

“The Balance of Payment Constraint to Mexico’s Economic  
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“Neither a borrower nor a lender be,  
For loan oft loses both itself and friend,  
And borrowing dulls the edge of husbandry.”  
Polonius to his son.  
*Hamlet*, act I, scene 3.

**Abstract:**

It will be shown that the historical, external restriction to Mexico’s economic growth has notably intensified as a result of the last decade’s structural reforms. It is suggested that the initiation of economic recovery is not to be associated primarily with the achievement and preservation of macroeconomic equilibrium but with structural aspects of the economy that are related to more complex dynamics and causes, linked in the last instance to the manufacturing sector.

**INTRODUCTION**

Since December 1994, Mexico has been suffering an intense economic crisis generated by a cause which is not at all new to the Latin American context. For at least four decades (i.e. Prebisch, 1950), the structuralists clearly detected that, due to the insufficient generation of reserve currency (faced with a high import elasticity for the industrial sector and the conspicuous consumption of the upper classes, combined with the inelasticity of the exports of the developing countries), economic growth would be seriously limited and even self -defeated because of the recurrent eruptions of crises in the balance of payments (see also Thirlwall 1995a and 1995b).

Perhaps what is to be viewed as “new” at this time is, that in spite of the fact that the Mexican economy for almost 15 years has been growing very slowly, the trade balance deficit generated by this modest growth is substantially greater than before, as are its effects on Mexican society

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as a whole. The prominence which the government program has given to the financial sector in these last few years, the dimension which the globalization of these financial markets has reached and rapid trade liberalization, all implemented since the middle of the last decade, have inscribed this crisis with new features.

The Mexican manufacturing sector (including the export sub-sector within it) has been traditionally incapable of generating enough foreign reserves, which have thus been provided by the rest of the economy. When this has not been possible, a balance of payments crisis has occurred, which inevitably has led to major devaluations. They, in turn, have provoked vital setbacks in all macroeconomic and social variables, affecting the stability and integrity of the nation.

In the last instance, the main constraint that historically the domestic economy has suffered from is the insufficient generation of foreign currency in relation to the growing demand from the manufacturing sector. This has impeded the maintenance of high and sustained growth rates during the last decades and has raised serious doubts about the real possibilities of currently reinitiating growth, notwithstanding the cost of the macroeconomic adjustment policies implemented during 1995, which corrected the enormous previous year's imbalance of the external sector.

The aim of this article is to demonstrate that the external restriction to Mexico's economic growth, already referred to, has intensified notably as a result of the application of the structural reform program in the last decade even though public finances reached equilibrium and inflation was reduced in this same period. In this sense the official argument, which begins with the macroeconomy and relates the external deficit to the disequilibrium of the public sector, falls short of explaining the real nature of the grave problem of the external trade balance and it falls even shorter of clarifying what this represents in terms of an external constraint to growth.

As an elementary conclusion, we defend the proposition that the commencement of growth recovery is not to be primarily associated with the achievement and preservation of macroeconomic equilibrium but with structural changes related to the productive sphere of the manufacturing sector, mainly by reducing its import-output coefficient.

The article is organized as follows. We present the structural nature of the trade deficit that has characterized the Mexican economy since 1950, highlighting the period 1982-1996, making a

macroeconomic analysis that allows us to understand the anatomy of the trade balance 1980-1994 at a branch level. Finally conclusions and further comments are presented.

## I. THE ENDEMIC NATURE OF TRADE DEFICIT

The hypothesis that economic growth is restricted by trade imbalance is not new to the structuralist school. In simple terms, the idea is that due the incapacity of underdeveloped countries to produce sufficient intermediate and capital goods in quality and quantity, their growth is self-defeated because it is accompanied by high and increasing import elasticity (mainly of these goods) and low export elasticity for primary goods. This growth pattern is sustained as long as external finance keeps flowing. However since the seventies these periods of growth-trade imbalance and external financing have become shorter. The corollary is almost always the application of adjustment programs which suddenly and drastically reduce internal demand which corrects the external imbalance but at the cost of distressing social consequences.<sup>2</sup>

Calculation of the external restriction to growth can be done in several ways, one of these being the well-known Harrod multiplier of foreign trade (Thirlwall, *op. cit.*) which expresses the growth rate compatible with trade balance, based on the supposition that the terms of trade do not change and that exports are the only component of autonomous spending.<sup>3</sup>

For simplicity, we express external restriction through linear adjustments applied to dispersion diagrams which relate the growth of gross domestic product compatible with trade equilibrium for different historical periods.

From diagram 1 the following analysis can be made:

1. The linear adjustment for the period (1950-1995) shows that in the Mexican economy a trade off between both variables has existed.<sup>4</sup>

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<sup>2</sup> The following argumentation is based on Loría, 1997.

<sup>3</sup> This is based on following expression:

$Y = X/m$ , where

$Y$ = real income;  $X$ = exports;  $m$ = marginal propensity to import.

Thirlwall makes it dynamic:

$Y_e = \frac{X}{\pi}$ , where

$Y_e$ = rate of growth compatible to trade equilibrium;  $x$ = rate of growth of exports;  $\pi$ = income elasticity of imports.

<sup>4</sup> In general terms, this is true for all economics, but this relationship is stronger in developing one.

2. The diagram consists of four quadrants. The first is the most desirable, because it associates economic growth with a trade surplus.

The second is characteristic of *recessive adjustment* (typical of orthodox adjustment programs) in which recession with a surplus balance occurs. The third is the least desirable as it reflects recession with trade deficit. The last corresponds to scenarios of growth with trade deficit and this is what has generally characterized the Mexican economy, at least for the last forty years.

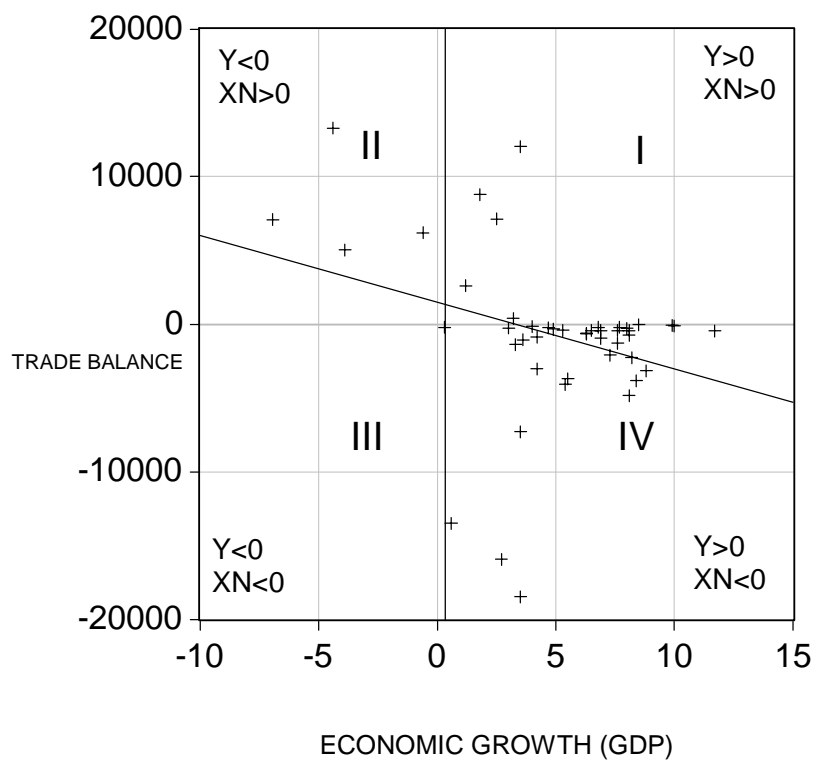
Indeed, between 1950 and 1981 the Mexican economy is to be located in quadrant IV, which corresponded to a combination of high growth rates with “manageable” trade deficits.<sup>5</sup>

3. From 1982 when diverse adjustment and stabilization programs were implemented, the economy left this quadrant and rapidly entered quadrants II and I (in this order). The brief periods of recovery (1984-1985 and 1987-1989) which followed the deep recessions of 1983 and 1986, moved the economy into quadrant I, to once again locate it in quadrant III, as growth continued. This is indicating the presence of a vicious circle which hinders growth take off without the presence of external balance problems.

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<sup>5</sup> By “manageable” we refer to those imbalances which can be financed without substantially increasing levels of foreign indebtedness. This was valid specially up to the beginning of the seventies but from then on growth has increasingly demanded foreign currency.

DIAGRAM 1  
ECONOMIC GROWTH AND TRADE BALANCE 1950-1995



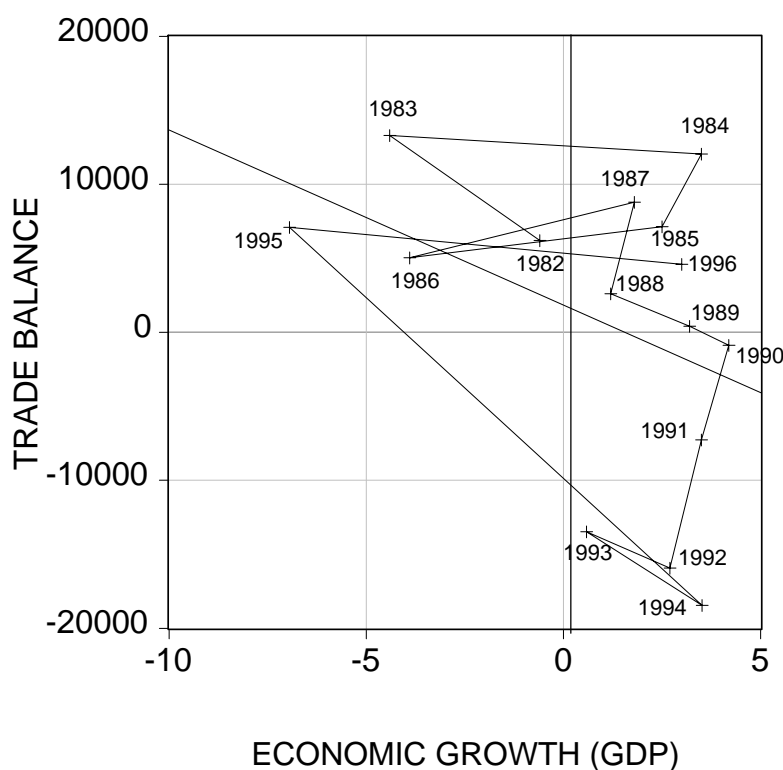
**TABLE 1**  
**TRADE BALANCE ACCOUNT AND GROWTH OF GROSS**  
**DOMESTIC PRODUCT, 1950-1995**  
**(millions of dollars)**

YEAR	TB	GDP	YEAR	TB	GDP
1950	-64	9.9	1973	-2,094	7.3
1951	-222	7.7	1974	-3,691.9	5.5
1952	-171	4.0	1975	-4,066.4	5.4
1953	-208	0.3	1976	-3,024.2	4.2
1954	-132	10.0	1977	-1,372.7	3.3
1955	-23	8.5	1978	-2,273.4	8.2
1956	-228	6.8	1979	-3,162.0	8.8
1957	-420	7.6	1980	-3,829.5	8.4
1958	-407	5.3	1981	-4,852.8	8.1
1959	-262	3.0	1982	6,196.5	-0.6
1960	-428	8.1	1983	13,290.9	-4.4
1961	-317	4.9	1984	12,031.6	3.5
1962	-242	4.7	1985	7,132.1	2.5
1963	-279	8.0	1986	5,020.0	-3.9
1964	-445	11.7	1987	8,787.0	1.8
1965	-431	6.5	1988	2,610.0	1.2
1966	-420	6.9	1989	405.0	3.2
1967	-615	6.3	1990	-882.0	4.2
1968	-730	8.1	1991	-7,279.0	3.5
1969	-654	6.3	1992	-15,934.0	2.7
1970	-955	6.9	1993	-13,481.0	0.6
1971	-1,058	3.6	1994	-18,464.0	3.4
1972	-1,297.3	7.6	1995	7,089.0	-6.9

Source: INEGI-INAH. (1994). INEGI. (Various years).

In diagram 2 it is possible to analyze with greater detail what has occurred from 1982. It is clear that as structural reform advanced –specially since 1989, when trade reforms were consolidated– the economy quickly shifted south-west to quadrant IV which indicates that growth restriction augmented in virtue of the fact that increasingly lower growth rates were associated with greater trade deficits.

DIAGRAM 2  
ECONOMIC GROWTH AND TRADE BALANCE, 1982-1996



This indicates that the historical, external restriction to growth has become tighter from 1970 onwards but specially from 1988, just when structural reforms were applied with greater severity. In fact, while the Mexican economy grew at an annual mean rate of 6.5%, which corresponded to an annual average trade deficit of \$364.4 million dollars (and a current account deficit of 2.3% of GDP), during the period 1970-1982, an annual growth of 6.0% generated a deficit which was substantially higher and represented 3.75% of GDP. Excluding the period 1983-1988, which was the phase of *recessive adjustment*, the years from 1988 to 1994, testify to an alarming feature: an annual mean growth rate of only 3.05% generated an average deficit of \$14.036 billion dollars, around 5% of GDP.

Following this methodology of periodical linear adjustment and in order to demonstrate our main hypothesis, Table 2, which is quite revealing, is presented.

TABLE 2

**RATES OF ECONOMIC GROWTH COMPATIBLE  
TO TRADE EQUILIBRIUM, 1982-1996**

PERIOD	$Y_e$
1982-1989	5.2
1982-1992	3.8
1982-1993	2.6
1982-1994	1.5
1982-1995	1.0
1985-1994	0.0
1990-1995	-4.0
1990-1996	-3.5
1988-1995	-2.5

Calculations are based on INEGI (several years) and Banco de México (several years).

An outstanding and obvious finding is that, as the structural adjustment model is implemented,  $Y_e$  begins to fall abruptly: from 5.2% between 1982-1989 to 1.5%, between 1982-1994.

But what is really impressive is that when the trade opening began (1985 or 1988), then  $Y_e$  becomes zero and falls to high negative rates. In other words, these figures indicate that, in spite of the fact that the Mexican economy undoubtedly has increased its export capacity of manufactures, now this is more costly to sustain. This is a fundamental consideration to be taken into account in any forecasting exercise for economic growth in the years to come.

On the other hand, various phases can be distinguished as regards the size of Mexico's trade deficit and the forms adopted to finance it. Even though the tendency was for it to increase, it was kept within manageable limits until the end of the sixties. During this phase, insofar as the agricultural sector was progressively incapable of generating the necessary foreign currency to finance industrial growth, import substitution was intensified which, on one hand, helped to alleviate the pressure but on the other, this led to the construction of an inefficient and low-export industrial structure.

As the import substitution phase came to an end in light industry and the country began to produce more complex products (intermediate and capital goods), the size of the industrial plant had to be enlarged, resulting in the demand for a larger market than that of the domestic economy, to produce under more efficient conditions. Due to the fact that this problem was not solved by increasing exports, the only way that many enterprises could continue to operate was by maintaining a highly protected economy, which later on resulted in inefficient productive structures.

Another alternative, frequently resorted to was the entry of capital through the encouragement of foreign direct investment in the industrial sector which later on meant that transnational companies were to acquire decisive importance and, due to protection, they did not break with the traditional anti-export bias of the Mexican manufacturing sector.<sup>6</sup>

From the middle of the seventies, foreign debt was increasingly used, which, along with the expansion of petroleum exports, permitted the recovery of high growth rates –specifically between 1978 and 1981. This brief period abruptly finished as highly negative external shocks<sup>7</sup> coincided with a large increase in imports. This induced an unsustainable deficit in both the trade balance and the current account (Table 3). Hence the world debt crisis commenced and hindered economic growth for a number of years.

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<sup>6</sup> During this stage, measures oriented towards export diversification were implemented favoring industrial goods, but the economy continued to maintain its profile as an exporter of primary goods.

<sup>7</sup> Among the most important were the rise in international interest rates in which the foreign debt was contracted and the international reduction of oil prices.

**TABLE 3**  
**CURRENT AND CAPITAL ACCOUNT, TRADE OPENING**  
**AND REAL EXCHANGE RATE, 1970-1996**

YEAR	CURRENT AC.*	CAPITAL AC.*	TRADE OP.	REAL E.R.**
1970	-1.1882	0.8485	0.40	1.1866
1971	-0.9292	0.8958	0.40	1.1737
1972	-1.0057	0.4324	0.40	1.1555
1973	-1.5286	2.0512	0.40	1.0948
1974	-3.2260	3.8227	0.18	0.9818
1975	-4.4423	5.4588	0.14	0.9322
1976	-3.6833	5.0699	0.14	1.0523
1977	-1.5971	2.2761	0.10	1.2269
1978	-2.6930	3.2542	0.24	1.1728
1979	-4.8705	4.5332	0.30	1.1060
1980	-10.2735	11.3772	0.40	1.0000
1981	-16.5632	26.5973	0.15	0.9215
1982	-6.2620	9.9957	0.00	1.4292
1983	5.4239	0.3392	0.00	1.5288
1984	3.7651	1.3057	0.17	1.3449
1985	0.7995	0.3165	0.65	1.3524
1986	-1.3735	2.7153	0.72	1.7610
1987	4.2389	-1.1888	0.73	1.7604
1988	-2.3756	-1.1632	0.80	1.4076
1989	-5.8211	3.1758	0.86	1.3355
1990	-7.4511	8.1635	0.86	1.2756
1991	-14.8924	24.9398	0.91	1.1628
1992	-24.4384	26.5726	0.89	1.0648
1993	-23.3992	32.4823	0.78	1.0060
1994	-29.4194	14.5842	0.89	1.0501
1995	-0.6543	14.112	0.90	1.5193
1996-I Sem	0.5229	1.7195	0.90	1.2762

\* Billion Dollars.

\*\* Annual Average: 1980 = 1

Trade opening is measured as the percentage of the imports free of previous permission.

Source: Banco de México (several years) and Castro, Loría y Mendoza (1996).

**TABLE 4**  
**FOREIGN INVESTMENT, 1987-1995**

YEAR	FINANCIAL		DIRECT		TOTAL
	MD	%	MD	%	MD
1987	-2,285.8	NM	3,247.6	NM	961.8
1988	-3,110.8	NM	2,594.7	NM	-516.1
1989	493.3	14.0	3,036.9	86.0	3,530.2
1990	1,994.5	43.1	2,633.2	56.9	4,627.7
1991	9,870.0	67.4	4,762.0	32.6	14,632.0
1992	18,011.0	80.4	4,393.0	19.6	22,404.0
1993	28,919.3	86.8	4,388.8	13.2	33,308.1
1994	8182.2	42.7	10,972.5	57.3	19,154.7
1995	-10,139.5	NM	6,964.3	NM	-3174.8
1996-I Sem	4,672.3	59.9	3,125.4	40.1	7,797.8

MD = Million dollars, NM = Non Economic Meaning.

Source: Banco de México (various years).

In the second half of the eighties the government defined an economic program which in the future would require large amounts of foreign currency for the manufacturing sector's export take off.

It was hoped that in a brief period, although the world context was particularly adverse, the sector would break with its anti-export bias which had characterized it for decades, and that it would not need a parallel industrial policy to actively stimulate exports and conserve domestic production.

With this objective in mind the following measures were implemented: rapid and unilateral trade liberalization, permanent exchange rate undervaluation, a widespread financial reform and fiscal discipline (See Aspe, 1993).

The Salinist strategy to stimulate growth, in general terms, was based on an intensification of the measures taken by the previous administration. In this sense, both postulated the same idea that the structural problems were greatly due to inefficiency in production which was reflected in low productivity levels, which however, were accompanied by high profit margins. Hence, national production was not globally competitive. One way to eradicate this problem was to force national entrepreneurs to quickly become efficient; trade opening and deregulation were key measures to this end. Furthermore, it was decided that inflation levels were to be brought down, to be similar to those that existed in the sixties. Within the general economic strategy, low inflation was to play a key role. That's why, once a high level of undervaluation was reached in 1986 and 1987, it was decided that the stability of the nominal exchange rate - with its consequent and future erosion- would be the determining factor of economic strategy, due to the

fact that it would favor other economic objectives. Moreover, it would be a main factor in the future reduction of inflation, acting as a kind of anchor for prices and providing a stable context for expectations. As well, it would facilitate the import of intermediate and capital goods, thus transforming and widening the export base. Lastly, it would become an additional factor to pressure manufacturers and to bring them in line with international standards. Briefly, trade opening, exchange rate overvaluation and deregulation of the economy were the corner stones to growth. In this vein, the index of economic liberalization began to grow rapidly (See Table 3).

In 1989, the government initiated a financial reform with the aim of changing the main source of financing growth; it was based on new institutional mechanisms which would widen the possibilities of obtaining foreign capital.<sup>8</sup>

In synthesis, the financial reform was the foundation for changing the sources of financing for economic growth. This in turn, caused equally intense changes in the balance of payments structure, specially in the composition of the capital account (See Table 4). Hence if 1989 is taken as the base year, we can observe that the composition of the capital account changed notably; portfolio investments grew precipitously in the total of foreign investments, to the extent that in 1992 and 1993, this type of investment alone reached the point where it was equal to the deficit in the current account.

To sum up, the economic authorities believed that the achievement of basic macroeconomic equilibrium based on the above measures and the activation of the market would be sufficient to promote growth and exports, even though the successful experiences of the Asian countries had demonstrated that additional measures are needed, in particular a centrally active industrial policy, within the framework of long-term integrated development.

An undeniable achievement of this recent economic policy was the rapid change in the percentage composition of exports. The contribution of oil exports systematically fell while that of manufactured goods increased sharply.<sup>9</sup> However, this was achieved through an unexpected increase of imported inputs to production, so the volume and value of non-oil exports increased, but imports increased even more, resulting in a trade deficit which was in great part financed by the entry of short-term (Portfolio) capital.

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<sup>8</sup> The main actions taken were the following: deregulation and modernization of the legal finance system, decentralizing of the trading banks and an opening of the system through the authorization of new, foreign and national, financial intermediaries (which included new legislation on foreign investment). Some of the results were that financial deepening increased from 34.4% to 54.3% and the attraction of foreign capital grew by an annual average of 10% in real terms between 1988 and 1994 which amplified the availability of resources from the banking system to the private sector, growing from 38% to almost 75% in the same period. Castro *et al. op cit.*

From the Mexican government point of view, this in no way represented a threat to stability and future growth. In this respect, Manuel Mancera, governor of the *Banco de México*, two weeks before the 1994 major devaluation, affirmed, "... the size of the current account deficit is to a certain extent a measure of the country's success, not its failure .... insofar as Mexico has greater success in its attraction for investment, it is almost sure that the deficit in the current account will get larger", quoted by Lopez (1995: 10).

This declaration merits comments. Given that this deficit, in the last instance, represents the acquisition of external savings, if it does not substitute internal saving, it can be a factor that contributes to enlarge economic growth capacity. However this statement needs to be qualified on two accounts: it depends on the size of the deficit and the forms used to finance it. A deficit whose dimensions reached that of the current account in the period previous to the crisis of December 1994 was unsustainable for a prolonged period, which made inevitable the sudden interruption of the brief expansion the economy had been experiencing. On the other hand, the resort to foreign portfolio investment to finance the growing external deficit, eventually made the economy increasingly more vulnerable, given that adverse judgment on the economy's prospects by foreign investors was to hold back capital inflows and, even worse, was to cause such a sudden departure of foreign currency that the deficit was unsustainable. The exponential growth of the external deficit was directly related to the following main factors: unilateral trade opening, over-valuation and economic growth. In spite of that, exports continued to grow but imports grew explosively. The marginal propensity to import (MgPM) and the import coefficient (M/Y) increased sharply (See Table 5). As will later be demonstrated, the import coefficient per export unit also increased. Without doubt, these indicators leave bare the ineffectiveness of the export manufacturing take off, and in the last instance, are proof of the program's failure.

**TABLE 5**  
**MARGINAL PROPENSITY TO IMPORT AND IMPORT COEFFICIENT, 1970-1993**

PERIOD	MgPM	M/Y
1970-1977	0.09	8.9
1978-1981	0.12	11.7
1982-1987	0.07	7.3
1988-1993	0.14	14.3

*Source:* Loría (1995: 71).

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<sup>9</sup> In effect, in 1986 the contribution of manufactures were a round 24%. Ten years after it grew up to 76%.

## II. ANATOMY OF THE TRADE BALANCE, 1980-1994

In this section the tendencies present in the trade balance for only 1980 to 1994 will be discussed. The analysis will become gradually more detailed. First, the Mexican economy is divided into two large surplus or deficit divisions. Then, the trade balance is presented at the level of three large sectors and finally, an analysis is given for each of the 59 branches which make up the national economy.<sup>10</sup>

### II.I. Surplus and Deficit Branches

An initial classification of the 59 branches, according to their trade position underlines the fact that the number of deficit branches is greater than the number of surplus ones (Table 6). Only in those years of pronounced recession (1983, 1986 and 1987)<sup>11</sup> has the reverse been the case, thus reinforcing the argument that economic contraction has been the only way used to correct the trade imbalance.

**TABLE 6**  
**NUMBER OF BRANCHES ACCORDING TO THEIR TRADING POSITION**

YEAR	NUMBER OF BRANCHES	
	DEFICIT	SURPLUS
1980	41	18
1981	42	17
1982	38	21
1983	29	30
1984	32	27
1985	32	27
1986	29	30
1987	28	31
1988	30	29
1989	35	24
1990	38	21
1991	39	20
1992	41	18
1993	43	16
1994	41	18

<sup>10</sup> All this information is presented according to the National Accounts System. Notwithstanding that the input-output matrix in Mexico takes into account 73 activities, for this study we only consider the first 59 given that the rest refer to *construction, electricity, commerce restaurants and hotels*, whose products are not tradeables.

<sup>11</sup> Strictly speaking 1987 was not of recession but GDP grew only by 1.8%.

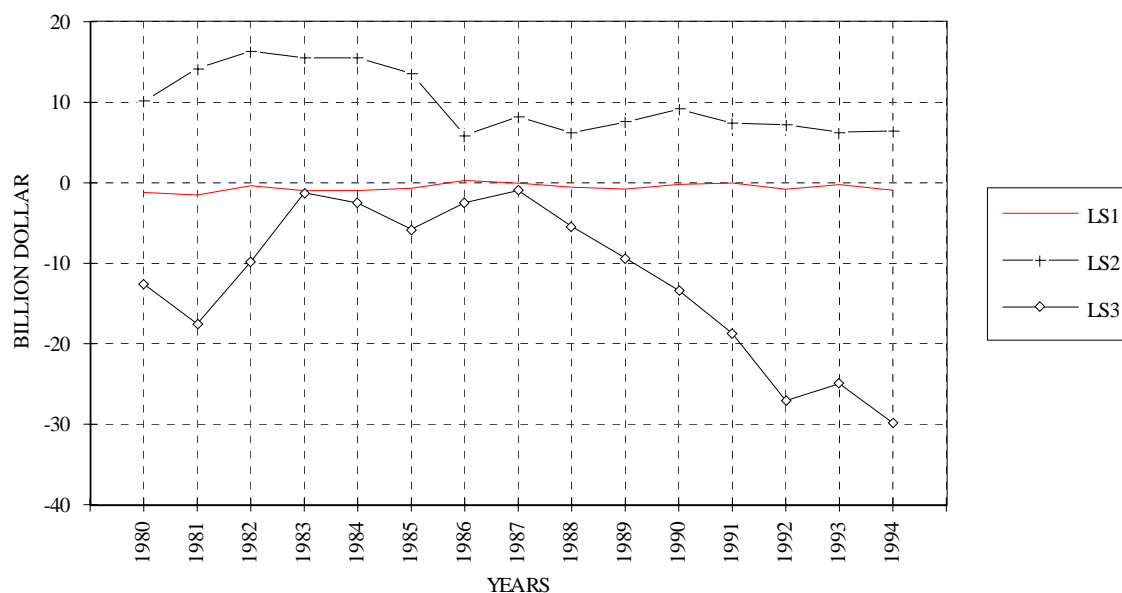
On grouping the 59 branches in this way for each year some relevant facts come to light (Figure 1). On the one hand between 1981 and 1983, the accumulated value of the deficit from the branches with this trade position decreased quite significantly, from a little over 20 thousand million dollars to 6 thousand million dollars. Meanwhile, the surplus generated by the branches with a positive balance rose to 18 billion dollars in 1983.

Secondly, from the following year on, until 1987, the negative balance of the deficit branches began to grow and the surplus of the positive branches fell. From 1988 onwards the surplus of these branches stabilized but the negative balance of the deficit branches began to grow explosively, enhancing the demand for reserve currency. Ultimately, this is explained by the dramatic increase in the import components per export unit and indicates why the export take off did not presumably lead to the virtuous circle of accumulative causality.

**FIGURE 1**  
**TOTAL DEFICIT AND SURPLUS OF ECONOMIC BRANCHES**



**FIGURE 2**  
**TRADE BALANCE BY LARGE SECTORS**  
**Billion Dollars, 1980-1994**



## II.2. Analysis by large sector

Now, regrouping the economy into three large sectors (agriculture, mining and manufacturing) we can observe that each one evolved over the same period in contrasting ways. The agriculture sector, (*agriculture, cattle, forests, hunting and fishing*) has in general maintained its deficit without any notable change in the long term. Mining, (*coal, crude oil and natural gas, iron and non- iron metallic minerals, quarries and non-metallic minerals*) undergoes a notable reduction in its surplus, which after having reached 15 billion dollars in 1984, dropped until 1986, and remained relatively stable after this at 6 thousand million dollars. Lastly the third sector, manufacturing, saw that its significant trade deficit at the beginning of the eighties fell considerably during the recessive adjustment program. Later on, when the economy began to reactivate growth, this sector's deficit intensified considerably, year after year, until it reached about 30 billion dollars in 1994, which was more than the deficit of the trade balance for the entire national economy (Figure 2).

## II.3. Deficit Branches, Temporality and Structural Change

Table 7 links the total number of branches and the number of years in which a deficit existed in their trade balance. Firstly, it must be emphasized that 23 branches, during the 15 years analyzed, showed a deficit and among them are those belonging to the three large sectors which we are considering: *forestry, mines –coal and iron– and manufactures: cooking oils, animal fodder, paper petrochemicals and basic chemicals, chemicals, rubber and plastic, metallic products machinery and equipment, electric appliances and electronics, auto parts and transport equipment*. Eight branches had a trade deficit which varies for a period of between 10 and 14 years. Among them are agriculture, meat and dairy products, sugar, clothing, printing, fertilizers, basic iron and steel industries and electric equipment.

**TABLE 7**  
**TOTAL NUMBER OF BRANCHES AND THE YEARS IN WHICH THEY PRESENT A TRADE DEFICIT, 1980-1994**

	NUMBER OF YEARS WITH A TRADE DEFICIT				
	15	10-14	5-9	1-4	0
NUM. OF BRAN.	23	8	10	9	9

Finally, some branches exist which had a surplus balance during the first phase of the period and later they systematically became branches with trade deficits (Table 8). All of them, except *non metallic minerals*, belong to the manufacturing sector. In other words, trade liberalization resulted in nine industrial branches with systematic surplus trade balances being transformed into branches with trade deficits.

**TABLE 8**  
**BRANCHES WHICH WENT FROM HAVING SURPLUS TO DEFICIT TRADE BALANCES BY YEAR**

BRANCH	YEAR
06. Non-metallic minerals	1993
13. Wheat flour	1989
19. Other food products	1991
20. Alcoholic beverages	1992 or 1993
22. Soft drinks	1988
24. Soft fibres	1990
26. Other textile industries	1989
33. Petroleum and derivatives	1989
45. Non-metallic mineral products	1992

Detailed information only about the 26 branches with larger trade deficits is presented in table 9 which registers annual averages for three distinct periods present in the Mexican economy since 1980:

a) the period of expansion stimulated by oil exports and the foreign debt at the beginning of the eighties; b) the recessive adjustment (1983 to 1986) and c) liberalization beginning in 1987.

The most relevant conclusions reached are the following:

1. Firstly, the dispersion of the trade deficit branches stands out in the foreign trade sector. Among them are to be found consumer, intermediate and capital goods, branches intensive in natural resources, such as agriculture, products derived from cattle and agricultural industries; labor-intensive products, such as cotton materials and garments and capital and technology intensive products, such as machinery and equipment.

2. In the three periods considered, the branch which has contributed most to the accumulated deficit of those branches with deficits balances is number 51, (*machinery and non-electric equipment*), which explains between a quarter and a fifth of the total deficit.

3. The weight of branch 57 in the deficit (*chassis, motors, parts and car accessories*) has drastically increased, which in the third period represented 17% of the total trade deficit generated by the negative trade balance branches. The deficit of branch 54 (*equipment and electronic appliances*) has also increased in importance. The same can be said for branch 11, (*meat and dairy products*).

4. In the third phase, the number of branches with a trade deficit augmented considerably, which is to be associated with the policy measures adopted and described earlier. Concretely in this period, the real exchange rate appreciated by 40%, the trade opening (measured by the coefficient of imports liberated from needing previous permission in relation to their total) went from 73 to 89%, the ratio between the internal and external interest rates, the latter being adjusted by the controlled exchange rate, went from 8.17 to 1.89% and the terms of trade worsened by almost 8%.

These figures, in addition to the absence of an industrial policy oriented to reinforce the backward links (input-output) and forward links (of investment and production) explain that the slow recovery of the economy caused the marked increase in both the number of trade-deficit branches and in the magnitude of the deficit.

**TABLE 9**

**ANNUAL AVERAGE TRADE DEFICIT OF THE DEFICIT BRANCHES AND THEIR CONTRIBUTION TO THE TOTAL DEFICIT**

**Million Dollars**

Branches	1980-1982		1983-1986		1987-1994	
	Dollars	%*	Dollars	%*	Dollars	%*
01. Agriculture	1,001.3	6.2	934.4	14.2	592.4	2.7
11. Meat and dairy products	417.7	2.6	335.6	5.1	1,202.2	5.6
16. Sugar	329.2	2.1			146.4	0.7
17. Cooking oils and fats					289.4	1.3
24. Soft fibres					254.0	1.2
27. Clothing					360.8	1.7
31. Paper	459.5	2.9			889.8	4.1
32. Printiners					150.2	0.7
33. Petroleum and derivatives					568.7	2.6
34. Basic petrochemicals	451.2	2.8	385.5	5.8	324.8	1.5
35. Basic chemicals	268.2	1.7			384.4	1.8
37. Resins					258.7	1.2
38. Pharmaceutical Pcts.					393.9	1.8
40. Chemical Products					497.6	2.3
41. Rubber					468.0	2.2
42. Plastics					767.0	3.6
46. Iron and steel	1115	7.0	190.8	2.9	640.9	3.0
50. Metallic Products	739.6	4.6			750.7	3.5
51. Non-electric equipment	3,996.9	24.9	1,532.0	23.2	4,535.1	21.0
52. Electric machinery	633.1	3.9	380.5	5.8	1,010.6	4.7
54. Electronic equipment	398.4	2.5	230.9	3.5	1,793.4	8.3
55. Electric equipment	288.7	1.8				
56. Automobiles	492.1	3.1				
57. Autoparts	1,827.2	11.4	273.8	4.2	3,585.1	16.6
58. Equipment for transport	868.7	5.4	495.7	7.5	858.3	4.0
59. Other manufactures	779.8	4.9	356.3	5.4	1272.7	5.9
SUBTOTAL	14,066.6	87.7	4,834.2	73.3	19,997.1	92.6
TOTAL	16,034.2	100.0	6,597.2	100.0	21,599.8	100.0

\* This is the percentage contribution of the branch deficit in the total of the branches that registered this trading position.

#### **II.4. Surplus-Trade-Balance Branches**

Table 10 registers those branches which have been decisive in the generation of a surplus trade (millions of dollars) balance. The percentage figures are also related to the total trade surplus of the surplus-trade branches. In contrast with the diversity of the branches with a trade deficit, those that contributed to finance imports are very few (8), and there is little variation over the

period analyzed. The only period during which the number of surplus balance branches increased was during the *recessive adjustment* (1983-1986), but when the economy began to expand slowly in the following phase, two branches which had been important for the generation of a trade surplus reversed this position. The only branches conserving their position achieved during the recessive phase were number 47, (*basic non-iron metals*) and number 56 (*automobiles*). This last branch is particularly important because during 1987-1994 it had contributed in 20.4% to the total trade surplus generated by the branches with positive trade balances and moreover it had been growing during the period studied. However, in 1994, it represented 34% of the surplus trade balance meanwhile the *extraction of crude oil and natural gas* accounted for 50% of the total trade surplus. Nevertheless, the conclusion that the automobile sector has become a net generator of foreign reserves is contradicted when we consider jointly the two branches of *–automobiles and auto parts*.

As was shown in Table 9, the latter is one of the most important branches in the generation of the total trade deficit. Considered as a whole for the period 1987-1994, the automobile branch accumulated a trade deficit of 8.7 billion dollars. Even by only referring to the year 1994 –in which the branch number 56 (*automobiles*) registered its greatest trade surplus– the trade deficit for the whole of the branch ascended to almost 2 billion dollars. In other words, for each dollar of trade surplus generated by the automobile branch in 1994, the automobile parts branch created a deficit of 1.44 dollars.

**TABLE 10**  
**ANNUAL TRADE SURPLUS AVERAGES FOR THE SURPLUS TRADE BALANCE**  
**BRANCHES AND THEIR CONTRIBUTION TO THE TOTAL TRADE SURPLUS**  
**Million Dollars**

BRANCH	1980-1982		1983-1986		1987-1994	
	DLLS.	%	DLLS.	%	DLLS.	%
6. Crude oil and nat. gas	13,269.6	87.3	12,302.8	78.6	7,158.6	58.4
8. Non-iron Minerals	252.7	1.7				
15. Coffee	390.2	2.6	582.5	3.7	418.8	3.4
19. Other foods	339.0	2.2	368.9	2.4	142.7	1.2
24. Soft Fibres			207.1	1.3		
33. Petroleum and derivatives			549.5	3.5		
47. Non-iron metals			297.0	1.9	373.7	3.1
56. Automobiles			130.3	0.8	2494.9	20.4
SUBTOTAL	14,633.3	93.7	14,438.3	92.3	10,588.9	86.4
TOTAL	15,205.7	100.0	15,643.1	100.0	12,252.4	100.0

## CONCLUSIONS AND FINAL REFLECTIONS

Notwithstanding the important structural changes which have occurred in the world and in the Mexican economy since the decade of the eighties, the country's trade structure continues to be an important limitation to sustain dynamic economic growth. This can be analyzed at various levels:

1. In spite of the notable change in the composition of exports in favor of manufactured goods, the net supply of foreign currency continued to be basically dependent on oil sales and other primary products with low value added.
2. Even though some branches of the manufacturing industry experienced a remarkable export boom, the import of inputs needed to produce the new goods rose prominently. An outstanding example of this is the automobile sector, which has needed to increase drastically its imports of autoparts.

To a great extent there are indications that a severe process of deindustrialization has taken place, at least in certain sectors of the manufacturing industry, which is to be explained by the trade opening and the economic policy measures defined since the middle of the 80s. Among these, the most important are trade liberalization and over-valuation, which resulted in the substitution of goods produced nationally by imports. (See Dussel, 1995).

Hence these last few years have seen a reduction of intersectorial productive links, which has hindered the transformation of the manufacturing sector to become a net generator of reserve currency and, on the contrary, it is this sector which accounts for the country's trade deficit.

Furthermore, those industrial branches which achieved greater export volume are simultaneously those which most increased their import coefficients per unit of output and exports.

3. An increase in the range of manufacturing surplus branches was not significantly achieved.
4. Some branches which had been able to obtain access to foreign markets in the middle of the eighties, some years later operated with deficits.
5. The most important change, that of automobile exports, was neutralized because its imports are dominated by transnational companies in whose intrafirm trade reduces the spillover effects to the rest of the economy. This means that the disarticulation of the economic system has not allowed the growth of some manufacturing exports to generate a virtuous internal cumulative effect of causality on the rest of the economy, in the classic terms expressed by Kaldor (1989).

6. It goes without saying that an urgent industrial strategy is needed to correct this situation.

7. The historical concern of the structuralists for import substitution (which for many years was ridiculed by those programs which conferred on the market all the virtues and the capacity for finding solutions) has become a major priority. A well-defined, viable and coherent industrial policy is required. Today, any substitute for this will only waste more resources and more effort, due to the grave deterioration of numerous enterprises and production chains resulting from the destructive nature of the model and economic policy implemented over the last years.

8. It must be stressed that everything seems to indicate that the external constraint to growth, especially in manufacturing, has intensified dramatically in the period analyzed in this article. In 1995, although the drop in GDP of about 7% resulted in a correction of the trade balance, leading to an accumulated surplus of about \$7.089 billion dollars, manufacturing (excluding in-bond industries) recorded a deficit of \$5.771 billion dollars even though its output fell by 4.6%. Therefore, the deindustrialization that the country suffered implies that, even with negative growth rates, this sector generates a trade deficit. In 1996 this deficit got worse (\$6.422 billions dollars) but in presence of a recovery of sectoral product of around 11%.

9. This fact represents the most important constraint to Mexico's economic growth, because the increment trade deficit has been financed by the inflow of short term capital at high interest rates which has shown to be unfeasible in the mid-term. So, the sustainable recovery of the Mexican economy requires not only the expansion of exports, but also the prevention of an excessive demand for imports. This requires paying special attention to internal links between different branches of the economy.

The figures analyzed over a longer time frame show that an extremely worrying phenomenon is occurring which is currently hindering, more than ever, the possibility of a sustained recovery.

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