects that the implementation of such a policy could have on that economy.

### 3.3.1. Base Scenario

Results for 1986:

Among the most relevant results of this exercise is the possibility that productive activity might grow moderately in 1986, in spite of the adverse condition of the international oil market. This growth potential would be due essentially to the stimulative effect of the expansive fiscal policy to which we made reference above.

The existence of substantial international reserves and treasury reserves, together with certain off-budget additional revenues to be available in 1986, might permit the government to carry out its additional spending plan; that off-budget public investment may well be large enough to provide a stimulus to private demand, mainly consumption, and consequently, to productive activity. As a result, growth may be achieved after a number of years of continuous contraction.

However, the drastic reduction of oil export earnings, plus the large payments due for service of the country's public and private foreign debts herein assumed (see External Debt Tables in the Annex), would inevitably bring about a significant deterioration in the balance of payments. Thus, the trade surplus would pass from US\$ 8.1 billion in 1985 to less than US\$ 2.7 billion this year, the current account balance would be slightly negative (US\$ -0.4 billion vs. a US\$ 4.3 billion surplus in

1985), and the capital account deficit would surpass the US\$ 2.7 billion level. As a result, the international reserves reduction could come to as much as US\$ 3 billion this year(\*).

This loss of international reserves would weight negatively on the monetary base, but the evolution of other of its components might well offset that effect. For one part, the public sector deficit will require the issuance of debt instruments by the State, which will be acquired by some public entities such as the Venezuelan Petroleum Corporation (PDVSA) which will reduce their deposits in the Central Bank. For other, the National Treasury will make a more intensive use of the funds it now keeps on deposit in the Central Bank. The reduction of these accounts, mainly those of PDVSA and the Treasury, will have an expansive effect on the monetary base, thereby compensating for the contractive effect of the reduction of international reserves.

Furthermore, it is assumed that the Central Bank will increase its financial assistance to the domestic financial institutions in the form of rediscount and advance operations, and

-----  
(\*). In this scenario, it is assumed that the scheduled principal payments on the public external debt owed the foreign banks corresponding to 1985, 1986 and 1987 will be postponed, and that the private foreign debts will be serviced as stipulated by Exchange Agreement No. 2, with annual principal payments of 20% of the total of those debts, during the entire period covered by the simulation. For 1986, public sector total amortization payments herein assumed are of US\$ 1.925 billion (a down payment of US\$ 750 million to foreign banks, and US\$ 1.175 billion for amortization of non-restructurable debt); additionally, US\$ 1.5 billion in principal payments on private foreign debts were established. However, it is possible, and even highly probable, that a part of those payments will be postponed as a consequence of the loss of oil income. If that happens, the overall balance of payments deficit would be substantially lower than estimated here.

that it will purchase a significant volume of public sector debt instruments; these actions, added to the contraction of the accounts indicated above, should make it possible for the monetary base to expand in 1986, even though to a moderate degree.

The monetary multiplier may well grow slightly this year, as a consequence of the expansion in the credit activity of the banking system at a time of declining deposit growth, the latter factor basically a response to the low interest rates fixed by the monetary authorities. This behavior of the multiplier would reinforce the increase of the monetary base to generate an acceptable expansion in the money supply as measured by currency (M1) or by monetary liquidity (M2)(\*), without major inflationary effects.

In the area of prices, we believe that the foreign-exchange rate adjustment which could take place throughout 1986 --an exogenous assumption,-- would yield an average devaluation of the bolivar for merchandise imports on the order of 35%; this would be reflected in the inflation rate, most strongly in the wholesale prices of manufactured products, which are highly determined by prices of imported goods. The overall inflation rate is expected to accelerate as a result, although in manageable proportions.

#### Medium-term Results (1987-1988):

In the medium term, economic activity is expected to decline, since the reduction of Treasury and international reser

---

(\*) Currency (M1) is defined in Venezuela as the bills and coins in circulation plus the demand deposits in the financial system. Monetary liquidity (M2) is composed of currency plus savings and time deposits (quasi-money).

ves, in conjunction with the relatively low level of oil income, if the world oil market should continue to be depressed as herein assumed, would require a moderation of the stimulative fiscal policy.

The resulting increase in unemployment and the slow growth of remunerations --wages and other types-- would hold the expansion of personal disposable income to a level below the inflation rate. As a result, the purchasing power of the population and real private consumption would decline.

This reduction of public and private demand would have an adverse impact on production and the economy would again fall into recession, although not a deep one.

At the same time, the overall deficit of the balance of payments would persist, due in part to the relatively small oil export earnings, which would keep the trade surplus in relatively low levels, in spite of the moderation of imports due to the severe foreign exchange controls and the low level of economic activity. The foreign debt service obligations herein assumed would also contribute to the generation of high overall deficits in the balance of payments.

The resulting contractions in the international reserves during the 1986-1988 period would total more than US\$ 7 billion. That would imply that the operational (liquid) reserves held by the Central Bank would be drastically reduced, and that total reserves would be cut by half in a three year period. At the end of 1988 about 2/3 of those international financial assets would be non-liquid reserves such as gold, S.D.R.'s, net creditor

position with the I.M.F., etc., and the liquid reserves would be close to critical levels. (\*)

As in the case of 1986, the large public sector deficits and the consequent reduction of the resources of PDVSA kept at the Central Bank for the purchase of public sector bonds, the acquisition of some of these obligations by the Central Bank, and the higher amount of rediscounts and advances to commercial banks, would combine to more than offset the contraction of the monetary base produced by the loss of international reserves. As a result, the monetary base would continue to grow during 1987 and 1988.

Furthermore, the monetary multiplier would continue showing a certain dynamism, though not disproportionately so. That behavior would reflect a slowdown in demand for credit by the private sector in response to the depressed condition of economic activity, which in turn, would keep monetary growth within reasonable limits.

Inflation would be relatively high, however, due in large part to the increase in the price of imported goods as a result of the devaluation of the bolivar.

### 3.1.2. Results of the Alternative Scenario

As stated above, in this scenario it is assumed a general increase in wages on the order of 25% in 1986, several percentage

---

(\*) One of the events of default included in the restructuring agreement of the public foreign debt recently reached with the international banking community is the reduction of the Central Bank operating international reserves below US\$ 2 billion. See the Restructuring Agreement for the Republic of Venezuela as Obligor and the Banks, February 26, 1986, Section 11.01, letter O, p. 11-3. (Unpublished material).

points in excess of the expected inflation rate of that year. As a result, personal disposable income would come to be a good deal higher than in the base scenario.

However, the stimulative effect of that general increase in wages is not as intense as might be supposed at first sight. Its impact would be offset in large measure by an acceleration of inflation, which would limit the expansion of private consumption and, in consequence, of productive activity.

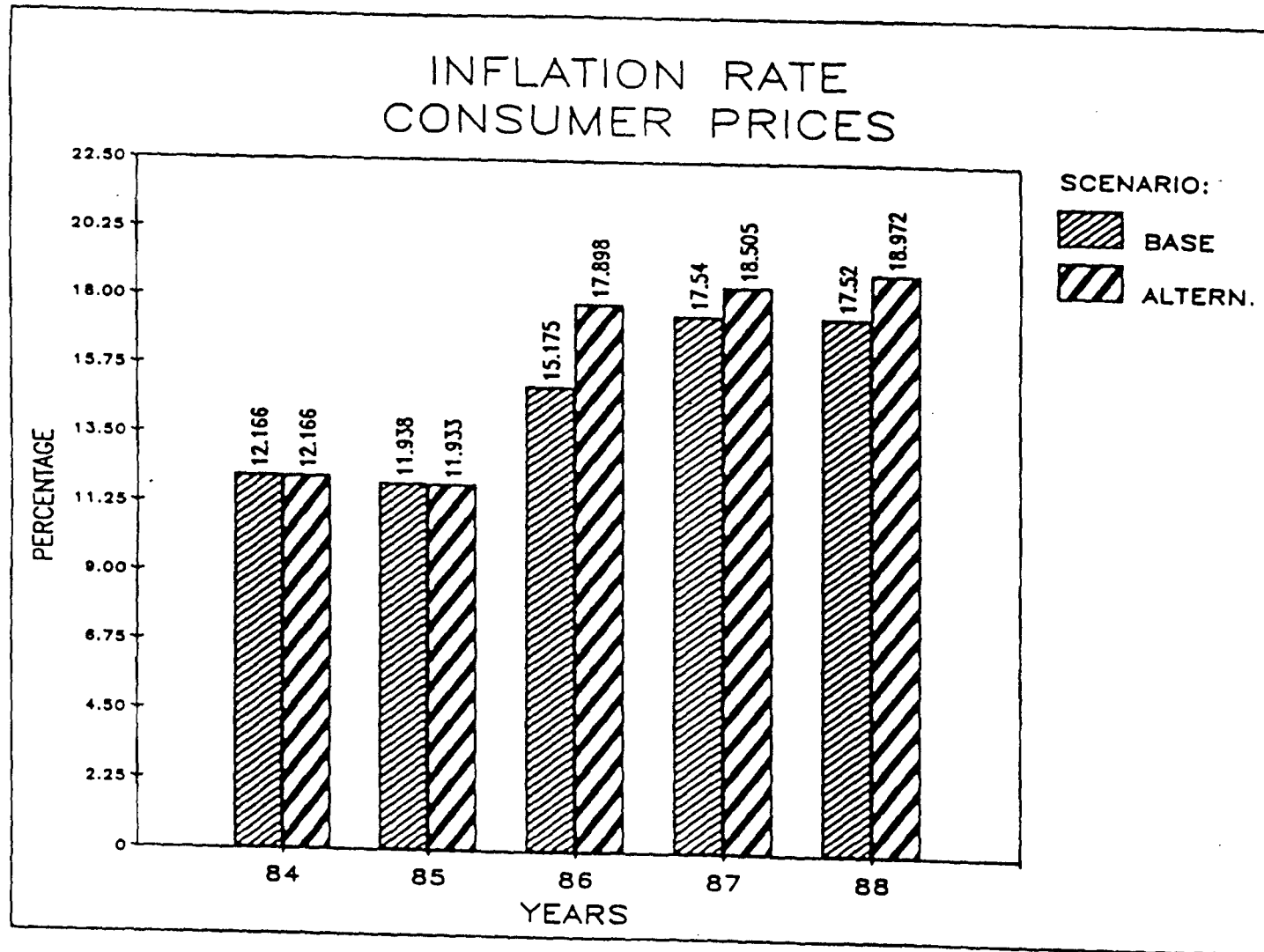
One of the causes of the increase in inflation would be the way in which the low-interest loans to be provided by the State to companies which raise their wages, in order to compensate them for the increased labor costs and prevent the transfer of those higher costs to prices, would have to be funded.

The growing deficits which the public sector would have to incur in order not only to keep its spending programs in place but also now to pay higher salaries to its employees, would make it hard for the government to provide by itself the financial assistance needed by private firms to increase salaries with no effect on their cash-flows.

Consequently, such financing would have to be based on some other scheme. The scheme assumed in this exercise contemplates financial assistance from the Central Bank to commercial banks in the form of rediscounts and advances (or some other equivalent) committed for being used as the required funding of loans programed to be given to the private sector for the purpose mentioned above.

This policy, in conjunction with the financing of the public

FIGURE No. 7





sector deficit through the intensive use of the resources of PDVSA and the Treasury on deposit with the Central Bank, and the purchase of a part of the public sector bonds by the Central Bank(\*), would result in an expansion of the net domestic assets of the monetary base to a level very much higher than the ones corresponding to the base scenario.

Furthermore, the more intensive use of the financing capacity of the domestic banking system in response to the increased demand for funds on the part of the public and private sectors(\*\*), would lead to a more vigorous expansion of the monetary multiplier than would occur in the base scenario. That expansion, combined with the larger growth of the monetary base, would generate a more vigorous increase in the money supply, which in turn would have an impact on internal prices.

One measure that might be adopted to moderate the growth of the money supply and of prices would be a postponement of spending of part of the general wage increase, possibly through a partial payment of the same in the form of savings certificates which could not be liquidated until a certain future date, or could be used only for given purposes, such as the construction or purchase of housing. This would be a form of forced savings,

-----  
(\* ) The Central Bank would have to buy a volume of State bonds larger than the one assumed for the base scenario; otherwise loanable funds to the private sector would be jeopardized by the increase in public sector internal borrowing requirements.

(\*\* ) The private sector would have larger financial needs throughout the simulated period, in spite of the loans received from the State, since the companies would have to pay higher salaries and to begin to repay the loans which they had received at the time of the wage increase.

FIGURE No. 8

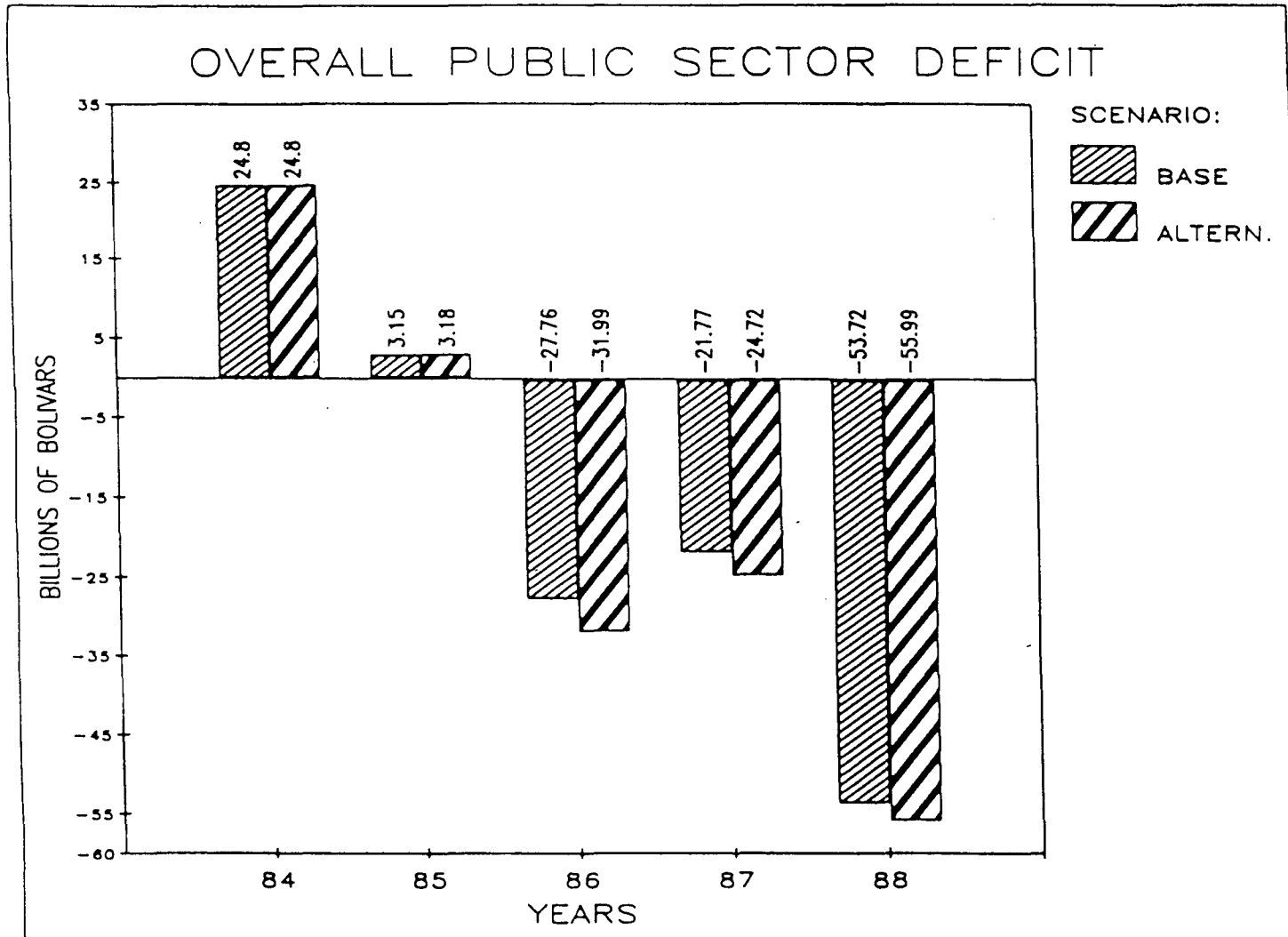
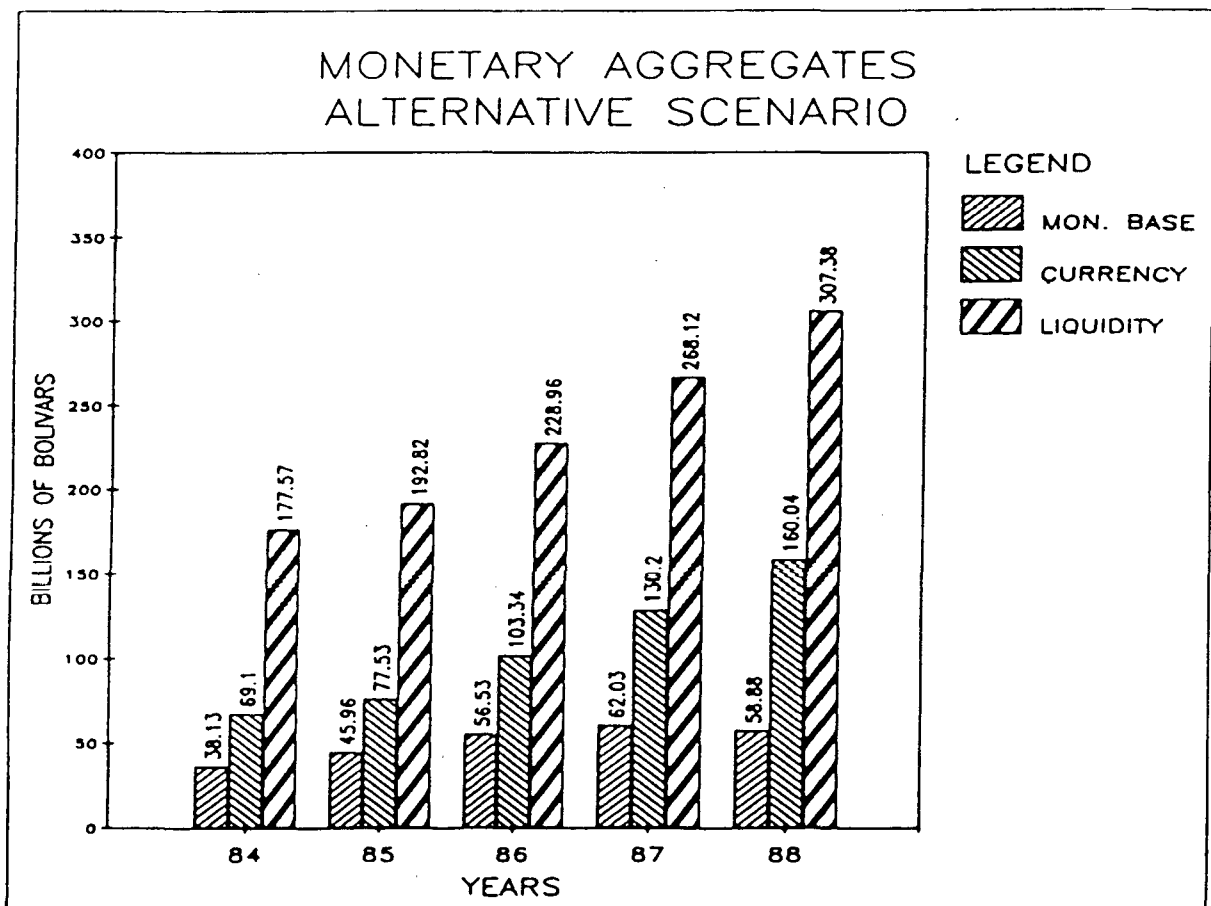
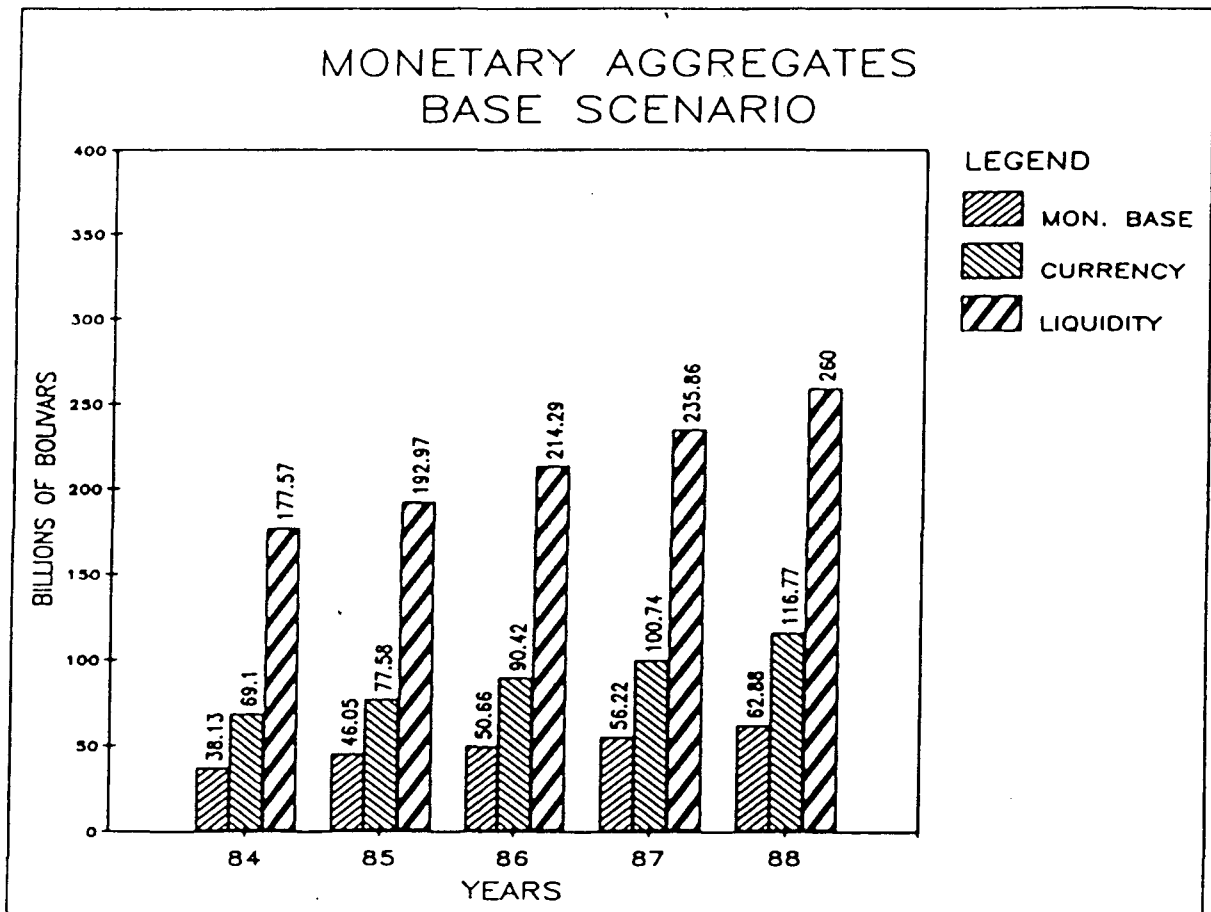


FIGURE No. 9



which would reduce the firms cash needs than would be the case if the salary increases had to be paid in full during the year.

Another factor which could increase inflation in this scenario would be the rise in production costs which every company would undergo as a result of the higher salary costs, and the increase in the prices of inputs purchased from other firms which would likewise be facing rising costs.

Furthermore, beginning with the second year of the simulation, the companies would begin to repay the loans received in the first year, which would add to their costs. These new factors would reinforce the cost-push inflation that had been repressed in the preceding years.

The general increase in wages and salaries might also be conducive to the materialization of a part of the repressed inflation in the sense that the higher real income would reduce the presently high price elasticity of private consumer demand, permitting many companies to transfer to prices their accumulated higher costs.

Such a trend would naturally depress the purchasing power of the higher nominal income generated by the adjustment of wages and salaries, and limit the expansion of consumption and production, particularly in the 1987-1988 period.

Unemployment on its part does not show a decline in this scenario in spite of the larger non-oil GDP growth in 1986, and the more moderate contractions during 1987 and 1988. Higher wages would limit labor demand, making managers to concentrate efforts in productivity expansion, which in turn would permit to

FIGURE No. 10

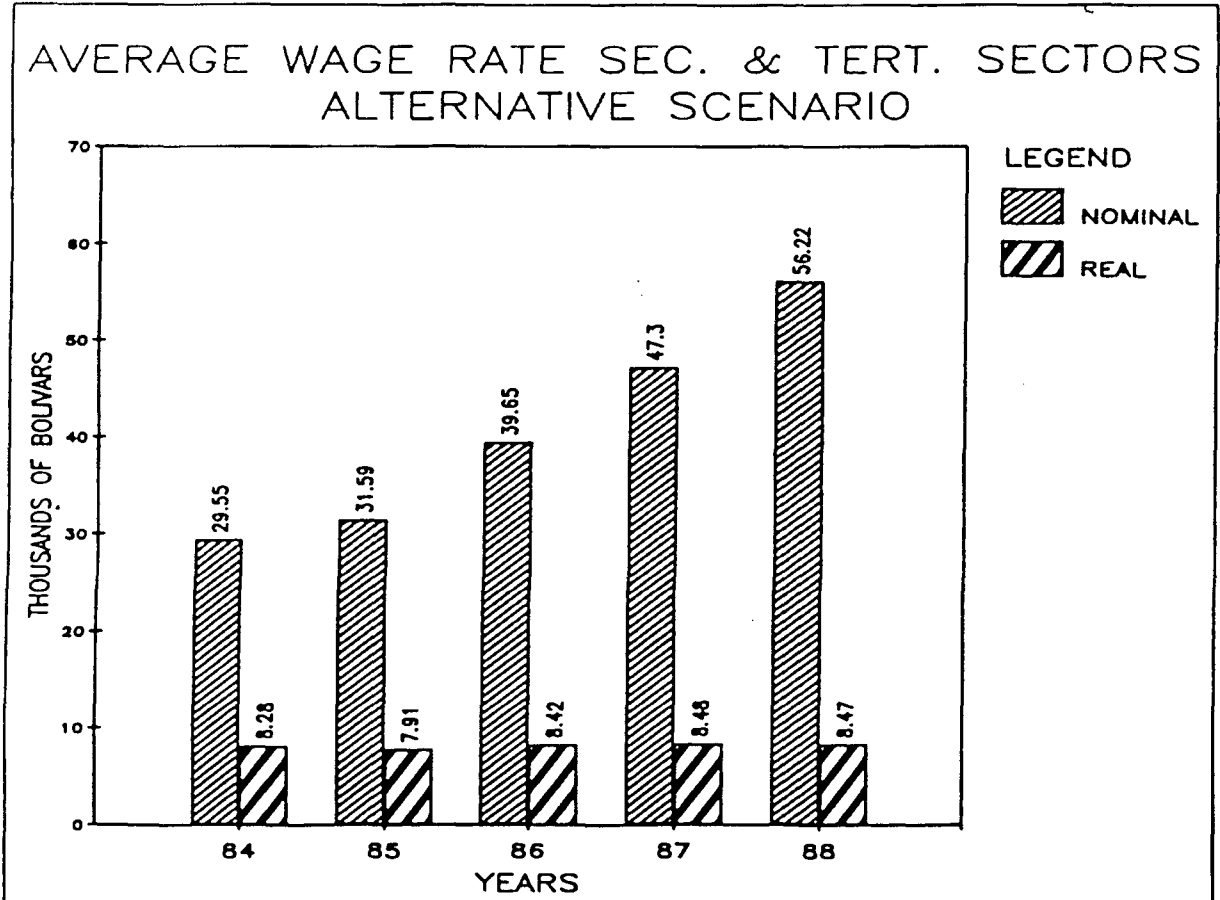
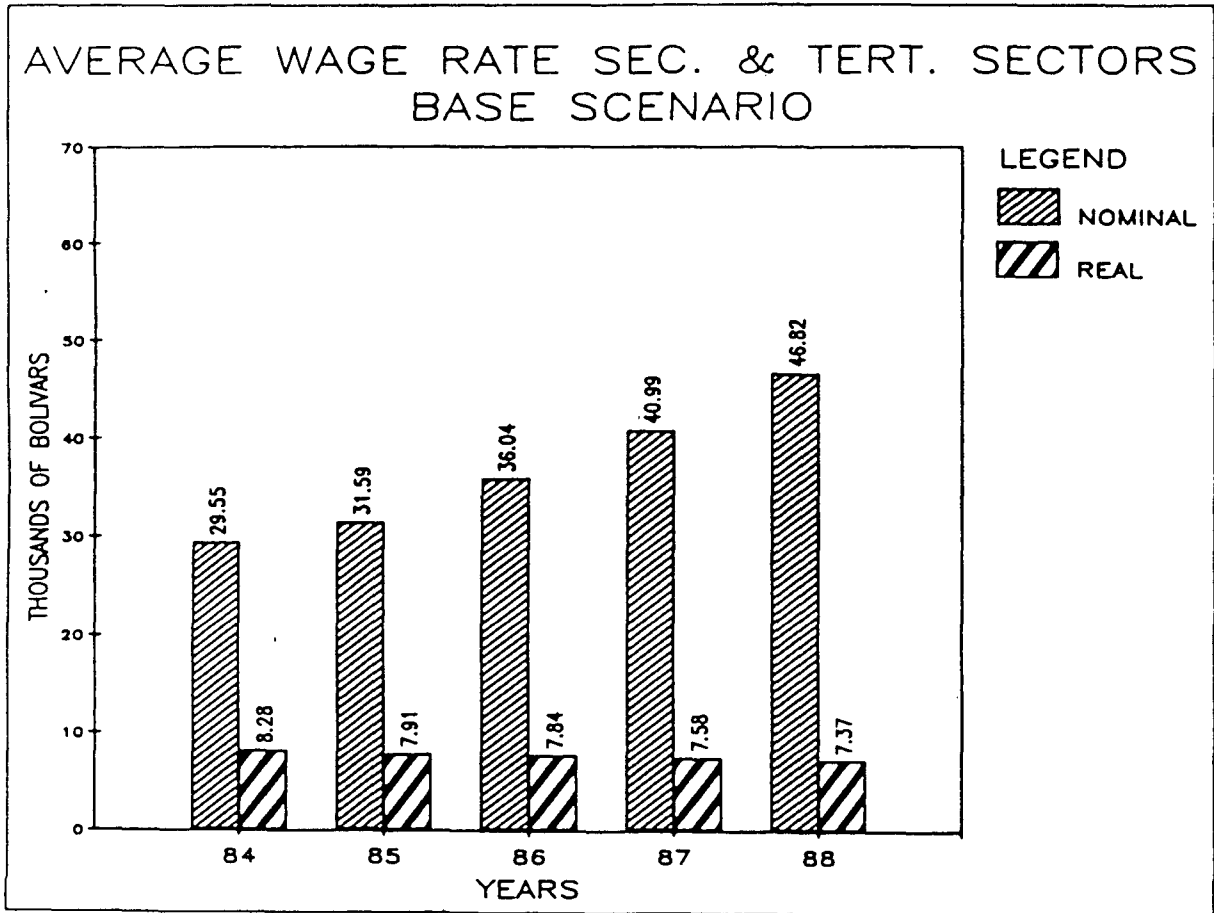


FIGURE No. 11

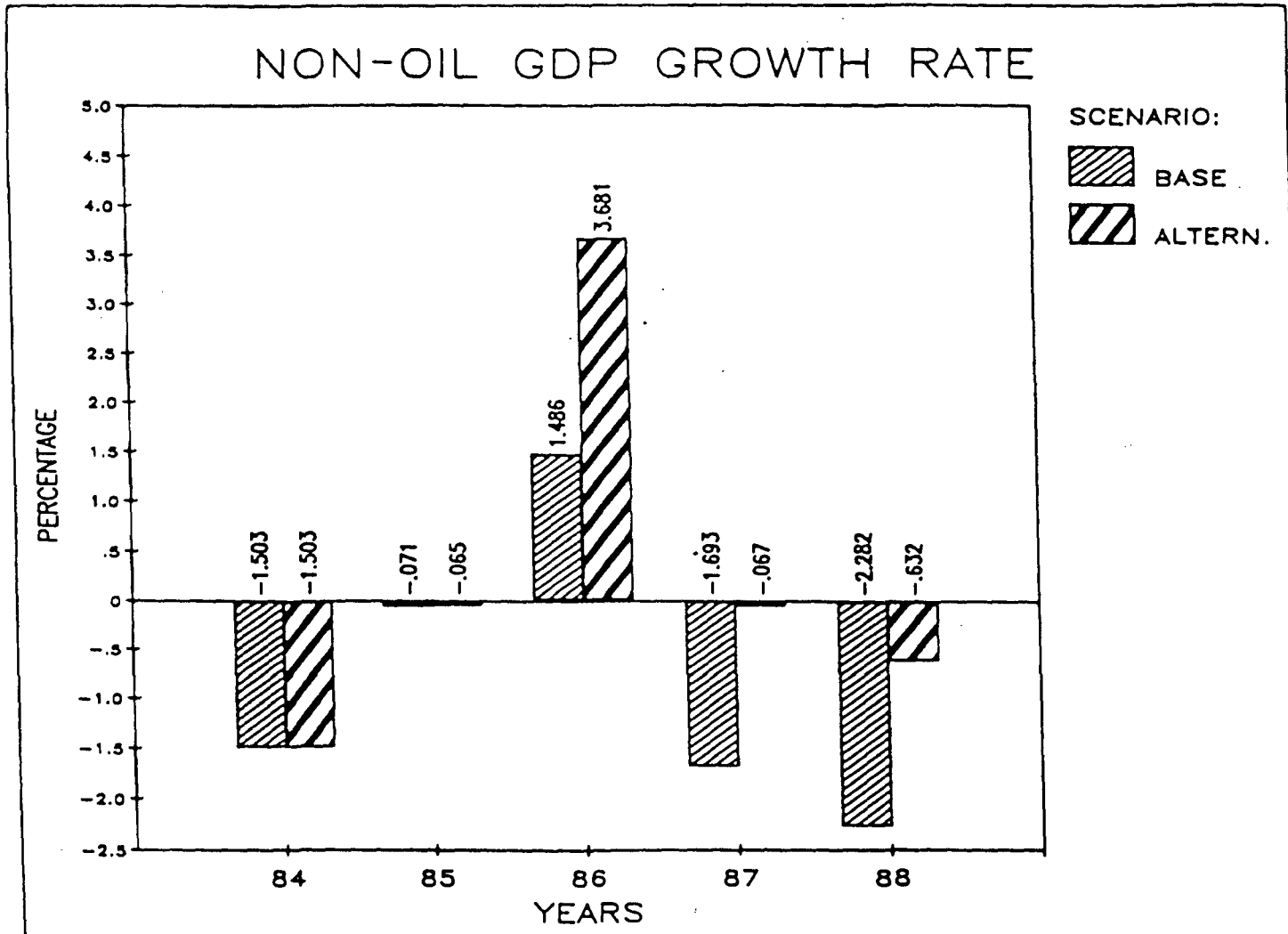
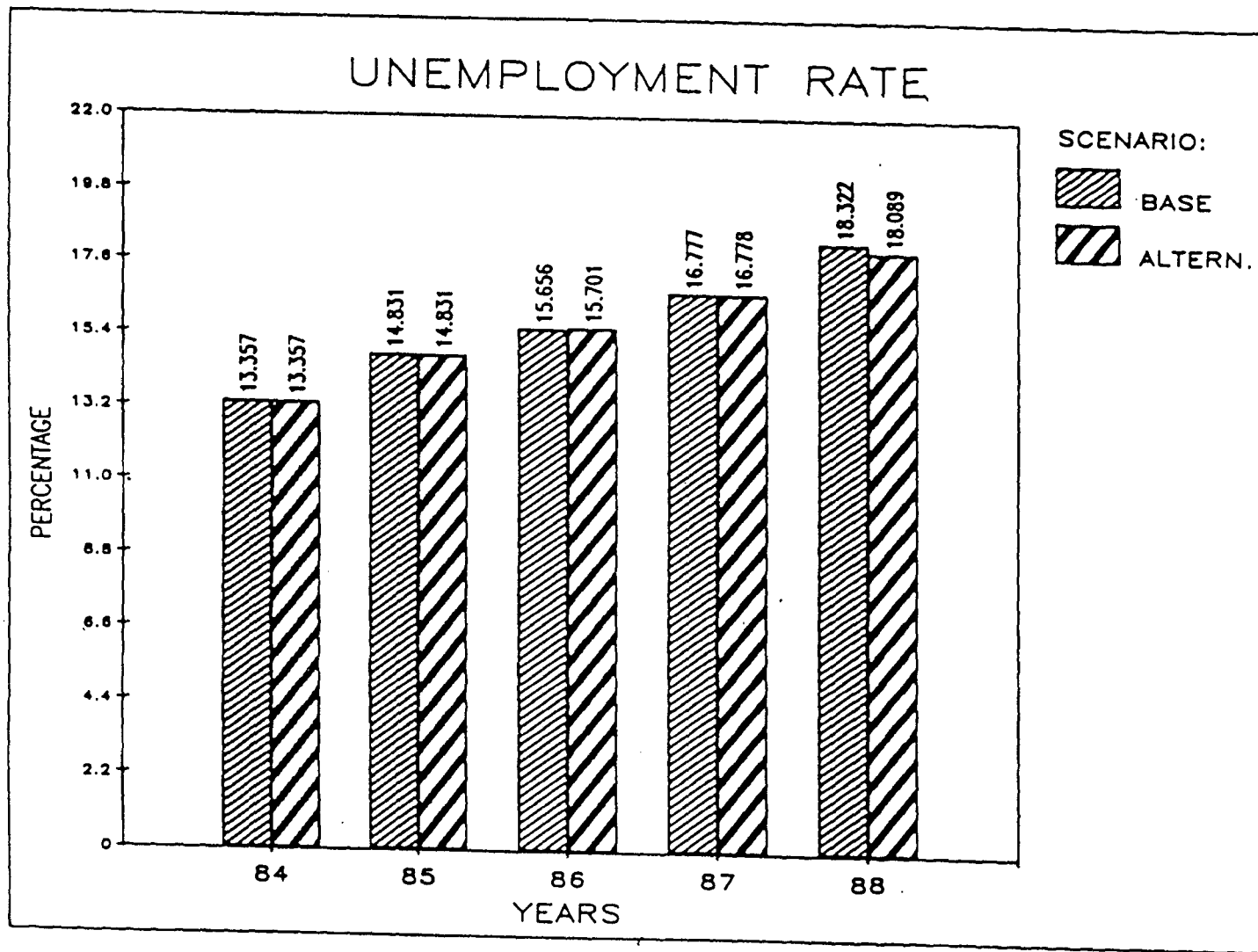


FIGURE No. 12



reduce labor requirements per unit of output.

It is worthwhile mentioning that inflation does not seem to get out of hand. Surely, price increases may still appear to be low compared to historical levels in other Latinamerican countries. This result is largely due to self-imposed fiscal discipline, which implies that the government stops short of financing ever growing levels of real public investment with money created by the Central Bank; in fact, after a brief upsurge, real investment by the public sector begins to fall.

In the case of private investment, the same behavior is observed; here, what occurs is that inflation differential between tradeable and non-tradeable goods affects more the purchasing power of incomes measured in terms of non-tradeables, particularly residential and non-residential construction.

Another situation arising in this scenario is the higher demand for imports generated by the acceleration of economic activity and consumption. This growth in imports would cause an even more serious deterioration in the country's balance of payments, and make it necessary to devalue the bolivar even more sharply. But these adverse effects would not be excessively intense in this scenario, due to the limited impact on the levels of production and consumption which are detected. On the other hand, if imports were not allowed to grow more rapidly than in the base scenario, resulting inflation rates would probably be higher due to likely supply shortages of key items.

In deciding whether to adopt a scheme such as the one analyzed in this scenario, it is necessary to consider the diffi-



culty of its implementation. It would not be easy to manage the issuance of credits to thousands of small, medium-sized, and large companies, nor to audit and supervise them to assure that they really did increase the wages and salaries of their workers by the reported amounts, with any degree of efficiency.

To do so would require highly sophisticated systems of supervision which do not normally exist in countries like Venezuela, and the absence of which would severely limit the feasibility of the proposed scheme, and allow many firms to pass their salary increases along to prices, thereby defeating one of the main purposes of the proposal, that of limiting inflation.

#### 4. Conclusions

The drastic fall in Venezuela's export earnings as a result of the decline in the price of oil, and the possible stabilization of the current prices at a level very much lower than those prevailing in previous years, will make it more difficult for an economic recovery to take place, and will severely limit the likelihood of success of the different economic policy alternatives aimed at achieving positive and sustained growth and a lasting reduction of unemployment.

Furthermore, the accumulation of distorting factors in the past, among which the most important is the repression of the underlying cost-push inflation generated by the devaluation of the bolivar during the last three years, in conjunction with the impossibility of passing cost increases along to prices due, in part, to the high price elasticity of consumer demand, will undoubtedly limit the effectiveness of stimulation of demand for

achieving an economic recovery.

The increase in income could reduce the sensitivity of demand to price variations and thereby allow the repressed cost-push inflation to materialize. That, in turn, would depress the purchasing power of the increased nominal income and, consequently, the conditions necessary for an expansion of demand and production.

Still, proposals such as the one examined in this paper retain a great deal of interest for Venezuela, since, even though it would generate a result which would satisfy the aspirations only partially, that modest result would contain a social benefit. In addition to somewhat higher level of economic activity, it would lead to a small gain in the remunerations of the workers, thereby reverting, at least temporarily, the current trend toward the sustained deterioration of income distribution observed in the last few years.



MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY ; BASE SCENARIO TB-1

BASIC ECONOMY INDICATORS

N	DESCRIPTION	NAME	LAGGED		ESTIMATED		PROJECTIONS	
			1984	1985	1986	1987	1988	
1	GROSS DOMESTIC PRODUCT (MILL. Bs)	PTBC	347530.000	388089.690	421112.392	514815.192	630554.957	
2	% Change	PTBC	19.63%	11.67%	8.51%	22.25%	22.48%	
3	GROSS DOMESTIC PRODUCT (MILL. 68 Bs)	PTBR	70894.000	70352.376	71320.321	70221.158	68764.517	
4	% Change	PTBR	-1.35%	-0.76%	1.38%	-1.54%	-2.07%	
5	G.D.P. DIFFERENT FROM OIL (MILL. 68 Bs)	PTEP	65024.000	64981.417	65920.419	64783.433	63292.092	
6	% Change	PTEP	-1.50%	-0.06%	1.44%	-1.72%	-2.30%	
7	PER CAPITA G.D.P. (TH. 68 BS)	PTBRSPOB	4.207	4.063	4.009	3.843	3.666	
8	% Change	PTBRSPOB	-4.04%	-3.43%	-1.32%	-4.13%	-4.61%	
9	UNEMPLOYMENT RATE	UR	13.357	14.831	15.658	16.784	18.333	
10	NATIONAL INCOME (MILL. Bs)	YNC	291973.000	343256.694	380341.034	470492.692	579556.902	
11	% Change	YNC	23.61%	17.56%	10.80%	23.70%	23.18%	
12	NATIONAL WAGE INCOME (MILL. Bs)	RETC	137626.205	148767.171	171435.581	196541.611	225324.267	
13	% Change	RETC	11.30%	8.09%	15.24%	14.64%	14.64%	
14	NATIONAL NON-WAGE INCOME (MILL. Bs)	REKC	154346.795	194489.523	208905.453	273951.081	354232.635	
15	% Change	REKC	37.12%	26.01%	7.41%	31.14%	29.30%	
16	PERSONAL DISPOSABLE INCOME (MILL. 68 Bs)	YPDR	53836.000	52310.188	52247.468	50676.121	49241.115	
17	% Change	YPDR	-1.83%	-2.83%	-0.12%	-3.01%	-2.83%	
18	WHOLESALE PRICE INDEX	IGPM	402.400	475.877	575.779	707.979	877.129	
19	% Change	IGPM	17.49%	18.26%	20.99%	22.96%	23.89%	
20	CONSUMER PRICE INDEX	IDCPR	356.800	399.376	460.139	541.001	635.908	
21	% Change	IDCPR	12.17%	11.93%	15.21%	17.57%	17.54%	
22	NON-OIL G.D.P. DEFLATOR (1968=100)	IDPTEP	398.496	468.073	561.393	685.442	846.245	
23	% Change	IDPTEP	13.28%	17.46%	19.94%	22.10%	23.46%	
24	CURRENCY (M1)	CIRC	69100.000	77526.870	91612.218	102241.535	118420.849	
25	% Change	CIRC	7.47%	12.19%	18.17%	11.60%	15.82%	
26	MONEY SUPPLY (LIQUIDITY) M2	LIQC	177567.000	192816.870	215575.946	237361.998	261648.540	
27	% Change	LIQC	8.75%	8.59%	11.80%	10.11%	10.23%	
28	TOTAL GROSS FIXED INVEST. (MILL. 68 Bs)	IBFR	13209.000	13531.005	13649.956	13109.303	12724.275	
29	% Change	IBFR	-18.86%	2.44%	0.88%	-3.96%	-2.94%	
30	TRADE BALANCE (MILL. \$)	BALCOM\$	8585.000	8115.368	2657.566	3030.161	3755.654	
31	CURRENT ACCOUNT BALANCE (MILL. \$)	BALCCTE\$	5298.000	4347.304	-370.518	-123.856	643.106	
32	GLOBAL BALANCE OF PAYMENTS (MILL. \$)	BPG\$	2122.000	1671.304	-3144.468	-1841.856	-2424.894	
33	EXCHANGE RATE FOR IMPORT OF GOODS	TCMB	5.769	7.272	9.757	12.453	14.553	
34	EXCHANGE RATE FOR EXPORT OF GOODS	TCXB	5.761	6.414	9.959	12.175	14.330	
35	EXCHANGE RATE IN THE FREE MARKET	TCLIB	13.020	14.100	19.000	20.995	22.552	

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO TB-2

G.D.P. AND AGGREGATE DEMAND  
(MILL OF 1968 Bs.)

N	DESCRIPTION	NAME	LAGGED				
			1984	ESTIMATED 1985	PROJECTIONS 1986 1987 1988		
1	REAL PRIVATE CONSUMPTION -----	CPTR	52334.666	51448.675	51371.667	50006.167	48730.867
2	x Change -----	CPTR	0.81%	-1.69%	-0.15%	-2.66%	-2.55%
3	REAL PRIV. CONS. FOOD, BEVE. & TOBACCO	CPABTR	20834.815	20709.841	20828.939	20395.617	19973.706
4	x Change -----	CPABTR	-1.78%	-0.60%	0.57%	-2.08%	-2.07%
5	REAL PRIVATE CONS. HOUSEHOLD EXPEND. -	CPGHQGR	12659.342	12060.734	12117.249	11822.043	11530.377
6	x Change -----	CPGHQGR	4.77%	-4.73%	0.47%	-2.44%	-2.47%
7	REAL PRIV. CONS. CLOTHING AND SHOES ---	CPVCR	1618.153	1662.122	1676.323	1639.492	1609.614
8	x Change -----	CPVCR	1.21%	2.72%	0.85%	-2.20%	-1.82%
9	REAL PRIV. CONS. SERVICES AND OTHERS -	CPSYOBR	14806.855	14533.978	14354.155	13817.016	13336.170
10	x Change -----	CPSYOBR	-0.51%	-1.84%	-1.24%	-3.74%	-3.48%
11	REAL PRIV. CONS OF NON-RESIDENT NET ---	CNETONRR	2415.501	2482.000	2395.000	2332.000	2281.000
12							
13	REAL PRIVATE GROSS FIXED INVESTMENT -----	IBFPR	6111.000	5334.612	5347.592	5541.881	5688.979
14	x Change -----	IBFPR	47.61%	-12.70%	0.24%	3.63%	2.65%
15							
16	REAL GOV. CONSUMPTION -----	CGR	11878.000	12057.036	12006.576	11893.193	11763.369
17	x Change -----	CGR	-1.59%	1.51%	-0.42%	-0.94%	-1.09%
18							
19	REAL GOV. GROSS FIXED INVESTMENT -----	IBFGR	7098.000	8196.393	8302.364	7567.422	7035.296
20	x Change -----	IBFGR	-41.53%	15.47%	1.29%	-8.85%	-7.03%
21							
22	REAL INVENTORY CHANGES -----	VER	446.197	-667.000	-637.000	-203.000	-163.000
23							
24	REAL EXPORTS OF GOODS AND SERVICES -----	XR	5688.440	5277.196	5353.776	5431.522	5519.582
25	x Change -----	XR	-3.66%	-7.23%	1.45%	1.45%	1.62%
26							
27	LESS: REAL IMPORTS OF GOODS AND SERVICES -	MR	12662.303	11294.536	10424.653	10016.027	9810.577
28	x Change -----	MR	5.09%	-10.80%	-7.70%	-3.92%	-2.05%
29	IMPORTS FOOD BEV. & TOBACCO -----	M01R	1850.875	1828.382	1731.446	1634.112	1540.593
30	x Change -----	M01R	4.91%	-1.21%	-5.30%	-5.62%	-5.72%
31	IMPORTS CRUDE MATERIALS -----	M24R	400.678	374.830	347.175	344.830	358.026
32	x Change -----	M24R	9.94%	-6.45%	-7.38%	-0.67%	3.83%
33	IMPORTS OF FUELS -----	M3R	139.183	63.000	67.000	72.000	76.000
34	x Change -----	M3R	14.58%	-54.74%	6.35%	7.46%	5.56%
35	IMPORTS OF MANUFACTURED GOODS -----	M59R	7285.050	6090.967	5595.892	5382.739	5274.748
36	x Change -----	M59R	9.94%	-16.39%	-8.13%	-3.81%	-2.01%
37	IMPORTS OF SERVICES -----	M59R	2986.518	2937.374	2683.148	2582.323	2561.262
38	x Change -----	M59R	-5.86%	-1.65%	-8.65%	-3.76%	-0.82%
39	GROSS DOMESTIC PRODUCT (MILL. 68 Bs) -----	PTBR	70894.000	70352.376	71320.321	70221.158	68764.517
40	x Change -----	PTBR	-1.35%	-0.76%	1.38%	-1.54%	-2.07%

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO

TB-3

EXTERNAL SECTOR (IN U.S. DOLLARS)

N	DESCRIPTION	NAME	LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	EXP. OF CRUDE OIL, PROD & GAS (MILL. \$) ----	XPDC\$	14794.000	13286.018	7555.500	7965.395	8687.000
2	% Change -----	XPDC\$	8.25%	-10.19%	-43.13%	5.42%	9.06%
3	EXPORTS OF NON-OIL PRODUCTS (MILL. \$) ----	XBNOPET\$	1053.000	1255.677	1372.778	1502.972	1702.186
4	TOTAL EXPORTS OF GOODS (MILL. \$) -----	XBTC\$	15847.000	14541.695	8928.278	9468.367	10389.186
5	% Change -----	XBTC\$	7.37%	-8.24%	-38.60%	6.05%	9.72%
6	TOTAL IMPORTS OF GOODS (MILL. \$) -----	MBTC\$	7262.000	6426.328	6270.712	6438.206	6633.534
7	% Change -----	MBTC\$	13.31%	-11.51%	-2.42%	2.67%	3.03%
8	TRADE BALANCE (MILL. \$) -----	BALCOM\$	8585.000	8115.368	2657.566	3030.161	3755.654
9	EXPORTS OF SERVICES (MILL. \$) -----	XS\$	847.000	897.945	952.073	1009.589	1070.711
10	SHIPMENT & INSURANCE -----	TRSEGRE	147.000	156.709	167.060	178.094	189.857
11	OTHER SHIPMENT & INSURANCE -----	OTYSCRE	298.000	311.514	325.641	340.409	355.847
12	TRAVEL CREDITS -----	VIAJECRE	358.000	383.499	410.813	440.073	471.418
13	OTHER SERVICES -----	OSERVCRE	44.000	46.223	48.559	51.012	53.589
14							
15	IMPORTS OF SERVICES (MILL. \$) -----	MS\$	2645.000	2783.579	2690.138	2736.626	2784.879
16	SHIPMENT & INSURANCE -----	TRSEGDEB	571.000	642.633	627.071	643.821	663.353
17	OTHER SHIPMENT & INSURANCE -----	OTYSDEB	609.000	630.315	622.376	637.159	650.460
18	TRAVEL DEBITS -----	VIAJEDEB	995.000	1024.676	955.237	963.727	972.470
19	OTHER GOVERNMENT SERVICE IMPORTS -----	GOBNIOP	99.000	101.970	105.029	108.180	111.425
20	OTHER SERVICES -----	OSERVDEB	371.000	383.985	380.424	383.739	387.170
21							
22	NET INVESTMENT INCOME (MILL. \$) -----	SXFC\$	-1352.000	-1679.608	-1142.223	-1273.642	-1234.722
23	INVESTMENT INCOME : CREDIT -----	ISICRE	2173.000	1642.874	1753.043	1617.433	1565.206
24	PRIVATE SECTOR -----	ISIPVCRE	1078.000	848.000	1085.000	1099.000	1187.000
25	PUBLIC SECTOR : -----	ISIPBCRE	1095.000	794.874	668.043	518.433	378.206
26	CENTRAL BANK OF VENEZUELA (BCV) ----	ISIBCVCR	798.000	664.874	538.043	388.433	248.206
27	VENEZUELAN INVESTMENT FUND (FIV) ---	ISIFIVCR	265.000	100.000	100.000	100.000	100.000
28	PETROLEUM CORPORATION (PDVSA) -----	ISIPDVCR	25.000	30.000	30.000	30.000	30.000
29	INVESTMENT INCOME : DEBIT -----	ISIDEB	3373.000	3164.402	2730.863	2720.095	2622.110
30	INTEREST ON PUBLIC EXT. DEBT -----	DPBXINT\$	3067.000	2466.936	2153.188	2217.639	2227.412
31	INTEREST ON PRIVATE EXT. DEBT -----	DPVXINT\$	319.000	697.466	577.675	502.456	394.697
32	DIR. FOREIGN INVEST. INCOME (DEBIT) -----	ISIEXDEB	152.000	158.080	164.403	170.979	177.819
33	BALANCE OF GOODS & SERV. (MILL. \$) -----	BMSC\$	5435.000	4550.127	-222.722	29.483	806.764
34	NET UNREQUITED TRANSFERS (MILL. \$) -----	TRANSEX\$	-137.000	-202.823	-147.796	-153.339	-163.658
35	CURRENT ACCOUNT BALANCE (MILL. \$) -----	BALCCTE\$	5298.000	4347.304	-370.518	-123.856	643.106

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO TB-4

EXTERNAL SECTOR (IN U.S. DOLLARS) [CONTINUATION]

N	DESCRIPTION	NAME	LAGGED	ESTIMATED		PROJECTIONS	
			1984	1985	1986	1987	1988
1	CURRENT ACCOUNT BALANCE (MILL. \$)	BALCCTE\$	5298.000	4347.304	-370.518	-123.856	643.106
2	CAPITAL ACCOUNT BALANCE (MILL. \$)	CTAH\$	-3440.000	-1683.000	-2773.950	-1718.000	-3068.000
3	CREDITS :	CKCRE	1087.000	915.000	2196.050	1630.000	2515.000
4	PUBLIC SECTOR NEW BORROWING	DPBXNEW\$	584.000	540.000	1050.000	1100.000	1100.000
5	PRIVATE SECTOR NEW BORROWING	DPVXNEW\$	140.000	0.000	750.000	100.000	160.000
6	NEW FOREIGN INVESTMENT	CKINVE\$	48.000	55.000	61.050	100.000	115.000
7	OTHER	CKOCRE	315.000	320.000	335.000	330.000	1140.000
8							
9	DEBITS :	CKDEB	4527.000	2598.000	4970.000	3348.000	5583.000
10	PRINCIPAL PAY. PUBLIC EXT. DEBT	DPBXAM\$	2751.000	997.000	1925.000	459.000	2616.000
11	PRINCIPAL PAY. PRIVATE EXT. DEBT	DPVXAM\$	513.000	353.000	1500.000	1450.000	1380.000
12	OTHER	CKOTHDB	1263.000	1248.000	1545.000	1439.000	1587.000
13	ERRORS AND OMISSIONS	ERROMISI	259.000	-993.000	0.000	0.000	0.000
14	GLOBAL BALANCE OF PAYMENTS (MILL. \$)	BPG\$	2122.000	1671.304	-3144.468	-1841.856	-2424.894
15	OFFICIAL CREATION OF RESERVES	CREOFRES	5.000	0.000	0.000	0.000	0.000
16	INTERNATIONAL RESERVES VARIATION	BPGVAR	2127.000	1671.304	-3144.468	-1841.856	-2424.894
17	INTERNATIONAL RESERVES (MILL. \$)	RI\$	14303.000	15974.389	12829.946	10988.034	8563.283
.....							
EXCHANGE RATES (Bs/\$)							
YEARLY AVERAGES							
.....							
18	OIL TRANSACTIONS	TCP	5.746	6.000	8.600	10.800	13.000
19	EXCHANGE RATE FOR IMPORT OF GOODS	TCMB	5.769	7.272	9.757	12.453	14.553
20	EXCHANGE RATE FOR EXPORT OF GOODS	TCXB	5.761	6.414	9.959	12.175	14.330
21	NON-OIL MERCHANDISE EXPORTS	TCXBNP	10.550	10.800	17.440	19.460	21.120
22	EXCHANGE RATE IN THE FREE MARKET	TCLIB	13.020	14.100	19.000	20.995	22.552

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO TB-5

N	DESCRIPTION	NAME	EXTERNAL DEBT				
			LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
0 PUBLIC SECTOR DEBT :							
1	OUTSTANDING DEBT END OF THE YEAR	DPBXEND\$	25859.000	25402.000	24527.000	25168.000	23652.000
3	% Change	DPBXEND\$	-5.81%	-1.77%	-3.44%	2.61%	-6.02%
4	AMORTIZATION PAYMENTS	DPBXAM\$	2751.000	997.000	1925.000	459.000	2616.000
5	% Change	DPBXAM\$	19.19%	-63.76%	93.08%	-76.16%	469.93%
6	NEW DEBT	DPBXNEW\$	584.000	540.000	1050.000	1100.000	1100.000
7	% Change	DPBXNEW\$	-68.21%	-7.53%	94.44%	4.76%	0.00%
8	INTEREST PAYMENTS	DPBXINT\$	3067.000	2466.936	2153.188	2217.639	2227.412
9	% Change	DPBXINT\$	3.72%	-19.57%	-12.72%	2.99%	0.44%
10	TOTAL SERVICE	DPBXSERV\$	4713.000	3463.936	4078.188	2676.639	4843.412
11	% Change	DPBXSERV\$	16.17%	-26.50%	17.73%	-34.37%	80.95%
PRIVATE SECTOR DEBT :							
12	OUTSTANDING DEBT END OF THE YEAR	DPVXEND\$	7330.000	6977.000	6227.000	4877.000	3657.000
14	% Change	DPVXEND\$	4.71%	-4.82%	-10.75%	-21.68%	-25.01%
15	AMORTIZATION PAYMENTS	DPVXAM\$	513.000	353.000	1500.000	1450.000	1380.000
16	% Change	DPVXAM\$	-84.09%	-31.19%	324.93%	-3.33%	-4.83%
17	NEW DEBT	DPVXNEW\$	140.000	0.000	750.000	100.000	160.000
18	% Change	DPVXNEW\$	-94.67%	-100.00%	0.000	-86.67%	60.00%
19	INTEREST PAYMENTS	DPVXINT\$	319.000	697.466	577.675	502.456	394.697
20	% Change	DPVXINT\$	-31.84%	118.64%	-17.18%	-13.02%	-21.45%
21	TOTAL SERVICE	DPVXSERV\$	922.000	1050.466	2077.675	1952.456	1774.697
22	% Change	DPVXSERV\$	97.01%	13.93%	97.79%	-6.03%	-9.10%
TOTAL EXTERNAL DEBT :							
23	OUTSTANDING DEBT AT THE END OF THE YEAR	DBTOTX	33189.000	32379.000	30754.000	30045.000	27309.000
25	% Change	DBTOTX	-3.67%	-2.44%	-5.02%	-2.31%	-9.11%
26	AMORTIZATION PAYMENTS	DXAM\$	2249.000	1350.000	3425.000	1909.000	3996.000
27	% Change	DXAM\$	104.45%	-39.97%	153.70%	-44.26%	109.32%
28	NEW DEBT	DPVTOT	724.000	540.000	1800.000	1200.000	1260.000
29	% Change	DPVTOT	-83.77%	-25.41%	233.33%	-33.33%	5.00%
30	INTEREST PAYMENTS	DXINT\$	3386.000	3164.402	2730.863	2720.095	2622.110
31	% Change	DXINT\$	-1.14%	-6.54%	-13.70%	-0.39%	-3.60%
32	TOTAL SERVICE	DXSERV\$	5635.000	4514.402	6155.863	4629.095	6618.110
33	% Change	DXSERV\$	24.53%	-19.89%	36.36%	-24.80%	42.97%
34	LONDON INTERBANK OFFERED RATE (LIBOR)	LIBOR	9.500	8.500	7.500	7.800	8.000
35	% Change	LIBOR	-5.00%	-10.53%	-11.76%	4.00%	2.56%



N	DESCRIPTION	NAME	VALUE ADDED (MILL. OF 1968 Bs.)				
			LAGGED 1984	ESTIMATED 1985	PROJECTIONS 1986 1987 1988		
1	AGRICULTURAL SECTOR G.D.P. REAL	PAR	4901.000	5240.769	5413.483	5595.913	5788.923
2	x Change	PAR	0.78%	6.93%	3.30%	3.37%	3.45%
3							
4	MINING SECTOR G.D.P. REAL	PMIR	505.000	557.979	584.352	606.042	624.066
5	x Change	PMIR	15.56%	10.49%	4.73%	3.71%	2.97%
6							
7	MANUFACTURING SECTOR G.D.P. REAL	PMR	12970.000	13347.558	13772.176	14104.735	14530.509
8	x Change	PMR	5.10%	2.91%	3.18%	2.41%	3.02%
9							
10	CONSTRUCTION SECTOR G.D.P. REAL	PCR	2350.000	1919.443	1977.051	1932.148	1829.122
11	x Change	PCR	-34.41%	-18.32%	3.00%	-2.27%	-5.33%
12							
13	ELECTRICITY SECTOR G.D.P. REAL	PER	2634.000	2728.408	2807.400	2876.434	2942.831
14	x Change	PER	-0.04%	3.58%	2.89%	2.46%	2.31%
15							
16	SERVICES SECTOR G.D.P. REAL	PSR	41664.000	41187.259	41365.957	39668.160	37576.641
17	x Change	PSR	-1.17%	-1.14%	0.43%	-4.10%	-5.27%
18	G.D.P. DIFFERENT FROM OIL (MILL. 68 Bs)	PTEP	65024.000	64981.417	65920.419	64783.433	63292.092
19	x Change	PTEP	-1.50%	-0.06%	1.44%	-1.72%	-2.30%
20							
21	OIL SECTOR G.D.P. REAL	PTPR	5870.000	5371.094	5399.941	5437.643	5472.623
22	x Change	PTPR	0.32%	-8.50%	0.54%	0.70%	0.64%
23	GROSS DOMESTIC PRODUCT (MILL. 68 Bs)	PTBR	70894.000	70352.376	71320.321	70221.158	68764.517
24	x Change	PTBR	-1.35%	-0.76%	1.38%	-1.54%	-2.07%
25	G.D.P. DEFLATOR	IDPT	490.210	551.636	590.452	733.135	916.975
26	x Change	IDPT	21.28%	12.53%	7.04%	24.16%	25.08%
27							
28	NON-OIL G.D.P. DEFLATOR (1968=100)	IDPTEP	398.496	468.073	561.393	685.442	846.245
29	x Change	IDPTEP	13.28%	17.46%	19.94%	22.10%	23.46%
30	GROSS DOMESTIC PRODUCT (MILL. Bs)	PTBC	347530.000	388089.690	421112.392	514815.192	630554.957
31	x Change	PTBC	19.63%	11.67%	8.51%	22.25%	22.48%
32							
33	NON-OIL G.D.P. CURRENT (MILL. Bs.)	PTCPC	259118.039	304160.371	370072.557	444052.956	535605.991
34	x Change	PTCPC	11.58%	17.38%	21.67%	19.99%	20.62%
35	PER CAPITA G.D.P. (TH. 68 Bs)	PTBRPOB	4.207	4.063	4.009	3.843	3.666
36	x Change	PTBRPOB	-4.04%	-3.43%	-1.32%	-4.13%	-4.61%
37							
38	PER CAPITA NON-OIL G.D.P. (TH. 68 Bs)	PTEPPOB	3.859	3.752	3.705	3.546	3.374
39	x Change	PTEPPOB	-4.17%	-2.76%	-1.26%	-4.31%	-4.83%

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO TB-7

N	DESCRIPTION	NAME	EMPLOYMENT ( TH. OF PERSONS )				
			LAGGED 1984	ESTIMATED 1985	PROJECTIONS 1986 1987 1988		
1	EMPLOYMENT IN AGRICULTURAL SECTOR -----	LA	789.800	812.000	826.812	836.941	848.903
2	% Change -----	LA	3.16%	2.81%	1.82%	1.22%	1.43%
3							
4	EMPLOYMENT IN OIL SECTOR -----	LP	40.375	40.621	41.243	41.956	43.018
5	% Change -----	LP	-2.24%	0.61%	1.53%	1.73%	2.53%
6							
7	EMPLOYMENT IN MINING SECTOR -----	LMI	36.525	25.120	26.334	27.311	28.462
8	% Change -----	LMI	34.79%	-31.22%	4.83%	3.71%	4.21%
9							
10	EMPLOYMENT IN PRIMARY SECTOR -----	L1	866.700	877.741	894.389	906.208	920.383
11	% Change -----	L1	3.92%	1.27%	1.90%	1.32%	1.56%
12							
13	EMPLOYMENT IN MANUFACTURING SECTOR -----	LM	760.100	798.208	833.436	865.205	895.527
14	% Change -----	LM	9.52%	5.01%	4.41%	3.81%	3.50%
15							
16	EMPLOYMENT IN CONSTRUCTION SECTOR -----	LC	333.300	306.650	311.713	311.942	308.931
17	% Change -----	LC	-10.35%	-8.00%	1.65%	0.07%	-0.96%
18							
19	EMPLOYMENT IN ELECTRICITY SECTOR -----	LE	66.600	67.160	69.670	71.120	72.230
20	% Change -----	LE	4.55%	0.84%	3.74%	2.08%	1.56%
21							
22	EMPLOYMENT IN SECONDARY SECTOR -----	L2	1160.000	1172.018	1214.819	1248.267	1276.688
23	% Change -----	L2	2.70%	1.04%	3.65%	2.75%	2.28%
24							
25	EMPLOYMENT IN SERVICES SECTOR -----	LS	2926.012	2969.605	3010.524	3038.359	3051.984
26	% Change -----	LS	2.40%	1.49%	1.38%	0.92%	0.45%
27	TOTAL EMPLOYMENT -----	L	4952.712	5019.364	5119.732	5192.834	5249.055
28	% Change -----	L	2.73%	1.35%	2.00%	1.43%	1.08%
29	UNEMPLOYMENT -----	U	763.495	874.045	950.479	1047.344	1178.328
30							
31	UNEMPLOYMENT RATE -----	UR	13.357	14.831	15.658	16.784	18.333
32	LABOR FORCE -----	POBA	5716.207	5893.409	6070.212	6240.178	6427.383
33	% Change -----	POBA	6.63%	3.10%	3.00%	2.80%	3.00%

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO

TB- 8

INCOME AND ITS DISTRIBUTION

N	DESCRIPTION	NAME	LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	NATIONAL INCOME (MILL. Bs) -----	YNC	291973.000	343256.694	380341.034	470492.692	579556.902
2	% Change -----	YNC	23.61%	17.56%	10.80%	23.70%	23.18%
3							
4	NATIONAL WAGE INCOME (MILL. Bs) -----	RETC	137626.205	148767.171	171435.581	196541.611	225324.267
5	SHARE OF WAGE INCOME ON NAT. INCOME ----	RETCSYNC	0.440	0.433	0.451	0.418	0.389
6							
7	NATIONAL NON-WAGE INCOME (MILL. Bs) -----	REKC	154346.795	194489.523	208905.453	273951.081	354232.635
8	SHARE ON NON-WAGE INC. ON NAT. INC. ----	REKCSYNC	0.560	0.567	0.549	0.582	0.611
9							
10	PERSONAL DISPOSABLE INCOME (MILL. Bs) -----	YPDC	215853.546	234762.958	270156.514	308079.415	351871.334
11	% Change -----	YPDC	11.39%	8.76%	15.08%	14.04%	14.21%
12							
13	PERSONAL DISPOSABLE INCOME (MILL. 68 Bs) ----	YPDR	53836.000	52310.188	52247.468	50676.121	49241.115
14	% Change -----	YPDR	-1.83%	-2.83%	-0.12%	-3.01%	-2.83%
15	WAGE RATE IN SEC. & TERT. SECT. (Bs) -----	WR23	29552.101	31591.532	36047.699	40995.871	46823.231
16	% Change -----	WR23	7.94%	6.90%	14.11%	13.73%	14.21%
17							
18	AVG. WAGE RATE IN THE ECONOMY. (IN Bs) ---	WRT	27788.049	29638.648	33485.263	37848.624	42926.634
19	PER CAPITA CURRENT NAT. INCOME (TH. Bs) ---	YNCSP0B	17.327	19.822	21.378	25.749	30.898
20	% Change -----	YNCSP0B	20.25%	14.40%	7.85%	20.45%	20.00%
21							
22	PER CAPITA PERS. DISP. INC. (TH. 68 Bs) ----	YPDRSP0B	2.984	3.021	2.937	2.773	2.625
23	% Change -----	YPDRSP0B	-10.79%	1.23%	-2.78%	-5.56%	-5.34%

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO

TB-9

N	DESCRIPTION	NAME	PRICES (INDEXES (1968 = 100) AND PERCENTAGES)					
			LAGGED		ESTIMATED		PROJECTIONS	
			1984	1985	1986	1987	1988	
1	WHOLESALE PRICES OF AGRIC. GOODS -----	IPMA	520.500	607.692	687.241	760.271	845.264	
2	% Change -----	IPMA	16.34%	16.75%	13.09%	10.63%	11.18%	
3								
4	WHOLESALE PRICES OF MANUFACT. GOODS -----	IPMM	375.300	445.232	550.665	698.738	890.419	
5	% Change -----	IPMM	17.72%	18.63%	23.68%	26.89%	27.43%	
6								
7	WHOLESALE PRICES OF IMPORTED GOODS -----	IPMT	366.300	430.604	533.537	680.010	864.573	
8	% Change -----	IPMT	17.82%	17.55%	23.90%	27.45%	27.14%	
9								
10	WHOLESALE PRICE INDEX -----	IGPM	402.400	475.877	575.779	707.979	877.129	
11	% Change -----	IGPM	17.49%	18.26%	20.99%	22.96%	23.89%	
12								
13	CONSUMER PRICE INDEX -----	IDCPR	356.800	399.376	460.139	541.001	635.908	
14	% Change -----	IDCPR	12.17%	11.93%	15.21%	17.57%	17.54%	
15								
16	NON-OIL G.D.P. DEFLATOR (1968=100) -----	IDPTEP	398.496	468.073	561.393	685.442	846.245	
17	% Change -----	IDPTEP	13.28%	17.46%	19.94%	22.10%	23.46%	
18								
19	G.D.P. DEFLATOR -----	IDPT	490.210	551.636	590.452	733.135	916.975	
20	% Change -----	IDPT	21.28%	12.53%	7.04%	24.16%	25.08%	
21	IMPORT PRICE INDEX OF GOODS -----	IPMB	480.032	559.165	790.345	1078.548	1331.716	
22	% Change -----	IPMB	32.51%	16.48%	41.34%	36.47%	23.47%	
23								
24	IMPORT PRICE INDEX OF GOODS & SERVICES ---	IPM	557.109	644.177	943.038	1234.905	1488.756	
25	% Change -----	IPM	32.31%	15.63%	46.39%	30.95%	20.56%	
26								
27	EXPORT PRICE INDEX OF GOODS & SERVICES ---	IPX	1851.586	1966.128	1943.254	2455.713	3079.212	
28	% Change -----	IPX	41.61%	6.19%	-1.16%	26.37%	25.39%	

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO TB-10

		PETROLEUM					
			LAGGED	ESTIMATED	PROJECTIONS		
N	DESCRIPTION	NAME	1984	1985	1986	1987	1988
1	DAILY CRUDE OIL PRODUCTION (MILL. BAR) ----	PPBD	1.799	1.623	1.629	1.633	1.638
2	x Change -----	PPBD	0.17x	-9.80x	0.38x	0.22x	0.35x
3							
4	ANUAL CRUDE OIL PRODUCTION (MILL. BAR) ----	PPB	658.434	592.311	594.586	595.873	597.973
5							
6	DAILY LIQUID HYDROC. PROD. (MILL.B) -----	PHIDLBD	1.856	1.686	1.717	1.730	1.740
7	x Change -----	PHIDLBD	0.16x	-9.13x	1.79x	0.77x	0.56x
8							
9	ANNUAL LIQUID HYDROC. PROD. (MILL.B) ----	PHIDLB	679.300	615.572	626.569	631.405	634.940
10	DAILY EXP. OIL PRODUCTS & GAS (MILL.B) ----	XPCDGBD	1.517	1.371	1.380	1.390	1.400
11	ANNUAL EXP. OIL PRODUCTS & GAS (MILL.BAR) --	XPCDGB	556.400	500.415	503.700	507.350	511.000
12	x Change -----	XPCDGB	1.29x	-10.06x	0.66x	0.72x	0.72x
13	EXP. OF CRUDE OIL, PROD & GAS (MILL.\$) ----	XPDC\$	14794.000	13286.018	7555.500	7965.395	8687.000
14	x Change -----	XPDC\$	8.25x	-10.19x	-43.13x	5.42x	9.06x
15	EXP. OF OIL PRODUCTS & GAS. (MILL.Bs) ----	XPDC	85226.000	79716.109	64977.300	86026.266	112931.000
16	x Change -----	XPDC	42.17x	-6.46x	-18.49x	32.39x	31.27x
17	REALIZATION PRICE EX. HYDROC. (Bs/BAR) ----	PXHIDPRO	152.830	159.300	129.000	169.560	221.000
18	x Change -----	PXHIDPRO	40.68x	4.23x	-19.02x	31.44x	30.34x
19							
20	REALIZATION PRICE OF HYDROCARB. (\$/Bs) ---	PXPD\$B	26.700	26.550	15.000	15.700	17.000
21	x Change -----	PXPD\$B	5.49x	-0.56x	-43.50x	4.67x	8.28x
22							
23	FISCAL PRICE OF HYDROCARBONS. (Bs/BAR) ---	VEXPRO	191.810	191.160	154.800	203.472	265.200
24	x Change -----	VEXPRO	41.23x	-0.34x	-19.02x	31.44x	30.34x
25	TOTAL TAXES ON OIL INDUSTRY -----	TTPCREC	60560.000	61886.237	47065.005	59544.070	78385.666
26	x Change -----	TTPCREC	49.36x	2.19x	-23.95x	26.51x	31.64x
27							
28	INCOME TAX ON OIL INDUSTRY -----	TUPCREC	51473.000	53348.642	29162.374	36336.678	50273.341
29	x Change -----	TUPCREC	51.03x	3.64x	-45.34x	24.60x	38.35x
30							
31	OTHER TAXES ON OIL INDUSTRY -----	REGALIAC	9411.000	8458.199	18761.218	23611.583	28521.503
32	x Change -----	REGALIAC	50.14x	-10.12x	121.81x	25.85x	20.79x
33							
34	OIL INDUSTRY EFFECTIVE INCOME TAX RATE ---	TEISRPET	65.700	65.700	65.700	65.700	65.700
35	OIL SECTOR G.D.P. REAL -----	PTPR	5870.000	5371.094	5399.941	5437.643	5472.623
36	x Change -----	PTPR	0.32x	-8.50x	0.54x	0.70x	0.64x
37	OIL DOLLAR EXCHANGE RATE-----	TCP	5.746	6.000	8.600	10.800	13.000

## PUBLIC SECTOR FINANCES

N	DESCRIPTION	NAME	ESTIMATED		PROJECTIONS	
			1985	1986	1987	1988
0 CENTRAL GOVERNMENT						
REVENUES						
1	TOTAL CURRENT CENTRAL GOV. REVENUES --	IOGC	106736.373	106697.264	118284.380	138584.091
2	TOTAL TAXES ON OIL INDUSTRY -----	TTPCREC	61886.237	47065.005	59544.070	78385.666
3	NON-OIL DIRECT TAXES -----	TDNPC	13240.278	15257.767	17492.203	20053.860
4	CUSTOMS TAXES -----	CUSTAX	4681.429	6132.738	7898.357	9424.068
5	GASOLINE TAX -----	TFDERPET	1852.233	2253.617	2704.132	3261.661
6	LIQUOR TAX -----	TFLICOR	2066.000	2617.000	2682.425	2749.486
7	CIGARRETE TAX -----	TFCIGARR	2026.000	3012.000	3072.240	3133.685
8	EXCHANGE PROFITS -----	UTCIFIS	11308.204	20213.641	14983.665	11521.460
9	OTHER -----	TFREST	9676.000	10145.500	9907.280	10054.226
OUTLAYS						
10	TOTAL OUTLAYS OF CENT. GOV. -----	GTFIS	112567.256	135537.237	139165.893	190034.678
11	CURRENT -----	GFISCTE	52681.050	57589.777	65504.855	75337.565
12	-INTEREST -----	GFINTDEU	21577.750	22636.417	27944.505	33886.753
13	DIRECT INVESTMENT -----	GFISCAP	4421.053	7157.895	8016.842	9620.211
14	TRANSF. TO NON CONS. PUB. ENT. -----	GFSITUAD	16010.461	16004.591	17742.653	20787.626
15	EXTERNAL DEBT AMORTIZATION -----	DPBXAM	7477.500	16555.000	4957.200	34008.000
16	TRANSFERS TO DESCENTRALIZED ST. AG. --	DEFADES	22423.672	25866.045	27897.050	31242.418
17	TRANSFERS TO NON-OIL STATE IND. -----	DEFEPB	9553.523	12363.929	15047.293	19038.861
DESCENTRALIZED AGENCIES						
REVENUES						
18	DESCENTRALIZED AGENCIES -----	IADES	11024.260	12016.443	13097.923	14276.736
19	TRANSFERS FROM CENTRAL GOVERNMENT -----	DEFADES	22423.672	25866.045	27897.050	31242.418
OUTLAYS						
20	CURRENT -----	GADESCTE	27918.520	31357.782	33818.502	37266.214
21	DIRECT INVESTMENT -----	GADESCAP	5529.412	6524.706	7176.471	8252.941
NON-OIL STATE INDUSTRIES						
REVENUES						
22	EXPORTS -----	XNPPBBS	7588.620	12866.936	15075.117	17179.114
23	DOMESTIC SALES -----	VTIEPB	35810.400	36008.076	38528.641	41225.646
24	OTHER -----	IEPBOTR	4200.000	4300.000	4500.000	5035.000
25	TRANSFERS FROM CENTRAL GOVERNMENT -----	DEFEPB	9553.523	12363.929	15047.293	19038.861
OUTLAYS						
26	CURRENT -----	GEPBCT	39930.320	44355.607	48971.051	54188.021
27	DIRECT INVESTMENT -----	GEPBCAP	17222.222	21183.333	24180.000	28290.600
OIL INDUSTRY						
REVENUES						
28	EXP. OF OIL PRODUCTS & GAS. (MILL. Bs)	XPDC	79716.109	64977.300	86026.266	112931.000
29	DOMESTIC SALES -----	VTINTPET	7984.664	9535.231	11250.398	13355.967
30	OTHER -----	OIPDVSA	1484.041	4298.010	4031.245	4382.533
OUTLAYS						
31	TOTAL TAXES ON OIL INDUSTRY -----	TTPCREC	61886.237	47065.005	59544.070	78385.666
32	OIL INDUSTRY -----	PDVEG	27757.373	32598.450	37980.138	44773.304
33	FOCOCAM SURPLUS -----	FOCOSAL	6589.656	6401.833	101.614	-4680.655
34	PUBLIC SECTOR SURPLUS/DEFICIT -----	DEFPGTOT	3181.110	-28682.547	-22282.088	-54298.971
35	AS % OF GDP -----	DEFSGDP	0.008	-0.068	-0.043	-0.086
36	AS % OF NON-OIL GDP -----	DEFSGDPEP	0.010	-0.078	-0.050	-0.101

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO TB-12

LIQUIDITY AND MONETARY BASE

N	DESCRIPTION	NAME	LAGGED	ESTIMATED		PROJECTIONS	
			1984	1985	1986	1987	1988
1	MONETARY BASE	BASE	38128.000	45955.465	51323.371	57054.428	63769.978
2	x Change	BASE	-3.69%	20.53%	11.68%	11.17%	11.77%
3	MONEY SUPPLY (LIQUIDITY) M2	LIQC	177567.000	192816.870	215575.946	237361.998	261648.540
4	x Change	LIQC	8.75%	8.59%	11.80%	10.11%	10.23%
5	CURRENCY (M1)	CIRC	69100.000	77526.870	91612.218	102241.535	118420.849
6	x Change	CIRC	7.47%	12.19%	18.17%	11.60%	15.82%
7	TIME & SAVINGS DEPOSITS	DAHP	108467.000	115290.000	123963.728	135120.463	143227.691
8	x Change	DAHP	9.59%	6.29%	7.52%	9.00%	6.00%
MONETARY BASE COMPONENTS FLOWS							
9	ASSETS	BCVACT	28560.000	9109.334	-12022.210	-2832.649	-5421.767
10	INTERNATIONAL RESERVES	ARIBS	20600.000	8230.334	-21022.210	-12332.649	-22421.767
11	DOMESTIC ASSETS	BCVACTIN	7960.000	879.000	9000.000	9500.000	17000.000
12	PUBLIC BONDS	BCVBOBUY	2785.000	-2634.000	4000.000	3500.000	8000.000
13	LOANS TO BANKING SYSTEM	AREDANT	2539.000	-1865.000	4000.000	6500.000	6500.000
14	OTHER ASSETS	AOACTBCV	2636.000	5378.000	1000.000	-500.000	2500.000
15	LIABILITIES	BCVPAS	0.000	-6527.131	-15390.116	-6563.706	-7637.317
16	PDVSA DEPOSITS	PDVAHFIN	5353.000	-1796.902	-10777.308	-6383.899	-3436.779
17	TREASURY DEP. AND OTHER LIABILIT.	AOPASBCV	4150.000	-4891.000	-2000.000	-800.000	-2500.000
18	CURRENCY MULTIPLIER	MULTMON	1.812	1.687	1.785	1.792	1.857
19	MONEY SUPPLY MULTIPLIER	MULTLIQ	4.657	4.196	4.200	4.160	4.103
20	CURRENCY (M1) / MONEY SUPPLY (M2)	M1/M2	0.389	0.402	0.425	0.431	0.453
21	MONEY SUPPLY (LIQUIDITY) M2 / GDP	M2/PTBC	0.511	0.497	0.512	0.461	0.415
22	MONEY SUPPLY (LIQUIDITY) M2 / NON-OIL GDP	M2/PTCPC	0.685	0.634	0.583	0.535	0.489

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : BASE SCENARIO TB-13

RATIOS AND MAIN EXOGENOUS VARIABLES

N	DESCRIPTION	NAME	LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	REAL PRIVATE CONSUMPTION / REAL G.D.P. ---	CPTRSPTBR	0.738	0.731	0.720	0.712	0.709
2	REAL PRIV. INVESTMENT / REAL G.D.P. -----	IBFPRSPTBR	0.086	0.076	0.075	0.079	0.083
3	REAL PUBLIC INVESTMENT / REAL G.D.P. -----	IBFGRSPTBR	0.100	0.117	0.116	0.108	0.102
4	REAL GROSS FIXED INVEST. / REAL G.D.P. ---	IBFRSPTBR	0.186	0.192	0.191	0.187	0.185
5	REAL IMPORT. GOODS & SERV. / REAL G.D.P. ---	MRSPTBR	0.179	0.161	0.146	0.143	0.143
6	REAL IMPORT. OF GOODS / REAL G.D.P. -----	MBTRSPTBR	0.136	0.119	0.109	0.106	0.105
7	WAGE INCOME / PERS. DISPOSABLE INCOME -----	RETCSYDC	0.637	0.634	0.635	0.638	0.640
8	WAGE INCOME PUB. SEC. / WAGE INCOME -----	RETPBCSRET	0.410	0.380	0.373	0.347	0.335
9	WAGE INCOME PRIV. SEC / WAGE INCOME -----	RETPVCSRET	0.590	0.620	0.627	0.653	0.665
10	WAGE INCOME PRIV. SEC / PROP. INCOME -----	RETPVCSRPR	1.073	1.119	1.133	1.190	1.219
11	PROPERTY INCOME / PERSONAL DISP. INCOME --	RPROPSYDC	0.350	0.351	0.351	0.350	0.349
12	PRIVATE CONSUMPTION / PERS. DISP. INCOME ---	CPTRSYPDR	1.041	0.984	0.983	0.987	0.990
13	REAL G.D.P. / EMPLOYMENT -----	PTBRSL	14.314	14.016	13.930	13.523	13.100
14	NON-OIL DIRECT TAXES / CURRENT GDP -----	TDNPCSPTBC	0.000	0.034	0.036	0.034	0.032
15	HIDROC. REALIZATION EXPORT PRICE \$/B-----	PXPD\$B	26.700	26.550	15.000	15.700	17.000
16	DAILY EXP. OIL PRODUCTS AND GAS (MILL B) ---	XPCDGBD1	1.517	1.371	1.380	1.390	1.400
17	ROYALTY PER BARREL (\$/B) -----	PREGALI\$	2.380	2.380	3.669	3.669	3.669
18	WAGE COMPENSATION OIL INDUSTRY (MILL. Bs) --	RTPC	6636.682	7238.600	7704.000	8366.000	9170.000
19	LONDON INTERBANK OFFERED RATE (LIBOR)-----	LIBOR	9.500	8.500	7.500	7.800	8.000
20	STOCKS VARIATIONS (MILL 68 Bs.)-----	VER	446.197	-667.000	-637.000	-203.000	-163.000
21	POPULATION (TH. OF PERSONS) -----	POB	16851.000	17317.000	17791.000	18272.000	18757.000
22	% Change -----	POB	2.79%	2.76%	2.74%	2.70%	2.65%
23	OIL EXCHANGE RATE (Bs/\$)-----	TCP	5.746	6.000	8.600	10.800	13.000
24	FREE MARKET EXCHANGE RATE (Bs/\$)-----	TCLIB	13.020	14.100	19.000	20.995	22.552

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986





MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-1

BASIC ECONOMY INDICATORS

N	DESCRIPTION	NAME	LAGGED				
			1984	1985	1986	1987	1988
1	GROSS DOMESTIC PRODUCT (MILL. Bs) -----	PTBC	347530.000	388089.690	433839.976	542391.863	677707.241
2	× Change -----	PTBC	19.63%	11.67%	11.79%	25.02%	24.95%
3	GROSS DOMESTIC PRODUCT (MILL. 68 Bs) -----	PTBR	70894.000	70352.376	72785.121	72786.070	72402.649
4	× Change -----	PTBR	-1.35%	-0.76%	3.46%	0.00%	-0.53%
5	G.D.P. DIFFERENT FROM OIL (MILL. 68 Bs) ---	PTEP	65024.000	64981.417	67373.076	67328.030	66902.463
6	× Change -----	PTEP	-1.50%	-0.06%	3.68%	-0.07%	-0.63%
7	PER CAPITA G.D.P. (TH. 68 BS) -----	PTBRSP0B	4.207	4.063	4.091	3.983	3.860
8	× Change -----	PTBRSP0B	-4.04%	-3.43%	0.70%	-2.63%	-3.10%
9	UNEMPLOYMENT RATE -----	UR	13.357	14.831	15.701	16.778	18.089
10	NATIONAL INCOME (MILL. Bs) -----	YNC	291973.000	343256.694	392180.055	496144.126	623417.299
11	× Change -----	YNC	23.61%	17.56%	14.25%	26.51%	25.65%
12	NATIONAL WAGE INCOME (MILL. Bs) -----	RETC	137626.205	148767.171	189292.714	227476.829	271917.765
13	× Change -----	RETC	11.30%	8.09%	27.24%	20.17%	19.54%
14	NATIONAL NON-WAGE INCOME (MILL. Bs) --	REKC	154346.795	194489.523	202887.341	268667.297	351499.534
15	× Change -----	REKC	37.12%	26.01%	4.32%	32.42%	30.83%
16	PERSONAL DISPOSABLE INCOME (MILL. 68 Bs) ---	YPDR	53836.000	52310.188	53537.278	54888.833	55843.434
17	× Change -----	YPDR	-1.83%	-2.83%	2.35%	2.52%	1.74%
18	WHOLESALE PRICE INDEX -----	IGPM	402.400	475.877	587.241	727.497	905.050
19	× Change -----	IGPM	17.49%	18.26%	23.40%	23.88%	24.41%
20	CONSUMER PRICE INDEX -----	IDCPR	356.800	399.376	470.858	557.990	663.854
21	× Change -----	IDCPR	12.17%	11.93%	17.90%	18.50%	18.97%
22	NON-OIL G.D.P. DEFLATOR (1968=100) -----	IDPTEP	398.496	468.073	568.523	700.779	870.486
23	× Change -----	IDPTEP	13.28%	17.46%	21.46%	23.26%	24.22%
24	CURRENCY (M1) -----	CIRC	69100.000	77526.870	103338.816	130197.794	160035.188
25	× Change -----	CIRC	7.47%	12.19%	33.29%	25.99%	22.92%
26	MONEY SUPPLY (LIQUIDITY) M2 -----	LIQC	177567.000	192816.870	228962.633	268119.627	307379.149
27	× Change -----	LIQC	8.75%	8.59%	18.75%	17.10%	14.64%
28	TOTAL GROSS FIXED INVEST. (MILL. 68 Bs) ---	IBFR	13209.000	13531.005	13411.824	12789.941	12342.502
29	× Change -----	IBFR	-18.86%	2.44%	-0.88%	-4.64%	-3.50%
30	TRADE BALANCE (MILL. \$) -----	BALCOM\$	8585.000	8115.368	2213.888	2255.140	2683.838
31	CURRENT ACCOUNT BALANCE (MILL. \$) -----	BALCCTE\$	5298.000	4347.304	-885.957	-1058.549	-703.090
32	GLOBAL BALANCE OF PAYMENTS (MILL. \$) -----	BPG\$	2122.000	1671.304	-3659.907	-2776.549	-3771.090
33	EXCHANGE RATE FOR IMPORT OF GOODS -----	TCMB	5.769	7.272	9.770	12.463	14.555
34	EXCHANGE RATE FOR EXPORT OF GOODS -----	TCXB	5.761	6.414	10.072	12.369	14.680
35	EXCHANGE RATE IN THE FREE MARKET -----	TCLIB	13.020	14.100	19.800	22.500	25.205

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO

TA-2

		G. D. P. AND AGGREGATE DEMAND (MILL OF 1968 Bs.)					
			LAGGED	ESTIMATED	PROJECTIONS		
N	DESCRIPTION	NAME	1984	1985	1986	1987	1988
1	REAL PRIVATE CONSUMPTION -----	CPTR	52334.666	51448.675	52913.590	53307.746	53553.533
2	x Change -----	CPTR	0.81x	-1.69x	2.85x	0.74x	0.46x
3	REAL PRIV. CONS. FOOD, BEVE. & TOBACCO	CPABTR	20834.815	20709.841	21177.129	21249.004	21380.748
4	x Change -----	CPABTR	-1.78x	-0.60x	2.26x	0.34x	0.62x
5	REAL PRIVATE CONS. HOUSEHOLD EXPEND. -	CPGHOGR	12659.342	12060.734	12532.780	12634.464	12741.112
6	x Change -----	CPGHOGR	4.77x	-4.73x	3.91x	0.81x	0.84x
7	REAL PRIV. CONS. CLOTHING AND SHOES ---	CPVCR	1618.153	1662.122	1730.512	1742.971	1725.762
8	x Change -----	CPVCR	1.21x	2.72x	4.11x	0.72x	-0.99x
9	REAL PRIV. CONS. SERVICES AND OTHERS -	CPSYOBR	14806.855	14533.978	14932.569	15036.106	15094.811
10	x Change -----	CPSYOBR	-0.51x	-1.84x	2.74x	0.69x	0.39x
11	REAL PRIV. CONS OF NON-RESIDENT NET ---	CNETONRR	2415.501	2482.000	2540.600	2645.200	2611.100
12							
13	REAL PRIVATE GROSS FIXED INVESTMENT -----	IBFPR	6111.000	5334.612	5265.862	5420.344	5519.123
14	x Change -----	IBFPR	47.61x	-12.70x	-1.29x	2.93x	1.82x
15							
16	REAL GOV. CONSUMPTION -----	CGR	11878.000	12057.036	12929.696	12787.498	12618.303
17	x Change -----	CGR	-1.59x	1.51x	7.24x	-1.10x	-1.32x
18							
19	REAL GOV. GROSS FIXED INVESTMENT -----	IBFGR	7098.000	8196.393	8145.962	7369.597	6823.379
20	x Change -----	IBFGR	-41.53x	15.47x	-0.61x	-9.53x	-7.41x
21							
22	REAL INVENTORY CHANGES -----	VER	446.197	-667.000	-797.000	-515.000	-482.000
23							
24	REAL EXPORTS OF GOODS AND SERVICES -----	XR	5688.440	5277.196	5349.226	5422.971	5512.466
25	x Change -----	XR	-3.66x	-7.23x	1.36x	1.38x	1.65x
26							
27	LESS: REAL IMPORTS OF GOODS AND SERVICES -	MR	12662.303	11294.536	11022.215	11007.085	11142.156
28	x Change -----	MR	5.09x	-10.80x	-2.41x	-0.14x	1.23x
29	IMPORTS FOOD BEV. & TOBACCO -----	MO1R	1850.875	1828.382	1804.731	1811.342	1829.182
30	x Change -----	MO1R	4.91x	-1.21x	-1.29x	0.37x	0.98x
31	IMPORTS CRUDE MATERIALS -----	M24R	400.678	374.830	356.617	358.482	374.966
32	x Change -----	M24R	9.94x	-6.45x	-4.86x	0.52x	4.60x
33	IMPORTS OF FUELS -----	M3R	139.183	63.000	67.000	72.000	76.000
34	x Change -----	M3R	14.58x	-54.74x	6.35x	7.46x	5.56x
35	IMPORTS OF MANUFACTURED GOODS -----	M59R	7285.050	6090.967	6064.888	6107.459	6197.899
36	x Change -----	M59R	9.94x	-16.39x	-0.43x	0.70x	1.48x
37	IMPORTS OF SERVICES -----	M59R	2986.518	2937.374	2728.979	2657.762	2664.126
38	x Change -----	M59R	-5.86x	-1.65x	-7.09x	-2.61x	0.24x
39	GROSS DOMESTIC PRODUCT (MILL. 68 Bs) -----	PTBR	70894.000	70352.376	72785.121	72786.070	72402.649
40	x Change -----	PTBR	-1.35x	-0.76x	3.46x	0.00x	-0.53x

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-3

EXTERNAL SECTOR (IN U.S. DOLLARS)

N	DESCRIPTION	NAME	LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	EXP. OF CRUDE OIL, PROD & GAS (MILL. \$) ----	XPDC\$	14794.000	13286.018	7555.500	7965.395	8687.000
2	x Change -----	XPDC\$	8.25%	-10.19%	-43.13%	5.42%	9.06%
3	EXPORTS OF NON-OIL PRODUCTS (MILL. \$) ----	XBNOPET\$	1053.000	1255.677	1388.606	1527.423	1748.815
4	TOTAL EXPORTS OF GOODS (MILL. \$) -----	XBTC\$	15847.000	14541.695	8944.106	9492.818	10435.815
5	x Change -----	XBTC\$	7.37%	-8.24%	-38.49%	6.13%	9.93%
6	TOTAL IMPORTS OF GOODS (MILL. \$) -----	MBTC\$	7262.000	6426.328	6730.218	7237.678	7751.977
7	x Change -----	MBTC\$	13.31%	-11.51%	4.73%	7.54%	7.11%
8	TRADE BALANCE (MILL. \$) -----	BALCOM\$	8585.000	8115.368	2213.888	2255.140	2683.838
9	EXPORTS OF SERVICES (MILL. \$) -----	XS\$	847.000	897.945	952.073	1009.589	1070.711
10	SHIPMENT & INSURANCE -----	TRSEGRE	147.000	156.709	167.060	178.094	189.857
11	OTHER SHIPMENT & INSURANCE -----	OTYSCRE	298.000	311.514	325.641	340.409	355.847
12	TRAVEL CREDITS -----	VIAJECRE	358.000	383.499	410.813	440.073	471.418
13	OTHER SERVICES -----	OSERVCRE	44.000	46.223	48.559	51.012	53.589
14							
15	IMPORTS OF SERVICES (MILL. \$) -----	MS\$	2645.000	2783.579	2736.088	2816.573	2896.723
16	SHIPMENT & INSURANCE -----	TRSEGDEB	571.000	642.633	673.022	723.768	775.198
17	OTHER SHIPMENT & INSURANCE -----	OTYSDEB	609.000	630.315	622.376	637.159	650.460
18	TRAVEL DEBITS -----	VIAJEDEB	995.000	1024.676	955.237	963.727	972.470
19	OTHER GOVERNMENT SERVICE IMPORTS -----	GOBNIOP	99.000	101.970	105.029	108.180	111.425
20	OTHER SERVICES -----	OSERVDEB	371.000	383.985	380.424	383.739	387.170
21							
22	NET INVESTMENT INCOME (MILL. \$) -----	SXFC\$	-1352.000	-1679.608	-1159.233	-1341.101	-1384.204
23	INVESTMENT INCOME : CREDIT -----	ISICRE	2173.000	1642.874	1736.033	1549.973	1415.725
24	PRIVATE SECTOR -----	ISIPVCRE	1078.000	848.000	1085.000	1099.000	1187.000
25	PUBLIC SECTOR : -----	ISIPBCRE	1095.000	794.874	651.033	450.973	228.725
26	CENTRAL BANK OF VENEZUELA (BCV) ----	ISIBCVCR	798.000	664.874	521.033	320.973	98.725
27	VENEZUELAN INVESTMENT FUND (FIV) ---	ISIFIVCR	265.000	100.000	100.000	100.000	100.000
28	PETROLEUM CORPORATION (PDVSA) -----	ISIPDVCR	25.000	30.000	30.000	30.000	30.000
29	INVESTMENT INCOME : DEBIT -----	ISIDEB	3373.000	3164.402	2730.863	2720.095	2622.110
30	INTEREST ON PUBLIC EXT. DEBT -----	DPBXINT\$	3067.000	2466.936	2153.188	2217.639	2227.412
31	INTEREST ON PRIVATE EXT. DEBT -----	DPVXINT\$	319.000	697.466	577.675	502.456	394.697
32	DIR. FOREIGN INVEST. INCOME (DEBIT) -----	ISIEXDEB	152.000	158.080	164.403	170.979	177.819
33	BALANCE OF GOODS & SERV. (MILL. \$) -----	BMSC\$	5435.000	4550.127	-729.360	-892.946	-526.378
34	NET UNREQUITED TRANSFERS (MILL. \$) -----	TRANSEX\$	-137.000	-202.823	-156.597	-165.603	-176.711
35	CURRENT ACCOUNT BALANCE (MILL. \$) -----	BALCCTE\$	5298.000	4347.304	-885.957	-1058.549	-703.090

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-4

EXTERNAL SECTOR (IN U.S. DOLLARS) [CONTINUATION]

N	DESCRIPTION	NAME	LAGGED	ESTIMATED		PROJECTIONS	
			1984	1985	1986	1987	1988
1	CURRENT ACCOUNT BALANCE (MILL. \$)	BALCCTE\$	5298.000	4347.304	-885.957	-1058.549	-703.090
2	CAPITAL ACCOUNT BALANCE (MILL. \$)	CTAK\$	-3440.000	-1683.000	-2773.950	-1718.000	-3068.000
3	CREDITS :	CKCRE	1087.000	915.000	2196.050	1630.000	2515.000
4	PUBLIC SECTOR NEW BORROWING	DPBXNEW\$	584.000	540.000	1050.000	1100.000	1100.000
5	PRIVATE SECTOR NEW BORROWING	DPVXNEW\$	140.000	0.000	750.000	100.000	160.000
6	NEW FOREIGN INVESTMENT	CKINVEX	48.000	55.000	61.050	100.000	115.000
7	OTHER	CKOCRE	315.000	320.000	335.000	330.000	1140.000
8							
9	DEBITS :	CKDEB	4527.000	2598.000	4970.000	3348.000	5583.000
10	PRINCIPAL PAY. PUBLIC EXT. DEBT	DPBXAM\$	2751.000	997.000	1925.000	459.000	2616.000
11	PRINCIPAL PAY. PRIVATE EXT. DEBT	DPVXAM\$	513.000	353.000	1500.000	1450.000	1380.000
12	OTHER	CKOTHDB	1263.000	1248.000	1545.000	1439.000	1587.000
13	ERRORS AND OMISSIONS	ERROMISI	259.000	-993.000	0.000	0.000	0.000
14	GLOBAL BALANCE OF PAYMENTS (MILL. \$)	BPG\$	2122.000	1671.304	-3659.907	-2776.549	-3771.090
15	OFFICIAL CREATION OF RESERVES	CREOFRES	5.000	0.000	0.000	0.000	0.000
16	INTERNATIONAL RESERVES VARIATION	BPGVAR	2127.000	1671.304	-3659.907	-2776.549	-3771.090
17	INTERNATIONAL RESERVES (MILL. \$)	RI\$	14303.000	15974.389	12314.504	9537.870	5766.805
.....							
EXCHANGE RATES (Bs/\$)							
YEARLY AVERAGES							
.....							
18	OIL TRANSACTIONS	TCP	5.746	6.000	8.600	10.800	13.000
19	EXCHANGE RATE FOR IMPORT OF GOODS	TCMB	5.769	7.272	9.770	12.463	14.555
20	EXCHANGE RATE FOR EXPORT OF GOODS	TCXB	5.761	6.414	10.072	12.369	14.680
21	NON-OIL MERCHANDISE EXPORTS	TCXBNP	10.550	10.800	18.084	20.554	23.024
22	EXCHANGE RATE IN THE FREE MARKET	TCLIB	13.020	14.100	19.800	22.500	25.205

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO

TA-5

EXTERNAL DEBT

N	DESCRIPTION	NAME	PROJECTIONS				
			LAGGED 1984	ESTIMATED 1985	1986	1987	1988
0 PUBLIC SECTOR DEBT :							
1							
2	OUTSTANDING DEBT END OF THE YEAR -----	DPBXEND\$	25859.000	25402.000	24527.000	25168.000	23652.000
3	% Change -----	DPBXEND\$	-5.81%	-1.77%	-3.44%	2.61%	-6.02%
4	AMORTIZATION PAYMENTS-----	DPBXAM\$	2751.000	997.000	1925.000	459.000	2616.000
5	% Change -----	DPBXAM\$	19.19%	-63.76%	93.08%	-76.16%	469.93%
6	NEW DEBT-----	DPBXNEW\$	584.000	540.000	1050.000	1100.000	1100.000
7	% Change -----	DPBXNEW\$	-68.21%	-7.53%	94.44%	4.76%	0.00%
8	INTEREST PAYMENTS-----	DPBXINT\$	3067.000	2466.936	2153.188	2217.639	2227.412
9	% Change -----	DPBXINT\$	3.72%	-19.57%	-12.72%	2.99%	0.44%
10	TOTAL SERVICE -----	DPBXSERV\$	4713.000	3463.936	4078.188	2676.639	4843.412
11	% Change -----	DPBXSERV\$	16.17%	-26.50%	17.73%	-34.37%	80.95%
PRIVATE SECTOR DEBT :							
12							
13	OUTSTANDING DEBT END OF THE YEAR -----	DPVXEND\$	7330.000	6977.000	6227.000	4877.000	3657.000
14	% Change -----	DPVXEND\$	4.71%	-4.82%	-10.75%	-21.68%	-25.01%
15	AMORTIZATION PAYMENTS-----	DPVXAM\$	513.000	353.000	1500.000	1450.000	1380.000
16	% Change -----	DPVXAM\$	-84.09%	-31.19%	324.93%	-3.33%	-4.83%
17	NEW DEBT-----	DPVXNEW\$	140.000	0.000	750.000	100.000	160.000
18	% Change -----	DPVXNEW\$	-94.67%	-100.00%	0.000	-86.67%	60.00%
19	INTEREST PAYMENTS-----	DPVXINT\$	319.000	697.466	577.675	502.456	394.697
20	% Change -----	DPVXINT\$	-31.84%	118.64%	-17.18%	-13.02%	-21.45%
21	TOTAL SERVICE -----	DPVXSERV\$	922.000	1050.466	2077.675	1952.456	1774.697
22	% Change -----	DPVXSERV\$	97.01%	13.93%	97.79%	-6.03%	-9.10%
TOTAL EXTERNAL DEBT :							
23							
24	OUTSTANDING DEBT AT THE END OF THE YEAR-----	DBTOTX	33189.000	32379.000	30754.000	30045.000	27309.000
25	% Change -----	DBTOTX	-3.67%	-2.44%	-5.02%	-2.31%	-9.11%
26	AMORTIZATION PAYMENTS -----	DXAM\$	2249.000	1350.000	3425.000	1909.000	3996.000
27	% Change -----	DXAM\$	104.45%	-39.97%	153.70%	-44.26%	109.32%
28	NEW DEBT-----	DPVTOT	724.000	540.000	1800.000	1200.000	1260.000
29	% Change -----	DPVTOT	-83.77%	-25.41%	233.33%	-33.33%	5.00%
30	INTEREST PAYMENTS -----	DXINT\$	3386.000	3164.402	2730.863	2720.095	2622.110
31	% Change -----	DXINT\$	-1.14%	-6.54%	-13.70%	-0.39%	-3.60%
32	TOTAL SERVICE -----	DXSERV\$	5635.000	4514.402	6155.863	4629.095	6618.110
33	% Change -----	DXSERV\$	24.53%	-19.89%	36.36%	-24.80%	42.97%
34	LONDON INTERBANK OFFERED RATE (LIBOR)-----	LIBOR	9.500	8.500	7.500	7.800	8.000
35	% Change -----	LIBOR	-5.00%	-10.53%	-11.76%	4.00%	2.56%

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-6

N	DESCRIPTION	NAME	VALUE ADDED (MILL. OF 1968 Bs.)				
			LAGGED		ESTIMATED		PROJECTIONS
			1984	1985	1986	1987	1988
1	AGRICULTURAL SECTOR G.D.P. REAL	PAR	4901.000	5240.769	5427.268	5629.698	5844.626
2	% Change	PAR	0.78%	6.93%	3.56%	3.73%	3.82%
3							
4	MINING SECTOR G.D.P. REAL	PMIR	505.000	557.979	584.352	606.042	624.066
5	% Change	PMIR	15.56%	10.49%	4.73%	3.71%	2.97%
6							
7	MANUFACTURING SECTOR G.D.P. REAL	PMR	12970.000	13347.558	13933.656	14371.885	14882.186
8	% Change	PMR	5.10%	2.91%	4.39%	3.14%	3.55%
9							
10	CONSTRUCTION SECTOR G.D.P. REAL	PCR	2350.000	1919.443	1948.547	1877.075	1760.833
11	% Change	PCR	-34.41%	-18.32%	1.52%	-3.67%	-6.19%
12							
13	ELECTRICITY SECTOR G.D.P. REAL	PER	2634.000	2728.408	2812.087	2895.418	2975.118
14	% Change	PER	-0.04%	3.58%	3.07%	2.96%	2.75%
15							
16	SERVICES SECTOR G.D.P. REAL	PSR	41664.000	41187.259	42667.166	41947.913	40815.635
17	% Change	PSR	-1.17%	-1.14%	3.59%	-1.69%	-2.70%
18	G.D.P. DIFFERENT FROM OIL (MILL. 68 Bs)	PTEP	65024.000	64981.417	67373.076	67328.030	66902.463
19	% Change	PTEP	-1.50%	-0.06%	3.68%	-0.07%	-0.63%
20							
21	OIL SECTOR G.D.P. REAL	PTPR	5870.000	5371.094	5412.077	5457.908	5500.225
22	% Change	PTPR	0.32%	-8.50%	0.76%	0.85%	0.77%
23	GROSS DOMESTIC PRODUCT (MILL. 68 Bs)	PTBR	70894.000	70352.376	72785.121	72786.070	72402.649
24	% Change	PTBR	-1.35%	-0.76%	3.46%	0.00%	-0.53%
25	G.D.P. DEFLATOR	IDPT	490.210	551.636	596.056	745.188	936.025
26	% Change	IDPT	21.28%	12.53%	8.05%	25.02%	25.61%
27							
28	NON-OIL G.D.P. DEFLATOR (1968=100)	IDPTEP	398.496	468.073	568.523	700.779	870.486
29	% Change	IDPTEP	13.28%	17.46%	21.46%	23.26%	24.22%
30	GROSS DOMESTIC PRODUCT (MILL. Bs)	PTBC	347530.000	388089.690	433839.976	542391.863	677707.241
31	% Change	PTBC	19.63%	11.67%	11.79%	25.02%	24.95%
32							
33	NON-OIL G.D.P. CURRENT (MILL. Bs.)	PTCPC	259118.039	304160.371	383031.716	471820.613	582376.261
34	% Change	PTCPC	11.58%	17.38%	25.93%	23.18%	23.43%
35	PER CAPITA G.D.P. (TH. 68 BS)	PTBRSPDB	4.207	4.063	4.091	3.983	3.860
36	% Change	PTBRSPDB	-4.04%	-3.43%	0.70%	-2.63%	-3.10%
37							
38	PER CAPITA NON-OIL G.D.P. (TH. 68 Bs)	PTEPSPDB	3.859	3.752	3.787	3.685	3.567
39	% Change	PTEPSPDB	-4.17%	-2.76%	0.92%	-2.70%	-3.20%

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-7

N	DESCRIPTION	NAME	EMPLOYMENT ( TH. OF PERSONS )				
			LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	EMPLOYMENT IN AGRICULTURAL SECTOR -----	LA	789.800	812.000	824.121	832.840	843.121
2	x Change -----	LA	3.16%	2.81%	1.49%	1.06%	1.23%
3							
4	EMPLOYMENT IN OIL SECTOR -----	LP	40.375	40.621	41.042	40.995	41.948
5	x Change -----	LP	-2.24%	0.61%	1.04%	-0.11%	2.32%
6							
7	EMPLOYMENT IN MINING SECTOR -----	LMI	36.525	25.120	25.892	26.840	27.512
8	x Change -----	LMI	34.79%	-31.22%	3.07%	3.66%	2.50%
9							
10	EMPLOYMENT IN PRIMARY SECTOR -----	L1	866.700	877.741	891.055	900.675	912.581
11	x Change -----	L1	3.92%	1.27%	1.52%	1.08%	1.32%
12							
13	EMPLOYMENT IN MANUFACTURING SECTOR -----	LM	760.100	798.208	835.584	870.425	904.256
14	x Change -----	LM	9.52%	5.01%	4.68%	4.17%	3.89%
15							
16	EMPLOYMENT IN CONSTRUCTION SECTOR -----	LC	333.300	306.650	309.573	307.694	303.407
17	x Change -----	LC	-10.35%	-8.00%	0.95%	-0.61%	-1.39%
18							
19	EMPLOYMENT IN ELECTRICITY SECTOR -----	LE	66.600	67.160	68.975	70.015	71.005
20	x Change -----	LE	4.55%	0.84%	2.70%	1.51%	1.41%
21							
22	EMPLOYMENT IN SECONDARY SECTOR -----	L2	1160.000	1172.018	1214.132	1248.133	1278.668
23	x Change -----	L2	2.70%	1.04%	3.59%	2.80%	2.45%
24							
25	EMPLOYMENT IN SERVICES SECTOR -----	LS	2926.012	2969.605	3017.900	3058.034	3088.355
26	x Change -----	LS	2.40%	1.49%	1.63%	1.33%	0.99%
27	TOTAL EMPLOYMENT -----	L	4952.712	5019.364	5123.088	5206.842	5279.604
28	x Change -----	L	2.73%	1.35%	2.07%	1.63%	1.40%
29	UNEMPLOYMENT -----	U	763.495	874.045	954.196	1049.721	1165.908
30							
31	UNEMPLOYMENT RATE -----	UR	13.357	14.831	15.701	16.778	18.089
32	LABOR FORCE -----	POBA	5716.207	5893.409	6077.284	6256.564	6445.512
33	x Change -----	POBA	6.63%	3.10%	3.12%	2.95%	3.02%



MACRO - ECONOMETRIC, MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-8

INCOME AND ITS DISTRIBUTION

N	DESCRIPTION	NAME	LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	NATIONAL INCOME (MILL. Bs) -----	YNC	291973.000	343256.694	392180.055	496144.126	623417.299
2	% Change -----	YNC	23.61%	17.56%	14.25%	26.51%	25.65%
3							
4	NATIONAL WAGE INCOME (MILL. Bs) -----	RETC	137626.205	148767.171	189292.714	227476.829	271917.765
5	SHARE OF WAGE INCOME ON NAT. INCOME ----	RETCSYNC	0.440	0.433	0.483	0.458	0.436
6							
7	NATIONAL NON-WAGE INCOME (MILL. Bs) -----	REKC	154346.795	194489.523	202887.341	268667.297	351499.534
8	SHARE ON NON-WAGE INC. ON NAT. INC. ----	REKCSYNC	0.560	0.567	0.517	0.542	0.564
9							
10	PERSONAL DISPOSABLE INCOME (MILL. Bs) -----	YPDC	215853.546	234762.958	283274.570	344169.166	416587.519
11	% Change -----	YPDC	11.39%	8.76%	20.66%	21.50%	21.04%
12							
13	PERSONAL DISPOSABLE INCOME (MILL. 68 Bs) ----	YPDR	53836.000	52310.188	53537.278	54888.833	55843.434
14	% Change -----	YPDR	-1.83%	-2.83%	2.35%	2.52%	1.74%
15	WAGE RATE IN SEC. & TERT. SECT. (Bs) -----	WR23	29552.101	31591.532	39653.652	47296.553	56218.869
16	% Change -----	WR23	7.94%	6.90%	25.52%	19.27%	18.86%
17							
18	AVG. WAGE RATE IN THE ECONOMY. (IN Bs) ---	WRT	27788.049	29638.648	36948.951	43688.059	51503.439
19	PER CAPITA CURRENT NAT. INCOME (TH. Bs) ---	YNCPOB	17.327	19.822	22.044	27.153	33.237
20	% Change -----	YNCPOB	20.25%	14.40%	11.21%	23.18%	22.40%
21							
22	PER CAPITA PERS. DISP. INC. (TH. 68 Bs) ---	YPDRSPOB	2.984	3.021	3.009	3.004	2.977
23	% Change -----	YPDRSPOB	-10.79%	1.23%	-0.38%	-0.17%	-0.89%

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-9

N	DESCRIPTION	NAME	PRICES (INDEXES (1968 = 100) AND PERCENTAGES)				
			LAGGED 1984	ESTIMATED 1985	PROJECTIONS 1986 1987 1988		
1	WHOLESALE PRICES OF AGRIC. GOODS -----	IPMA	520.500	607.692	705.042	807.532	927.538
2	% Change -----	IPMA	16.34%	16.75%	16.02%	14.54%	14.86%
3							
4	WHOLESALE PRICES OF MANUFACT. GOODS -----	IPMM	375.300	445.232	560.440	710.868	903.865
5	% Change -----	IPMM	17.72%	18.63%	25.88%	26.84%	27.15%
6							
7	WHOLESALE PRICES OF IMPORTED GOODS -----	IPMT	366.300	430.604	533.537	680.010	864.573
8	% Change -----	IPMT	17.82%	17.55%	23.90%	27.45%	27.14%
9							
10	WHOLESALE PRICE INDEX -----	IGPM	402.400	475.877	587.241	727.497	905.050
11	% Change -----	IGPM	17.49%	18.26%	23.40%	23.88%	24.41%
12							
13	CONSUMER PRICE INDEX -----	IDCPR	356.800	399.376	470.858	557.990	663.854
14	% Change -----	IDCPR	12.17%	11.93%	17.90%	18.50%	18.97%
15							
16	NON-OIL G.D.P. DEFLATOR (1968=100) -----	IDPTEP	398.496	468.073	568.523	700.779	870.486
17	% Change -----	IDPTEP	13.28%	17.46%	21.46%	23.26%	24.22%
18							
19	G.D.P. DEFLATOR -----	IDPT	490.210	551.636	596.056	745.188	936.025
20	% Change -----	IDPT	21.28%	12.53%	8.05%	25.02%	25.61%
21	IMPORT PRICE INDEX OF GOODS -----	IPMB	480.032	559.165	792.861	1080.323	1330.831
22	% Change -----	IPMB	32.51%	16.48%	41.79%	36.26%	23.19%
23							
24	IMPORT PRICE INDEX OF GOODS & SERVICES ---	IPM	557.109	644.177	944.706	1238.996	1494.626
25	% Change -----	IPM	32.31%	15.63%	46.65%	31.15%	20.63%
26							
27	EXPORT PRICE INDEX OF GOODS & SERVICES ---	IPX	1851.586	1966.128	1976.752	2518.786	3197.527
28	% Change -----	IPX	41.61%	6.19%	0.54%	27.42%	26.95%

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-10

		PETROLEUM					
N	DESCRIPTION	NAME	LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	DAILY CRUDE OIL PRODUCTION(MILL. BAR) ----	PPBD	1.799	1.623	1.634	1.641	1.650
2	% Change	PPBD	0.17%	-9.80%	0.70%	0.43%	0.54%
3							
4	ANUAL CRUDE OIL PRODUCTION(MILL. BAR) ----	PPB	658.434	592.311	596.469	599.016	602.255
5							
6	DAILY LIQUID HYDROC. PROD. (MILL.B) ----	PHIDLBD	1.856	1.686	1.722	1.738	1.751
7	% Change	PHIDLBD	0.16%	-9.13%	2.09%	0.97%	0.73%
8							
9	ANNUAL LIQUID HYDROC. PROD. (MILL.B) ----	PHIDLB	679.300	615.572	628.438	634.527	639.192
10	DAILY EXP. OIL PRODUCTS & GAS (MILL.B) ----	XPCDGBD	1.517	1.371	1.380	1.390	1.400
11	ANNUAL EXP.OIL PRODUCTS & GAS(MILL.BAR) --	XPCDGB	556.400	500.415	503.700	507.350	511.000
12	% Change	XPCDGB	1.29%	-10.06%	0.66%	0.72%	0.72%
13	EXP. OF CRUDE OIL, PROD & GAS (MILL.\$) ----	XPDC\$	14794.000	13286.018	7555.500	7965.395	8687.000
14	% Change	XPDC\$	8.25%	-10.19%	-43.13%	5.42%	9.06%
15	EXP. OF OIL PRODUCTS & GAS. (MILL.B\$) ----	XPDC	85226.000	79716.109	64977.300	86026.266	112931.000
16	% Change	XPDC	42.17%	-6.46%	-18.49%	32.39%	31.27%
17	REALIZATION PRICE EX. HYDROC. (B\$/BAR) ----	PXHIDPRO	152.830	159.300	129.000	169.560	221.000
18	% Change	PXHIDPRO	40.68%	4.23%	-19.02%	31.44%	30.34%
19							
20	REALIZATION PRICE OF HYDROCARB. (\$/B\$) ---	PXPD\$B	26.700	26.550	15.000	15.700	17.000
21	% Change	PXPD\$B	5.49%	-0.56%	-43.50%	4.67%	8.28%
22							
23	FISCAL PRICE OF HYDROCARBONS. (B\$/BAR) ---	VEXPRO	191.810	191.160	154.800	203.472	265.200
24	% Change	VEXPRO	41.23%	-0.34%	-19.02%	31.44%	30.34%
25	TOTAL TAXES ON OIL INDUSTRY ----	TTPCREC	60560.000	61886.237	47004.425	59520.343	78496.296
26	% Change	TTPCREC	49.36%	2.19%	-24.05%	26.63%	31.88%
27							
28	INCOME TAX ON OIL INDUSTRY ----	TUPCREC	51473.000	53348.642	29047.340	36193.808	50186.349
29	% Change	TUPCREC	51.03%	3.64%	-45.55%	24.60%	38.66%
30							
31	OTHER TAXES ON OIL INDUSTRY ----	REBALIAC	9411.000	8458.199	18820.623	23736.154	28725.749
32	% Change	REBALIAC	50.14%	-10.12%	122.51%	26.12%	21.02%
33							
34	OIL INDUSTRY EFFECTIVE INCOME TAX RATE ---	TEISRPET	65.700	65.700	65.700	65.700	65.700
35	OIL SECTOR G.D.P. REAL ----	PTPR	5870.000	5371.094	5412.077	5457.908	5500.225
36	% Change	PTPR	0.32%	-8.50%	0.76%	0.85%	0.77%
37	OIL DOLLAR EXCHANGE RATE ----	TCP	5.746	6.000	8.600	10.800	13.000

## PUBLIC SECTOR FINANCES

N	DESCRIPTION	NAME	ESTIMATED		PROJECTIONS	
			1985	1986	1987	1988
0 CENTRAL GOVERNMENT						
REVENUES						
1	TOTAL CURRENT CENTRAL GOV. REVENUES --	IOGC	106736.373	109325.196	122726.194	144838.322
2	TOTAL TAXES ON OIL INDUSTRY -----	TTPCREC	61886.237	47004.425	59520.343	78496.296
3	NON-OIL DIRECT TAXES -----	TDNPC	13240.278	16847.052	20245.438	24200.681
4	CUSTOMS TAXES -----	CUSTAX	4681.429	6625.046	8956.701	11149.140
5	GASOLINE TAX -----	TFDERPET	1852.233	2332.534	2873.228	3546.474
6	LIQUOR TAX -----	TFLICOR	2066.000	2617.000	2682.425	2749.486
7	CIGARRETE TAX -----	TFCIGARR	2026.000	3012.000	3072.240	3133.685
8	EXCHANGE PROFITS -----	UTC FIS	11308.204	20741.641	15468.528	11508.339
9	OTHER -----	TFREST	9676.000	10145.500	9907.280	10054.226
OUTLAYS						
10	TOTAL OUTLAYS OF CENT. GOV. -----	GTFIS	112567.256	141671.484	146191.516	197836.463
11	CURRENT -----	GFISCTE	52681.050	60456.585	68891.046	79280.781
12	INTEREST -----	GFINTDEU	21577.750	22829.265	28496.301	34710.426
13	DIRECT INVESTMENT -----	GFISCAP	4421.053	7157.895	8016.842	9620.211
14	TRANSF. TO NON CONS. PUB. ENT. -----	GFSITUAD	16010.461	16398.781	18408.923	21725.750
15	EXTERNAL DEBT AMORTIZATION -----	DPBXAM	7477.500	16555.000	4957.200	34008.000
16	TRANSFERS TO DESCENTRALIZED ST. AG. -	DEFADES	22423.672	27651.045	29867.250	33343.728
17	TRANSFERS TO NON-OIL STATE IND. -----	DEFEPB	9553.523	13452.179	16050.254	19857.994
DESCENTRALIZED AGENCIES						
REVENUES						
18	DESCENTRALIZED AGENCIES -----	IADES	11024.260	12016.443	13097.923	14276.736
19	TRANSFERS FROM CENTRAL GOVERNMENT -----	DEFADES	22423.672	27651.045	29867.250	33343.728
OUTLAYS						
20	CURRENT -----	GADESCTE	27918.520	33142.782	35788.702	39367.524
21	DIRECT INVESTMENT -----	GADESCAP	5529.412	6524.706	7176.471	8252.941
NON-OIL STATE INDUSTRIES						
REVENUES						
22	EXPORTS -----	XNPPBBS	7588.620	13342.068	15922.608	18727.837
23	DOMESTIC SALES -----	VTIEPB	35810.400	36008.076	38528.641	41225.646
24	OTHER -----	IEPBOTR	4200.000	4300.000	4500.000	5035.000
25	TRANSFERS FROM CENTRAL GOVERNMENT -----	DEFEPB	9553.523	13452.179	16050.254	19857.994
OUTLAYS						
26	CURRENT -----	GEPBCT	39930.320	45918.990	50821.503	56555.876
27	DIRECT INVESTMENT -----	GEPBCAP	17222.222	21183.333	24180.000	28290.600
OIL INDUSTRY						
REVENUES						
28	EXP. OF OIL PRODUCTS & GAS. (MILL. Bs)	XPDC	79716.109	64977.300	86026.266	112931.000
29	DOMESTIC SALES -----	VTINTPET	7984.664	9865.111	11931.819	14465.569
30	OTHER -----	OIPDVSA	1484.041	4298.010	4031.245	4382.533
OUTLAYS						
31	TOTAL TAXES ON OIL INDUSTRY -----	TTPCREC	61886.237	47004.425	59520.343	78496.296
32	OIL INDUSTRY -----	PDVEG	27757.373	33119.007	38835.669	45897.847
33	FOCOCAM SURPLUS -----	FOCOSAL	6589.656	6737.536	409.890	-4688.998
34	PUBLIC SECTOR SURPLUS/DEFICIT -----	DEFPBTOT	3181.110	-31989.287	-24715.700	-55990.745
35	AS % OF GDP -----	DEFSGDP	0.008	-0.074	-0.046	-0.083
36	AS % OF NON-OIL GDP -----	DEFSGDPEP	0.010	-0.084	-0.052	-0.096

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-12

LIQUIDITY AND MONETARY BASE

N	DESCRIPTION	NAME	LAGGED		ESTIMATED		PROJECTIONS	
			1984	1985 <sup>a</sup>	1986 <sup>a</sup>	1987	1988	
1	MONETARY BASE	BASE	38128.000	45955.465	56531.081	62028.487	58875.428	
2	% Change	BASE	-3.69%	20.53%	23.01%	9.72%	-5.08%	
3	MONEY SUPPLY (LIQUIDITY) M2	LIQC	177567.000	192816.870	228962.633	268119.627	307379.149	
4	% Change	LIQC	8.75%	8.59%	18.75%	17.10%	14.64%	
5	CURRENCY (M1)	CIRC	69100.000	77526.870	103338.816	130197.794	160035.188	
6	% Change	CIRC	7.47%	12.19%	33.29%	25.99%	22.92%	
7	TIME & SAVINGS DEPOSITS	DAHP	108467.000	115290.000	125623.817	137921.833	147343.961	
8	% Change	DAHP	9.59%	6.29%	8.96%	9.79%	6.83%	
MONETARY BASE COMPONENTS FLOWS								
9	ASSETS	BCVACT	28560.000	9109.334	-2955.013	-1927.649	-11423.838	
10	INTERNATIONAL RESERVES	ARI8S	20600.000	8230.334	-25455.013	-22427.649	-39923.838	
11	DOMESTIC ASSETS	BCVACTIN	7960.000	879.000	22500.000	20500.000	28500.000	
12	PUBLIC BONDS	BCVBOBUY	2785.000	-2634.000	3500.000	4500.000	10500.000	
13	LOANS TO BANKING SYSTEM	AREDANT	2539.000	-1865.000	17500.000	9500.000	8500.000	
14	OTHER ASSETS	ADACTBCV	2636.000	5378.000	1500.000	6500.000	9500.000	
15	LIABILITIES	BCVPAS	0.000	-6527.131	-13530.629	-7425.055	-8270.779	
16	PDVSA DEPOSITS	PDVAHFIN	5353.000	-1796.902	-10914.516	-6544.255	-3576.366	
17	TREASURY DEP. AND OTHER LIABILIT.	AOPASBCV	4150.000	-4891.000	0.000	-1500.000	-3000.000	
18	CURRENCY MULTIPLIER	MULTMON	1.812	1.687	1.828	2.099	2.718	
19	MONEY SUPPLY MULTIPLIER	MULTLIQ	4.657	4.196	4.050	4.323	5.221	
20	CURRENCY (M1) / MONEY SUPPLY (M2)	M1/M2	0.389	0.402	0.451	0.486	0.521	
21	MONEY SUPPLY (LIQUIDITY) M2 / GDP	M2/PTBC	0.511	0.497	0.528	0.494	0.454	
22	MONEY SUPPLY (LIQUIDITY) M2 / NON-OIL GDP	M2/PTCPC	0.685	0.634	0.598	0.568	0.528	

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

MACRO - ECONOMETRIC MODEL OF VENEZUELA "MODVEN VI"

SIMULATION OF THE BUNGE - BORN PROPOSAL IN THE VENEZUELAN ECONOMY : ALTERNATIVE SCENARIO TA-13

RATIOS AND MAIN EXOGENOUS VARIABLES

N	DESCRIPTION	NAME	LAGGED	ESTIMATED	PROJECTIONS		
			1984	1985	1986	1987	1988
1	REAL PRIVATE CONSUMPTION / REAL G.D.P. ---	CPTRSPTBR	0.738	0.731	0.727	0.732	0.740
2	REAL PRIV. INVESTMENT / REAL G.D.P. ----	IBFPRSPTBR	0.086	0.076	0.072	0.074	0.076
3	REAL PUBLIC INVESTMENT / REAL G.D.P. ----	IBFGRSPTBR	0.100	0.117	0.112	0.101	0.094
4	REAL GROSS FIXED INVEST. / REAL G.D.P. ---	IBFRSPTBR	0.186	0.192	0.184	0.176	0.170
5	REAL IMPORT.GOODS & SERV./REAL G.D.P. ----	MRSPTBR	0.179	0.161	0.151	0.151	0.154
6	REAL IMPORT. OF GOODS / REAL G.D.P. ----	MBTRSPTBR	0.136	0.119	0.114	0.115	0.117
7	WAGE INCOME / PERS. DISPOSABLE INCOME ----	RETCSYPDC	0.637	0.634	0.668	0.661	0.653
8	WAGE INCOME PUB.SEC. / WAGE INCOME ----	RETPBCSRET	0.410	0.380	0.370	0.329	0.305
9	WAGE INCOME PRIV.SEC / WAGE INCOME ----	RETPVCSRET	0.590	0.620	0.630	0.671	0.695
10	WAGE INCOME PRIV.SEC / PROP. INCOME ----	RETPVCSRPR	1.073	1.119	1.315	1.343	1.335
11	PROPERTY INCOME / PERSONAL DISP. INCOME --	RPROPSYPDC	0.350	0.351	0.320	0.330	0.340
12	PRIVATE CONSUMPTION / PERS.DISP. INCOME ---	CPTRSYPDR	1.041	0.984	0.988	0.971	0.959
13	REAL G.D.P. / EMPLOYMENT ----	PTBRSL	14.314	14.016	14.207	13.979	13.714
14	NON-OIL DIRECT TAXES / CURRENT GDP ----	TDNPCSPTBC	0.000	0.034	0.039	0.037	0.036
15	HIDROC. REALIZATION EXPORT PRICE \$/B-----	PXPD\$B	26.700	26.550	15.000	15.700	17.000
16	DAILY EXP.OIL PRODUCTS AND GAS (MILL B)---	XPCDGBD1	1.517	1.371	1.380	1.390	1.400
17	ROYALTY PER BARREL (\$/B) ----	PREGALI\$	2.380	2.380	3.669	3.669	3.669
18	WAGE COMPENSATION OIL INDUSTRY(MILL.Bs) --	RTPC	6636.682	7238.600	8410.665	9241.136	10307.000
19	LONDON INTERBANK OFFERED RATE (LIBOR)-----	LIBOR	9.500	8.500	7.500	7.800	8.000
20	STOCKS VARIATIONS (MILL 68 Bs.)-----	VER	446.197	-667.000	-797.000	-515.000	-482.000
21	POPULATION (TH. OF PERSONS) -----	POB	16851.000	17317.000	17791.000	18272.000	18757.000
22	% Change -----	POB	2.79%	2.76%	2.74%	2.70%	2.65%
23	OIL EXCHANGE RATE (Bs/\$)-----	TCP	5.746	6.000	8.600	10.800	13.000
24	FREE MARKET EXCHANGE RATE (Bs/\$)-----	TCLIB	13.020	14.100	19.800	22.500	25.205

A PRODUCT DEVELOPED AT MetroEconómica, CARACAS VENEZUELA  
MAY 1986

## REFERENCES

- Banco Central de Venezuela. Informe Económico. Caracas, Various.
- Confederación de Trabajadores de Venezuela (1985), Planteamientos de la Confederación de Trabajadores de Venezuela Sobre los Ajustes Salariales a Ser Presentados a la Comisión Tripartita Nacional. Caracas, October 1985. (Unpublished Material).
- Duesenberry, James (1952) Income, Savings and the Theory of Consumer Behavior. Cambridge, Mass.: Harvard University Press.
- Friedman, Milton (1957) A Theory of the Consumption Function. Princeton: Princeton University Press.
- MetroEconómica. The Venezuelan Economy, Monthly Report. Caracas. Various.
- Palma, Pedro A. (1985) The Venezuelan Economy 1974-1983, From Bonanza to Stagnation and Crisis. Caracas. (Unpublished Material).
- \_\_\_\_\_, and Fontiveros, D. (1986) The Venezuelan Economy and the World Oil Crisis. Caracas, MetroEconómica.
- Republic of Venezuela and the Banks (1986), Restructuring Agreement for The Republic of Venezuela as Obligor and the Banks. New York, February 26, 1986. (Unpublished Material).
- Rodríguez, Cristina (1985) El Ahorro en Venezuela. Third Conference on the Latin America and the Caribbean Financial Market Development. Caraballeda, Venezuela. (Unpublished Material).
- Servicio de Estudios Económicos, (1985) Anti-Inflationary Policy 1985-1986. Lima, Perú.