Chapter 13

Stabilisation and Growth in the Mexican Economy, 1982-94

This chapter reviews the macroeconomic performance of the economy, both in terms of policies used as well as actual outcomes, between the period 1982-94. The end-points of the period under consideration are marked by exceptionally severe economic crises. Also at the time of writing, 1994 is the latest year for which complete evidence is available. The chapter therefore would also attempt to analyse whether the nature of the macroeconomic policies used to stabilise the economy after the first crisis contributed in any measure to the second. The chapter is divided into seven sections. Section I is an introduction which provides synoptic sketches of the two crisis points. Section II which reviews the growth performance of the Mexican economy over the period 1982-94, is divided into sub-sections: Section II.i analyses the growth performance of the economy during the period of high inflation, between 1982 and 1987; Section II.ii discusses the economy's growth performance in the context of successful stabilisation between the period 1988-94. To complement the discussion on the growth performance of the economy, Section III presents a disaggregated analysis of the sources of demand growth in the economy. Section IV turns to an analysis of macroeconomic policy during the period 1982-87. Given the inability to control inflation between 1982-87, Section V considers some theoretical issues arising out of the nature of inflation control policies used in orthodox stabilisation programmes. Section VI moves on to an analysis of the macroeconomic policies during 1988-94, which led to successful stabilisation and also analyses their impact on the growth performance of the economy. Section VII provides a brief conclusion.

I. Introduction: from crisis to crisis

During the course of Jose Lopez Portillo's six-year presidential term (1976-82), the Mexican economy saw a long boom between 1978-81 - on an average, GDP grew at 8.4 and per capita income by 5.5 per cent over this four year period. In 1982, the final year, however, this came to an end, as the economy contracted by 0.2 per cent. That this unprecedented boom had resulted in severe

1 The growth rates mentioned are simple averages at constant 1970 prices.
macroeconomic imbalances, and was thereby unsustainable, was clear enough - in 1981 the current account deficit and budget deficit stood at 6.1 and 14.1 per cent of GNP and GDP, respectively. By 1982, both these indicators had worsened to 7.2 and 16.9 per cent respectively. But what sent the economy into a tailspin was the worsening, in 1981, of two prices central to its development strategy - that of international credit and petroleum.

As the price of borrowing abroad rose and that of petroleum fell, a massive speculative attack was mounted on the peso, which traditionally traded at a fixed parity with the US dollar. The resultant capital flight brought the Lopez Portillo regime to its knees. In February 1982 the government allowed the peso to float, but this measure did little to stop the haemorrhaging of funds out of Mexico. By the end of August, unable to check capital flight, Lopez Portillo, in near desperation, decreed capital controls, nationalised the banking sector and declared a moratorium on debt-servicing, sparking off an international debt crisis.

In the inevitable autopsy which followed, mainstream academia laid the blame squarely on the government’s expansionary fiscal policy [see for e.g., Zedillo (1986); Solis and Zedillo (1985); and Dornbusch (1988)]. There were a few dissenting voices, but not many. For example Diaz-Alejandro (1984) argued that the severity of the external shocks were to blame for the full blown developmental crisis which Mexico and most of Latin America found itself in. There were others, for example ECLAC (1984) and Fitzgerald (1985) who while acknowledging the conjunctural role of external shocks, argued that the crisis was 'made in Mexico', but not in the sense argued for by mainstream academia. These works argued that the crisis reflected deep-seated structural problems facing the economy - chiefly, a fiscal crisis of the state stemming from an inability to raise resources through non-inflationary means, a structural import-dependence, given the relative backwardness of the capital

2 According to Morgan Guaranty, between 1980 and 1982 capital flight out of Mexico amounted to $22.5 billion. Cuddington (1987) puts the estimate at $23.4 billion for the same period. To help put this figure in perspective, in December 1982, Mexico’s total external debt was $91-billion. Perhaps equally important, in December 1980, total external debt stood at $40 billion [see Dornbusch (1988)]. See Lessard and Williamson (1987) for other estimates of capital flight and for conceptual problems which arise in its measurement.
goods industry and a highly unequal distribution of income.

Be that as it may, the Mexican state, faced with a 'crisis of confidence' at home, as a result of the fact that its traditional ties with the capitalist class had been ruptured due to the bank nationalisation, and denied access to international capital markets, turned to the IMF for a bailout. In the December of 1982, an adjustment and stabilisation package was signed with IMF, which provided Mexico with $3.8 billion in credit for the period 1983-85. The IMF stabilisation package is significant not only in and of itself, but more so because it marked the beginning of a complete U-turn in Mexico's development strategy, involving a shift from import substitution to export-led growth and the retrenchment of the state as the motor of economic development.

The orthodox stabilisation policies used by Miguel de la Madrid Hurtado, who succeeded Lopez Portillo as President, hampered output growth and did little to control inflation, which in 1987 was running at an average rate of more than 130 per cent per annum. A change of strategy in the last

3 These have been discussed at some length in Chapter 11 which takes a retrospective look at the Mexican growth experience between 1930-80. It is also a view that this thesis is in sympathy with.

4 One indicator of how deep seated this crisis of confidence was, is the continued capital flight in the first two years of Miguel de la Madrid (the successor to Lopez Portillo) regime. According to Morgan Guaranty, capital flight during 1983-84 amounted to $17.7 billion. Cuddington (1987) puts the figure at $6.9 billion dollars. Even if one takes the lower figure as being representative of the magnitudes involved, capital flight still remained a significant problem. Given that the peso was devalued by about 100% in 1982 and a further 150% in 1983, in the first couple of years of the de la Madrid regime it was considerably undervalued. Capital flight over this period, therefore, provides a good counter example to the standard explanation provided for it - a phenomenon arising as a response to a substantially overvalued currency in need of a correction. One reason for the crisis in confidence was the nationalisation of the banking sector. The impact that the nationalisation had on the relationship between the state and the capitalist class and its repercussions on economic policy will be discussed in greater detail in Chapter 16.

5 Negotiations for IMF credit were begun and finalised in the last days of the Lopez Portillo government, even though the agreement formally took effect from the beginning of the de la Madrid regime. The signing of an adjustment package with the IMF also allowed negotiations to take place between Mexico and her commercial lenders, resulting in $5 billion 'involuntary' lending from the consortium, as well an agreement on the rescheduling of outstanding debt servicing dues. The total cost of the bail out therefore was $8.8 billion. For an explanation of the phenomenon of 'involuntary' lending see Mohanty (1992).

6 The macroeconomic performance of the economy will be studied in greater detail below.
year, as in, a move towards using a heterodox stabilisation package (essentially the use of some kind of an incomes-policy along with the more usual IMF-stabilisation package), helped control inflation and saw the return of moderate growth in the economy. Under Carlos Salinas de Gortari, who took over as President from de la Madrid in December 1988, the macroeconomic strategy adopted during the last year of the previous regime was continued and the process of reform deepened. With the return of moderate growth in the economy, the signing of the North American Free Trade Agreement (NAFTA) and Mexico's enthusiastic return to credit-worthiness in international capital markets, she was held up as a success story and as model for other countries, undergoing similar stabilisation and adjustment programmes, to emulate. A survey in 'The Economist' applauded Mexico for being "[o]ne of the 1980s' most enthusiastic converts to economic liberalism" and suggested that after years "[M]exico is poised for the spotlight. The club of rich nations hails it as the perfect student of economics."7

Despite these and other plaudits, in late December 1994, barely a month after Salinas handed over the charge of the presidency to his successor Ernesto Zedillo de Ponce Leon, there was a massive run on the peso and ensuing capital flight ultimately led to a devaluation of more than one hundred per cent8 and the Mexican miracle had come unstuck. The warning signs had been there for all to see - a highly overvalued currency [see e.g., Dornbusch and Werner (1994); and Oks and Wijnbergen, (1992)]; a high and rising current account deficit, amounting to 7.0 and 7.7 per cent of the GDP in 1993 and 1994 respectively, and a stagnant economy. Yet buoyed by huge inflows of private foreign capital - between 1990-93 gross inflows of foreign capital amounted to a stupendous $91 billion - which were taken as market signals of correct 'fundamentals', these signs were ignored or, perhaps more accurately, were wished away9, only for reality to eventually catch up. And when


8 It is reported that in two days $5 billion (see the Economist, 28th October, 1995) left the country. In early December, the exchange was 3.5 new pesos to the dollar. By March 1995 it had fallen to 7.5 new pesos to the dollar.

9 See Banamex-Accival (1994) which argues that the rise in the value of the peso did not indicate that it was overvalued, but rather a real appreciation reflecting a movement to a new equilibrium level, in line with the productivity gains which the economy had made as a result of economic
the crash came, there was a feeling of déjà vu, of 1982 repeating itself all over again. There was however a crucial difference between the last collapse and this one - whereas in 1981 the government had run up a huge budget deficit (14.1 per cent of GDP), this time around the government had consistently run a surplus budget since 1992, eloquent testimony to the fact that the state's financial rectitude by itself does not guarantee economic stability.

Outside of this crucial difference between 1982 and 1994, on the surface the effects of the latter collapse mimicked the earlier one, but with the magnitudes involved being much larger. It required a $50 billion package, largely put together by the IMF and the US Treasury and backed by the political muscle of the US President to stabilise the peso. By the fourth quarter of 1995 the economy had contracted by 6.6 per cent and inflation in December 1995 was running at 44 per cent as compared to a year earlier. The exchange rate which had recovered somewhat, after the initial collapse, to about 6 new pesos to the dollar had, by March 1996, slid back to 7.55. As in 1983, the trade balance swung around sharply - from a deficit of 5.8 per cent of GDP in 1994 to a surplus of $8.5 billion, for the year ending February 1996, which would amount to roughly 3 per cent of GDP.

---

reforms. Post facto, this remains the official position of the Mexican government and the collapse is attributed to the fact of

"[c]riminal offenses and unfortunate political events that took place during the year (1994), which had a negative impact on the expectation of economic agents." [Banco de Mexico (1995)]

If privatisation proceeds are included then the government budget turned in a surplus from 1991 [see Dornbusch and Werner (1994)].

There were differences in the behaviour of other macroeconomic aggregates as well. For example, the composition of the current account deficit was markedly different in the two episodes. These will be discussed in much greater detail below. Here the budget deficit has been singled out given the primacy it is given in IMF-style stabilisation policies as the cause of macroeconomic disequilibria.

282
II. Growth Performance of the Mexican Economy, 1982-94

<table>
<thead>
<tr>
<th>Year</th>
<th>Rate of Growth $^a$</th>
<th>PCY $^b$</th>
<th>I $^c$</th>
<th>TB $^d$</th>
<th>CAB $^e$</th>
<th>PSBR $^d$</th>
<th>Inflation $^f$</th>
<th>Emp $^g$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>8.77</td>
<td>105.39</td>
<td>28.6</td>
<td>-2.4</td>
<td>-6.1</td>
<td>-14.1</td>
<td>14</td>
<td>105.5</td>
</tr>
<tr>
<td>1982</td>
<td>-0.62</td>
<td>102.41</td>
<td>21.8</td>
<td>5.0</td>
<td>-0.7</td>
<td>-16.9</td>
<td>75</td>
<td>103.1</td>
</tr>
<tr>
<td>1983</td>
<td>-4.20</td>
<td>95.95</td>
<td>16.6</td>
<td>9.6</td>
<td>3.9</td>
<td>-8.6</td>
<td>93</td>
<td>93.4</td>
</tr>
<tr>
<td>1984</td>
<td>3.61</td>
<td>97.28</td>
<td>17.0</td>
<td>7.8</td>
<td>2.5</td>
<td>-8.5</td>
<td>67</td>
<td>92.5</td>
</tr>
<tr>
<td>1985</td>
<td>2.59</td>
<td>97.71</td>
<td>18.3</td>
<td>5.1</td>
<td>0.6</td>
<td>-9.6</td>
<td>58</td>
<td>94.4</td>
</tr>
<tr>
<td>1986</td>
<td>-3.75</td>
<td>92.11</td>
<td>15.3</td>
<td>3.9</td>
<td>-1.6</td>
<td>-16.0</td>
<td>87</td>
<td>92.5</td>
</tr>
<tr>
<td>1987</td>
<td>1.86</td>
<td>91.94</td>
<td>15.9</td>
<td>6.1</td>
<td>1.6</td>
<td>-16.0</td>
<td>131</td>
<td>92.7</td>
</tr>
<tr>
<td>1988</td>
<td>1.24</td>
<td>91.24</td>
<td>17.6</td>
<td>1.5</td>
<td>-2.3</td>
<td>-13.0</td>
<td>114</td>
<td>92.4</td>
</tr>
<tr>
<td>1989</td>
<td>3.35</td>
<td>92.46</td>
<td>17.8</td>
<td>-0.2</td>
<td>-3.7</td>
<td>-5.6</td>
<td>20</td>
<td>94.6</td>
</tr>
<tr>
<td>1990</td>
<td>4.45</td>
<td>94.71</td>
<td>18.9</td>
<td>-1.2</td>
<td>-4.3</td>
<td>-3.9</td>
<td>27</td>
<td>94.7</td>
</tr>
<tr>
<td>1991</td>
<td>3.63</td>
<td>96.25</td>
<td>19.6</td>
<td>-3.2</td>
<td>-5.4</td>
<td>2.0</td>
<td>23</td>
<td>93.1</td>
</tr>
<tr>
<td>1992</td>
<td>2.81</td>
<td>96.93</td>
<td>21.8</td>
<td>-5.6</td>
<td>-8.4</td>
<td>3.5</td>
<td>16</td>
<td>89.5</td>
</tr>
<tr>
<td>1993</td>
<td>0.53</td>
<td>95.50</td>
<td>20.0</td>
<td>-4.3</td>
<td>-7.2</td>
<td>1.5</td>
<td>9</td>
<td>85.0</td>
</tr>
<tr>
<td>1994</td>
<td>1.54</td>
<td>20.5</td>
<td>-5.8</td>
<td>-5.8</td>
<td>-5.8</td>
<td>7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Notes:  
$^a$ - Rate of growth of GDP at market prices at constant 1980 prices. Figures for 1993 and 1994 are provisional.
$^b$ - PCY refers to an index of real GDP per capita at constant 1980 prices, with 1980 = 100.
$^c$ - I refers to gross capital formation as a percentage of GDP at market prices, with both measured at constant 1980 prices. Figures for 1993 and 1994 are provisional.
$^d$ - Trade balance (TB) and Public Sector Borrowing Requirement (PSBR), both as a percentage of GDP at market prices measured at current prices.
$^e$ - Current Account Balance (CAB) expressed as a percentage of GNP at current prices.
$^f$ - Inflation refers to an average-of-period percentage change in the Consumer Price Index constructed with 1990 as the base year.
$^g$ - Emp refers to an index of manufacturing employment.

The period 1982-94 begins with the last year of the Lopez Portillo regime and goes on to span
two presidencies, that of Miguel de la Madrid (December 1982 to November 1988) and Carlos Salinas de Gortari (December 1988 to November 1994). As even a cursory reading of the Table I would suggest, the performance of the Mexican economy, over the period under consideration, has been fairly volatile. The data itself would suggest that it may be analytically worthwhile to break up the period under consideration in two - 1982-88, a phase of economic stagnation (the average rate of growth over the period was marginally higher than 0.1 per cent p.a.) and high inflation; and 1989-94, a period of relatively moderate and declining inflation accompanied by moderate to low growth (the average growth rate over the period being 2.7 per cent p.a.). Inflation would also be the obvious benchmark to use as a criterion for breaking up the thirteen-year long period, given that inflation stabilisation was one of the primary objectives of the IMF stabilisation programme which, in return for access to IMF credit, the economy had to undergo right from the beginning of the period.

I would, on the other hand, break the period up slightly differently. The focus remains on inflation, but I would use the two different macroeconomic regimes underlying the high and the low inflation phases as my differentiating criterion for periodisation. The period then would be broken up into the following two sub-periods: 1982-87\(^{12}\) and 1988-94. The first of these sub-periods saw the use of, what may be termed, orthodox IMF stabilisation policies which sought to curb excess demand in the economy by using restrictive monetary and fiscal policies. As Table I would amply testify, these policies were unable to break the stranglehold of inflation (reasons for which will be discussed in greater detail below), and therefore, in the second sub-period, the economy shifted to, what the literature calls, a heterodox stabilisation policy - the use of an incomes policy in conjunction with tight monetary and fiscal policies to tame inflation.

\(^{12}\) Whereas negotiations for IMF credit were completed during the Lopez Portillo regime, the stabilisation package itself was implemented during the de la Madrid presidency. Therefore strictly speaking, in terms of macroeconomic regimes, the first sub-period would be 1983-87. But 1982 has been advisedly taken as the beginning of the period, given that some of the measures which the IMF had suggested, for example a cutback on government consumption expenditure, had already been put in place in that year. Equally importantly, some of the measures which Lopez Portillo instituted - such as a dual exchange rate and import controls - were to remain in place for a substantial part of the new 'orthodox stabilisation' macroeconomic regime.
As Table I would suggest, the period 1982-87 was an economic disaster for Mexico. GDP contracted at an average rate of about 0.09 per cent p.a. over the period. The rate of growth of GDP actually masks the extent of demand contraction which the economy saw over this period. Total demand in the economy (including the demand for imports), on the other hand, contracted appreciably more, at an average rate of 1.02 per cent p.a. The bulk of the demand contraction was borne by investment, resulting in a nearly six percentage point fall in the gross investment-to-GDP ratio - from 21.8 to 15.9 per cent between 1982 and 1987, respectively. Reflecting the contraction in output, per capita incomes fell sharply over the period, with the 1987 level more than 10 per cent lower than its 1982 level. In comparison with the 1981 peak, per capita incomes, by 1987, had declined by almost 13 per cent. Employment too followed a similar trend. Employment in manufacturing, which was symptomatic of the economy as a whole, fell secularly over the period, with the 1987 level 10 per cent lower than that in 1982.

Despite this sharp contraction in demand, inflation proved much more stubborn. Whereas the first half of this period saw some deceleration in inflation, falling from an annual rate of 75 per cent in 1982 to 58 per cent in 1985, it picked up during the second half and by 1987 was running in triple...

---

13 Total demand is defined as the sum of consumption, investment and export demand (C+I+X) or GDP plus import demand. The fact that GDP contracted much less than total demand indicates the extent of import compression that took place over this period - amounting to slightly under one per cent of GDP per annum over the period. Imports being a leakage from the economy, a fall in imports would positively affect GDP growth rates. That of course says nothing about where in the growth cycle this fall happens. If imports (as a percentage of GDP) fall when GDP is growing then it would indicate successful import substitution. If on the other hand, imports fall as an economy contracts, it merely reflects the much sharper fall in total demand, which is the Mexican experience during 1982-87. During contractionary phases of economic growth, an analysis only in terms GDP growth rates would therefore be incomplete as it would mask the full extent of the downturn. It is therefore useful to analyse the behaviour of total demand as well, to get a more complete picture. The only case where this would not hold is when imports, as percentage of GDP, rise as an economy contracts.

14 The fall was much sharper if one compares it with 1981 ratio which stood at 28.6 per cent, a contraction of nearly 13 per cent.
digit figures. The inability to control inflation impacted adversely\textsuperscript{15} on the budget deficit (PSBR). The budget deficit, which by 1984 had fallen to 8.5 per cent of GDP from 16.9 per cent in 1982, climbed back to 16 per cent by 1987.

The only economic variable which bucked this trend was the trade balance which remained in surplus right throughout this period. In 1982, the surplus on the trade balance amounted to 5 per cent of GDP\textsuperscript{16}. In the subsequent year it had risen to a phenomenal 9.6 per cent of GDP, and even though in the later part of the period it declined from those rarified heights, in 1987 it stood at a comfortable 6.1 per cent. The turnaround in the trade balance came about due to the import compression mentioned earlier and a robust growth in exports aided by sharp nominal and real devaluations, cuts in real wages\textsuperscript{17}. In the early part of the period, import compression was more important with the import-to-GDP ratio contracting from 12.8 per cent in 1981 to 9.5 per cent in 1984. But with export growth occurring within an overall scenario of demand contraction, its positive multiplier effects were completely swamped. But what a positive trade balance did allow was Mexico to service its external debt obligations which remained substantial, with net factor payments (largely constituted by interest payments) in the range of 4-5 per cent of GDP throughout this period. But as noted earlier, the cost to Mexico of servicing its debt was high in terms of output losses and drop in

\textsuperscript{15} The mechanism by which inflation adversely affects the budget deficit will get discussed in greater detail in Section V below.

\textsuperscript{16} The extent of the turnaround in the trade balance can be gauged from the fact that in 1981, the trade balance was in deficit, amounting to 2.4 per cent of GDP.

\textsuperscript{17} The real exchange rate vis-a-vis the US, which is Mexico's largest trading partner, depreciated by more than 36 per cent, the index (1980 = 100) falling from 106.71 in 1981 to 67.98 in 1983. If the real exchange is constructed in terms of unit labour costs of Mexico's six major trading partners, it depreciated by an astounding 58 per cent over the same period and by 1987 had depreciated by more than 73 per cent (calculations based on data from Dornbusch and Werner, 1994). The behaviour of the latter real exchange rate points to the compression of real wages that took place over this period. An index for real wages in manufacturing (1980 = 100), for example, stood at 66 in 1987, as opposed to 103.21 in 1982. Between 1982-87 the real minimum wage declined by 45 per cent [see Dornbusch (1988)]. Of course the flip side of using undervalued exchange rates to gain external competitiveness was that devaluations, through the cost side, fuelled inflation, providing, in part, the explanation for the government's inability to control price rise. A more detailed account of export behaviour will provided later.
living standards.

II.ii Growth in the Context of Successful Stabilisation, 1988-94

The period 1988-94 saw the return of more normal economic conditions with inflation being brought under control and the resumption of some growth, albeit the economy grew well below 6 per cent, which was its trend rate of growth in the period 1930-80 (see Table I, Chapter 11). The most marked turnaround was in the control of inflation. As has already been noted, towards the end of 1987, the de la Madrid government changed its macroeconomic stabilisation strategy with the introduction of an incomes policy along with restrictive monetary and fiscal policies to try and control inflation. The new strategy worked and inflation which was running at 114 per cent in 1988 was brought down to single digit figures, with prices increasing by only seven per cent in 1994. With the control of inflation and a continuation of a restrictive fiscal stance, the government's budget turned around from a deficit of 13 per cent of GDP in 1988 to a surplus of 2 per cent of GDP by 1991, after which it continued to remain in the black until 1993, the last year for which firm figures are available.

Between 1988-94 the economy grew at an average rate of 2.5 per cent p.a., though this average masks the uneven nature of growth over the period. The growth rate of the economy peaked in 1990 at 4.45 per cent, after which there was an almost secular decline, with the economy barely growing in 1993, followed by a slight upturn in 1994. This modest recovery (as compared with the earlier sub-period) was aided by some increase in investment demand, with the ratio of gross investment to GDP rising from 17.6 to 20.5 per cent between 1988-94. To put this investment growth in perspective, it should be remembered that despite the pick-up in investment, it still remained below the 1982 level of 21.8 per cent of GDP, let alone the 1981 level of 28.7 per cent. If economic growth remained somewhat anaemic, total demand in the economy was much more robust, growing at an average rate 4 per cent p.a. over the period, hinting at the dampening effect of growing import demand on the economy. With the resumption of growth, per capita incomes recovered somewhat.

18 According to some preliminary estimates, the government budget turned in a small deficit for the year 1994.
with the 1993 level 4.7 per cent higher than that in 1988. It is important however to remember that the 1993 level was still almost 5 per cent lower than the per capita income in 1980 and more than 9 per cent below the 1981 peak.

If the stagnation in economic growth towards the end of the period pointed towards problems in Mexico's growth strategy, equally worrisome was the performance of the economy on the employment and foreign trade front. Between 1988-93 manufacturing employment actually contracted. Employment generated in manufacturing during 1993 was 8 per cent lower than in 1988. The decline in manufacturing employment was however not secular. Between 1988 and 1990 manufacturing employment grew by 2.5 per cent, but over the next three years, as the rate of growth in the economy decelerated, it contracted by 10.2 per cent. It is also perhaps worth noting that manufacturing employment shrank at about the same rate in the six year period 1982-87 when the economy was contracting, as it did over the three year period 1990-93 when the economy was growing, albeit at a decelerating rate.

Over the twelve-year period 1982-93, employment grew only in three years and as a result of which, the manufacturing sector was creating 15 per cent fewer jobs in 1993 than in 1980 and almost 20 per cent fewer jobs than the 1981 peak. The economy's employment performance, epitomised by that in manufacturing, has been perhaps its weakest spot, given both its notoriously high income inequalities and significant proportion of the population below the poverty line (see discussion in Section III, Chapter 11). Perhaps equally important, the labour force had increased by nearly 3 per cent per annum over this period, thereby compounding the problems associated with a dismal performance in job-creation. As Chenery (1974) has pointed out, growth in employment generation is one of the primary channels through which income inequalities can be narrowed. It therefore stands to reason that income inequalities over the period under consideration would, in all probability, have widened.

Turning to the economy's foreign trade performance, one of the symptoms of economic imbalance is reflected in the behaviour of the trade balance. As has already been noted, in 1987 the economy registered a trade surplus amounting to 6.1 per cent of GDP. By 1988, the beginning of the second sub-period, the surplus had declined to 1.5 per cent of GDP. In 1989 the trade account went
into a deficit which kept steadily widening thereafter, reaching a phenomenal 5.8 per cent of GDP by 1994. The current account balance mirrored the trend of the trade balance, declining from a surplus in 1987, amounting to 1.6 per cent of GNP, to a deficit of 7.7 per cent in 1994. Before getting into a more disaggregated analysis of the trade balance, there is one issue worth noting. As has been mentioned in Section I, in 1981, the final year of the 1978-81 economic boom, an indicator of the macroeconomic imbalance was the very high current account deficit which the economy notched up - 6.1 per cent of GNP. The current account deficit in 1994 - 7.7 per cent of GNP - although higher than the 1981 deficit was not radically different, pointing to an apparent similarity in the two situations.

There are however crucial differences. First, the 1981 deficit was recorded at the height of a boom as opposed to 1994 when the economy was essentially stagnating. Second, the underlying trade deficit in 1981 was merely 2.4 per cent of GDP\(^\text{19}\) as opposed to 5.8 per cent of GDP in 1994, indicating a very different magnitude of import dependence. Or to put it differently, the deterioration in the current account balance in the early 1980s had less to do with the behaviour of the real economy and more to do with financial factors\(^\text{20}\). On the other hand, the deterioration of the current account balance in the first half of the 1990s was more directly linked with the behaviour of the real economy and its increasing import dependence (this will be discussed in greater detail in Chapter 13), reflected by the fact that the current account mirrored a sharply worsening situation in the trade account.

Third, one of the factors underlying the crisis of the early 1980s was massive public sector dissaving, as indicated by PSBRs amounting to 14.1 and 16.9 per cent of GDP in 1981 and 1982, respectively. But in the mid-1990s public sector accounts were in surplus, indicating that the consistent and massive trade deficits run up during the growth phase of the economy, reflected

\(^{19}\) The trade deficit in 1980 was 2.3 per cent of GDP. The rate of growth of the economy in 1980 and 1981 was 8.3 and 8 per cent p.a. respectively. The large difference between the trade balance and the current account balance reflecting the enormous debt-servicing burden borne by the economy as a result of its huge external debt.

\(^{20}\) As has been mentioned earlier, the worsening debt-service scenario for Mexico resulted from two factors - first, an increasing dependence on external borrowing in the face the state's inability to mobilise domestic resources; and second, a negative interest rate shock resulting from the tightening of the international credit market.
substantial deterioration in the behaviour of private savings in the economy. This aspect will be
discussed in greater detail Section VI, but at this point, what is more important to recognise is that
the two crises, for all their superficial similarities, were underpinned by very different tendencies
within the real economy.

The growing import dependence of the economy becomes clear in a more disaggregated
analysis of trade variables. The share of foreign trade in GDP was around 23 per cent in the early
1980s\textsuperscript{21}. The increasing importance of foreign trade in the economy can be gauged from the fact this
ratio, which in 1982 stood at 25.6 per cent, by 1987 had risen to 32.9 per cent. In the next sub-
period, 1988-94, the ratio stabilised around the low thirties - the average for the period working out
to 31.4 per cent of GDP, with a high of 32.7 and a low of 29.1 per cent in 1990 and 1993,
respectively.

But the behaviour of the foreign trade ratio masks vastly different trends in exports and
imports. In the first sub-period, 1982-87, underlying the increase in the foreign trade ratio, was a
sharp increase in the export-to-GDP ratio - from 10.4 per cent in 1981 to 19.5 in 1987. The import-
to-GDP ratio on the other hand declined for most of the period - falling from 12.8 to 9.5 per cent
between 1981 and 1984\textsuperscript{22}, respectively, before recovering to 13.4 per cent in 1987. In the next sub-
period, 1988-94, when the foreign trade ratio stabilised around the low thirties, the behaviour of the
export and import ratios reversed itself. The period began with the export ratio at 16.8 per cent - a
decline from the 1987 level of 19.5 - from which it almost consistently declined, reaching 13.1 per
cent in 1994. The import ratio on the other hand, opened the sub-period at 15.3 per cent - an increase

\textsuperscript{21} To be more accurate, foreign trade accounted for 23.6 and 23.2 per cent of GDP in 1980 and
1981, respectively. The data used in this discussion of foreign trade is based on my calculations on
the basis of ECLAC, (1995); and United Nations, (1994). All ratios have been calculated at current
prices.

\textsuperscript{22} The fall in the import ratios reflect the import compression mentioned earlier. It is useful to
remember that over 1982-82 the economy on an average had contracted. Not detracting from the
high rate of growth of exports achieved during the period, a contracting economy and growing
exports would overstate the share of exports in GDP. By a similar logic, the extent of import
compression would be understated in import ratios, given that the economy was contracting over the
period.
over the 1987 figure of 13.4 - and ended the period at 18.9 per cent. Both export and import ratios in 1994 were significantly higher in 1994 than in 1981, pointing towards the changed role of foreign trade in the economy. But equally important, it also points to the fact that whatever modest growth the economy saw in the second sub-period had been increasingly import-dependent, surpassing levels reached by the economy during the 1978-81 boom.

To summarise, whereas the second-sub period saw inflation being brought under control and the resumption of modest growth in the economy, on other fronts the performance of the economy was disquieting. First, by the end of the period, the economy was in a situation of near stagnation. Second, the employment performance of the economy was worrisome. Third, the modest growth that the economy did see in this period had been highly import-dependent. A rising share of imports in GDP, by itself, need not be a cause for alarm, but taken in tandem with a lack of dynamism in exports meant increasing economic vulnerability.

III. Contributions to Demand Growth: A Disaggregated Analysis, 1982-94

It may be worthwhile to consider in somewhat greater detail the behaviour of demand and its various components over the two sub-periods. Doing so would allow a clearer understanding of what has been the motive force behind demand growth (or the lack of it) in the economy. One way of analysing the sources of demand growth is simply to look at the rates of growth of the various components of demand - i.e. consumption, investment, exports etc. - relative to the growth of GDP. But rates of growth are necessarily influenced by the base upon which they are calculated. Therefore, if comparisons are being made between sub-categories of demand with widely differing weights, then an analysis in terms rates of growth would necessarily be biased in favour of demand categories with lower weights. For example, if consumption and exports account for 70 and 10 per cent of GDP respectively, and grow at 3 and 15 per cent p.a. respectively while all other demand aggregates remain unchanged, then a simple analysis of rates of growth would suggest that growth in the economy was export-led. But if one takes weights into account, consumption despite the lower growth rate still accounts for the bulk of the demand growth in the economy - 2.1 out 3.6 per cent or more than 58 per cent of demand growth.
One way out of this problem is to consider change in the sub-category of demand as a proportion of change in total demand. One would then be rid of the problem of differing weights. Or to put it differently, the standard national income accounting identity reads as follows:

\[ GDP = C_g + C_p + St + I + X - M \]

where GDP refers to Gross Domestic Product, \( C_g \) to government consumption, \( C_p \) to private consumption, \( St \) to change in stocks, \( I \) to fixed investment, \( X \) to exports, and finally \( M \) to imports. Therefore,

\[ GDP' = C_g' + C_p' + St' + I' + X' - M' \]

where the superscript (') refers to absolute change, over a given time period, in the value of the variable in question. For example, GDP' refers to \((GDP_t - GDP_{t-1})\) where \( n \) can be any number \( 1, 2, \ldots, n \), with \( n < t \). If the second equation is now normalised by setting \( GDP' = 100 \), then the values of the other variables in the equation will express the percentage contribution of the variables to the increase in GDP.

Obviously, results of any exercise which measures activity between two points of time is sensitive to the choice of end-points. Therefore in choosing end-points, which will be detailed in a moment, care has been taken to see that they represent roughly comparable rates of economic activity - i.e., a trough has not been compared with a peak. The periods are as follows: 1982-88, 1988-94 and 1984-90\(^2\). The first period is the stagnationist\(^3\) phase of the economy; the second, the growth phase;

\(^2\) GDP growth rates in end-point years are as follows: 1982 = (-)0.6; 1988 = 1.25; 1994 = 1.54; 1984 = 3.61; and 1990 = 4.44. The only period where the choice of end-points may be slightly problematic is 1982-88. But the choice of any other starting point for this period would have been infinitely more problematic. In 1981 the economy had grown by nearly 8.8 per cent and in 1983, the economy had contracted by a whopping 4.2 per cent. Therefore, perforce, 1982 was chosen.

\(^3\) ‘Stagnationist’ is not only being used here in the more literal sense - as in, indicating a period over which the economy did not grow - but also in the Kaleckian sense, where the term encapsulates the nature of demand-supply imbalances faced in the economy. In the latter sense, if an economy is going through a stagnationist phase then demand contraction and wage-cutting policies (which are standard fare in IMF stabilisation policies) would drag an economy into stagflation (which admirably captures the behaviour of the Mexican economy during the first sub-period), rather than open up possibilities of growth via substitution effects, as IMF orthodoxy would suggest. For IMF-style macroeconomics to work itself through, an economy would need to be capacity constrained in some
and the third, does a peak-to-peak comparison. Table II reports the results of the above exercise.

<table>
<thead>
<tr>
<th>Period</th>
<th>Cg'</th>
<th>Cg</th>
<th>St'</th>
<th>I'</th>
<th>(X-M)'</th>
<th>X'</th>
<th>M'</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982-88</td>
<td>99.1</td>
<td>-0.9</td>
<td>100.0</td>
<td>-479.4</td>
<td>381.3</td>
<td>503.7</td>
<td>122.4</td>
</tr>
<tr>
<td>1988-94</td>
<td>11.1</td>
<td>88.3</td>
<td>-10.7</td>
<td>48.4</td>
<td>-37.1</td>
<td>32.8</td>
<td>69.9</td>
</tr>
<tr>
<td>1984-90</td>
<td>3.3</td>
<td>99.5</td>
<td>1.4</td>
<td>36.0</td>
<td>-40.2</td>
<td>39.2</td>
<td>79.4</td>
</tr>
</tbody>
</table>


Note: Values represent percentages, with GDP' = 100.

Between 1982-88, or what has been labelled here as the stagnationist phase of the Mexican economy, the average rate of growth of GDP was 0.09 per cent p.a. Total demand, however, over this period actually contracted at an average rate of 0.31 per cent p.a. The issue, therefore, clearly is not so much which sources of demand were the basic motors of the economy, as what accounted for the stagnation. Analysis of sources of demand suggests that, over the stagnationist period, changes in private final consumption expenditure largely canceled themselves out, and therefore at the end of the period, it stood more or less unchanged, showing if anything a slight contraction. The bulk of the contraction in demand was borne by fall in fixed investment levels - investment at the end of the period having fallen by nearly five times the slight increase in GDP. On the other hand, counterbalancing the deflationary shock of a cut in investment demand, was the positive contribution of net exports - an increase of almost four times that of GDP\(^2\). But as has been noted earlier, the fashion, or to put it differently, in an 'exhilarationist' phase. For a more detailed discussion of 'stagnationist' and 'exhilarationist' macroeconomic scenarios, see Taylor, (1988). In this connection, also see Marglin and Bhaduri (1990).

\(^2\) To make it strictly comparable to the periodisation of the economy using macroeconomic regimes as the benchmark, the sources of demand growth exercise was also done for the period 1982-87. It will be recalled that between 1982-87, GDP contracted at an average rate of 0.09 per cent p.a. whereas total demand contracted much faster at an average rate of a little over one per cent p.a. Whereas the overall assessment of the period tallies with that for the 1982-88 period, the magnitudes involved are much larger and there are some significant differences. C\(_p\)' = -677.1; I' = -3637.9; (X-M)' = 3457.5; X' = 2624.0; M' = -833.5. Besides the fact that it underlines the massive cuts in fixed investment and the phenomenal increase in net exports, there are a few other points worth
phenomenal increase in net exports went essentially towards servicing Mexico's external debt and in the face of a sharp contraction in investment, export growth had few multiplier effects. Indeed, it has been argued by some [see e.g., Lustig and Ros (1993)] that a part of the export boom is related to the contraction of domestic demand.26

In the next sub-period, 1988-94, or what has been labelled here as the growth phase of the economy, things were obviously radically different. It will be recalled that GDP grew at an average rate of 2.5 per cent p.a. over this period. Equally noteworthy was the fact that total demand in the economy had grown significantly faster than GDP, at an average rate of 4 per cent p.a. over this period. There was some pick up in investment demand but it was growth in consumption which accounted for the bulk of demand in growth in the economy. As Table II suggests, growth in private final consumption accounted for 88.3 per cent of the increase in GDP. Private and government consumption taken together accounted for more than 99 per cent of the increase in GDP. Growth in fixed investment came a distant second accounting for 48.4 per cent of the increase and in sharp contrast to the earlier period, net exports turned significantly negative, accounting for a leakage of 37.1 per cent of the total increase. The negative contribution of net exports is only partly explained by a deceleration in export growth, because export demand still accounted for 32.8 per cent of the increase in GDP. Far more important for the behaviour of net exports was robust increase in import demand, accounting for a gross leakage of 69.9 per cent.

The peak-to-peak comparison, 1984-90, yields essentially similar results, barring the reordering of fixed investment and exports as sources of demand. In this sub-period, the average rate of growth of GDP was 1.9 per cent p.a., whereas total demand generated in the economy grew at 3

---

26 As evidence, Lustig and Ros (1993) point to the fact that intermediate goods industries (e.g., cement, steel etc) which traditionally ran up external trade deficits, faced with serious capacity utilisation problems because of contracting demand and aided by an undervalued currency, turned to exports and thereby, suddenly generated large trade surpluses or significantly reduced their deficits. There will be a more detailed discussion on foreign trade performance in Chapter 13.
per cent p.a.. As compared with 1988-94, consumption if anything was marginally more dominant as a source of demand. Increase in private final consumption accounted for 99.5 per cent of the increase in GDP. If government consumption demand is included then, increase in total consumption accounted for nearly 103 per cent of the increase in GDP. Increase in fixed investment, on the other hand, lagged way behind, accounting for only 36 per cent of the increase in GDP. As in the earlier sub-period, net exports were significantly negative, accounting for a leakage of 39.6 per cent of increase in GDP. Disaggregating net exports into export and import components suggests that exports were marginally more important than fixed investment as a source of demand, accounting for 39.8 per cent of the increase in GDP. Demand leakage due to imports, on the other hand, were far more important in this period, amounting to 79.4 per cent of the increase in GDP.

In sum, what disaggregated demand analysis suggests is that in the stagnationist phase of the economy, the burden of demand contraction was borne primarily by a sharp fall in investment demand. A contraction of private final consumption demand did add to the recessionary impulse but, it was relatively much less important. To some extent, the demand shock of a sharp cutback in investment was counterbalanced by an increase in net exports. On the other hand, during the growth phase of the economy, demand was primarily consumption driven (this ties up with the deterioration in private savings during this period which had been mentioned earlier), with increase in investment demand playing second fiddle. Equally important, net exports had a dampening effect on GDP growth, with a significant proportion of demand leaking out of the economy.
Mexico's official statistical institute, INEGI, carried out a similar exercise - disaggregating sources of demand for the period 1989-93 - except that their results are reported in terms of growth rates. The results which are reported below in Table III corroborate the analysis for the growth phase presented earlier.

<table>
<thead>
<tr>
<th>Period</th>
<th>GDP</th>
<th>Cₜ</th>
<th>Cₙ</th>
<th>I</th>
<th>(X-M)</th>
<th>X</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989-91</td>
<td>4</td>
<td>0.3</td>
<td>3.5</td>
<td>1.9</td>
<td>-1.3</td>
<td>0.8</td>
<td>2.1</td>
</tr>
<tr>
<td>1991-93</td>
<td>1.6</td>
<td>0.3</td>
<td>1.3</td>
<td>0.9</td>
<td>-0.9</td>
<td>0.5</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Note: Figures above relate to average rates of growth. e.g., In 1989-91 out of a GDP growth rate of 4 per cent, private consumption contributed 3.5. In terms of the methodology used in Table II, private consumption accounted for 87.5 per cent of the increase in GDP.

IV. Macroeconomic policy: the inflationary period, 1982-87

Having looked at some length at the overall performance trends in the economy one can now analyse the macroeconomic regime(s) which underpinned this period.
Table IV: Indicators of Macroeconomic Stance

<table>
<thead>
<tr>
<th>Year</th>
<th>PSBR*</th>
<th>PB*</th>
<th>OB*</th>
<th>RER1b</th>
<th>RER2b</th>
<th>W1c</th>
<th>W2c</th>
<th>Rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>-14.1</td>
<td>-8.0</td>
<td>-10.0</td>
<td>106.7</td>
<td>124.4</td>
<td>101.4</td>
<td>104.7</td>
<td>30.8</td>
</tr>
<tr>
<td>1982</td>
<td>-16.9</td>
<td>-7.3</td>
<td>-5.5</td>
<td>75.8</td>
<td>91.8</td>
<td>110.9</td>
<td>103.2</td>
<td>45.3</td>
</tr>
<tr>
<td>1983</td>
<td>-8.6</td>
<td>4.2</td>
<td>0.4</td>
<td>68.0</td>
<td>52.2</td>
<td>79.3</td>
<td>79.5</td>
<td>56.6</td>
</tr>
<tr>
<td>1984</td>
<td>-8.5</td>
<td>4.8</td>
<td>-0.3</td>
<td>81.1</td>
<td>54.5</td>
<td>75.1</td>
<td>74.7</td>
<td>48.6</td>
</tr>
<tr>
<td>1985</td>
<td>-9.6</td>
<td>3.4</td>
<td>-0.8</td>
<td>83.6</td>
<td>54.4</td>
<td>73.3</td>
<td>76.7</td>
<td>60.2</td>
</tr>
<tr>
<td>1986</td>
<td>-16.0</td>
<td>1.6</td>
<td>-2.4</td>
<td>67.7</td>
<td>35.7</td>
<td>79.8</td>
<td>65.7</td>
<td>86.7</td>
</tr>
<tr>
<td>1987</td>
<td>-16.0</td>
<td>4.7</td>
<td>1.8</td>
<td>67.2</td>
<td>33.3</td>
<td>90.0</td>
<td>66.0</td>
<td>95.8</td>
</tr>
<tr>
<td>1988</td>
<td>-13.0</td>
<td>8.0</td>
<td>-3.6</td>
<td>82.4</td>
<td>41.3</td>
<td>51.9</td>
<td>64.7</td>
<td>69.2</td>
</tr>
<tr>
<td>1989</td>
<td>-5.6</td>
<td>7.9</td>
<td>-1.7</td>
<td>84.2</td>
<td>47.8</td>
<td>54.5</td>
<td>70.4</td>
<td>45.0</td>
</tr>
<tr>
<td>1990</td>
<td>-3.9</td>
<td>7.8</td>
<td>2.2</td>
<td>87.7</td>
<td>50.1</td>
<td>50.8</td>
<td>72.9</td>
<td>34.8</td>
</tr>
<tr>
<td>1991</td>
<td>2.0</td>
<td>9.1</td>
<td>6.4</td>
<td>98.3</td>
<td>54.5</td>
<td>46.4</td>
<td>77.2</td>
<td>19.3</td>
</tr>
<tr>
<td>1992</td>
<td>3.5</td>
<td>8.8</td>
<td>5.9</td>
<td>108.1</td>
<td>59.1</td>
<td>40.1</td>
<td>83.3</td>
<td>15.6</td>
</tr>
<tr>
<td>1993</td>
<td>1.0</td>
<td>4.0</td>
<td>1.9</td>
<td>114.8</td>
<td>59.8</td>
<td>39.6</td>
<td>81.9</td>
<td>14.9</td>
</tr>
</tbody>
</table>

Source: Dornbusch and Werner (1994).

Notes:  
* - Public Sector Borrowing Requirement (PSBR), Primary Balance (PB), Operational Balance (OB), all expressed as percentage of GDP at current prices. Primary Balance (PB) is defined as the non-interest budget or the PSBR less interest payments. Operational Balance (OB) is defined as the PSBR less the inflationary component of interest payment on domestic debt.
  
b - RER refers to an index of the real exchange rate with 1980 = 100. An increase in the index indicates an appreciation. RER1 refers to the real exchange rate calculated on the basis of Mexico-USA wholesale relative price levels. Given that in 1993, the USA accounted for 70 per cent of Mexico's imports and more than 80 per cent of her exports, RER1 becomes a key relative price. RER2 is estimated on the basis of the unit labour costs of Mexico's six largest trading partners, which among them accounted for 85 per cent of Mexico's trade in manufactures.
  
c - W1 and W2 are indices for wage rates calculated with 1980 = 100. W1 is an index for the minimum wage. W2 is an index for real wages in manufacturing.
  
d - R refers to the annual nominal interest rate applicable for a one-month treasury bill, CETES.

As both the government budget and the current account balance spiralled out of control, the Lopez Portillo government in its final year, 1982, attempted to stem the rot using a devaluation and some attempt at fiscal control. Nominal devaluations of more than hundred per cent in 1982, which
translated to real devaluations of more than 28 per cent, did help turn the trade account around from a deficit of 2.4 of GDP in 1981 to a surplus of 5.0 per cent in 1982 (see Table I). Fiscal control however proved far more elusive as the increase in the PSBR would suggest, but that some attempt was made at reining in government consumption is suggested by the decline in the deficit in the primary balance between 1981 and 1982. This is supported by the fact that government consumption which grew at 10.2 per cent, at constant 1980 prices, in 1981, increased by a mere 2 per cent in 1982.

Be that as it may, with inflation running at 75 per cent in 1982 and a PSBR of almost 17 per cent of GDP, the de la Madrid regime clearly had a difficult macroeconomic situation on its hands. Dictated in part by necessity and in part by IMF conditionality in return for financial support, the de la Madrid government launched an orthodox stabilisation programme called the Programa Inmediato de Reordenacion Economica (PIRE, or the Immediate Programme of Economic Restructuring). The basic aims of the programme were the attainment of price and exchange rate stability, and a balance of payments equilibrium. Towards that end, the government would attempt a substantial cut in its budget deficit and use an undervalued exchange rate to change the relative price structure facing the economy. Both these policies taken together would help turn around the trade account on a sustained basis and thereby enable Mexico to service her debt as well as achieve price stability. The translation of a nominal into a real devaluation obviously entailed a cut in real wages.

As Table IV suggests, a substantial cut in public expenditure did take place with a change of more than 11 per cent in the primary balance - falling from a deficit of 7.3 per cent of GDP in 1982 to a surplus of 4.2 in 1983. The turnaround in the primary balance came about not only through expenditure cuts - primarily borne by cuts in public investment - but also by augmenting revenue flows through increases in indirect taxation and hikes in public sector prices. Continued devaluation of the peso saw the real exchange rate depreciate further despite high inflation, entailing obviously a drastic reduction in real wages - both the minimum wage and the real wage in manufacturing fell by more than 20 per cent as compared with 1980 (the fall is much greater if 1981 levels are used as

\[27\] To be precise, for a nominal devaluation to translate into a real devaluation must necessarily imply either a cut in real wages or a fall in profits. In Mexico, profits were far sticky [see e.g., Ros (1992)] and therefore it was real wages which bore the brunt of adjustment.
The demand contraction coupled with drastic undervaluation meant that the economy achieved an "overkill", generating a much larger than anticipated trade surplus - amounting to 9.6 per cent of GDP - and a much deeper - GDP contracted by 4.2 per cent in 1983 - than planned for recession. Besides, inflation increased from the already high 1982 levels to more than 92 per cent, as the nominal devaluations and increases in public sector prices fed into an indexed economy. The high rate of inflation coupled with a restrictive monetary policy - the short-term interest rate in 1983 was almost 57 per cent - which increased the interest burden of servicing domestic debt, meant that the sharp cuts in expenditure indicated by the behaviour of the primary balance did not feed through entirely into the PSBR. The PSBR did decline to 8.5 per cent of GDP, but by much less than the change in the primary balance. The PSBR, as will be noted later, was to climb back quite quickly to its earlier level.

In theory, the structural adjustment and stabilisation goals of the PIRE (the stabilisation programme adopted by de la Madrid) were to coalesce in trying to influence the behaviour of the real exchange rate. As noted earlier, the real exchange rate was seen to be the key relative price facing the economy and an 'adequately' undervalued real exchange rate was seen to underpin Mexico's competitiveness in a export-oriented development strategy, consequent upon which would be changes in the production structure of the economy. The 1983 level of the real exchange rate was seen to be adequate and a path of mini-devaluations hoped to maintain it at that level [see Ros, (1992)]. Besides, along with restrictive monetary and fiscal policies, the additional tool to control inflation was to be the setting of pre-announced mini-devaluations in a manner so as to contribute to the deceleration of inflation. To achieve both structural adjustment (supply side reforms) and stabilisation simultaneously, therefore, required that actual inflation followed the percentage change in pre-announced devaluation path, which in turn would have been set on the basis of the governments inflation targets. But in the sub-period 1982-87, one of the signal failures of government policy was the failure to control inflation (see Table I). With wide divergences between actual and target inflation rates, leading to an inevitable

28 The affect of inflation on the budget deficit can be gleaned from the fact that the operational balance of the budget turned in a small surplus in 1983. Note also that the change in the primary and the operational balance is roughly of the same magnitude.
appreciation of the real exchange rate, tensions between structural adjustment and stabilisation objectives soon emerged.

As Table I makes clear, even though the rate of inflation decelerated somewhat in 1984 and 1985, it still remained stubbornly high. Part of the reason for this stubbornness lay in the fact that inflation was inertial (inertial inflation will be discussed more fully in a moment) and hence contraction of demand had little impact on it. Be that as it may, sustained high rates of inflation meant that the real exchange rate appreciated, as is clear from the movement of RER1 in Table IV - it increases from 68 in 1983 to 81.1 and 83.6 in 1984 and 1985, respectively. The appreciating exchange rate impacted adversely on trade performance with a decline in the rate of growth of exports - falling to 5.6 per cent in 1984, as opposed to 13.7 per cent in 1983, and contracting 4.5 per cent in 1985 - and an increase in the rate of growth of imports - growing by 17.8 per cent and 11 per cent respectively in 1984 and 1985, as opposed to contracting by 33.8 per cent in 1983. As a consequence of this the trade surplus declined from 9.6 per cent of GDP in 1983 to 5.1 per cent in 1985. The situation was complicated by a decline in oil prices and speculation against the peso in financial markets, sparked off partly by the continuing appreciation of the peso. As a result of all these pressures, finally, in mid-1985 the foreign exchange market collapsed. That is to say, there was such massive speculation against the peso that trading had to stopped for a few days.

The collapse of the foreign exchange market proved a turning point in the formulation of economic policy. In terms of macroeconomic policy there was an intensification of the earlier policy regime with a deepening of fiscal cuts and a further tightening of monetary policy. As Table IV indicates, in 1985, the short-term interest rate increased to more than 60 per cent and by 1987 would be standing just below 96 per cent. There was a sharp devaluation in mid-1985 followed by an acceleration in the rate of depreciation in early 1986, consequent upon a crash in international oil

29 By all accounts, the above would seem to indicate that the foreign trade sector, at least in that period, was price responsive. Maquiladora exports, which depended on the cheapness of Mexican labour for their competitiveness (maquiladoras will be discussed in detail in Chapter 14), would in any case be sensitive to movements in the real exchange rate. Given that in this period, domestic demand contracted and investment was significantly slashed, it would be implausible to assume that increases in productivity would have helped cushion changes in price. Therefore, the likelihood that the foreign trade sector was very price responsive.

300
prices, due to which Mexico saw a loss in export revenue amounting to 7 per cent of GDP. As a result of these devaluations, the undervaluation of the peso was back to 1983 levels. In fact as Table IV indicates, RER1 was slightly lower in 1986 as compared with 1983 and declined a little further in 1987. The obverse side of currency undervaluation was the continuing restraint on real wages, as the behaviour of both W1 and W2 in Table IV makes clear.

But more than macroeconomic policy, it was the arena of structural reform that saw really radical policy changes. The retrenchment of the state from productive activity, involving privatisation and liquidation of public sector firms gathered speed in 1986-87. The July-August 1985 policy package unveiled in the aftermath of the foreign exchange collapse included a radical trade liberalisation programme. Additionally, with Mexico being granted membership of GATT in July 1986, the trade reform process begun a year earlier received a significant boost. The impetus for radical trade liberalisation came from two sources. First, there was an influential view among government policy makers that a part of the reason for the economy's poor record in inflation control lay in inadequate import liberalisation. It was argued that the downward rigidity in profit mark-ups during a recessionary phase accounted for the sluggishness of prices and that the only way to pressurise these mark-ups was to introduce foreign competition. Ergo, import controls should be eliminated to bring inflation down [see Ros (1992); and Lustig (1991)]. Second, a deepening of trade liberalisation was seen as a signal to sceptical domestic investors that the new outward-oriented development strategy was here to stay (this was also one of the reasons for the government’s privatisation programme).

The tensions between the stabilisation and structural adjustment objectives of the reform package noted earlier, were emphatically resolved in favour of the latter with the institution of an aggressive trade liberalisation programme and the maintenance of a highly undervalued exchange rate.

30 Both privatisation and trade liberalisation will be studied separately below (see Sections I and II, Chapter 15).

31 Mexico had an extensive system of import controls in place during the earlier phase of import substituting industrialisation. In 1982 as the current account spiralled out of control, the scope of these controls was widened. As noted earlier, under the IMF stabilisation programme which was put in place in 1983, Mexico was allowed to retain these controls as a temporary measure.
As result of this strategy, a substantial trade surplus and a comfortable foreign exchange reserve situation was achieved but at the cost of accelerating inflation. By 1987, inflation was running at triple digit figures (see Table I) and in the danger of turning into hyper-inflation. The inability to control (or, perhaps more accurately, the neglect of) inflation and the consequent tightness of monetary policy, meant that despite fiscal austerity on part of the government, the increasing burden of servicing domestic debt resulted in a sharp deterioration public accounts, with a PSBR amounting to 16 per cent of GDP in both 1986 and 1987. In October 1987 the Mexican stock markets crashed in the wake of the collapse in the New York Stock Exchange (the famous Black Monday episode) and in this febrile economic environment, the ensuing collapse of confidence led to renewed capital flight, setting the stage for another change in policy.

The above then was the macroeconomic regime which underpinned the economy between 1982-87. It is important, though, to recall that there were two discernible phases with different emphases during the period. As has been noted in the discussion on the overall performance trends in the economy, its signal success lay in the dramatic turnaround in the trade balance which allowed Mexico to successfully service its external debt. But, again as has been noted earlier, because of the accompanying demand contraction, the cost borne by the economy in terms of declining living standards and foregone growth, was very high. The cut in real wages instead of leading to substitution-effect driven growth resulted in demand recession. Whatever be the impact of the macroeconomic impact of real wage cuts, it is important to recognise that the cuts themselves were feasible not only because of the close links of labour with the state, but also because of the nature of these links (see Sections IV and VI, Chapter 9). In that sense, the state's relationship with labour gave it an important degree of macroeconomic flexibility. IMF orthodoxy notwithstanding, that the dominant impact of real wage and budget cuts on the economy could be contractionary is well recognised in the literature [see e.g., Diaz Alejandro (1963), (1965); Krugman and Taylor (1978)]. From a different analytical tradition, there are those who following Kalecki, have argued that orthodox stabilisation policies do not work in 'stagnationist' economies [see e.g. Rowthorn (1982),

32 For example, in 1987 both the primary and the operational balance were in surplus, to the tune of 4.7 and 1.8 per cent of GDP, respectively (see Table IV).
also see the discussion in Section III, Chapter 11. But then, economic policy is rarely formulated and implemented after disinterested debate.

Finally, it has been noted earlier that the brunt of the demand contraction over this period was borne by cuts in investment. Before moving on, it may be worthwhile to discuss this aspect in a more disaggregated fashion. Table V presents the broad trends in investment behaviour over the period 1982-87.

Table V: Investment Trends in the Mexican Economy, 1981-87

<table>
<thead>
<tr>
<th>Year</th>
<th>FI</th>
<th>ICON</th>
<th>IME</th>
<th>IPVT</th>
<th>IPUB</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>26.5</td>
<td>14.5</td>
<td>11.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1982</td>
<td>22.2</td>
<td>-13.7</td>
<td>8.5</td>
<td>12.4</td>
<td>9.8</td>
</tr>
<tr>
<td>1983</td>
<td>16.6</td>
<td>11.1</td>
<td>5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>17.0</td>
<td>11.1</td>
<td>5.9</td>
<td>10.5</td>
<td>6.6</td>
</tr>
<tr>
<td>1985</td>
<td>17.9</td>
<td>11.2</td>
<td>6.7</td>
<td>11.4</td>
<td>6.5</td>
</tr>
<tr>
<td>1986</td>
<td>16.4</td>
<td>10.5</td>
<td>5.9</td>
<td>10.7</td>
<td>5.8</td>
</tr>
<tr>
<td>1987</td>
<td>16.1</td>
<td>10.5</td>
<td>5.6</td>
<td>11.1</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Source: Calculations based on data on macroeconomic aggregates from ECLAC (1995); United Nations, (1994); and Banco de Mexico, (1995).

Notes: a - All figures are ratios expressed as a percentage of GDP at constant 1980 prices.
   b - FI refers to gross fixed capital formation
   c - ICON refers to gross fixed capital formation in construction
   d - IME to gross fixed capital formation in machinery and equipment
   e - IPVT to gross fixed capital formation by the private sector
   f - IPUB to gross fixed capital formation by the public sector

Table V presents a fairly clear and stark picture of the nature of investment cutbacks which took place during 1982-87. There are however a few issues which may bear emphasising. In four out of the six years under consideration, fixed investment contracted. Starting with 1982, the rate of growth fixed capital formation at 1980 constant prices is as follows: -16.8, -28.3, 6.4, 7.9, -11.8 and -0.1 per cent. It is these huge cuts in fixed investment expenditure which explain the five point fall in the fixed investment ratio - from 22.2 per cent of GDP in 1982 to 16.1 per cent in 1987. If the 1981 peak is taken into account then there is an even more dramatic ten point fall.
Additionally, this cutback in fixed investment was unequally shared both across types of investment and agents. From the point of view of type of investment, the bulk of the adjustment was borne by cutbacks in machinery and equipment investment - from 11.9 per cent of GDP in 1981 to 5.6 per cent in 1987, a fall of 6.3 percentage points. This fall in the level is explained by an average contraction of 9.3 per cent in the rate of growth of investment in machinery and equipment over the period 1982-87. Fixed investment in construction also declined, but by much less - registering a fall of 4 percentage points, from 14.5 to 10.5 per cent of GDP between 1981 and 1987. The rate of growth of investment in construction too contracted, but by about half the rate of investment in machinery and equipment, at an average rate of 4.9 per cent over 1982-87. As a result, construction which accounted for 55 per cent of gross fixed investment in 1981, by 1987 had increased its share to more than 65 per cent.

Similarly, where fixed investment by the private and the public sector is concerned, the bulk of the adjustment was borne by the latter. Fixed investment by the public sector amounted to 9.8 per cent of GDP in 1982. By 1987 this ratio had declined to 5 per cent, a fall of nearly 5 percentage points. For the private sector on the other hand, fixed investment amounted to 12.4 per cent in 1982. This ratio too declined by, but only by a little more than one per cent, with the 1987 ratio standing at 11.1 per cent. Obviously, this skewed adjustment pattern significantly affected the relative weights of public and private investment in the economy. In 1982, the private sector accounted for 56 per cent of the fixed investment in the economy. By 1987, its share had risen to 69 per cent.33

V. Inflation and Stabilisation: Some Theoretical Issues

Before analysing the macroeconomic regime which underpinned the next sub-period, 1988-94, it may be useful to discuss why inflation control proved so difficult despite the severe demand...
contraction which the economy saw. At the base of orthodox stabilisation policies is the notion that inflation results from too much money chasing too few goods or in other words, is a demand-driven phenomena. Therefore, the high premium, in orthodox stabilisation programmes, on demand contraction as an antidote to inflation. Inflation, of course, could also be due to supply shocks - say, a fall in agricultural output leading to an increase in the price of wage-goods - leading to higher inflation through cost increases. If inflation is due to supply shocks, then demand contraction, as a policy measure to control inflation, may actually exacerbate the macroeconomic imbalance. But outside of disturbances in demand and supply conditions which may lead to inflationary episodes, inflation may also be 'inertial' - that is, inflation in this period may be high because of the fact that inflation in the last period was high. As the example would suggest, this kind of inflation would be especially significant during episodes of high inflation.

Inertial inflation may stem from formal wage indexation rules due to which the level of wages today is based on the rate of inflation yesterday (to be more precise, during the past year or six months\(^{34}\)). Also, in a bilateral monopoly situation, if unions attempt to maintain the real wages accruing to workers, a similar result would obtain. It is not just institutional mechanisms such as wage indexation or wage bargaining with unionised labour which may result in inertial inflation. Even under a more atomistic set up, inflation may be expectation driven and therefore acquire a degree of inertia. For example, if agents use a price-setting rule (say, mark-up pricing) where today's price is equal to yesterday's, then cost increases automatically get built into the cost structure, resulting in inertial inflation. Notice of course that inertial inflation would result in high but stable rates of inflation. But when inflation of this kind interacts with either demand-push or cost-push inflation then it may degenerate into a spiral, resulting in hyper-inflation.

It is worth pointing out that if inflation is inertial then, simple wage-cutting or a reduction in profit margins would do little to halt it. For example, if inflation is running at 100 per cent, but wages are increased by only 80 per cent, then, whereas it would mean a significant drop in real wages, it would hardly make any difference to the overall level of inflation [see Dornbusch (1988)].

\(^{34}\) Though in instances of extreme hyper-inflation, the time lag between adjustments may shorten drastically.
At the end of the day, what explains inertial inflation is that inflationary expectations get built into the pricing mechanism of an economy. Ending inertial inflation, therefore, involves the coordination of decisions of various atomistic agents. That is, whereas each individual agent may well believe that a cut in prices and wages may be in the benefit of the economy as a whole, no individual agent would be willing to be the first to take the plunge and offer a price or wage cut because of the fear that this (the cut, that is) may not be matched by other agents. Under these circumstances, a government's macroeconomic stabilisation policy must not only be seen to be credible and sustainable by other agents in the economy, but also must play the role of coordinating the expectations and decision-making of individual agents and thereby allow disinflationary impulses to feed through to the rest of the economy. It is in such a scenario that an incomes policy - a package of temporary controls on the movements of wages, prices and the exchange rate - becomes a useful tool not only to break the cycle of inflationary expectations but also to coordinate the decisions of various atomistic agents.

It is important to recognise that an incomes policy is necessarily a short-term policy tool to manage the transition from a high inflation to a low inflation regime. But given the fact that this transition cannot be instantaneous, in the period during which wage-price controls are in force, the underlying prices in the real economy are actually moving and thereby would tend to impact on the behaviour of the real economy. A good candidate as an example of this is the real exchange rate. Given that the nominal exchange rate gets fixed at the beginning of the period and that there exists residual inflation as the economy transits from a high to a low inflation regime, at the end of the period (that is, the point at which low inflation is attained) the real exchange rate would necessarily have appreciated and would, as a consequence, also affect the evolution of the trade account.

\[35\] Whether the appreciation in the real exchange rate leads to an overvaluation of the currency would depend upon where the real exchange rate was when the incomes policy was adopted. Typically, stabilisation programmes using incomes policies tend to go in for a large devaluation (which hopefully translates into an undervalued real exchange rate) just prior to adoption of an incomes policy. The hope is that the undervaluation of the currency would provide enough of a cushion such that by the time low inflation rates are attained, the appreciation in the real exchange rate would not have led to any significant over-valuation of the domestic currency. It is hoped that once price stability has been attained and it is possible for macroeconomic policy to be rid of the
Therefore, given the fact that the trade account would invariably be adversely affected during the course of a transition, economies, which have successfully used incomes-policy-based stabilisation programmes to bring inflation down, have needed a foreign exchange cushion, either in terms of a healthy reserve situation or in terms of foreign aid, to help cope with the transition.

The existence, however, of a foreign exchange cushion is only a necessary condition and not a sufficient one for the economy to be on an equilibrium path. For example, if in the course of stabilising the economy, the exchange rate gets overvalued, then the government may find itself in a catch-22 situation. Given that the programme is anchored on the exchange rate, if it devalues, it risks destabilising expectations and upsetting the applecart. But the longer it postpones devaluation, the more overvalued the exchange rate gets, adversely affecting the trade and current account and thereby setting up expectations for an imminent devaluation. To shore up expectations, the government may be forced to hike interest rates and thereby squeeze the domestic economy. This would be in addition to the deflationary impact of running large trade deficits. In such a situation, any small disturbance, either political or economic, could destabilise expectations and therefore lead to an economic collapse.

Problems related to overvalued exchange rates are not the only one which plague incomes-policy based stabilisation. Notice that inertial inflation which comes about due to the presence of indexation mechanisms of one kind or another, reflects underlying distributional conflict, withcontending coalitions being of roughly equal strength. An incomes-policy based stabilisation programme, with a wage-price freeze, essentially holds these conflicts in abeyance for a period of time, but does not resolve them. Therefore even though while the incomes-policy is in place, inflation may be checked, once macroeconomic policy making moves out of the confines of incomes-policies, it could resurface if these distributional conflicts have not been resolved. In that sense, an incomes-policy is a necessary but not a sufficient condition for successful stabilisation.

Straitjacket of an incomes policy, it should be possible to sustain that real exchange rate under more normal economic conditions. It should be clear however that should the currency get overvalued in the process of attaining price stability, it opens up the possibility of further economic instability, either through a deteriorating trade account and/or high domestic rates of interest needed to sustain an overvalued currency, with consequent deleterious effects on investment and growth.
It has been argued that for sustainable macroeconomic stability, an incomes policy must be backed by a conservative fiscal policy - in other words, continued fiscal austerity - so as to set the basic financial framework for growth [see Dornbusch (1988)]. Unfortunately, the economic necessity for fiscal austerity has not been clearly worked out. For example, it is true that a budget deficit which arises because current expenditure consistently outstrips current revenue, is clearly unsustainable. But which is not the same thing as arguing that all budget deficits are unsustainable. An economic case can be made for budget deficits which, for example, support public investment [see, e.g., Nayyar (1995)]. If this be so, then why the premium on fiscal austerity, per se? I think the reason lies in using the government's fiscal stance as an anti-inflationary anchor. Given that markets usually work with fairly simple rules of thumb - e.g., all budget deficits translate into inflationary pressure in the economy - it is better to follow these and, in this example, not stray from the path of fiscal austerity rather than risk destabilising expectations. Or to put it differently, the market has simply no way of discriminating between one budget deficit and another and given that it is the market which sets the economic rules of the game, fiscal austerity is preferred to the risk of destabilising expectations, in the hope that with 'fundamentals being right', private investment will pick up and kickstart growth.

Be that as it may, even if, despite all the problems noted above, incomes policies backed by tight monetary and fiscal policies help achieve stabilisation, it is also recognised that moving from stabilisation to growth is, as the saying goes, 'a different ball game'. As Dornbusch, among others, has not tired of emphasising [see Dornbusch (1988), (1991)] there is little from within a successful stabilisation model which allows for the resumption of growth. Public expenditure is constrained by fiscal austerity demanded by 'good economic management' and private investment may simply decide to 'wait and see'. Typically, then the economy is forced to rely on external capital inflow to provide the missing spark. Dornbusch realising the problem, argues that too much austerity may run the risk of inducing a recession. Whereas, that is indubitably true, too much or too little fiscal austerity, as guidelines to policy making, run the risk of becoming lines drawn on sand, especially when one is trying tether something as volatile as expectations.

There is one final aspect of orthodox stabilisation programmes to consider before moving on to a discussion of the macroeconomics of the second sub-period, 1988-94 - the relationship between
the inflation and the budget deficit. As has been noted above, standard IMF macroeconomics has looked at inflation essentially as a cyclical phenomena arising from too much money chasing too few goods. In this view, the villain of the piece is the budget deficit, stemming from unrestrained government expenditure which is not matched by compensating revenue inflows and thereby pumping in more money into the economy than can be productively absorbed. The causality is, therefore, very clear, running from high budget deficits to high rates of inflation. Hence the famous IMF dictum - 'a deficit is a deficit, is a deficit!'. On the other hand, as has been pointed out earlier, inflation need not stem only from demand disturbances. It is equally likely to result from supply shocks and endogenously formed expectations and under these circumstances, demand contraction as an antidote to inflationary pressure not only does not work, but may in fact exacerbate the imbalance.

Whatever be the validity, limited or otherwise, of the IMF diagnosis of budget deficits causing inflation, once inflation sets in, there are good reasons to believe that the causality actually reverses itself - that is high rates of inflation result in high budget deficits (here measured as PSBR as a percentage of GDP). There are two reasons why inflation adversely impacts on the budget deficit. First, is due to what is known as the Olivera-Tanzi effect. Given that government revenue is always collected with a lag, the real value of its revenue collections is lower, the higher the rate of inflation. At very high levels of inflation this obviously makes a significant difference to the real resources at the disposal of the government. Second, in an economy where interest rates are determined by the market, high rates of inflation would lead to high rates of interest, given that interest rates would reflect expected inflation and the probability of depreciation of the domestic currency. High nominal

\[36\] If, on the other hand, the rate of interest is set by the government and it is, additionally, assumed that it does not respond to rising rates of inflation, then the financial system runs the risk of disintermediation. In the face of significantly negative real rates of interest (which would result if nominal rates of interest do not respond to rising inflation), financial resources could switch to the unorganised sector (on the fairly reasonable assumption that unorganised sector interest rates adjust to inflation). If, the unorganised sector lacks the depth to absorb the inflow or is seen to risky (say, because it does not have lender of the last resort protection), then resources could move into non-financial assets such as gold or real estate, which are normally de facto inflation indexed. In either instance, the organised financial system would be faced with disintermediation and a consequent decrease in the government's control over financial resources. Therefore, to avoid this eventuality, even if interest rates are set by non-market forces, an increase in nominal interest rates as the rate of inflation rises, is a plausible consequence. The above is not necessarily an argument in favour of high
rates of interest would immediately impact on the debt-servicing burden of government outlays.

Both these factors would exogenously inflate the budget deficit. Which is why analysts [e.g., see Buiter (1985)] have suggested the appropriate measure of a government's fiscal stance would be the inflation-adjusted budget deficit, or what in the literature is called the operational deficit, rather than the PSBR. In this connection, it has also been suggested that the primary balance, or a government's budget net of interest payments should be considered so as to get a more rounded view of government expenditures during the course of a stabilisation programme. How important it is to make this distinction is clear when one looks at the data on the PSBR, the operational balance and the primary balance, for the period 1982-87, reported in Table IV. The data on the primary balance and the operational balance suggest a very restrictive fiscal stance. In fact the operational balance, for much of the period oscillates between small surpluses and deficits. The PSBR on the other hand shows little relationship to either of these two indicators, and consistently registers very high deficits, from a low of 8.5 per cent to a high a 16 per cent of GDP.

From a policy making point of view the above suggests that in inflationary situations, the budget deficit may not be a good indicator of a government's macroeconomic stance. Equally importantly, it suggests that the IMF's view of the relationship between budget deficits and inflation is not only simplistic, but what is worse, can be misleading. Taken in conjunction with the discussion on inertial inflation, the above has argued that the both the diagnosis of and the remedy for inflation which the IMF suggests is far too narrowly specified. It misses out both on the variety of factors which could induce inflationary pressures as well as on propagation mechanisms.

Locating the above discussion on inertial inflation in the context of the discussion in Section IV on the macroeconomic policy regime which underpinned stabilisation between 1982-87, there are a few points to be noted. Given that, in Mexico, both wage indexation as well as wage-setting through bargaining with unions is present, inflation therefore had a large inertial component. Add to this the numerous supply shocks (e.g., the repeated devaluations of the currency discussed earlier) which the economy faced during the period, 1982-87, it does not come as a surprise that standard positive real rates of interest. It merely points out that significantly negative real rates of interest have a debilitating impact on the health of a financial system.
demand contraction policies were not able to tame inflation. In addition, even though, as the following section will discuss, the adoption of an incomes-policy based stabilisation programme helped cope with inflation, some of the problems noted with such programmes were to surface in the Mexican economy as well.

VI. Macroeconomic Policy: Successful Stabilisation, 1988-94

The above discussion on the nature of inflation, both as it is encapsulated in orthodox stabilisation programmes as well as in the way it obtains in real world economies, sets the stage for analysing the macroeconomic regime adopted in the second sub-period under discussion - 1988-94. As has been noted earlier, the primary achievement of the earlier sub period, 1982-87, was a turnaround of the trade balance, which allowed Mexico to successfully service its external debt, but at the cost of deteriorating living standards and near hyper-inflationary pressures. With Mexico staring down the abyss of hyper-inflation, towards the end of 1987 the government changed its macroeconomic strategy, despite the fact that the following year was a presidential election year and a renewed dose of austerity ran the risk of a political fallout. The government adopted, what in the literature is called, a heterodox stabilisation programme. The programme unveiled in December 1987 and called the Pacto de Solidaridad Económica (PSE, or the Pact of Economic Solidarity) introduced an incomes policy (the heterodox element) along with more standard monetary and fiscal policies (the orthodox element) to try and control inflation.

The aim of the Pacto was to reduce the rate of inflation to less than 2 per cent a month by the end of 1988. It sought to do this by a realignment of all the basic prices in the economy. It will be recalled that in mid-1985 there had been a sharp devaluation of the peso, followed by an acceleration in the rate of mini-devaluations from 1986 onwards in an attempt to maintain the undervaluation of the peso. As a part of the Pacto, in the first three months of its implementation (i.e. up to February 1988) the rate of depreciation of the currency was slowed down. Public sector prices were adjusted upwards and minimum wage levels were increased. Price agreements were reached with the private sector for all basic products. Non-interest government spending was to decrease by 1.5 per cent of GDP and a tight monetary policy maintained with an absolute reduction in credit available to the
private sector. Banks were authorised to lend a maximum of 85 per cent of their outstanding average balance in December 1987 [see Aspe (1993)].

Trade liberalisation was deepened with a reduction in maximum tariff levels and elimination of remaining import permits. From March 1988 onwards, the basic prices in the economy, including the exchange and wage rates, were frozen. The Pacto was to be reviewed regularly (it began with bi-monthly reviews and as the programme took hold, the period between reviews was lengthened) so that necessary corrections could be made. Equally important the Pacto was arrived at after negotiations with labour unions and business confederations and therefore had their, albeit grudging, approval. As will be discussed in a moment, the Pacto proved a success and was continued37 by Salinas when he took over the Presidency in December 1988. It was to remain the broad framework within which macroeconomic policy operated until the end of the period38.

In terms of its central objective - the reduction of inflation rates - the Pacto(s) must be deemed a success. Even though the average rate of inflation in 1988, the first year of the Pacto, remained in triple digit territory (see Table I), towards the end of the year the Pacto had actually achieved its goal of a monthly inflation rate in the neighbourhood of 2 per cent. By 1989, inflation had come down quite drastically to an average rate of 20 per cent per annum. It was to remain in the range of 20-30 per cent per annum for the next couple of years, before starting to decline again from 1991 onwards to finally reach single digit levels by 1993 (see Table I).

The government's fiscal stance remained restrictive for much of the period. In terms of constant 1980 prices, government consumption expenditure actually contracted in 1988 and 1989 - by 0.5 and 0.2 per cent respectively - before resuming a growth of between 2-4 per cent for the rest

37 Salinas however renamed it to Pacto de Estabilidad y Crecimiento Economico (PECE, or the Pact for Stability and Economic Growth)

38 The above is not to suggest that there were no changes in prices and other economic variables controlled under the pact. But that the basic framework remained a negotiated incomes policy, backed by fiscal austerity. As far as the exchange rate is concerned, from January 1989 onwards it returned to the earlier rule of pre-announced devaluations, though at a rate well below that of inflation and declining over time. For details of the broad changes in the various phases of the Pacto see Appendix A in Dornbusch and Werner (1994).
of the period. As a result of this, the operational balance which had turned significantly negative in 1988 - it registered a deficit amounting to 3.6 per cent of GDP (see Table IV) - turned around and by 1990 went into surplus territory. It remained in surplus for the rest of the period, though with a clear declining trend reflecting perhaps the underlying stubbornness of real interest rates. Similarly, the primary balance averaged a surplus of more than 8 per cent of GDP up to 1992. With inflation under control, the movements in the PSBR tracked those in the operational balance much more closely, with the deficit of 13 per cent of GDP turning into a surplus of 2 per cent by 1991. As Table IV suggests, it continued to remain in the black for the rest of the period.

The turnaround in the government's budgetary performance is explained not only by its restrictive fiscal stance but also by improved tax revenue mobilisation which this sub-period saw, explained in part by the tax reforms introduced early in the Salinas regime. Total tax revenue in 1987 amounted to 8.6 per cent of GDP at current prices. By 1992 this ratio stood at 12.2 per cent, thereby contributing substantially to the budgetary turnaround. With the easing of inflationary pressures, monetary policy also turned less restrictive, reflected in the declining trend in short term interest rates, falling from 69.15 per cent in 1988 to 14.9 per cent in 1993 (see Table IV). It is interesting to note, however, that the decline in interest rates was more gradual than the much sharper

39 As a result of the government's continued tightfisted spending patterns, the weight of government consumption in GDP declined consistently, from 11.4 to 10.8 per cent between 1988 and 1992. After which, it regained somewhat to reach 11.4 per cent in 1994. Calculations are at 1980 constant prices.

40 Though that figure overstates the case somewhat, given that revenues from privatisation are included in 1991 and 1992. Net of privatisation proceeds, whereas the primary balance registered a surplus of around 8 per cent of GDP between 1988-90, it declined to a little over 5 per cent in the next two years. In 1993 it stood at 4 per cent of GDP (see Table IV).

41 Net of privatisation proceeds, the PSBR in 1991 is actually in deficit and turns in a surplus only in 1992. The PSBR, net of privatisation revenues, is as follows: -1.5, 0.5 and 1 per cent of GDP in 1991, 1992 and 1993 respectively [see Dornbusch and Werner (1994)].

42 In 1982, the beginning of the first sub-period, total tax revenue amounted to 8.7 per cent of GDP. For the rest of the sub-period - i.e., 1982-87 - this ratio stayed roughly constant, with very minor fluctuations in either direction.
decline in inflation. As a result, interest rates remained well above the inflation rates for most of the period, indicating a policy of maintaining significantly positive real rates of interest. Another important achievement of the economy over this period was that the budgetary surpluses achieved (including privatisation proceeds) helped retire public debt. Public debt declined from 67 per cent of GDP in 1987 to 30 per cent in 1993 [see Sachs, Tornell and Velasco (1995)].

Before moving on, it is perhaps worthwhile mentioning some of the factors which allowed for the success of the stabilisation plan. Mexico's was not the first economy to use a heterodox stabilisation plan. Argentina, Brazil, Peru and Israel had tried it earlier, and barring the last mentioned, all others had been spectacular failures. In fact, heterodox stabilisation programmes were quite disreputable in some policy-making circles during those days. Indeed, as Ros and Lustig (1993) point out, had Mexico been under an IMF programme when the Pacto was introduced, it would have been practically impossible to apply the wage-price freeze which was so central to the deindexation strategy.

The drop in inflation itself was primarily due to the use of an incomes policy [see Ros and Lustig (1993)] but the ability to sustain the pact were largely due to the fact of some initial conditions which were favourable. The sine qua non of any incomes-policy-based stabilisation programme is a deteriorating current account balance due to the fact of fixing the exchange rate during a period when inflation is high. In facing this situation, Mexico was helped by the fact that, at the time of launching the Pacto, her foreign exchange reserve situation was comfortable enough to sustain a steady depletion which inevitably resulted.

Second, coping with the effects of an appreciating currency was not immediately a problem, given the fact that at the end 1987 the peso was considerably undervalued (see Table I). Third, an

---

43 One of the reasons for the failure of the programmes in Brazil, Argentina and Peru was that the distributional conflict underlying inertial inflation in these economies was not resolved. Therefore, as noted in Section V above, these soon destabilised the economies in question. The nature of the links between the state and labour in Mexico (see Sections IV and VI, Chapter 9) meant that the government was, at least for the moment, able to successfully resolve distributional issues. But as will be discussed in a moment, other problems with the strategy were to surface.

44 It is estimated that the drain on foreign exchange reserves on account of the Pacto, during the first year of its implementation, was to the tune of $10 billion [see Lustig and Ros (1993)].
intensification of the privatisation programme along with the beginning of a downturn in international interest rates in 1989, meant that Mexico suddenly became attractive to international investors. As mentioned earlier, between 1990-93, gross foreign capital inflows amounted to $91 billion dollars and this clearly helped sustain a widening current account deficit. Fourth, as noted repeatedly above, the semi-corporatist nature of the Mexican state with its close ties with official labour unions, meant that there existed the institutional framework within which, not only to negotiate a pact, but also to sustain it.

If stabilisation proved a success and there was a resumption of moderate growth in the economy, as has already been discussed at some length earlier, there were at least two fronts on which there was cause for grave concern - job creation and foreign trade performance. While the first had probably more to do with the nature of the restructuring which the Mexican economy had undergone, affecting perhaps its employment-elasticity of output, the second was more directly the result of the macroeconomic stabilisation policy which was used. As Dornbusch and Werner (1994) and Dornbusch et al. (1995) among others have argued, a key element constituting the incomes policy which brought about successful disinflation was an appreciating real exchange rate - a result of first freezing the nominal exchange rate and then following a depreciation path where the rate of depreciation was less than the rate of increase in prices.

Between 1988-93 the Mexican peso-US dollar real exchange rate, constructed in terms of relative wholesale prices (RER1 in Table IV), had appreciated by nearly 40 per cent, with its 1993 level higher than the 1981 peak. A real exchange rate based on unit labour costs, relative to those of Mexico's six largest trading partners (RER2 in table IV) appreciated by nearly 45 per cent over the same period. A real exchange rate constructed on the basis of wholesale price movements relative to all of Mexico's trading partners, appreciated by nearly 34 per cent. The upshot of the above is that the overvaluation of the real exchange rate is not a statistical mirage, arrived at by choosing an

\[\text{The difference in appreciation between RER1 and the multilateral real exchange rate arises from the fact that over this period the dollar depreciated against most major currencies. But movements in RER1 would still be of significant importance to the Mexican economy given that nearly 70 per cent of her foreign trade is carried out with the US.}\]
appropriate index, but a robust economic fact. An appreciation of this magnitude coupled with extensive trade liberalisation inevitably resulted in a sharp deterioration in foreign trade performance. The flip side of this is that the real appreciation coupled and as a consequence high interest rates, were able to attract short-term capital inflows which helped finance the current account deficit. But the dependence on short-term capital only increased the economy's vulnerability [for an analytical discussion of this and related issues see, for example, Nayyar (1996)].

It should be pointed out that an appreciation in the value of a currency is not necessarily synonymous with an overvalued currency. If the appreciation takes place in conjunction with an increase in productivity, then the increase in the price of a currency could reflect a movement to a more efficient point on the production curve. In fact this is what the official line of argument was [see Banco de Mexico (1995)]. But what the official line chose to ignore was that the nature of growth over this sub-period belied any significant increases in productivity. First, as has been noted in the sources of demand growth analysis (see Section III above), during this sub-period, growth was essentially consumption driven. There is no evidence of an investment boom to underpin any rapid increase in productivity. Second, neither can it be argued that increases in productivity stemmed from a more efficient use of resources. Estimates of total factor productivity in manufacturing actually suggest that over the period 1988-90, total factor productivity growth was actually negative, declining by 0.7 per cent per annum [see IMF (1994)]. Admittedly, the evidence is for a rather short period of time but taken in conjunction with other evidence cited above, a balanced analysis would seem to suggest that the appreciation of the currency reflected an overvaluation, rather than a move towards a more efficient production equilibrium. It is more likely that it was, therefore, a symptom of economic imbalance induced by the macroeconomic stabilisation plan [also see Dornbusch and

46 An appreciating currency implies a subsidy to imports. The fact that the appreciation happened in the context of extensive trade liberalisation meant that imports already cheapened by significant reductions in tariff and non-tariff barriers were subsidised even further. Ideally of course, a depreciation of the currency along with trade liberalisation would have afforded some protection against imports and at the same time aided structural change, by probably reinforcing depreciation-induced substitution between non-tradeable and tradeable goods production. But here a conflict between structural change and stabilisation objectives comes to the fore. Stabilisation required the appreciation of the currency and the primacy of the stabilisation objective clearly predominated.
A sustained deficit on the trade account coupled with a government budget which had moved into surplus from about the middle of the sub-period, would indicate that the excess of investment over saving stemmed from the private sector. As the final element in this discussion on macroeconomic policy and its impact on economic growth, the investment and savings behaviour of the economy in this sub-period will be analysed below.

Table VI: Saving and Investment in the Mexican Economy, 1989-93

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Savings</td>
<td>21.4</td>
<td>21.9</td>
<td>22.4</td>
<td>23.3</td>
<td>22.4</td>
</tr>
<tr>
<td>External Savings</td>
<td>2.8</td>
<td>3.1</td>
<td>5.2</td>
<td>7.5</td>
<td>6.6</td>
</tr>
<tr>
<td>Public Savings</td>
<td>-0.9</td>
<td>0</td>
<td>2.6</td>
<td>4.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Private Savings</td>
<td>19.5</td>
<td>18.8</td>
<td>14.6</td>
<td>11.3</td>
<td>12.6</td>
</tr>
<tr>
<td>Gross Investment</td>
<td>21.4</td>
<td>21.9</td>
<td>22.4</td>
<td>23.3</td>
<td>22.4</td>
</tr>
<tr>
<td>Public Investment</td>
<td>4.8</td>
<td>4.9</td>
<td>4.6</td>
<td>4.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Private Investment</td>
<td>13.4</td>
<td>13.7</td>
<td>15.0</td>
<td>16.6</td>
<td>16.4</td>
</tr>
</tbody>
</table>

Source: IMF (1994a)
Notes: a - Ratios expressed as a percentage of GDP at current prices
b - Public and private investment refers to gross fixed investment by respective sectors and therefore the sum of the two does not add up to gross investment. The difference between the sum of the two and gross investment, i.e., change in stocks, has not been included in the table. Change in stocks fluctuated between 2-3.3 per cent over this period.
c - Total savings is equal to gross domestic savings plus net resources from abroad (proxied by non-interest current account deficit).

Over the period, 1988-94, gross investment, as a percentage of GDP at current prices, increased from 20.4 to 23.6. On the other hand, over roughly the same period, 1988-93, gross domestic savings expressed as a ratio of GDP at current prices, declined by 2.5 percentage points, from 19.3 to 15.8. The decline in the gross savings ratio, however, masks a much sharper decline in private savings which took place over this period. As Table VI indicates, private savings, as a percentage of current GDP, declined by nearly seven percentage points, from 19.5 to 12.6 per cent between 1989 to 1993. The decline in the private savings ratio corroborates evidence from the
disaggregated demand growth analysis presented in Section III, which suggested that over the period 1988-94 growth was consumption driven.

Compensating for this decline in private savings was an improvement in the savings behaviour of the public sector, which from being a dissaver in 1989, contributed savings to the tune of 3.2 per cent of current GDP in 1993. Equally important was the contribution of net resource transfers from abroad which, reversing the trend through 1982-87, turned positive and rose from a level of 2.8 per cent of GDP in 1989 to 6.6 per cent in 1993. But the behaviour of private savings suggests that these large inflows of foreign capital substituted rather complemented the domestic resource mobilisation effort. That the increased net resource transfers financed private consumption and not investment is also suggested by the fact that gross fixed capital formation by the private sector, as a percentage of current GDP, increased by only 3 per cent between 1989-93 (see Table VI).

As Table VI suggests, the Mexican economy saw a large inflow of foreign capital. On average, between 1989-93, the economy received $18.5 billion per annum. This was far greater than any other economy outside the developed market economies [see IMF (1994a)]. The composition of these capital flows was however weighted far too heavily in favour of volatile portfolio capital. Between 1989-92, portfolio capital constituted almost 75 per cent of the total inflow47, which played a major role in exacerbating the crisis, as capital flight hammered the peso down in the end of December 1994 and early January 1995. Outside of the problems of volatility, just the sheer magnitude of the capital inflows created complications of their own. First, given that for much of the period the Mexican government was following a tight monetary policy, it chose to sterilize these capital inflows, thereby adding to upward pressure on the interest rate. Second, they also contributed to the appreciation in the value of the peso, reinforcing the real appreciation which in any case was used as part of the disinflation package.

Finally, it was noted earlier that there was some increase in investment in this sub-period. To be precise, gross investment as a percentage of GDP at current prices, increased from 20.4 to 23.6 per cent. But as Table VI indicates, the increase in the overall ratio masks differing trends in

---

47 On the basis of data on composition of capital flows available in Dornbusch and Werner (1994). The fact that the bulk of the capital was portfolio capital is also corroborated by IMF (1994a).
investment behaviour when disaggregated by type of agents. The share of the public sector in fixed capital formation actually declined as indicated by the fall in the ratio of gross fixed capital formation by the public sector as a percentage of GDP at current price - falling from 4.8 to 4 per cent between 1989 to 1993. This same ratio for the private sector on the other hand rose from 13.4 to 16.4 per cent.

To conclude this discussion on macroeconomics and growth, it may be worthwhile presenting a somewhat more disaggregated picture of investment trends with constant price data. Table VII summarises the available data.

Table VII: Investment Trends in the Mexican Economy, 1988-92

<table>
<thead>
<tr>
<th>Year</th>
<th>FI$^b$</th>
<th>ICON$^c$</th>
<th>IME$^d$</th>
<th>IPVT$^e$</th>
<th>IPUB$^f$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>16.8</td>
<td>10.2</td>
<td>6.6</td>
<td>12.1</td>
<td>4.7</td>
</tr>
<tr>
<td>1989</td>
<td>17.3</td>
<td>10.2</td>
<td>7.1</td>
<td>12.6</td>
<td>4.7</td>
</tr>
<tr>
<td>1990</td>
<td>18.8</td>
<td>10.5</td>
<td>8.3</td>
<td>13.7</td>
<td>5.1</td>
</tr>
<tr>
<td>1991</td>
<td>19.6</td>
<td>10.5</td>
<td>9.2</td>
<td>14.9</td>
<td>4.7</td>
</tr>
<tr>
<td>1992</td>
<td>21.1</td>
<td>10.9</td>
<td>10.2</td>
<td>16.8</td>
<td>4.3</td>
</tr>
</tbody>
</table>

Source: Calculations based on data on macroeconomic aggregates from ECLAC (1995); United Nations, (1994); and Banco de Mexico, (1995).

Notes: a - All figures are ratios expressed as a percentage of GDP at constant 1980 prices.
b - FI refers to gross fixed capital formation
c - ICON refers to gross fixed capital formation in construction
d - IME to gross fixed capital formation in machinery and equipment
e - IPVT to gross fixed capital formation by the private sector
f - IPUB to gross fixed capital formation by the public sector

Whereas investment trends in terms of constant prices (Table VII) broadly agree with those emerging from current price data, there are some differences. In terms of current prices gross fixed capital formation as a percentage of GDP increased by a mere 1.5 per cent between 1988-94 - from 19.6 to 21.1. In terms of constant prices however, the increase, over the same period, is far more robust 4.7 per cent - from 16.8 to 21.5. Unfortunately, disaggregated investment data at constant prices is available only up to 1992. Disaggregation of fixed investment by kind of goods suggests a reversal of the trend of the earlier sub-period, 1982-87. In that sub-period, the bulk of the cutbacks
in investment had been in plant and equipment. On the other hand, in this sub-period, fixed investment in plant and equipment was far more dynamic than in construction. As a result gross fixed investment in plant and equipment as a percentage of GDP increased from 6.6 to 10.2 per cent between 1988-92. The same ratio in construction, on the other hand, more or less stagnated, increasing marginally from 10.2 to 10.9 per cent. As a result, the share of plant and equipment in fixed investment which had fallen to less than 35 per cent in 1987, increased to more than 48 per cent.

By type of agent, the private sector was far more dynamic than the public sector. Gross fixed investment by the private sector as a percentage of GDP at constant prices, increased from 12.1 to 16.8. The public sector on the other hand, this ratio was essentially stable around 4.7, though it fell to 4.3 per cent in the last year. As data for the intervening years suggests, there was a mild acceleration in public sector investment up to 1990, after which it decelerated. These trends meant that the pattern set in the earlier sub-period - that of the private sector increasing its share of gross fixed investment - was reinforced in this sub-period as well, with the private sector's share increasing from 69.2 to 79.4 per cent.

VI. Conclusion

In the face of the economic crisis of 1982, the government, under the tutelage of the IMF, chose orthodox stabilisation policies of demand contraction and devaluation to rectify the economic imbalance. Unfortunately for Mexico, given the economy's 'stagnationist' features and the presence of inertial inflation, demand contraction did little to help rid the economy of inflationary pressures. On the other hand, the demand contraction aided by extremely sharp devaluations did help turnaround the trade balance and therefore service Mexico's huge external debt. But with inflation persisting, the devaluation-induced external competitiveness was steadily eroded, and faced with the necessity of servicing its debt, Mexico chose to maintain an undervalued currency or the path of devaluations.

Whereas this succeeded in maintaining large trade surpluses, almost on every other front it meant economic disaster. Between 1982-87, the economy stagnated; the living standard of the average Mexican declined; investment levels fell and the economy reached the brink of hyper-inflation. Faced with hyper-inflation and coupled with some easing of the debt-servicing burden with
the implementation of the Brady Plan, the government changed its macroeconomic strategy. This time around full cognizance was taken of the fact that inflation in Mexico had an inertial component and therefore the stabilisation programme included an incomes policy as one of the tools in its armoury. The use of an incomes policy saw the stabilisation of the economy and even resumption of moderate growth. But an appreciating currency along with intensification of trade liberalisation meant that growth was import intensive and simultaneously, exports stagnated. The resulting trade deficit dampened economic growth and as a result, the economy after 1990 started decelerating and by 1993 was clearly stagnant. The difference was that slowing down of growth had not led to a reduction in the trade deficit and as a result, even with a stagnating economy, the trade deficit was a whopping 4.3 per cent of GDP.

Unfortunately what little growth there was, was consumption driven, on the one hand, and underwritten by massive inflows of volatile portfolio capital, on the other. The inflow of portfolio capital, drawn to Mexico, in part, due to opportunities created by privatisation and high real interest rates and, in part, to the down turn in international interest rates in 1989, stopped in 1994 as US interest rates began to climb upwards. An overvalued currency, a stagnant economy, a huge current account deficit with no source of external financing, simply meant one thing - another economic crisis. As the government took tentative steps towards correcting the overvaluation, the bottom fell out of the foreign exchange market, and the ensuing run on the peso led to a currency collapse and the Mexican miracle had ended spectacularly, a victim perhaps of its own success.