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The Macroeconomic Implications of Paying: Policy Responses to the Debt 'Crisis' in Mexico, 1982-88

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"Yet this problem is fundamental. Payment takes on a different aspect when, instead of being expressed in terms of milliards and as a liability of the transitory abstraction [government], it is translated into a demand for a definite sum from a specific individual. This stage is not yet reached, and until it is reached the full intrinsic difficulty will not be felt. For at this stage the struggle ceases to be primarily one between the Allies and the German government and becomes a struggle between different sections and classes of Germans. The struggle will be bitter and violent, for it will present itself to each of the contesting interests as an affair of life and death. The most powerful influences and motives of self-interest and self-preservation will be engaged. Conflicting conceptions of the end and nature of society will be ranged in conflict. A government which makes a serious attempt to cover its liabilities will inevitably fall from power". (J. M. Keynes, *A Revision of the Treaty, The Collected Writings*, vol. III, London, Macmillan, 1971, p. 55).

After the Second World War and during the process of industrialization, the Mexican economy generated trade deficits almost without interruption. This implied having received, year after year, net resources from abroad which were financed by loans. Interest accrued on the growing debt was also covered by loans. Thus, over this period the economy absorbed more resources than it produced. Starting in 1982 this situation reversed itself radically, due to the sudden refusal, on the part of the international financial community, to continue providing loans to Mexico.

All this is by now common knowledge. What is less well known is the magnitude of the transfers involved and of other associated macroeconomic

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costs. The present article starts by measuring these costs during 1982-88.¹ It is shown that apart from the massive size of the transfer—which exceeded by far what was received during the previous three decades—the method of exacting them from the economy was extremely wasteful in terms of domestic resources. The strategy implemented during this period required drastic structural changes, particularly in aggregate demand and supply, an issue which is examined in some detail in a later section. There follows a discussion as to the means of attaining this, which leads to an analysis of fiscal and exchange rate policies. It is contended that both policies were used basically as mechanisms for restraining domestic demand. The importance of the fiscal stance in this process is emphasized. It is also shown that real devaluations assisted through their impact on inflation and on income distribution, rather than by acting on the price-elasticities of imports and exports. They also proved costly in other respects, given their terms-of-trade effect. It is argued that it was the impact of constrained effective demand on trade which made payments abroad possible. Trade liberalization in this context tended to make activity adjustments even more painful. In a subsequent section the question is addressed as to who, in the domestic economy, paid for the macroeconomic costs of the strategy. It emerges that some sectors actually *gained* during this process, while others, in particular wages, had to bear a disproportionate burden, in what amounts to a structural reallocation of income. A parallel is then drawn between the Mexican economy during this period and Germany under the Treaty of Versailles. The comparison of the two cases reveals remarkable coincidences and offers valuable lessons. The article concludes with a critical assessment of an economic strategy for which debt servicing was the overriding priority.

Measuring the transfer of resources

An accurate way of defining transfer of resources abroad is the surplus in the balance of goods and non-factor services.² For short, this will be referred to as the trade surplus. This measures the amount of resources sent abroad (exports) less those absorbed from the rest of the world (imports). It is equivalent to the difference between what an economy produces and the expenditure of its domestic sectors. This is a better

¹ The period of analysis starts in 1982, the first year in which there was a positive transfer abroad, and extends over the term of the current administration (1983-88). In general, the figures for 1988 are estimates based on partial information.

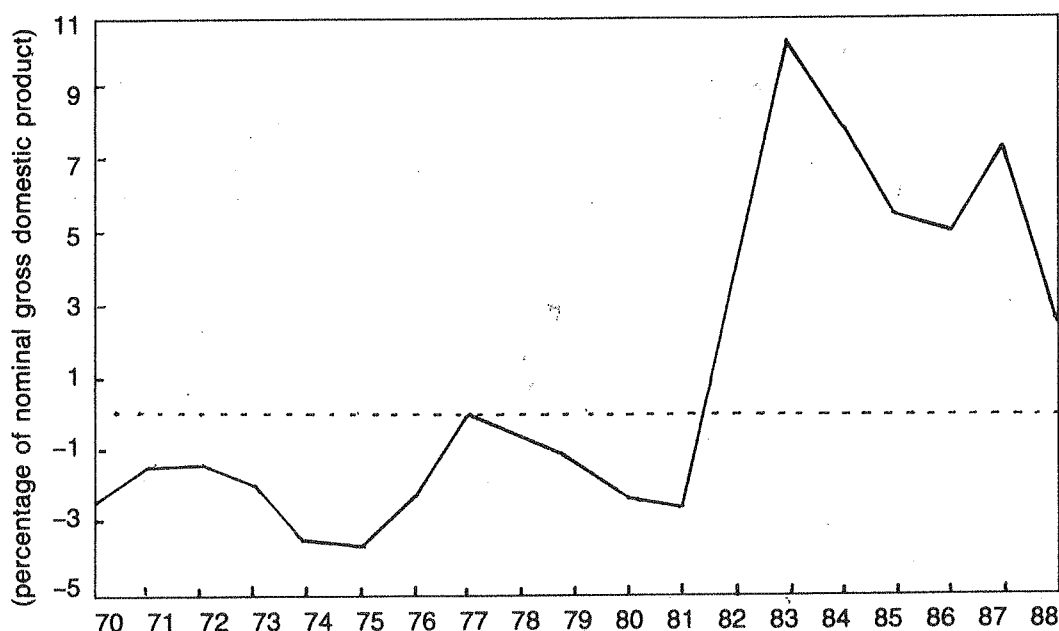
² These include part of the so-called invisibles, such as travel, transportation and insurance. They exclude 'factor' payments in the form of wages, interest, dividends and rents.

criterion than that of interest payments, since these can be covered by loans, in which case the operation becomes purely financial and no real effort is involved on the part of the debtor. Moreover, it can be the case that the trade surplus is larger than interest payments if part of the principal is redeemed, or else there are capital flights or reserves are being accumulated.

Table 1 shows that whereas during the twelve years 1970-81 the economy received from abroad 15 billion dollars at 1970 prices, in the seven years, 1982-88, it transferred 24 billions, measured also at 1970 prices. (See also graph 1). The latter figure is equivalent, at current prices, to 64 billion dollars. In fact, more resources were transferred abroad in those seven years than the amount received during the previous thirty-two years. These comparisons are even more unfavourable to Mexico when measured in real domestic purchasing power, where full consideration is given to changes in the terms of trade.

Graph 1

Transfer of resources abroad
(trade balance in goods and non-factor services)



Over the period most of the trade surplus was devoted to paying interest abroad, although a part of it was also used to finance capital outflows. Overall indebtedness—small in comparison to previous years—was insufficient to cover private capital flights and reserve accumulation. (See table 2).

Table 1

*Transfer of resources abroad, accumulated by periods, 1950-69, 1970-81 and 1982-88
(surplus in the balance of goods and non-factor services)*

	1950-69	1970-81	1982-88
US dollars, billions			
At current prices	- 3.5	- 24.1	63.8
At 1970 prices ¹	- 4.4	- 14.9	23.7
Mexican pesos, billions			
At 1970 prices ²	-58.0	-154.8	391.1

¹ Deflated with the US consumer price index

² The current price figures were divided by the domestic demand deflator, in order to consider changes in the terms of trade

Sources: Banco de México, Economía Aplicada, IMF and INEGI (Instituto Nacional de Estadística, Geografía e Informática, *Estadísticas Históricas de México*, 1985)

Table 2

*Transfer of resources abroad, composition by type of transaction, accumulated 1982-88
(billions of US dollars)*

Trade surplus, goods and non-factor services			63.8
Factor payments			
Interest abroad		70.3	
Other net payments		-10.8	59.5
Capital movements			
Outflows			
Private capital ¹	23.9		
Reserve accumulation	3.9	27.8	
Inflows			
Public sector indebtedness	24.7		
Private sector indebtedness	-11.9		
Foreign direct investment	10.7	23.5	4.3

¹ Includes the residual item in the balance of payments

Source: Banco de México and Economía Aplicada

Transfer of resources and waste of resources

Payments abroad were not only excessive, but the method applied to obtain them was also macroeconomically inefficient, because it implied the waste of large amounts of domestic resources.

Under this policy, debt servicing is more than a permanent levy on the economy. It is not only a question of paying a sort of tax of more than 5 per cent of GDP every year, given the level of activity. In order to pay, the economy had to be forced into a straight-jacket. Paradoxically, instead of producing more so as to augment the capacity to pay, production was reduced. The reason for this is that payment had to be made in foreign currency. To exact the amount required at a rapid pace, the most effective method was to compress domestic demand. This depressed imports more than proportionately and helped to create some export surpluses. Non-oil exports grew very fast, but were still unable to compensate for the drop in domestic demand.

As a result, during 1982-88, wasted resources—the difference between capacity and actual production—were more than twice the size of transfers abroad. As a whole, in this period, the domestic sectors of the economy consumed and invested almost 17 per cent less than the technically feasible level. (See table 3).³ This is equivalent to having produced nothing at all in one year out of seven.

³ If capacity had grown at 5 per cent per annum over the period — from 1970 to 1981 the actual rate was more than 7 per cent —, instead of being reduced in the process of 'adjustment', the loss would have been more than 27 per cent of potential output.

Table 3

Potential output, non-utilized resources and transfers abroad, 1982-88

	Billions of 1970 pesos ¹	Percentage structure
Domestic demand	6021	83.2
plus:		
Resources transferred abroad	391	5.4
equals:		
Actual gross domestic product	6412	88.6
plus:		
Non-utilized resources	822	11.4
equals:		
Potential output	7234	100.0

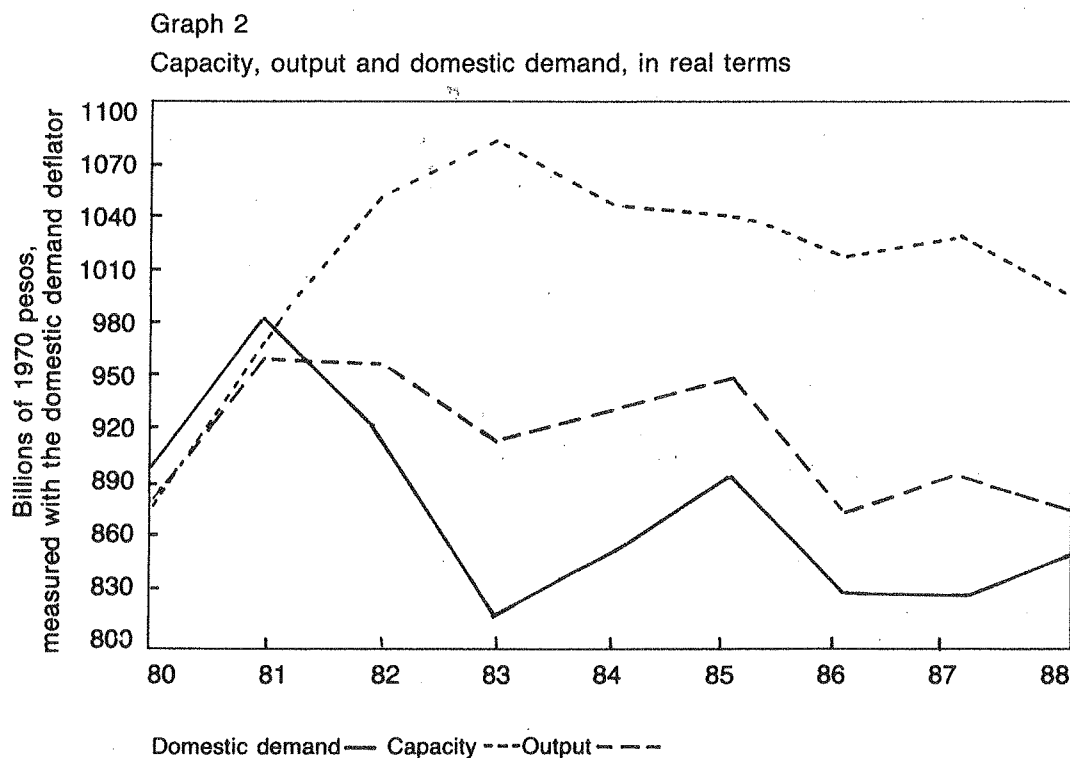
¹ Nominal figures divided by the domestic demand deflator

Sources: Banco de México, *Economía Aplicada* and INEGI (Instituto Nacional de Estadística, Geografía e Informática, *Sistema de Cuentas Nacionales de México*, several issues).

In graph 2, the gap between domestic demand and gross domestic product measures transfers abroad. This is clearly smaller than the gap between capacity and product, which measures waste. Whereas the former at least contributed to the welfare of the rest of the world, the latter was beneficial to no-one.

Changes in the structure of demand

A striking feature of graph 2 is the fall of potential output. This is due to gross investment in plant and equipment not being quite enough to cover depreciation. Given the high import-intensity of investment as well as its extremely pro-cyclical nature, reduction of this component of demand was a major source of the external gap. Changes in the structure of demand can be more fully investigated in table 4. Gross non-residential investment, both private and public, was in 1987 half of what it had been in 1981. The same is true of imports. In fact, investment and *total* imports of goods seem to be highly correlated, as shown in graph 3. The correlation is all the more surprising when one considers that during the period huge changes



in the real exchange rate took place, without an apparent effect on the relationship between these two variables.⁴

Part of the drop in investment in 1982-87 was due to fiscal policy, as capital formation acted as the residual item in the repeated attempts by the public sector to reduce its nominal deficit. Private sector investment behaved more as an endogenous variable, following closely the "accelerator" principle.⁵ On the other hand, the reduction in the volume of private consumption between 1981 and 1987—more than 5 per cent in total, or more than 17 per cent in per capita terms—was propted by a substantial fall in real wages. As will be shown later, this was largely the result of accelerating inflation.

⁴ The exception seems to be 1988 but, as discussed below, the behaviour of imports in that year is explained, to a large extent, by a sudden liberalization affecting both quantitative restrictions and tariffs. Actually the liberalization process started at a slow pace from 1984 onwards. This may account for the differing trends between imports and investment, discernible in graph 3, during that period. Their cyclical patterns are, however, as correlated as before. Another possible explanation for these differing trends is that, owing to stagnation, there was destruction and down-grading of capacity. Whatever the reason, it should be emphasized that, given large real devaluations, one would expect the trends to diverge and not to converge.

⁵ On this see Economía Aplicada, S.C., *La política económica en México, 1982-88*, forthcoming.

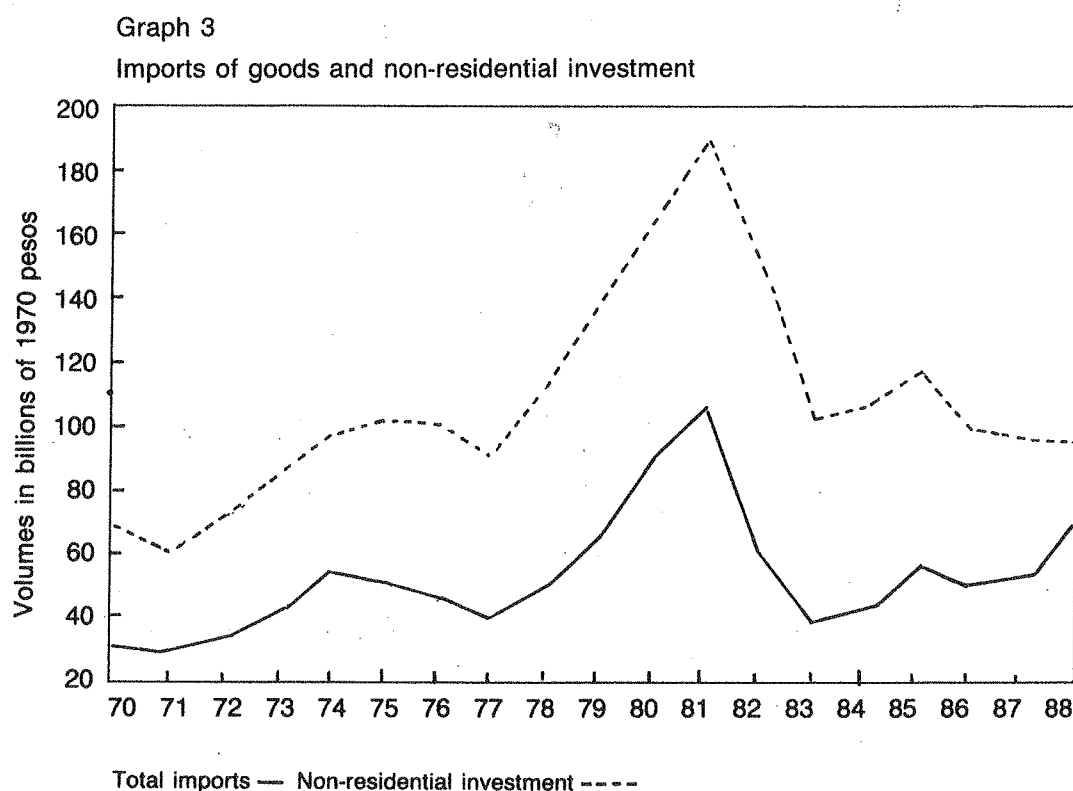


Table 4

Aggregate supply and demand, 1981-87
(volumes at 1970 prices)

	Percentage growth 1981-87	Percentage structure	
		1981	1987
Gross domestic product	-2.0	86.5	92.6
Imports	-49.8	13.5	7.4
Goods	-50.3	9.6	5.2
Non-factor services	-48.5	3.9	2.2
Aggregate supply and demand	-8.5	100.0	100.0
Domestic demand	-15.3	93.6	86.6
Private consumption	-5.2	59.7	61.9
Government consumption	9.2	7.9	9.4
Gross fixed investment	-39.0	21.6	14.4
Stock variation	-	4.4	1.0
Exports	90.4	6.5	13.4
Goods	120.5	3.9	9.4
Crude oil and products	(20.9)	(1.5)	(1.9)
Non-oil goods	(180.1)	(2.4)	(7.5)
Non-factor services	43.9	2.6	4.0
Memorandum:			
Gross fixed investment	-39.0	21.6	14.4
Residential	11.5	3.7	4.5
Private non-residential	-46.0	8.6	5.0
Public	-52.4	9.4	4.9

Note: due to rounding errors, the parts may not add to the totals

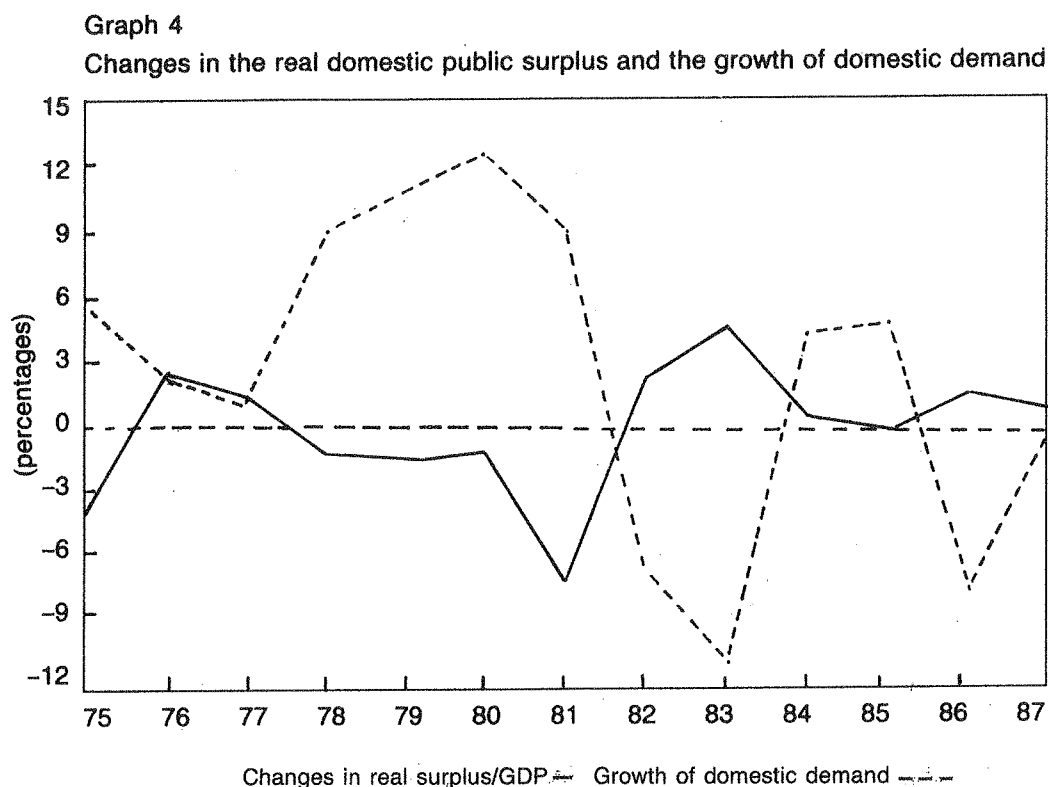
Source: Economía Aplicada and INEGI (*Sistema de Cuentas Nacionales, op. cit.*)

Fiscal stance and the level of domestic demand

It was pointed out that transfers abroad were made possible by restraining domestic demand. It will be shown here that the two main mechanisms for achieving this end were fiscal policy and exchange rate policy.

There is a very close association between growth of domestic demand and *changes* in the real domestic public sector surplus. The latter is obtained from the overall deficit by excluding transactions between the public and the external sectors and by deducting the inflationary loss on government

debt, implicit in interest payments to the domestic sectors. Thus it basically reflects the net real result of the public-private economic relationship. Graph 4 shows that high growth of demand coincides with reductions in the public sector real surplus, and viceversa.



One of the main objectives of economic policy, as stated repeatedly by the 1982-88 government, was to 'strengthen' the public sector, by a process of 'cleaning-up' its finances. This was seen as a prerequisite for a successful anti-inflationary policy, on the grounds that monetary creation was associated with the borrowing requirement of the government. For most of the period the requirement was measured in nominal terms, and ever increasingly austere targets were established on this basis. (Only very late in the period did the government discover inflation accounting.) Since inflation was increasing, and interest rates on domestic debt were almost fully indexed, payments on this account absorbed higher and higher proportions of the budget. If annual inflation goes from 20 to 100 per cent, and interest rates follow suit, interest payments increase five times; other expenditures only double in nominal terms. Thus, given the overall budget, expenditure on real goods and services was crowded-out. This is particularly true of public investment, since current items are more difficult to compress, given their link to daily operations. (See table 5).

Table 5
Federal public sector consolidated accounts, 1981-87
(percentages of nominal gross domestic product)

	1981	1983	1985	1987
<i>Total revenues¹</i>	27.7	34.2	32.3	30.9
Direct taxes	5.8	4.2	4.2	4.0
Indirect taxes & other, government	6.0	7.4	7.2	7.7
Oil exports	5.5	11.3	8.4	6.1
Other income, public enterprises	10.4	11.3	12.6	13.1
<i>Total outlays, excluding interest¹</i>	36.1	29.2	28.3	25.8
Wages	9.7	7.9	7.9	6.8
Intermediate consumption	9.0	8.4	10.1	8.6
Transfers to local governments	2.0	2.2	2.2	2.2
Other transfers and subsidies	4.4	3.7	2.0	3.0
Capital formation	11.0	6.9	6.1	5.1
<i>Interest payments</i>	5.2	13.5	12.4	20.4
Domestic currency, nominal	2.4	8.6	8.4	16.3
Foreign currency	2.8	4.9	4.0	4.1
<i>Nominal economic deficit</i>	13.6	8.5	8.4	15.3
less:				
Inflationary amortization of domestic currency debt	2.9	9.1	7.6	16.2
equal:				
<i>Real economic operational deficit</i>	10.7	-0.6	0.8	-0.9
less:				
Net external transactions	0.0	-4.1	-2.3	-1.1
equal:				
<i>Real domestic economic deficit</i>	10.8	3.6	3.1	0.2

Note: due to rounding errors the parts may not add up to the totals

¹ Net of intra-sector transactions

Source: Banco de México and Economía Aplicada

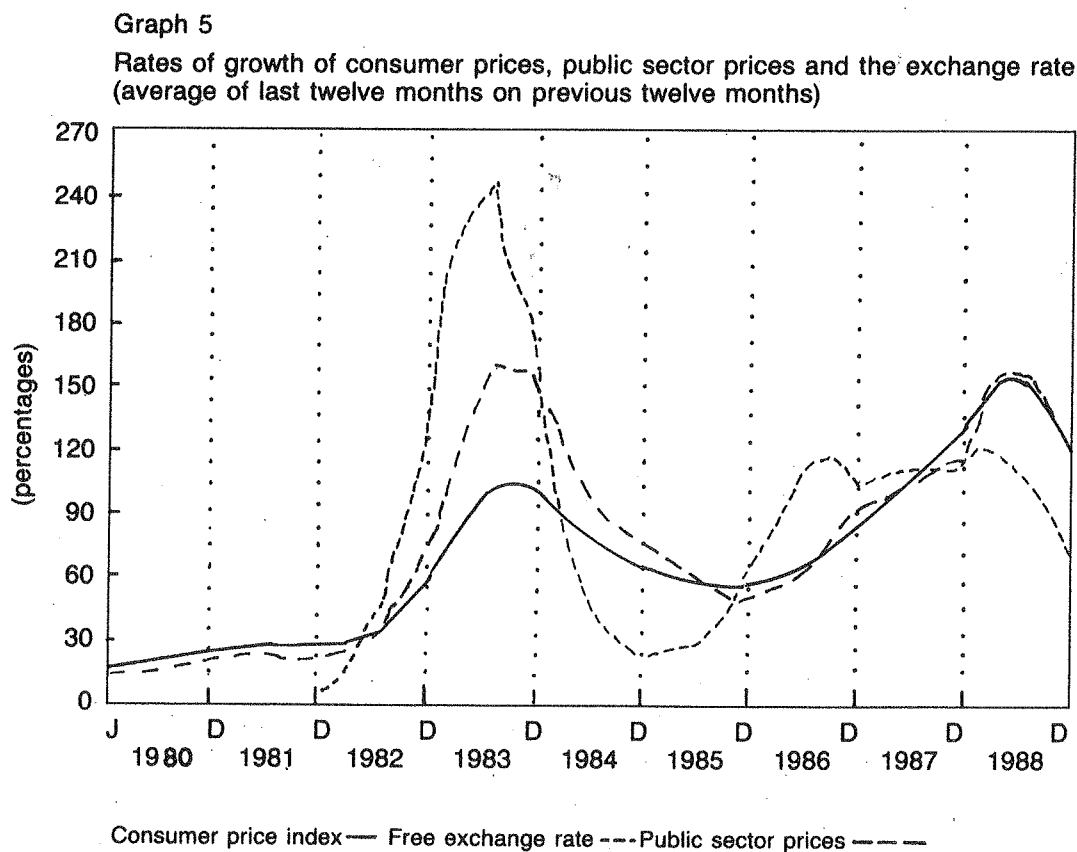
Another effect of fiscal policy was to promote inflation. In the pursuit of stringent targets for the nominal borrowing requirement, indirect taxes were raised, subsidies cut and real public sector prices increased. In fact, the nominal targets for the deficits were never achieved. To some extent a vicious circle was established: as inflation accelerated, due in part to fiscal policy, nominal interest payments expanded more than proportionately to additional revenues, so that extra cuts in real expenditure and higher public sector prices were required. (See again table 5).

Exchange rate policy as a means of restraining domestic demand

However, the main factor behind the considerable acceleration of prices during 1982-88 was the policy of massive real devaluations. It will be argued that the main effect of these devaluations was to restrain domestic demand through inflation and the consequent changes in income distribution. Furthermore, it was through reductions in the level of activity, rather than through changes in relative trade prices, that the required external surplus was obtained. It will also be shown that the impact of real devaluations in deteriorating the terms of trade made the whole process more painful.

Exchange rates and public sector prices were subject to wild fluctuations during the period. These preceded movements in the general consumer price index, as can be seen, in graph 5. The idea was to create a 'cushion' in real terms, i.e. to implement nominal changes at rates far greater than necessary, in order to take into account erosion through subsequent inflation. This was true both in 1982 and in 1985, years in which large devaluations took place.⁶ Of course, the result was always more inflation than anticipated.

⁶ Note incidentally in graph 5 that the second large devaluation occurred before February 1986, the month in which the international oil market collapsed. This cannot be attributed to



The policy was very successful, however, in changing relative prices. This is shown in table 6. In 1988 purchasing power of minimum wages—the national guideline reference for remunerations—was about half of its 1981 level. It was this lack of ‘real wage resistance’ that prevented hyperinflation, as was the case in other Latin-American countries. Actually the economy was at the threshold of hyperinflation at the end of 1987, when a non-orthodox price-freeze was adopted, reversing almost six years of mishaps in anti-inflationary policy. This is reflected in the real revaluations of 1988—the exchange rate was frozen in nominal terms while prices continued to grow, albeit at a much slower rate.

foresight on the part of the authorities — they were actually taken by surprise — but to a deteriorating balance of payments, capital flights and the policy of fully servicing debt.

Table 6

*Main relative prices, with respect to the consumer price index
(1980 = 100, annual averages)*

	Wages		Exchange rates ²		Public prices	Controlled prices
	Minimum	Average ¹	Free	Controlled		
1980	100.0	100.0	100.0	100.0	100.0	100.0
1981	102.1	104.3	92.2	92.2	96.3	95.1
1982	99.9	107.0	139.9	133.2	105.6	96.4
1983	75.7	82.5	196.5	155.0	130.6	101.8
1984	70.0	75.6	150.6	136.3	139.7	106.3
1985	69.2	76.2	161.5	135.1	134.4	107.8
1986	63.6	72.9	184.2	175.6	139.7	111.6
1987	59.3	72.4	183.5	179.7	132.2	114.2
1988 ^e	51.9	na	145.5	143.1	133.1	109.1

e: estimate; na: not available

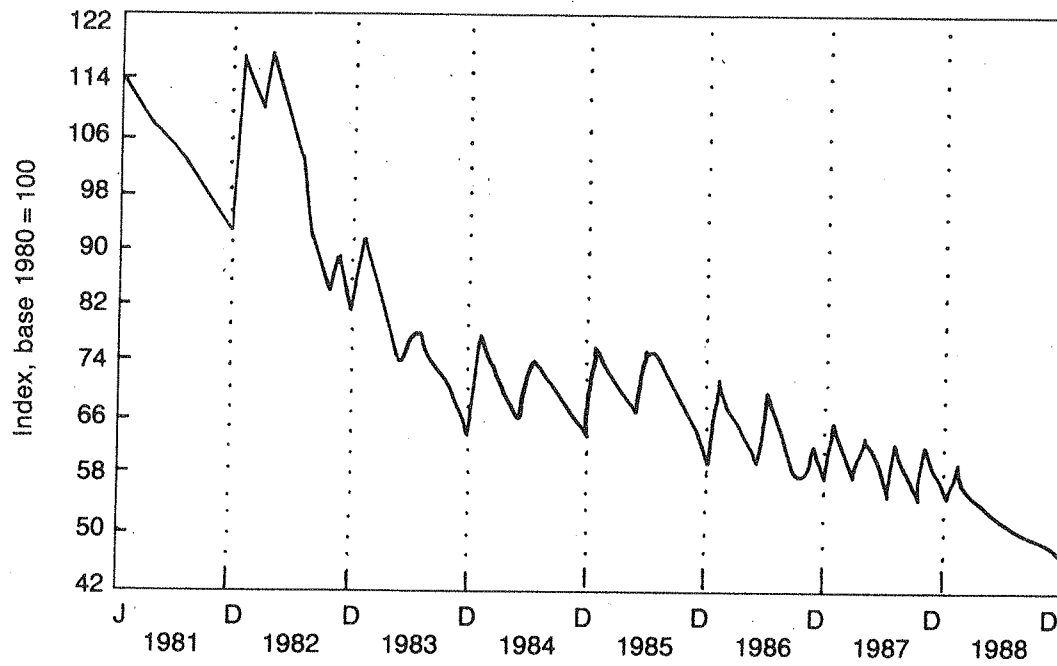
¹ Average in manufacturing industry

² With respect to the US economy. An increase in this index means real devaluation and viceversa.

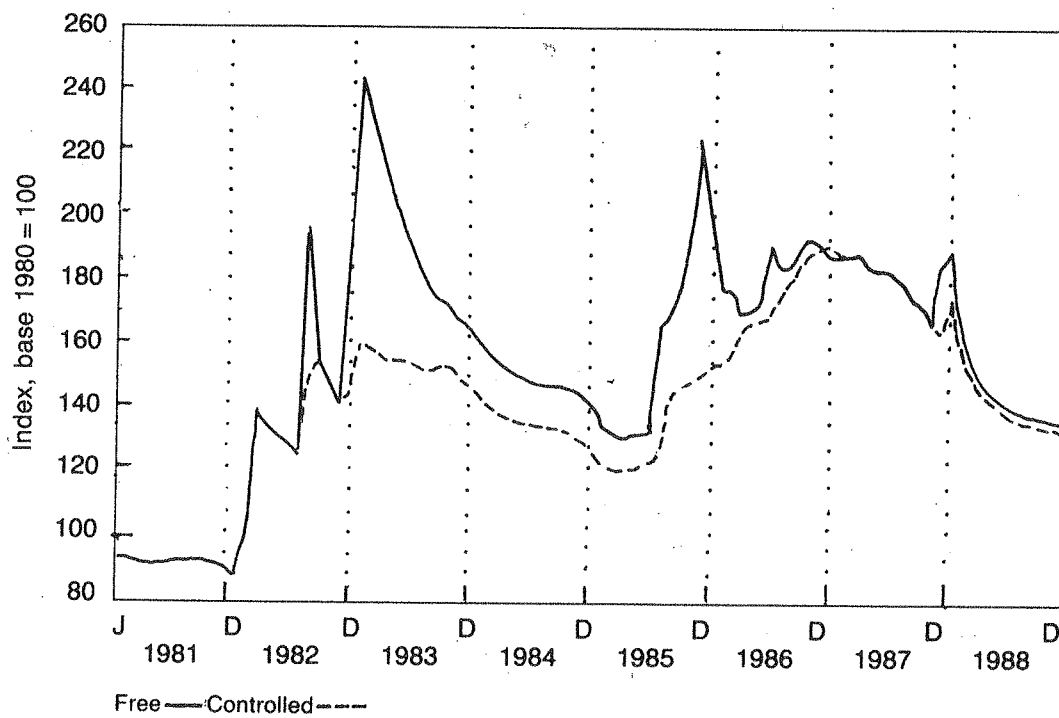
Sources: Banco de México, Economía Aplicada and OECD

The process by which wages got squeezed is illustrated in graphs 6 and 7. The frequency of the revisions of the minimum wage was increased from annually to quarterly. This in itself contributed to inflation. Still the revisions were made at discrete intervals and were ‘backward-indexed’, usually with coefficients of indexation of around one—i.e. they tended to recover past

Graph 6
Real minimum wage



Graph 7
Real exchange rate



inflation—, although this was not always the case. Such a mechanism will generate stable average real wages with stable inflation. However, when inflation accelerates, the purchasing power of wages will drop. Exchange rate policy contributed greatly in this respect. In the periods of decelerating inflation—e.g. 1984-85 and 1988, when the adjustment mechanism mentioned above should have allowed the recovery of real wages—the indexation coefficient was in practice reduced to less than unity. This was obtained by changing the rule to ‘forward-indexing’ on a target inflation that was usually exceeded, as the government asked the labour movement to cooperate with anti-inflationary policy. This is exemplified in the wage freeze that started in March 1988, under the new non-orthodox policy. Thus a ratchet effect forced wages into a trap that made each real loss permanent. The reduction of real wages permitted a devaluation of the real exchange rate, as was the intention of the policy. Furthermore, by strongly compressing the single most important component of private income, and presumably the one with the largest propensity to consume, exchange rate policy contributed to reduce domestic demand, as the goal of paying abroad dictated.

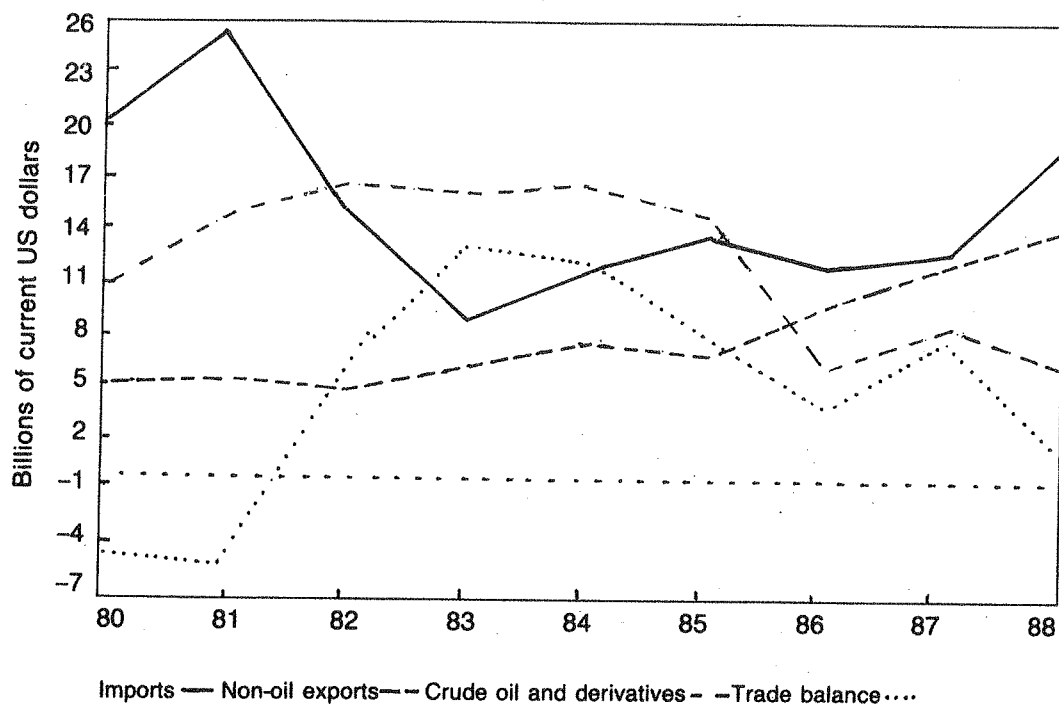
Exchange rate policy, trade performance and the terms of trade

The creation of a trade surplus during the period was, to a large extent, a consequence of reducing the value of imports. Exports of oil peaked in 1982-84, both in value and in volume, and subsequently fell. In particular, the price of oil in 1986 was reduced by half. Given the weight of hydrocarbons in Mexican trade, this imposed a great burden on the policy of paying at any cost, especially since almost no new credit could be obtained in compensation. As compared with 1985, exports of crude oil and its derivatives dropped in 1986 by more than 8.5 billion dollars, or about 40 per cent of total exports of goods. Oil revenues recovered somewhat in 1987 but returned to their 1986 levels in 1988. As for non-oil exports, their growth was impressive but, given their initial low level, they started making large contributions to the surplus only later in the period. (See graph 8).

Thus the behaviour of imports was essential to the policy. It has already been argued that imports are highly sensitive to domestic demand, in particular to investment in plant and equipment. Although price elasticities are significant, they are not very large and explain a relatively low proportion of the variability of imports, in spite of large movements of the real exchange rate.⁷ A glance at graph 3 above substantiates this statement. That in 1988

⁷ Except for consumer products, econometric studies in México tend to show that price elasticities of imports are less than unity, both for goods and for services (cf. J. Ros et al., “Modelo macroeconómico”, *Economía Mexicana*, Serie temática n. 2, Centro de Investigación y Docencia Económicas, 1984).

Graph 8
Value of trade in goods



the volume of imports increased by more than 35 per cent, and its value by nearly 50 per cent, with virtually no growth in domestic demand, is largely explained by the fact that the process of trade liberalization, implemented piece-meal throughout the period, made a hasty advance in 1988. The result of this trade policy will be to reduce further the level of activity compatible with debt service, as the global import propensity of the economy is raised in the process.⁸ This has, in fact, been the underlying trend of the import propensity since 1983.

Nor was the policy of real exchange devaluations very effective on the export side. Firstly, at the beginning of the period, crude oil and its derivatives accounted for 78 per cent of total sales of goods abroad. (The proportion was reduced to 42 per cent in 1987, largely as a consequence of the substantial fall in price referred to above.) This implies that a considerable fraction of export earnings was totally impervious to the exchange rate. In the second place, as for the volume of non-oil exports,

⁸ In official circles there seems to exist the idea of reducing transfers abroad through a policy of import liberalisation, although no specific financial mechanism has been so far announced. Elsewhere it is argued that this method of reclaiming external resources is *inefficient* in a macroeconomic sense, whatever its microeconomic advantages, since it implies less creation of domestic resources per unit of foreign exchange *vis-à-vis* a sensible policy of protection (cf. Economía Aplicada, *La política económica en México, op. cit.*).

a recent study⁹ shows that its impressive growth, of over 18 per cent per annum during 1981-87, can be decomposed in three main factors, each with approximately equal weight: movements of the real exchange rate, growth in world demand and the *rate of deceleration* of domestic demand. Had the rate of growth of domestic demand remained constant (i.e. zero acceleration), it was calculated that the annual rate of growth of the volume of non-oil exports would have been about 12 per cent, and not 18 per cent. This is explained basically by the residual nature of many exports, which expand in order to compensate for drops in the domestic market, a state of affairs that turns around as soon as the economy recovers. The effect of external demand was substantial, about 7 percentage points per annum, on account of very high elasticities coinciding with the *longest sustained* post-war period of growth of the US economy. The contribution of exchange rate policy was of the order of 6.5 percentage points per year, equivalent to about one third of the overall growth rate. This contribution to the *volume* of non-oil exports was at least partially offset, however, by the terms-of-trade effect of real devaluations.¹⁰ Thus while the *volume* rose at an average annual rate of more than 18 per cent, the *value* increased at less than 14 per cent a year, in spite of international inflation.

Table 7 shows a selection of trade deflators. It is clear that over 1981-87 the price of oil dominated the pattern of the terms of trade. However, the dollar price of exports of non-oil goods and services also fell considerably, whereas import deflators rose. It is possible that in this result the drop of international quotations of raw materials had some influence. But this was not nearly as substantial as the reduction experienced by the export deflators, which should be attributed largely to exchange rate policy.¹¹ Thus the policy was instrumental in reducing real national income, by contributing to the deterioration of the terms of trade. The urge to export in order to pay was bound to squander resources. (See table 8).

The evidence examined in this section substantiates the contention that the role played by exchange rate policy in the process of creating an external surplus was basically that of increasing inflation and thus reducing purchasing power, particularly of wages. Inflation also reduced the real components

⁹ See *ibid.*

¹⁰ Most econometric studies for México show price-elasticities of exports below unity for the main categories of goods and services. They also reveal that domestic prices, apart from external prices, have some weight in determining export prices, an effect which tends to be considerable in manufacturing and in services (cf. J. Ros et al., *op. cit.*). This implies that when the local currency is depreciated in real terms, export prices in foreign currency drop, hence the terms of trade effect. In combination with small price elasticities, the latter can outweigh the gains in volume stemming from a real devaluation, when measured in foreign currency (see below, table 7).

¹¹ The behaviour shown by export deflators in foreign currency, given the large real devaluation, was to be expected according to the results of most econometric studies, as mentioned above (n. 10).

of public sector expenditure which were increasingly substituted with interest payments.¹² Thus domestic demand was compressed sufficiently to decrease imports and to increase exports. Exchange rate policy acted

¹² Since net transactions of the public sector with the rest of the world are in deficit, real devaluations tend to increase the overall deficit as a proportion of GDP. Given a target for the latter, this exerts downward pressure on public expenditure (see above, table 5).

Table 7

Trade deflators and the terms of trade, 1981-87
(percentage growth rates over the period, based on US dollar figures)

<i>Export deflators</i>	
Total	-44.5
Oil and products	-51.2
Non-oil goods	-22.3
Services	-19.6
<i>Import deflators</i>	
Total	6.1
Goods	2.7
Services	18.5
<i>Terms of trade</i>	
Total	-47.7
Goods, total	-54.7
Goods, excluding oil	-24.5
Primary	(-43.2)
Manufactured	(-13.7)
Services	-32.2
<i>Memorandum</i>	
US consumer price index	23.7
OECD consumer price index ¹	26.1
Agricultural commodities ²	-6.1
Mining commodities ²	-10.2

Note: all deflators are based 1970 = 100

¹ Index in local currencies converted into US dollars and weighted with the structure by country of the Mexican non-oil trade

² Index of international quotations weighted with the commodity composition of Mexican exports of the corresponding raw materials

Source: Banco de México, Economía Aplicada, INEGI, (*Sistema de Cuentas Nacionales*, *op. cit.*), and OECD

Table 8

Gross domestic product and real national income, 1982-88
(percentage annual growth rates based on figures at 1970 prices)

	Gross domestic product	Real national income ¹	Population	Real per capita income
1982	-0.5	-2.8	2.6	- 5.3
1983	-5.3	-3.6	2.5	- 6.0
1984	3.7	2.3	2.4	- 0.1
1985	2.8	3.6	2.3	1.3
1986	-3.9	-9.3	2.1	-11.2
1987	1.5	3.6	2.0	1.6
1988	0.6	-1.5	1.9	- 3.3
1981-88	-1.4	-8.0	16.9	-21.3

¹ Gross domestic product less factor income abroad, divided by the domestic demand deflator in order to include the terms-of-trade effect

Source: Economía Aplicada and INEGI (*Sistema de Cuentas Nacionales, op. cit.*).

through these indirect means, rather than through price elasticities. To the extent that trade liberalization had an impact in raising the import propensities, it made the whole process more burdensome.

Who paid?

It was shown that the economy, in the process of creating a trade surplus, incurred large losses not only because of the transfers themselves, but also due to the waste of domestic resources. But who paid? Although the precise allocation of these losses between sectors is difficult to calculate—this requires an estimate, under different assumptions, of how the economy would have behaved in conditions of full employment—, an analysis of income distribution by institutional sectors brings out the main issues. It seems that, compared with the period 1970-81, between 1982 and 1988 wages not only bore the burden of the extra income of the external sector (3 percentage points of GDP) but also that of the public sector (about 1 point) and the increase in capital and mixed incomes (nearly 5 points). The reduction of wage remuneration between these periods was more than 9 percentage points of GDP, clearly disproportionate to the magnitude of the transfers abroad. The mechanism through which this result is obtained

has already been examined above, in connection with fiscal stance and exchange rate policy. (See table 9).

Thus the process by which the economy made room to cover its financial commitments abroad was not only extremely wasteful in terms of resources, it also implied a considerable reshuffling of the remaining domestic income away from labour. It is therefore an understatement to say that labour paid the cost of the policy. It paid much more.

Table 9

Distribution of national income by institutional sectors, 1970-81 and 1982-88 (in percentages based on figures expressed in real terms)¹

	1970-81 (1)	1982-88 (2)	Difference (2) - (1)
Gross domestic product	100.0	100.0	0.0
less:			
Income, external sector	2.3	5.2	2.9
equals:			
National gross income	97.7	94.8	-2.9
Non-financial public sector ²	14.4	15.2	0.8
Non-financial private sector	83.4	79.0	-4.4
Capital and mixed incomes	(49.9)	(54.7)	(4.8)
Labour	(33.5)	(24.3)	(-9.2)
Financial sector	-0.1	0.5	0.6

¹ Current price figures were divided by the domestic demand deflator (base 1970 = 100) in order to include variations in the terms of trade. Intersectoral flows are adjusted for the inflationary effect on financial assets denominated in local currency.

² Includes regional and other local governments

Source: Banco de México, Economía Aplicada and INEGI (*Sistema de Cuentas Nacionales*, op. cit.)

Payments abroad and the German hyperinflation: a digression

There are historical situations which bear some resemblance to the one now facing Mexico, as far as its economic implications are concerned. This is the case, *inter alia*, of Germany during 1920-23. In spite of the different origin of the problem and the different international background, there are striking similarities, from a macroeconomic point of view, with present day Mexico.

Under the Treaty of Versailles the Allies demanded from Germany the payment of war reparations, to be completed in the course of thirty to forty years. The initial demands implied an annual cost greater than the total foreign earnings of an economy which was, in any case, running a trade deficit of around 10 per cent of exports in 1920-21. After a series of renegotiations, the annual payments were fixed at about 40 per cent of exports. As discussed below, not even this was actually ever paid. This is in stark contrast to the Mexican case during 1982-88, in which a proportion of exports of the same order of magnitude was in fact transferred abroad.

Thus the creditors, in spite of having won a war and of being in a position to occupy German territories by military force, had to extend loans to the country in order to finance reparations. This situation did not last more than six months—from mid 1921 to the beginning of 1922—when Germany had to declare a partial default on its debt. During that half-year the exchange rate was devalued 436 per cent, domestic inflation reached 260 per cent and the government faced a mounting nominal deficit.¹³ In an attempt to resume payments in 1922, inflation was pushed to a fourdigit rate. The French ended up by occupying German industrial areas because of lack of payment. Not even this allowed France to exact the transfer of resources stipulated in the Treaty, which by then had been renegotiated five times. Meanwhile, struggle among groups within German society, each one trying to avoid their share of the burden, precipitated the final phases of hyperinflation, which reached 40,000 per cent a month in October 1923. Stabilization of the economy afterwards, which involved a monetary reform and a price freeze, was accompanied by full refinancing of reparations by the United States. In 1934 Hitler repudiated both the reparations and the debt accumulated in the process.

The end results of this experience were virtually no transfers abroad; the complete disarray of the economic, social and political structure of the debtor nation; and, finally, the collapse of the international monetary system during the thirties. With the cancellation of the initial commitments only the first of these consequences would have resulted. The Mexican case has been far more favourable to the creditors, given the massive volume of resources already sent abroad since 1982. The question is whether this state of affairs can continue into the future without precipitating at least one of the other two phenomena. The creditors have no doubt been pressing their luck. Thus a word of advice from Keynes is in place: "By demanding the impossible, they forsook the substance for the shadow and will in the event lose everything".¹⁴

¹³ On this, cf. C. WINOGRAD, *De la hiperinflación alemana a la reforma económica argentina*, August 1985, mimeo.

¹⁴ J. M. KEYNES, *The Economic Consequences of the Peace* (1920), *The Collected Writings*, vol. III, London, Macmillan, 1971, p. 55.

Conclusion

During 1982-88 the government fully committed itself to an orthodox policy of austerity and to the pursuit of 'efficiency'. It is a bitter irony that it ended up by being perhaps the most wasteful period in contemporary Mexican history. The waste of resources stemming from a misplaced austerity was shown to be of a vast macroeconomic magnitude. This was probably far greater than the cost of allocative inefficiency attributed to economic policy in the past, especially during the years of the oil boom. Whereas in the course of the previous twelve years real output doubled, during 1982-88 it stagnated. About 7 million people were employed in new formal jobs from 1970 to 1981; none were created later on. In the meantime more than 5.5 million people joined the labour force and either became unemployed or had to take refuge in underemployment or emigration.¹⁵

In the light of the preceding analysis, the drastic 'cleaning-up' of public finances that took place in the period can be interpreted mainly as a method of paying resources abroad. No doubt there was waste of resources and inefficiencies in the public sector which required major trimming. But the cuts were not replaced by 'efficient' expenditure, either public or private. In any case it is doubtful whether this waste was comparable to that created by the macroeconomic effects of the policy, as measured in this paper.¹⁶

The evidence examined leaves the strong impression that something was going very wrong in economic policy-making in Mexico during the 1982-88 period. It can easily be explained how the operation of compound interest can lead to mounting financial commitments. In fact, the Mexican economy had been paying interest abroad for decades. However, whereas previously these payments were financed by loans, in 1982-88 they were not, and a disproportionate volume of real resources was channeled abroad. In fact, whatever loans were obtained, they returned to the banks through capital flights. (See above, table 2). Even so the government decided to pay at any cost. Strict financial criteria prevailed—under the circumstances, not even the proper approach to apply in the boardroom of a bank—instead

¹⁵ Cf. INEGI, *Sistema de Cuentas Nacionales*, *op. cit.*, and *Economía Aplicada*, *op. cit.*

¹⁶ In 1988 a most remarkable aspect of fiscal policy was the increase, equivalent to 6 percentage points of GDP, in public sector *real* interest payments on domestic currency denominated debt. Thus, the real operational surplus of 0.9 points obtained in 1987 was transformed into a deficit estimated at about 5.6 points in 1988. This is associated with the policy of very high interest rates — of more than 30 per cent per annum, after deducting price increases — that accompanied the new non-orthodox anti-inflationary policy. That level of the real fiscal deficit was never reached during the seventies, except for the single year 1975, and later on it was only exceeded in 1981 and 1982. The difference is that whereas before real interest paid to the domestic private sector was minimal or even negative, in 1988 it was highly positive. In addition, previously the benefits of the deficit were spread throughout the private sector, while now they are concentrated among the rentiers, who presumably have a comparatively low propensity to spend. So it seems that the government can no longer even claim the 'clearing-up' of public finances as an achievement (see above, table 5).

of macroeconomic criteria, as statesmanship should have dictated. Since the level of debt was not reduced in the process, the extrapolation of this policy into the future implies a never-ending series of transfers abroad of approximately equal size.

It has become habitual to attribute the disastrous effects of the policy to the 'crisis'. But this is only an empty concept, an image conjured up to justify every policy mishap. This article has attempted to show that the so-called crisis is the logical consequence of a government action that was, either by design or by the force of circumstances, completely geared to effecting an unprecedented transfer of resources abroad. No doubt the problems facing Mexico in 1982, in the midst of the debt crisis, were momentous. But the policy did not solve them; instead they were compounded. The collapse of the oil market in 1986 was certainly another important blow to the economy. In retrospect, however, it must be stressed that total oil revenues in 1982-88 were more than two and a half times those of the boom years, 1977-81.¹⁷ In any case, this collapse offered an invaluable opportunity—the ideal excuse for Mexico to unload, at least partially, its debt burden. The chance was not seized.

In the event, as has been discussed, the burden was by all accounts excessive and the method of exacting it both wasteful and socially unjust. The economy ended the 1982-88 period worse off than it started: with lower capacity in plant and equipment and a weakened industrial base; with real national income lower and more unequally distributed; with higher unemployment and underemployment; more vulnerable to the vagaries of the international economy;¹⁸ and more unstable socially and politically. Far from being reduced, foreign debt increased. Not even a blue-print for a long-term solution to the problem was worked out as a legacy for others to implement. And all this to keep the foreign bankers and a minority segment of Mexican society gratified. In the context of recent developments in Mexico, Keynes final dictum quoted at the outset is worth repeating: "A government which makes a serious attempt to cover its liabilities will inevitably fall from power".

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¹⁷ From 31.9 billion dollars in 1977-81 to 85.0 billion in 1982-88.

¹⁸ In the sense that the non-oil trade deficit, measured at a constant pressure of demand, is now larger than it previously was, in spite of the additional exports.