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STABILIZATION AND ADJUSTMENT IN POST1982, MEXICO: ARE THERE SIGNS OF EXPORT-LED GROWTH?

Nora Lustig

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Introduction

Similar to many other developing countries, Mexico's economic history of the years following World War II is characterized by a sustained effort to combine industrialization with a relaxation of the foreign balance constraint. Up to the mid-nineteen seventies the country did indeed succeed in expanding its industrial base as well as achieving relatively high growth rates (between 5 and 6 percent per year from the forties through the mid-seventies). Nonetheless, contrary to what had been expected, the balance of payments constraint became more and more stringent, as reflected by the fact that a particular growth rate could only be sustained by greater indebtedness.

Under this scenario, it was believed that the oil discoveries made public around the mid-seventies would not only drastically change the growth potential for the country, but also would eliminate the foreign exchange constraint. Both the payments crisis that occurred by mid 1982 as well as the subsequent years of adjustment policies and recession testify to the misappreciation of the implications of the oil "bonanza".

Beginning in 1983, the incoming administration of De la Madrid implemented an adjustment program whose main objectives were to curb inflation and restore macro equilibrium, especially in the fiscal and external accounts. Through fiscal restraint and drastic changes in key relative prices (i.e., the exchange rate, the wage rate and public sector prices) it was expected that Mexico would witness a substantial decline in the inflation rate, together with a fundamental re-orientation of its growth strategy, in which non-oil exports would play a leading role.

As we shall discuss below the results of the program have been mixed. Although non-oil exports have grown at much higher rates than before, their behaviour may be more closely associated with the contraction of the domestic market than with a fundamental change in the economic structure as regards its trade performance. At the outset we would like to warn the reader that the following essay is conceived as an exercise in "hypothesis building", rather than one in "hypotheses testing". Principally due to the short length of the period under analysis robust econometric analysis is currently curtailed by insufficient data points. Nonetheless, our impression is that the following descriptive analysis may result in a useful starting point for future empirical work.

1. A brief overview of the Mexican economy: the oil-boom and the crisis periods

1.a The oil-boom period: 1978-1981

In Table 1 we present a synthesis of the performance of the Mexican economy from the 1960's onward. From the early sixties to the mid-seventies Mexico grew at sustained high rates. This positive growth performance, however, was accompanied by an increasing vulnerability of the external account, illustrated by the growing current account deficit and the rise in the total foreign debt.

By the end of 1976, this vulnerability evolved into crisis, when after twenty two years of a fixed exchange rate the peso was devalued by nearly 100 percent. The crisis which began in 1976, however, was notoriously short-lived. The discovery and massive exploitation of Mexico's oil reserves relaxed the balance of payments constraint on growth and initiated a period of unprecedented rapid economic expansion. During the oil-boom, which literally lasted from 1978 to 1981, the GDP average growth rate was 8.5 percent per annum and was essentially "investment-led"(by both private and public investment).

With oil exports growing at an annual rate of over 50 percent, and apparently unrestricted foreign credit available at cheap rates, it was perceived at the time that the country could afford its widening current account disequilibrium, which on average was three times the size of the average deficit during the 1971-1975 period. Subsequent events illustrated that this perception was fatally wrong.

The oil boom resulted in an exacerbation of the country's vulnerabilities to internal and external shocks. With repect to the external account, for example, the real appreciation of the peso which resulted from the massive inflow of foreign exchange negatively affected non-oil exports and overly cheapened imports. The economy, therefore, became increasingly dependent on oil revenues, which accounted for about 80 percent of the total value of exports at the end of the "boom" period. Thus, in spite of the fact that international oil prices rose to much higher levels than those expected at the outset of the boom (i.e., as contemplated by the industrial and macroeconomic plans developed in 1979 and 1980), the reversal of the upward trend in 1981 resulted in total disruption.

However, clearly not everything can or should be blamed on the external shock. After the 1976 crisis the government made some effort to reduce the public deficit as a percentage of GDP: the adjusted operational deficit (as calculated by the Bank of Mexico, 1987) was reduced from an average of 9 percent of GDP in 1975-76 to an average of slightly over 5 percent in 1977-78. Nonetheless, no further attempts to curtail the government deficit were made, although, as many observers have pointed out, the government could have tried to gradually reduce some of the subsidies (on the domestic price of gasoline, for example), thereby avoiding the financial vulnerability which became evident when the price of oil declined and the expenditure inertia was out of control. (For a discussion of the role of the public sector deficit in triggering the crisis and the controversies that surround this issue see: Barker and Brailovsky, 1984; Bazdresch, 1983; Garcia and Serra, 1984; Ize and Ortiz, 1983; Ros, 1985; Taylor, 1984).

The combination of an appreciating peso with a financially vulnerable public sector was fatal to the economy once oil prices began sliding and external interest rates increasing. In 1981 the different points of view within the presidential cabinet as to which policy to follow (devaluation versus exchange controls) paralyzed the decision making process at the most critical moment, when capital was massively flying out of the country. According to various estimates the net capital outflow between 1981 and 1982 was around 10 billion dollars (Taylor, op. cit.,

Table 2).

The year of 1982 was the last year of the Lopez Portillo Government. A president who had initiated his six-year term with the support and praise of the private sector finished amidst widespread criticism and accusations. During the last months of the regime economic policy was quite chaotic. After a massive devaluation in February 1982 (about 80 percent in nominal terms), the government recommended wage increases that -in spite of the fact that they were largely ignored- increased inflationary expectations and exacerbated capital flight at a time when foreign sources of capital were rapidly drying up. By mid-1982 Mexico had to announce to the world that it would be unable to meet its foreign commitments and that urgent rescheduling and fresh money were required.

In his last yearly presidential address to the nation (on September 1, 1982), Lopez Portillo announced the nationalization of the banking system and the establishment of full exchange controls. Both measures were considered necessary to curtail pernicious capital flight, already deeply in process at that point. Nonetheless, several runs on the peso in subsequent years indicate that it is not that easy to control a rich, powerful and knowledgeable financial sector, independently of the desirability of controling it in moments when its behaviour can only magnify instability.

Thus, the political aftermath of the confrontation implied by the nationalization decree was left to his successor, Miguel de la Madrid. Yet in contrast to what apparently was Lopez

Portillo's perception during his last months in office, De La Madrid clearly considered the private sector to be pivotal in the development strategy which would prevail in Mexico during the following years .

1.b The crisis period: 1982-1987

Overall, the last three months of the Lopez Portillo government were characterized by a strange combination of macroeconomic policy. While the outgoing government attempted to implement an unorthodox financial policy (i.e., the reduction of interest rates and the generation of a dual exchange rate regime), the incoming administration negotiated an IMF agreement with essentialy classic orthodox characteristics. The adjustment package was to begin on December 1982.

In principle two phases can be identified in the three-year stabilization program agreed upon with the IMF: the "shock treatment" phase of 1983 and the "gradualist" phase in 1984-85. The main targets of the program corresponding to each phase were the following: 1) abruptly reduce inflation from around 100 percent in 1982 to 55 % in 1983 and the current account deficit from close to 5 billion in 1982 to 2 billion in 1983, 2) gradually reduce inflation to a level in the twenties and thirties range and the current account deficit to 1.2 billion in 1985.

The three principal instruments used to achieve these goals were: 1) a sharp cut in the government deficit; 2) an initial maxi-devaluation of the controlled and free exchange rates; and

3) severe wage restraint. At the time it was expected that in terms of growth the stabilization program would imply: zero growth in 1983, 3 percent in 1984 and by 1985 the historical growth rate of 5 to 6 percent. As Table 2 illustrates, the actual performance was quite different.

The striking result is that in spite of the fact that the public sector deficit goal was achieved almost to the dot (i.e., it was halved from its 1982 level to 8.5 % in 1983), the inflation rate declined by much less than expected (the projected rate for 1983 was 55 % in contrast to the resulting rate of 80.8 %). The "gradualist" approach, which relied mainly on real exchange rate appreciation, the postponment of public sector price increases and wage repression, yielded meager results as well. It would seem that the dynamics of the inflationary process in Mexico had acquired similar characteristics to those prevailing in other Latin American countries, where the "productivity" of standard stabilization measures was notably low.

The contraction in output in 1983, however, was far more severe than expected : -5.3% versus projected zero growth. Yet not sooner had the economy begun to recover, when a new "exchange crisis" occurred in mid-1985, as the initial spectacular achievements of the external accounts were rapidly eroded away by an appreciating (though still undervalued) exchange rate ,a growing internal market and resumed capital flight. (For a more detailed discussion of the events during the 1982-86 period see Lustig and Ros, 1987).

The explanation of why output declined in 1983 by so much more than anticipated can be found in three elements: 1) the low degree of elasticity between the reduction in public deficit and the rate of inflation , which implied that the contraction of the deficit in real terms was more drastic than the reduction in the financial deficit; 2) an underestimation of the contractionary effects of a real devaluation on consumption and investment; and 3) an underestimation of the degree to which private investment would follow the downturn in public investment.

The year of 1986 witnessed another drastic decline in international oil prices which reduced oil income from abroad by almost half. The supply shock resulted in another year of negative growth and an acceleration of inflation (Table 2). The mild recovery which started in 1987 was jeopardized one more time by financial instability as capital gains from a highly profitable stock exchange (the highest in the world at the time) were cashed in and exchanged for dollars in face of a relatively appreciated exchange rate (though still undervalued by any measure) and declining domestic interest rates.

The events at the end of 1987 made the government part from gradualism and undertake a heterodox package in which fiscal stringency is combined with wage and price freezes. As these freezes have been the result of some negotiation procedure with the various interest groups, they are currently called "concerted" rather than "coercive" by decree.

One characteristic of these crisis years which should be underlined is the fact that there has been, with the exception of 1986, a continuous transfer of resources from Mexico to the rest of the world. According to the initial agreement signed with the IMF the country was to reduce its current account deficit during the 1983-85 period although it was not committed to sustaining a surplus.

What is worrisome, however, is that as soon as the surplus begins to erode the private sector receives the message that the country is once again facing an external crisis and that the dollar has once more become "too inexpensive". This perception is undoubtedly dangerous to the economy, as growth accompanied by price stability will probably not be resumed on a sustained basis if the country continuously has to transfer part of its saving to the rest of the world.

2. The performance of non-oil exports during the 1983-87 period: are there any signs of an export-led growth?

As we mentioned in the introduction the performance of non-oil exports (especially manufacturing exports) during the 1983-86 period has been interpreted as an important indicator of structural change in the Mexican economy, from an inward- looking to an outward-looking development path. On average, manufacturing exports have grown at close to 20 percent during this period. In 1986 and 1987, after the drastic reduction in the international price of petroleum, their value exceeded that of oil exports for the first time since the late seventies.

The behavior of non-oil exports has been attributed to the policies followed during the adjustment program especially the correct realignment of relative prices (particularly the exchange rate) in the right direction. A closer observation of the pattern followed by manufacturing exports and that of three other crucial variables such as the exchange rate, the GDP growth rate and the size and composition of investment, however, casts quite a bit of doubt on the assumption that outward oriented structural adjustment has been taking place.

On the one hand, one observes that non-oil exports have been counter-cyclical: that is, the growth rate of these exports moves in the opposite direction to that of total output when yearly data is examined (see Graph 1). This would seem to indicate two things: first, that the striking performance of exports is associated more with a contraction of the domestic market than with a re-allocation of output between tradeables and non-tradeables and second that the "virtuous circle" between exports and output growth is apparently not holding. The counter-cyclical behavior appears at the disaggregated level as well (see graphs 2 through 10).

The relation between non-oil exports and the real exchange rate has the right sign (i.e., when the real exchange rate appreciates, non-oil export growth slows down and vice versa; see Graph 1). Nevertheless, as the net effect of real devaluations on the Mexican economy seems to be contractionary (Lustig and Ros, 1987; McLeod and Sheehey, 1988; Edwards, forthcoming), the performance of exports may result more from the contraction of output than the relative price effect induced by a real devaluation.

In theory, export-led growth should show up in capacity expansion in the tradeable sector. If exports are considered profitable, private entrepreneurs should re-invest their profits in the same sector and, thus, a new dynamic interaction between exports, investment and output growth should be established.

However, in recent years there is no indication in Mexico that exports are an incentive to gross capital formation. On the one hand, total private investment has grown on average at a negative rate equal to -6.3 % per annum between 1983 and 1987 (see Table 3). On the other, at least until 1984 (the last year for which we have data) this negative performance has been true for practically all of the manufacturing sectors (Table 5), including the great export performers of the period such as Machinery and Equipment (see Tables 5 and 6).

Given the pattern of capital formation it would seem that the positive performance of exports since 1983 is possible thanks to the productive capacity generated during the investment boom between 1978 and 1981 (again see Table 5).

The composition of exports indicates a shift from the traditional exports (food products and textiles) to non-traditional manufactured goods such as basic metals, machinery and equipment (se Table 7). Nevertheless, this shift is not present in the current investment structure as far as one can discern from the behavior of gross capital formation by sector between 1982 and 1984.

As far as the current account goes, the so much celebrated performance of the Mexican external sector is also the consequence of the contraction in imports and not only the expansion in exports (see Table 4). The import contraction is a direct result of the dramatic reduction in gross investment (see Tables 2 and 3) which reflects itself in a considerable decline in imported capital and intermediate goods (see Table 4).

Although a superficial observation of the net-export to gross value of production ratios by sector leads to the conclusion that the manufacturing sector has become substantially less dependent on imports (see Table 8), after 1982 these ratios have been calculated for levels of capacity utilization that are substantially lower and for a period in which capital formation was negative. Thus, it is premature to assert that the manufacturing sector has become less dependent on non-competitive imports for each additional unit of exports. The rapid deterioration of the balance of trade just as soon as the economy starts to recover unfortunately is a sign which contradicts this hypothesis; (see the performance of trade during the 1984-1985 period in Table 4).

In all fairness, one should say that external performance in 1987 has been slightly different from that of previous years. For the first time since 1983 exports have increased at the same time that output growth, though small, has been positive (see Table 4 and Graph 1). Nonetheless, it is too early to say whether this behavior signals a fundamental change in the course of events or whether it is a "happy coincidence". The answer to this will depend on the behavior of exports and imports once sustained positive output growth is attempted.

3. Concluding remarks

In spite of the five years of severe adjustment since 1983 (as shown by the size in the current account balance in Table 4), the Mexican government has not rid itself of severe policy dilemmas. Sustained growth with some degree of price stability cannot be obtained without some exchange rate appreciation (which has occurred under all the disinflationary packages tried in Mexico) and a reduction in the domestic real interest rate (to encourage investment).

However, on the one hand, real exchange rate appreciation given what we said before in terms of export and import performance, would probably result in a reduction of the trade surplus. On the other, ever since the debt crisis started in 1982 the private sector has responded very rapidly to any signs of exchange rate appreciation (even when the exchange rate remained undervalued by any standard) and to erosion of the trade surplus with capital flight.

This "oversensitivity" to variations in the exchange rate (or changes in foreign reserves independently of their size) on the part of the private sector has curtailed the degrees of freedom for policy management of growth. As a result, there is a negative feedback to private sector expectations of future profits who, in turn, delays further investment. Thus, no growth in fact occurs.

It would seem, then, that growth cannot be restored unless the constraint imposed by the external sector is relaxed: this would permit a decline of the trade surplus, which is a natural consequence of growth resumption, without triggering destabilizing responses in the private capital account.

In this sense the major constraint to break the "impasse" and launch a strategically outward-oriented growth scheme is the burden imposed by the external debt. It would seem that unless a fundamental solution to this constraint is found, the growth prospects for Mexico (and for many other developing countries) are disturbingly gloomy.

TABLE 1

PERFORMANCE OF THE MEXICAN ECONOMY 1960 -1981

	1961-70	1971-75	1976-77	1978-81
Real National Income				
(annual growth)	7.1%	6.6%	3.0%	9.5%
Investment Ratio (% GDP)	17.5	20.3	19.9	22.6
Urban Unemployment Rate	-	7.2 /1	7.7 /2	5.3
Real Public Sector Surplus (% GDP)	-	-	-2.2 /2	-3.6
External Current Account				
(billions of dollars)	-0.5	-2.2	-2.6	-6.7
Total Foreign Debt (end of				
period)(billions of dollars)	7.0	20.2	29.0	75.0
Total GDP (annual growth rates)	7.0%	7.2%	3.4%	8.5%
Agriculture	3.8%	3.0%	4.2%	4.2%
Oil industry	8.3%	8.5%	9.2%	18.9%
Non-Oil Industry	8.5%	7.0%	1.8%	9.1%
Commerce and Services	7.1%	7.3%	3.7%	8.3%
Domestic Expenditures, Exports and				
Imports (annual growth rates)				
Private Consumption	6.4%	5.9%	3.2%	7.8%
Public Consumption	8.8%	10.9%	2.6%	9.8%
Private Investment	8.1%	5.5%	-0.5%	13.4%
Residential	-	8.8%	3.0%	3.0%
Other	-	3.5%	-3.1%	20.0%
Public Investment	13.0%	13.4%	-7.1%	20.1%
Exports (goods and services)	5.2%	4.7%	15.6%	9.0%
Oil and Natural Gas	-	19.3%	40.0%	56.1%
Non-Oil Goods	-	2.4%	7.3%	3.1%
Services	-	5.9%	19.9%	5.1%
Imports (goods and services)	6.4%	8.2%	-4.8%	25.9%
Prices, Wages and Exchange Rates				
Consumer Prices (annual growth)	2.4%	12.0%	22.2%	22.4%
Average Real Wage (annual growth)	6.3%/3	4.7%	4.1%	2.4%
Free Real Exchange Rate				
(1970=100)	99.6	94.7	101.6	91.1

Sources: Banco de Mexico, Gross Domestic Product and Expenditure, 1960-1977.
Banco de Mexico, Annual Reports, several years.
Secretaria de Programacion y Presupuesto, National Accounts 1970-1981.
Secretaria de Programacion y Presupuesto, Current Information Bulletins, several years.

1/ 1975.
2/ 1977.
3/ Minimum real wage.

TABLE 2

PERFORMANCE OF THE MEXICAN ECONOMY 1980 - 1987

	1981	1982	1983	1984	1985	1986 p	1987 e	1983-87
Real GDP								average annual growth
(annual growth rate)	8.0	-0.5	-5.3	3.7	2.7	-3.8	1.4	-0.6%
Investment Ratio								simple average
(1970 prices)	21.5	19.1	15.1	15.2	15.7	14.5	n.a.	15.1
Urban Unemployment Rate	4.2	4.1	6.9	5.7 p	4.4 p	4.3 p	4.1 /2	5.1
Nominal Financial Deficit /1	14.8	17.6	9.0	8.7	10.0	16.3	17.9	
Ajusted Operational Deficit /1	11.0	12.5	5.5	3.7	3.59	4.16	n.a.	4.2
External Current Account Dalance								
(billions of dollars)	-12.5	-4.9	5.3	4.2	1.2	-1.3	3.6 /2	2.6
Accumulated Foreign Debt (end of								
period,billions of U.S. dollars)								total change
Estimate #1 /3	79.7	91.3	98.0	98.8	101.6	104.0	n.a.	6.1%
Estimate #2 /4	n.a.	87.6	93.83	96.6	97.3 p	101.4 p	n.a.	8.1%
Prices, Wages, Interest Rates and								
Foreign Exchange Rates			annual growth rates					
Consumer Price Index								average annual growth
(average annual rate)	27.9	58.9	101.9	65.4	57.7	86.2	131.8	86.0%
(Dic. to Dic.)	28.7	98.8	80.8	59.2	63.7	105.7	159.2	90.6%
								total change
Real Average Wage	4.2	-2.4	-26.5	-4.9	1.0	-9.9	-5.5	-37.4%
Real Minimum Wage	2.6	-11.5	-16.9	-6.7	-1.2	-8.5	-6.5	-34.5%
Real Exchange Rate /5				indices				average annual growth
(1970=100)	90.8	124.2	133.3	110.5	106.2	156.4	170.4 /6	27.8%
								simple average
Real Interest Rate /7	3.1	-25.2	-3.8	3.6	5.2	6.3	-4.1	1.4

Sources: Banco de Mexico, Economic Indicators, Dic. 1987.
Economia Aplicada, 1988, based on the document "Criteria of Economic Policy for officiating the Law of Revenues and the Federal Expenditures Budget", 1987, and the "Pact of Economic Solidarity", 1987.
INEGI, economic statistics published in "El Financiero", March 28, 1988: Total GDP, GDP by expenditure and origin, 1987.
INEGI,SPP, National Census on Urban Employment: unemployment rate between 1981 and 1983.
Secretaria de Programacion y Presupuesto, National Accounts, several years.

1/ As a percentage of GDP. Banco de Mexico, Annual Report, 1986.
2/ Data up to October 1987.
3/ Estimate done Economia Aplicada, 1988.
4/ Estimate by the General Office of Public Finance Planning.
5/ This index is calculated as the following ratio: world price index (an average of the CPI's of 133 countries) divided by the national consumer price index.
6/ Simple average of monthly data, up to October, 1987.
7/ Calculated on the basis of the average interest rate on savings deposits and the Dec. to Dec. inflation rate.

TABLE 3

GDP BY EXPENDITURE AND ORIGIN 1981 - 1987
(1970 prices)

	1981	1982	1983	1984	1985	1986 p	1987 p	1983-87
				growth rates				average annual growth
Private Consumption	7.3	1.1	-7.5	2.5	2.1	-5.5	-1.4	-2.0
Public Consumption	10.1	2.4	-1.3	6.0	1.3	1.3	-1.0	1.4
Gross Fixed Investment	14.7	-15.9	-27.9	5.1	6.7	-11.7	-0.7	-6.6
Private Fixed Investment	13.9	-17.3	-24.2	9.0	13.4	-8.8	2.1	-6.3
Residential	6.9	2.6	-6.2	4.9	5.9	-2.0	n.a.	n.a.
Other	17.2	-25.8	-34.9	12.5	19.5	-13.3	n.a.	n.a.
Public Fixed Investment	15.8	-14.2	-32.5	0.6	-4.4	-16.8	n.a.	n.a.
Total Exports (goods and services)	6.2	13.7	11.5	10.5	-2.6	5.2	12.2	7.2
Oil and Natural Gas Exports	31.0	33.2	1.7	-1.3	-7.7	-10.9	3.5	-3.1
Non-oil Exports (goods)	-2.3	8.4	25.4	20.2	-1.1	20.8	n.a.	n.a.
Total Imports (goods and services)	20.3	-37.1	-41.7	19.7	11.0	-12.2	3.5	-6.8
Total GDP	8.0	-0.5	-5.3	3.7	2.7	-3.8	1.4	-0.4
Agriculture	6.1	-0.6	2.9	2.5	3.8	-2.1	1.6	1.7
Mining and Quarrying 1/	10.1	0.3	-5.1	2.7	4.2	-6.1	n.a.	n.a.
Oil Industry 2/	16.5	8.8	1.6	2.7	-0.8	-2.4	n.a.	n.a.
Manufacturing 3/	6.6	-3.0	-8.1	4.8	6.3	-6.2	2.0	-0.4
Durable Consumer Goods	9.6	-11.2	-20.6	3.4	11.7	-11.1	14.3	-1.4
Non-durable Consumer Goods	6.0	1.0	-3.6	2.5	3.4	-1.3	-1.8	0.8
Capital Goods	12.7	-14.3	-25.3	8.9	16.8	-12.0	32.0	0.5
Intermediate Goods	7.2	-3.0	-6.8	7.2	5.6	-4.9	7.2	1.6
Construction	11.8	-5.0	-10.0	3.4	3.0	-9.1	1.7	-4.2
Electricity	8.4	6.6	0.7	7.4	8.3	4.7	3.8	4.9
Services	7.9	0.2	-4.6	3.5	1.4	-2.6	n.a.	n.a.

Sources: Secretaria de Programacion y Presupuesto. National Accounts, several years.
Banco de Mexico. Economic Indicators, Dec. 1987.
Banco de Mexico. Industrial Indicators, several years.
Presidencia de la Republica. General Criteria of Economic Policy, 1984.
INEGI, economic statistics published in "El Financiero", March 28, 1988: Total GDP, GDP by expenditure and origin, 1987.

1/ Excludes Sector 06, "oil and natural gas extraction".
2/ Includes Sector 06, 33 and 34, "oil and natural gas extraction", "oil refining" and "basic petrochemicals".
3/ Excludes Sector 33 and 34, "oil refining" and "basic petrochemicals".

TABLE 4

FOREIGN TRADE AND THE BALANCE OF PAYMENTS 1981 -1987
(billions of current dollars)

	1981	1982	1983	1984	1985	1986	1987 /1
Exports (goods and services)	29.1	27.3	27.2	30.1	27.6	22.0	20.5
Oil	14.1	16.5	16.0	16.6	14.8	6.3	6.6
Other Primary Goods	2.2	1.7	1.7	2.0	1.9	2.6	1.6
Manufactured Goods	3.1	3.0	4.6	5.6	5.0	7.1	7.2
Services	9.7	6.0	4.9	5.9	5.9	6.0	5.1
"Maquiladoras"	1.0	0.9	0.8	1.2	1.3	1.3	1.1
Tourism	1.8	1.4	1.6	2.0	1.7	1.8	1.8
Border Transactions	4.8	2.3	1.1	1.3	1.2	1.2	0.9
Other Services	2.2	1.5	1.3	1.5	1.8	1.7	1.3
-Imports (goods and services)	34.4	21.8	12.8	16.2	18.5	16.3	12.4
Consumer Goods	2.9	1.5	0.6	0.8	1.1	0.8	0.5
Intermediate Goods	13.7	8.4	5.7	7.8	9.2	7.6	6.4
Capital Goods	7.4	4.5	2.2	2.6	3.2	3.0	1.8
Services	10.4	7.4	4.2	5.0	5.3	4.9	3.7
Tourism	1.6	0.8	0.4	0.6	0.7	0.6	0.6
Border Transactions	4.9	2.4	1.1	1.5	1.6	1.5	1.1
Other Services	4.3	4.2	2.6	2.8	3.1	2.8	2.0
Balance of Trade	-5.3	5.4	14.4	13.9	9.1	5.7	8.1
-Interest Payments on Foreign Debt	8.4	11.3	10.2	11.7	10.2	8.3	6.0
+Other Income From Abroad	1.1	0.9	1.1	2.1	2.3	1.3	1.5
Current Account Balance	-12.5	-4.9	5.3	4.2	1.2	-1.3	3.6
Net Long-term Capital Inflow	11.7	10.4	7.3	3.6	0.3	0.9	4.2
Net Short-term Capital Inflow	10.2	-1.7	-8.4	-3.6	-1.8	1.4	-0.4
Errors and Omissions	-8.4	-8.4	-0.9	-0.9	-2.1	-0.2	0.2
Bank of Mexico	1.0	-4.7	3.3	3.4	-2.3	1.0	7.8

Source: Banco de Mexico. Annual Report, several years.

1/ Data up to October, 1987.

TABLE 5

SECTORAL BEHAVIOUR OF GROSS FIXED INVESTMENT 1975 -1984

Sector	1975-84	1978-81	1982-84
	annual average growth rates		
1. Food, Beverages, Tobacco	4.7%	25.3%	-9.3%
2. Textiles, Apparel, Leather	18.8%	55.3%	2.8%
3. Wood Products	-1073.0%	34.7%	-58.5%
4. Paper, Printing, Publishing	3.5%	21.1%	-56.1%
5.1. Chemicals, Petrochemicals, Rubber, Plastics	-3.4%	17.0%	-43.4%
5.2. Chemicals, Petrochemicals, Rubber, Plastics, Oil Derivates	24.4%	88.4%	-60.4%
6. Non-Metallic Mineral Products	5.3%	47.0%	-17.6%
7. Basic Metal Products	35.3%	-0.6%	-57.9%
8. Metal Products, Machinery, Equipment	5.7%	35.6%	-36.5%
9. Other Manufacturing Industries	-12.3%	7.0%	-23.6%

Source: Warman, F. The Behaviour of Manufacturing Exports and Imports: 1980 -1986, Masters' Thesis presented at the Colegio de Mexico, 1987.

TABLE 6

MANUFACTURING EXPORT PERFORMANCE 1980 - 1986
(calculated from current dollar values)

Manufacturing Sector	1981	1982	1983	1984	1985	1986	1983-86 average annual growth rate
(annual growth rates)							
1. Food, Beverages, Tobacco	-12.1%	4.2%	2.4%	13.4%	-8.6%	24.8%	7.3%
2. Textiles, Apparel, Leather	-9.9%	-17.1%	27.3%	43.9%	-29.3%	71.0%	22.0%
3. Wood Products	2.4%	-12.4%	57.6%	19.8%	-26.5%	39.4%	17.9%
4. Paper, Printing, Publishing	-5.6%	-3.6%	-4.3%	29.0%	-10.0%	59.3%	15.1%
5. Chemicals, Petrochemicals, Rubber, Plastics, Oil Derivates	31.7%	-31.0%	83.1%	44.0%	-2.4%	-24.8%	18.0%
5.a. Oil Derivates	43.0%	-57.3%	182.9%	68.6%	0.6%	-52.7%	25.1%
5.b. Petrochemicals	47.1%	-12.8%	17.7%	18.1%	-33.6%	-18.2%	-6.8%
5.c. Chemicals	17.3%	-3.4%	42.2%	20.4%	-10.9%	23.1%	17.1%
5.d. Rubber and Plastic Products	5.9%	15.7%	68.7%	47.0%	-36.6%	90.5%	31.6%
6. Non-Metallic Mineral Products	-3.3%	12.0%	50.6%	37.3%	8.5%	19.8%	20.0%
7. Basic Metal Products	-25.0%	265.0%	81.4%	-0.1%	-27.8%	43.1%	16.7%
7.a. Iron and Steel	4.6%	75.6%	181.7%	19.3%	-36.7%	85.3%	40.9%
7.b. Metallurgy	-40.4%	437.6%	51.5%	-10.8%	-21.2%	18.0%	5.8%
8. Metal Products, Machinery, Equipment	-5.8%	-0.7%	83.9%	35.7%	-4.0%	54.2%	38.7%
9. Other Manufacturing Industries	3.5%	-27.8%	108.5%	-0.5%	-9.1%	-6.4%	15.3%
Total Manufacturing Exports	1.4%	-1.2%	60.9%	28.2%	-8.0%	21.1%	23.1%
Total Exports	26.9%	9.3%	5.1%	8.4%	-10.5%	-26.0%	-6.8%

Source: Warman, F. The Behaviour of Manufacturing Exports and Imports: 1980 -1986, Masters' Thesis presented at the Colegio de Mexico, 1987.

TABLE 7

COMPOSITION OF MANUFACTURING EXPORTS 1980 - 1986
(calculated from current dollar values)

	1980	1981	1982	1983	1984	1985	1986
Manufacturing Sector							
1. Food, Beverages, Tobacco	23.1%	19.8%	20.9%	13.4%	11.8%	11.7%	12.2%
2. Textiles, Apparel, Leather	6.0%	5.3%	4.4%	3.5%	3.9%	3.0%	4.4%
3. Wood Products	1.7%	1.7%	1.5%	1.5%	1.4%	1.1%	1.3%
4. Paper, Printing, Publishing	2.6%	2.4%	2.3%	1.4%	1.4%	1.3%	1.0%
5. Chemicals, Petrochemicals, Rubber, Plastics, Oil Derivates	27.7%	35.7%	24.9%	28.5%	31.9%	33.8%	21.4%
5.a. Oil Derivates	12.8%	17.8%	7.7%	13.6%	17.8%	21.0%	8.4%
5.b. Petrochemicals	2.7%	3.9%	3.4%	2.5%	2.3%	1.7%	1.1%
5.c. Chemicals	11.6%	13.3%	13.0%	11.6%	10.8%	10.5%	10.8%
5.d. Rubber and Plastic Products	0.6%	0.7%	0.8%	0.8%	0.9%	0.6%	1.0%
6. Non-Metallic Mineral Products	3.9%	3.6%	4.1%	3.9%	4.1%	4.9%	4.9%
7. Basic Metal Products	5.3%	3.9%	14.5%	16.4%	12.7%	10.0%	12.0%
7.a. Iron and Steel	1.8%	1.9%	3.3%	5.8%	5.4%	3.7%	5.8%
7.b. Metallurgy	3.5%	2.1%	11.2%	10.6%	7.3%	6.3%	6.2%
8. Metal Products, Machinery, Equipment	28.3%	26.1%	26.2%	30.1%	31.7%	33.1%	42.9%
9. Other Manufacturing Industries	1.4%	1.5%	1.1%	1.4%	1.1%	1.1%	0.[illegible]
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: Warman, F. The Behaviour of Manufacturing Exports and Imports: 1980 -1986, Masters' Thesis presented at the Colegio de Mexico, 1987.

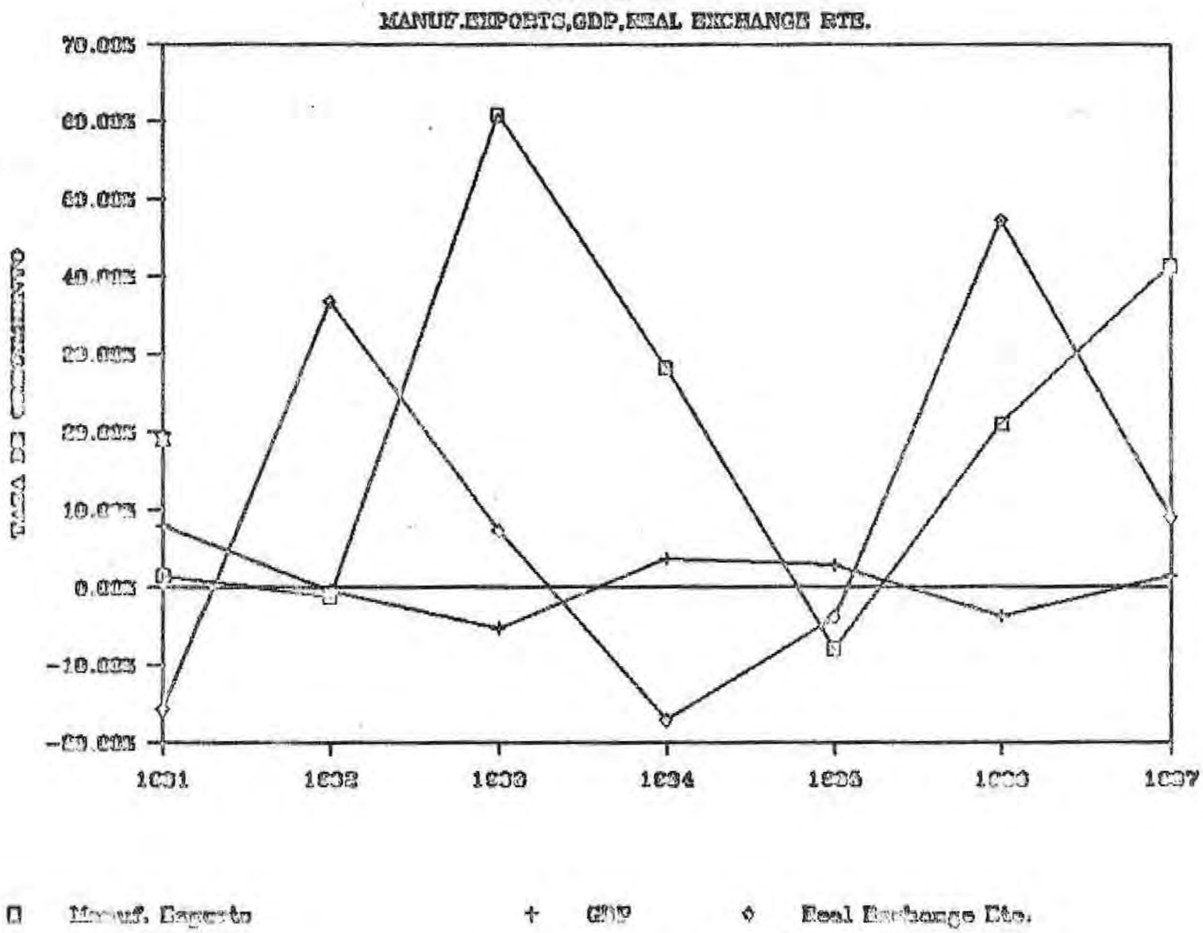
TABLE 8

SECTORAL RATIO OF NET EXPORTS TO GROSS OUTPUT 1980 -1984

	1980	1981	1982	1983	1984
Manufacturing Sector					
1. Food, Beverages, Tobacco	-3.1%	-2.7%	0.1%	2.1%	2.8%
2. Textiles, Apparel, Leather	-1.2%	-3.7%	-2.7%	4.4%	4.6%
3. Wood Products	-1.2%	-1.9%	0.02%	8.0%	6.9%
4. Paper, Printing, Publishing	-25.3%	-24.9%	-19.6%	-18.0%	-15.7%
5. Chemicals, Petrochemicals, Rubber, Plastics, Oil Derivates	-17.5%	-16.7%	-16.2%	-0.7%	-0.7%
6. Non-Metallic Mineral Products	-1.9%	-3.6%	1.4%	15.2%	15.4%
7. Basic Metal Products	-63.1%	-71.4%	-32.2%	17.9%	-4.6%
8. Metal Products, Machinery, Equipment	-86.8%	-102.2%	-87.1%	-42.7%	-43.7%
9. Other Manufacturing Industries	-9.6%	-12.4%	-7.5%	15.2%	8.0%
Total Manufacturing Exports	-27.7%	-32.3%	-22.9%	-4.0%	-5.8%

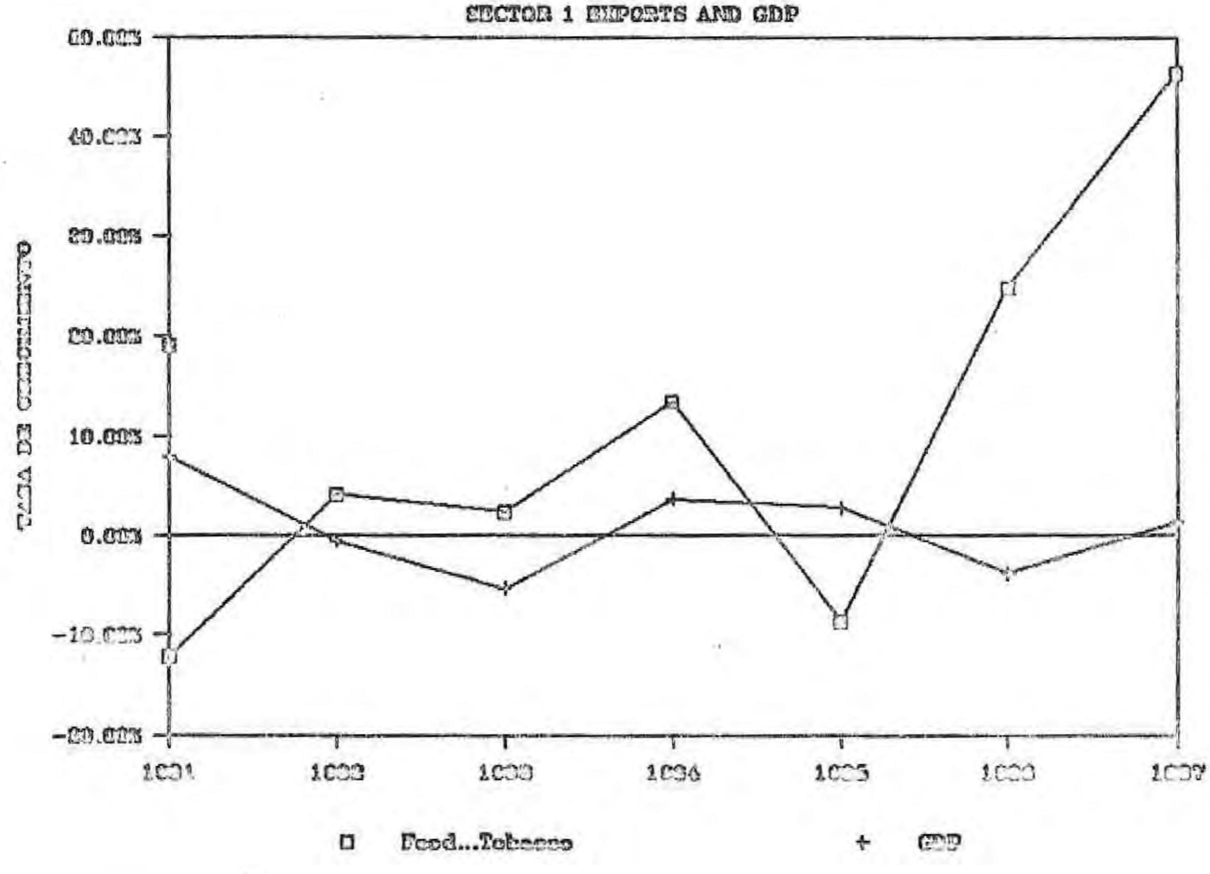
Source: Moreno, F. The Behaviour of Manufacturing Exports and Imports: 1980 -1986, Masters' Thesis presented at the Colegio de Mexico, 1987.

GRAPH 1


MANUF.EXPORTS,GDP,REAL EXCHANGE RTE.
70.00%
0.00%
1981
1984
1987
Manuf. Exports
GDP
Real Exchange Rte.

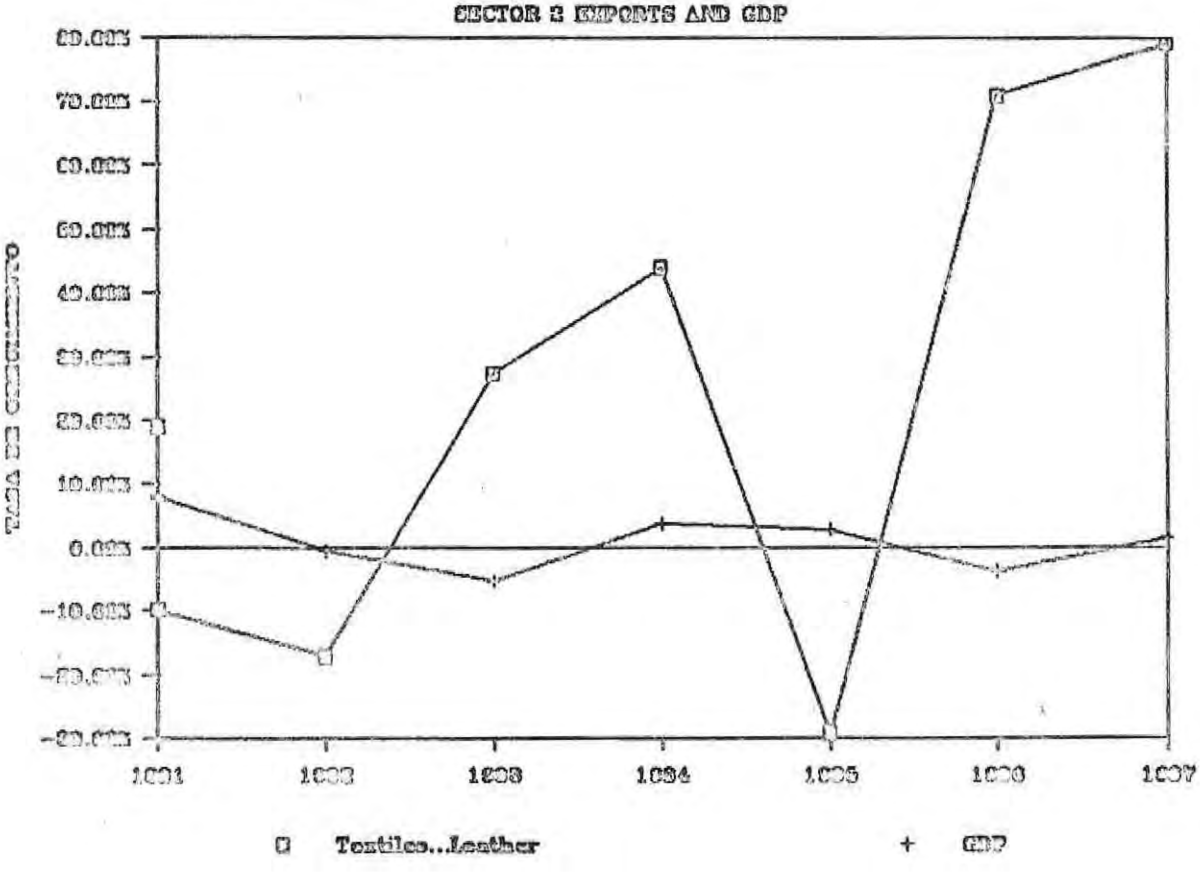
GRAPH 2

SECTOR 1 EXPORTS AND GDP



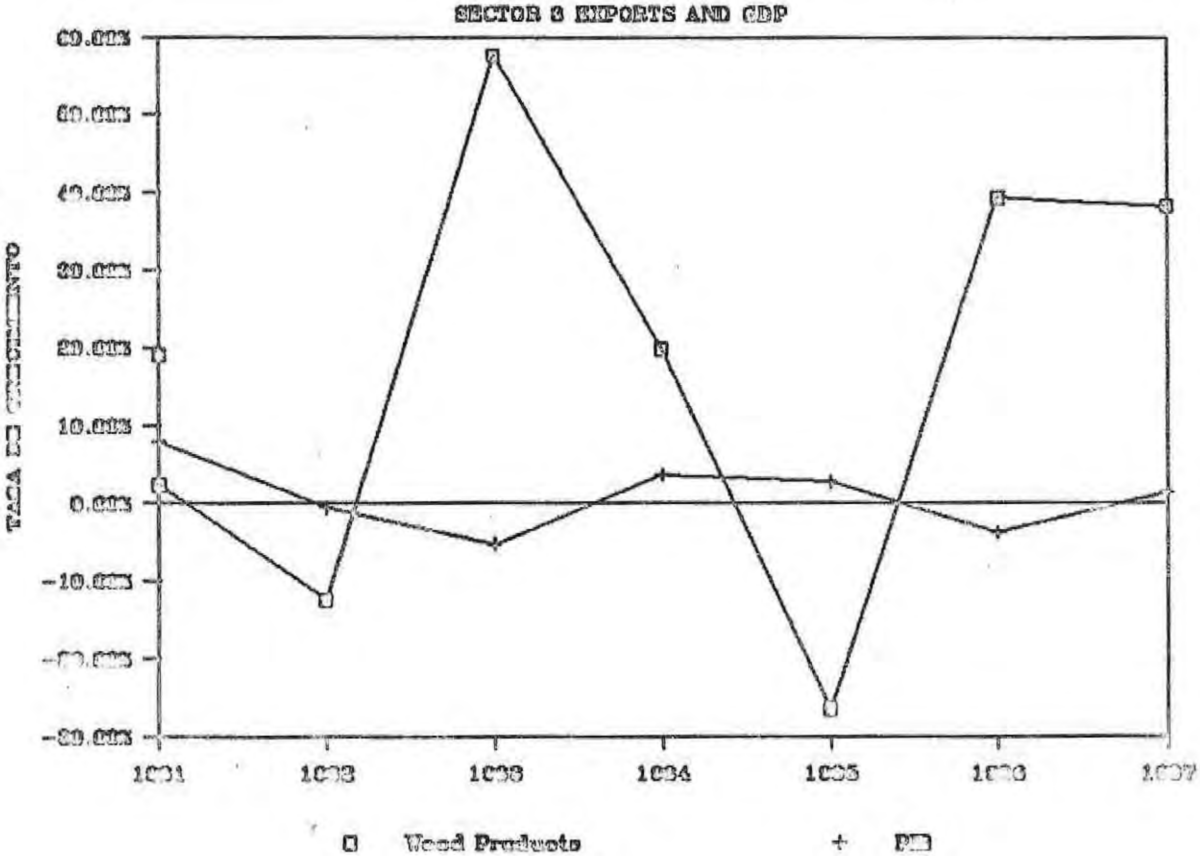
GRAPH 3

SECTOR 2 EXPORTS AND GDP

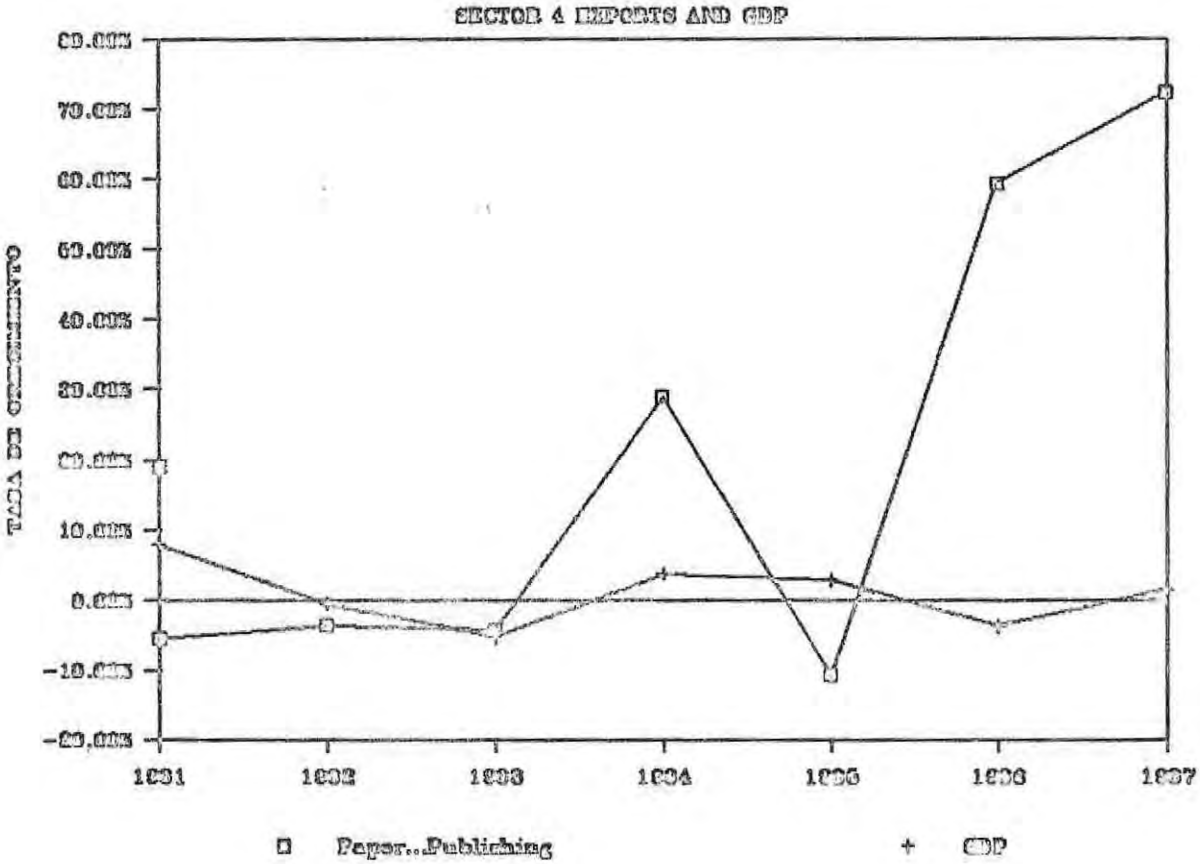


GRAPH 4

SECTOR 8 EXPORTS AND GDP

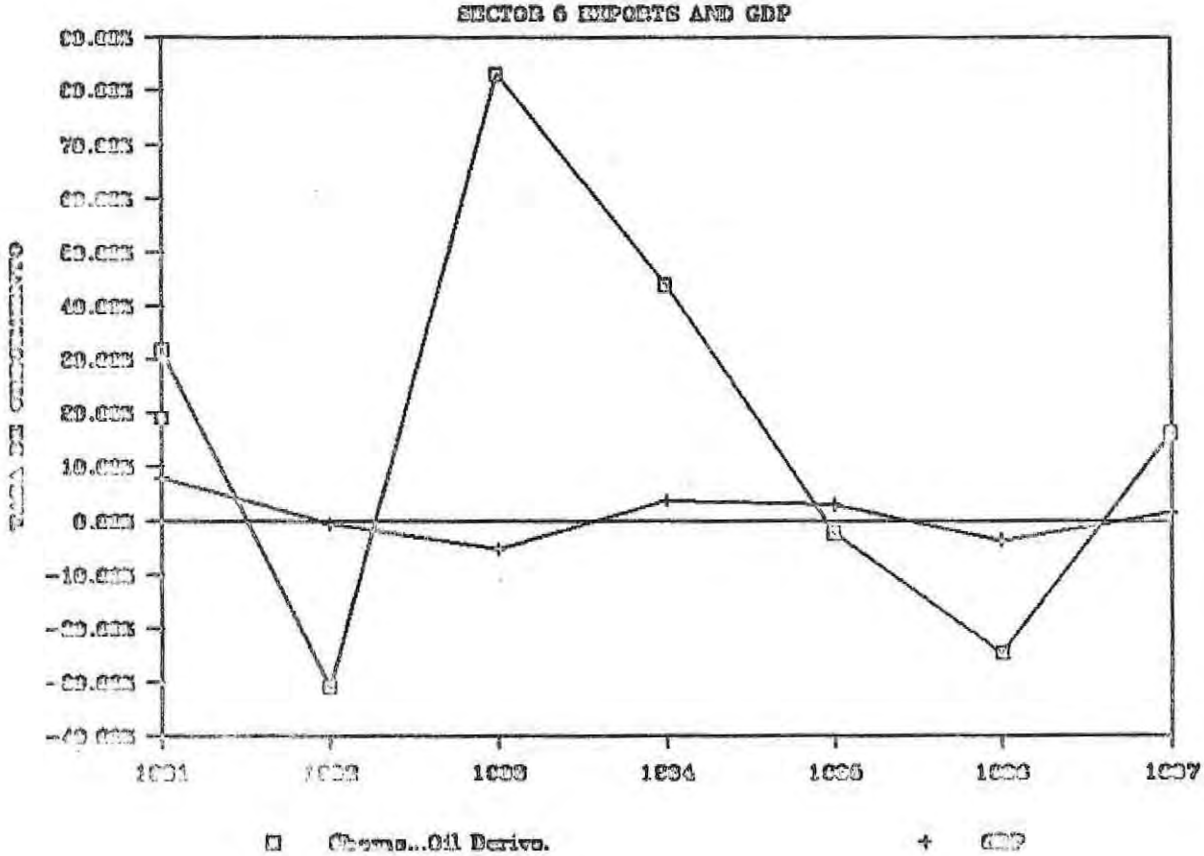


GRAPH 5


SECTOR 4 EXPORTS AND GDP
TASA DE CRECIMIENTO
Paper...Publishing
GDP

GRAPH 6

SECTOR 6 EXPORTS AND GDP

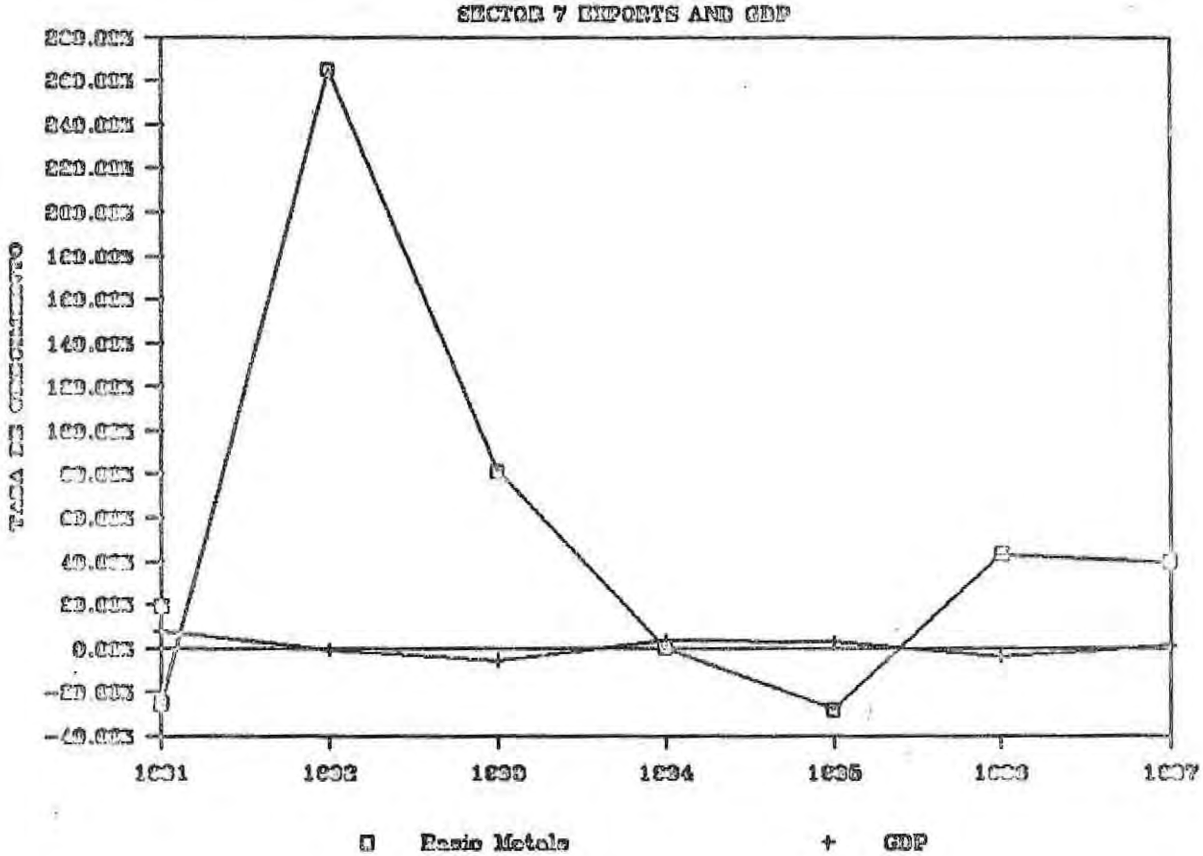


GRAPH 7

SECTOR 6 EXPORTS AND GDP

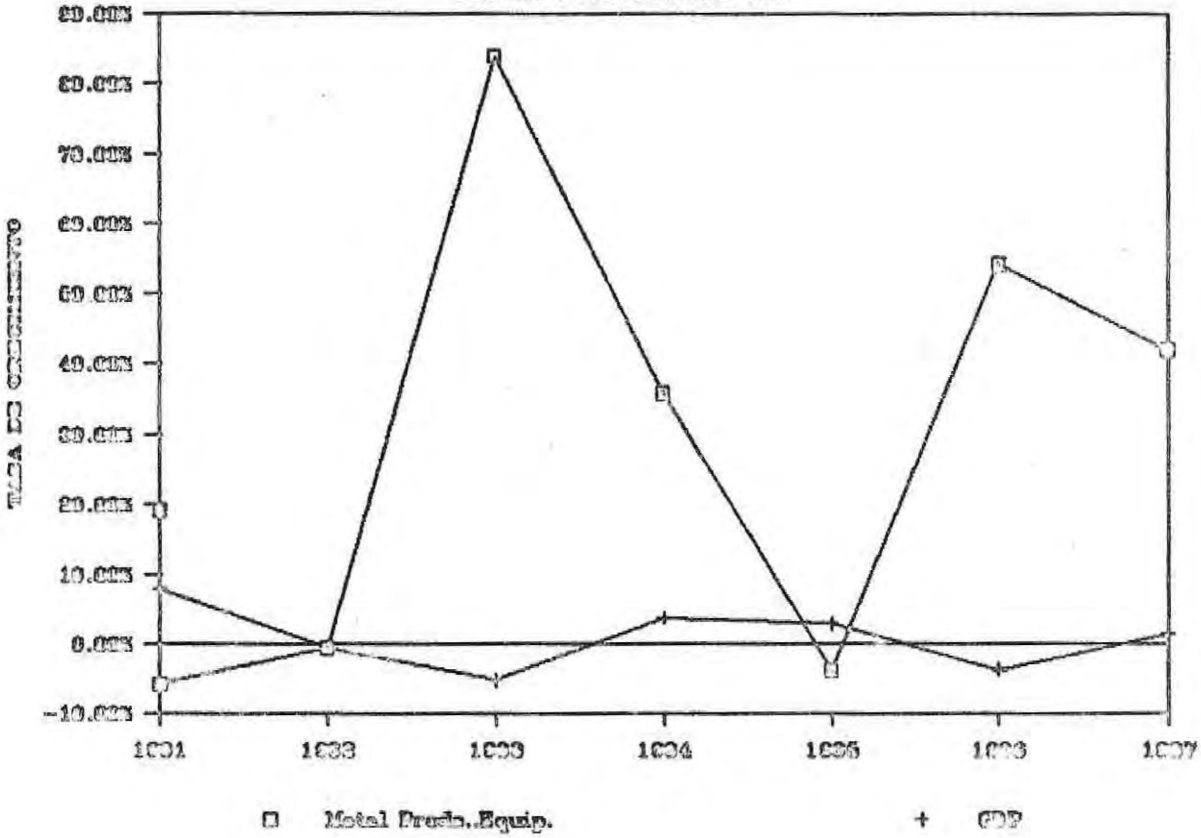
GRAPH 8

SECTOR 7 EXPORTS AND GDP



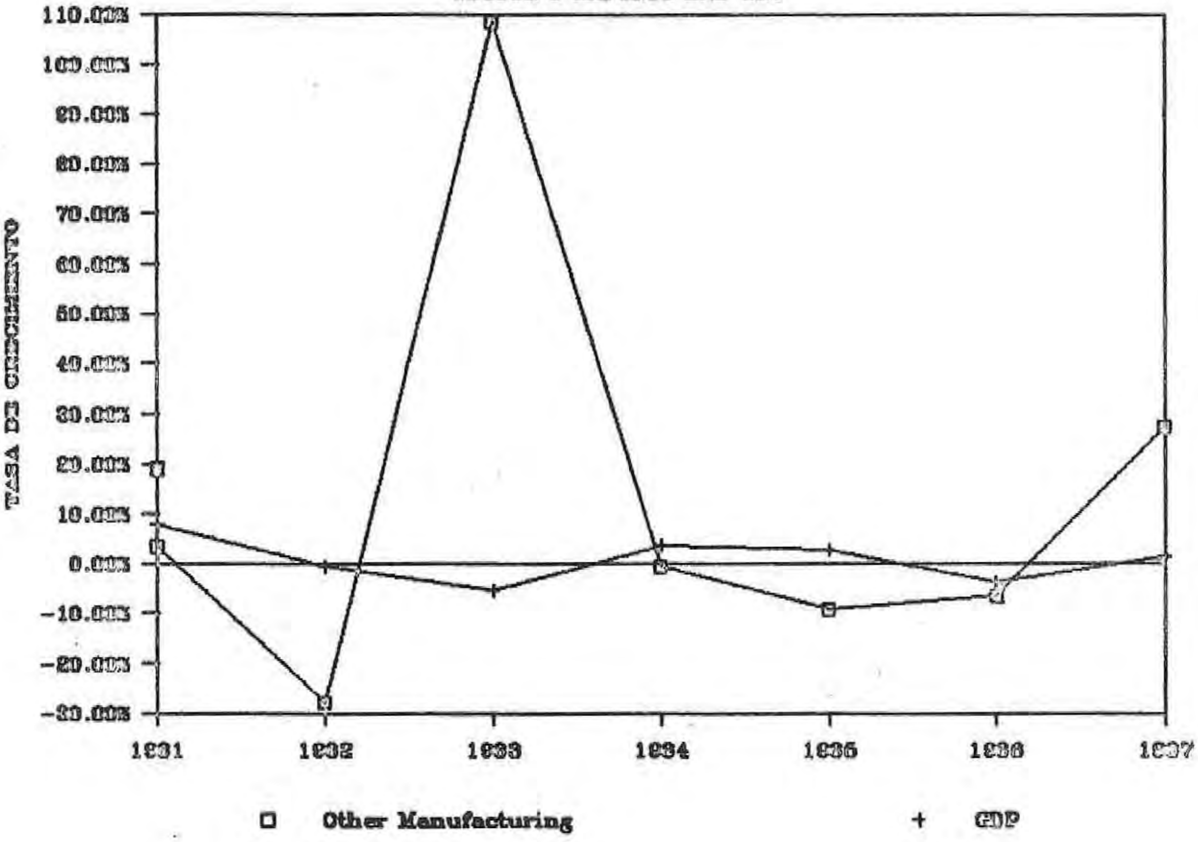
GRAPH 9

SECTOR 8 EXPORTS AND GDP



GRAPH 10

SECTOR 9 EXPORTS AND GDP



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