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ARGENTINA SINCE MARTINEZ DE HOZ

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Argentina Since Martinez De Hoz

ABSTRACT

The paper reviews macroeconomic events and policies in Argentina in the period 1981-1984. In that period inflation, that had decelerated to less than 100 percent, resumed and reached more than 600 percent in mid-1984. The real exchange rate that had appreciated in the policy of disinflation depreciated sharply and, in the end-phase, real wages grew more than forty percent. These events, by Northern-Atlantic standards, are dramatic and the paper attempts to sort out the main issues and connections. Special attention is paid to the role of the real exchange rate and its relation to real wages, the determinants of the black market premium for foreign exchange, and to the budget.

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ARGENTINA SINCE MARTINEZ DE HOZ

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"To write about recent events
is a most risky affair."
Guido di Tella

In March 1981 the Viola government took over an economy that had already for five years been in the process of stabilisation. Finance minister Martinez de Hoz had attempted stabilization in 1976-78 with non-market approaches. But he did not succeed in that way and therefore moved in December 1978 to an alternative that turned out to be quite destructive --the Plan of December 20th. The plan fought inflation by prefixed exchange rates, using the influence of stabilized and declining import price inflation to reduce inflationary expectations and to reduce directly the rate of inflation. Concurrent commercial liberalisation was expected to reinforce the price discipline of the exchange rate scheme. At the same time the economy was opened widely to international capital flows.[1]

The experiment failed to stop inflation definitively and by the time Martinez de Hoz administration left office in March 1981, a legacy of financial instability had built up that proved unmanageable for the subsequent administrations. Today, three years and five finance ministers later, stability is a prospect far removed and the traditional conflicts about real wages, distribution, and inflation remain topical and are further complicated by an external debt crisis.

In late 1983 production of manufactures and real GDP were still at

[1]See Fernandez (1983), Fernandez and Rodriguez (1982) and Dagnino Pastore (1983).

the levels they had in early 1978 and significantly below the peak in the transient period of prosperitiy of early 1979. Inflation has moved from less than 100% at the peak of real appreciation in 1981 to more than 400%. The product wage (manufacturing wages deflated by the WPI for domestic non-agricultural goods) today is as high as it was in early 1981 while the purchasing power of wages in terms of the CPI has risen more than 30% over that period. These real wage gains, of course, stand now at the center of domestic controversy over the budget; inflation and standards of living, employment and a viable external level of competitiveness. As a counterpart industrial employment is more than 20% below the 1979 level. The real exchange rate is significantly above the level of early 1979 when the "tablita" started.

After more than ten years of crisis it does not make sense to try and decide where to lay the blame for the destruction of social and economic stability, which event to single out as crucial and which policy to identify as "the" single step toward disaster. Some policy episodes might claim exemption because they purported to create stability via rules and consistency, for example the Martinez de Hoz experiment. Others, such as the Dagnino Pastore - Cavallo administration might appear especially chaotic. But the former surely gained on inflation by shifting the costs of overvaluation and increased external debts to later administrations, while the other left behind much more inflation, but also had reduced private and public debt burdens through a policy of negative real interest rates.

Of course, any administration with strong political support and favorable initial conditions must be judged by a more demanding test.

Others that inherit lack of credibility, domestic and foreign debts, too high real wages, overvaluation and inflation start with a handicap.

There are important differences in the strength of political mandate with which different administrations could approach the economic stabilization effort. Strongest, no doubt, was the mandate of Martinez de Hoz who entered office in 1976, in the aftermath of the Peronist debacle, on the shoulders of an as yet uncompromised military. His political power, if anything, strengthened during his office as a direct consequence of growth, reduced inflation and increased real wages. The subsequent Sigaut administration operated with much more of a handicap, in part self-imposed because of a lack of policy direction. Alemann did have strong political support but the Malvinas war completely ruined his possibilities for stabilization. The following administrations were rendered largely impotent by the complete collapse of any legitimacy the military might have had. But something very positive must be said of the post-Malvinas economic policy makers. Both Dagnino Pastore and Wehbe made it their chief objective to create and sustain economic conditions that would make possible the transition to democracy. In this they were indeed successful even if it meant more inflation.

Whatever the weight we give to these considerations, none of the administrations can be judged a macroeconomic success. But, in a larger historical perspective the experience of the last three years was not unusual as Yeager (1981,p.139) suggests:

"Argentine experience since World War II illustrates the self-feeding aspects of an entrenched inflation-interactions among prices, wages, exchange depreciation, controls, government deficits, and expansion of money and credit. It provides examples of gimmickry... Especially in contrast with episodes of successful stabilization policy in other countries, Argentine experience illustrates the importance of

whether the political situation warrants confidence in consistent and resolute policy."

The 1981-84 period discussed in this paper is not the first instance of extreme macroeconomic instability. Certainly the years 1975-76 were much the same. But from a longer perspective the macroeconomic performance of the post-war period is very mediocre (see Table 1) and sets Argentina apart from other semi-industrial countries. Indeed, Argentina's problem is very much that "semi-industrial" status, the country is neither efficiently industrial in the way of Brazil or the Asian NICs, nor does she exploit effectively the extraordinary opportunities of agriculture in the way Australia has more effectively done. The strength of the agricultural export base has meant that Argentina was "independently wealthy" being able to squander resources on an inefficient industry, an even more inefficient public sector and an unforgiveably inefficient military. There is no indication that all this inefficiency was the direct price of advancing social objectives as opposed to narrow and often conflicting group interests. Martinez de Hoz has claimed his policies were designed to change in a broad way the Argentinian economy and society, and indeed his early micro-policies pointed in that direction. But early success made him greedy and led to his failure. Today Alfonsin is making a second attempt, based on democratic compromise, with as much ambition but also with the handicap of macroeconomic priorities and problems that make success quite doubtful.

Table 1 Historical Perspective on Growth and Inflation
(Average Annual Percentage Change)

	1950-59	1960-69	1970-79	1980-83
Real GDP Growth	3.1	3.8	2.7	-2.1
Inflation	27.0	22.5	135	178

Source: IFS and BCRA.

We now present a brief overview of the 1978-84 period and then discuss some brief details of the macroeconomic experience in each of the four administrations. We then consider in more detail three issues: exchange rate policy, real wages and the external debt.

I. An Overview

Table 2 shows a broad view of the path the economy has taken over the period. The Table brings out why the Martinez de Hoz experiment had so much appeal: in 1979-80 there was reduced inflation, strong growth and a gain in real wages--everybody was benefitting from the experiment. As Calvo (1982) has argued, this transitory euphoria represents the shortrun adjustment to overvaluation. It is the counterpart for the appreciation case of the recessionary impact of currency depreciation which Diaz-Alejandro (1963) had identified earlier.

The broad pattern of the 1981-84 period that does emerge is one of accelerating inflation and declining and stagnant economic activity. Striking points are the up and down of the real wage and the vast deterioration in the budget, even when the deficit is calculated net of domestic and foreign debt service.

The budget deficit data are calculated in the following manner: the C-P estimates due to Cavallo and Pena calculate the deficit on the basis

Table 2 Inflation, Growth, the Budget, and the Real Wage

	Inflation (% p.a)	Growth (% p.a)	Budget Deficit (% of GDP)				Real Wage (1980-82=100)
			IMF(A)	IMF(B)	CP(A)	CP(B)	
1978	174	-2.8	6.9	3.8	10.1	1.8	87
1979	159	6.7	7.2	3.8	9.0	2.4	98
1980	101	0.9	8.6	4.8	11.3	7.2	111
1981	104	-6.3	14.3	7.8	10.6	8.2	101
1982	165	-4.8	12.8	3.7	17.2	5.3	83
1983*	334	1.7	11.2	6.0	21.5	8.0	111
1984:1	446						139

*Estimates.
Source: Fiel, BCRA, DRI Inc., Cavallo and Pena (1983).

of total public sector financing. The estimate (A) represents total borrowing, estimate (B) excludes all debt service, domestic and international. The estimates labelled IMF use the International Monetary Fund's procedures for calculating the consolidated public sector's deficit, including state enterprises. Estimate A represents the total financing requirement while estimate (B) excludes the inflation component of interest payments. On the inflation-adjusted basis both sets of estimates show a large increase in the deficit in 1980-81 and again , following the 1982 consolidation, in 1983. The budget deficit, of course, is central to Argentinian macroeconomic instability.

In Figures 1-3 we show the behavior the real exchange rate, industrial output, real wages and the premium in the parallel market. The Figures highlight some of the important trends.

Figure 1 shows the real wage (average salaries in manufacturing deflated by the CPI) as well as the real exchange rate. The real

FIGURE 1

THE REAL WAGE AND THE REAL EXCHANGE RATE
(Index 1980-82=100)

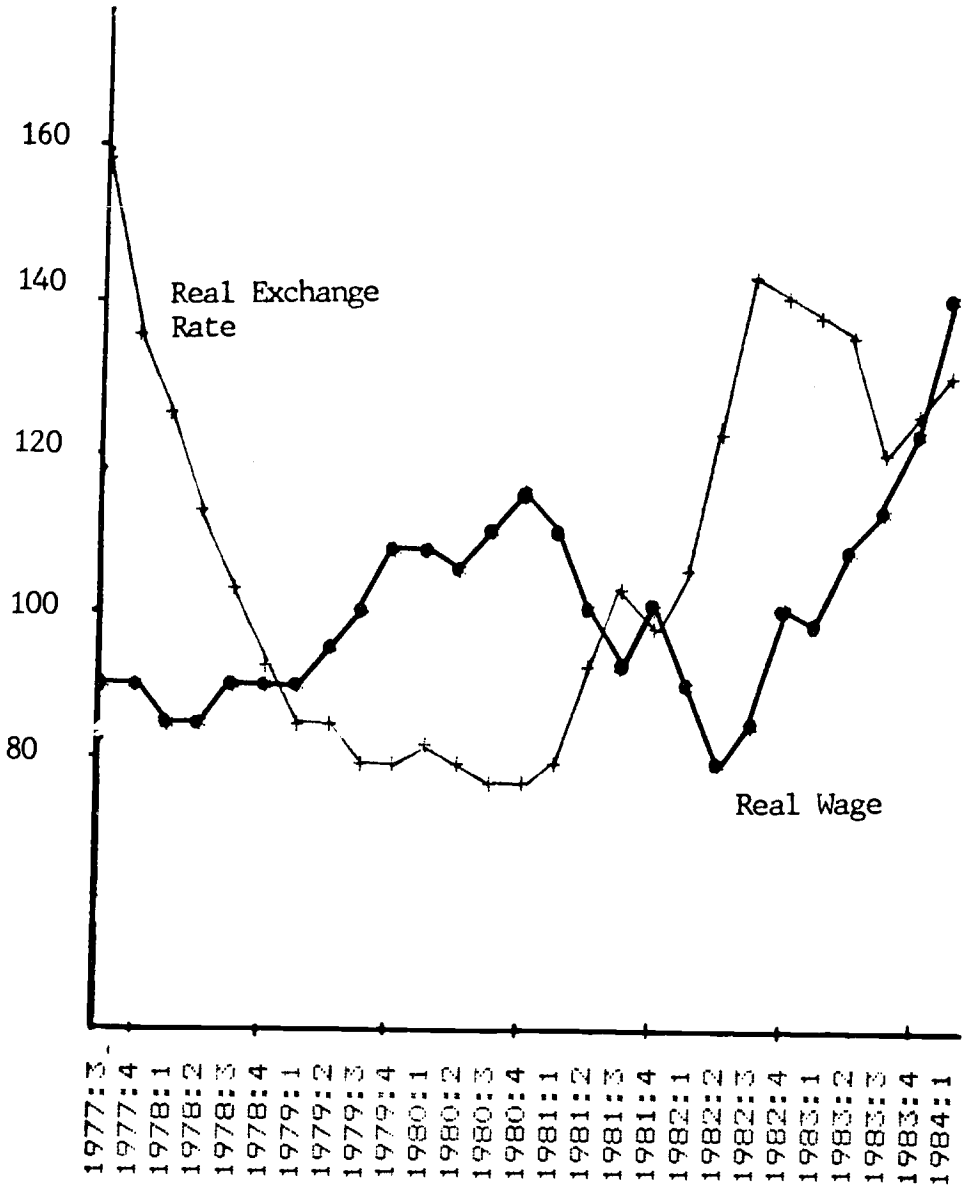
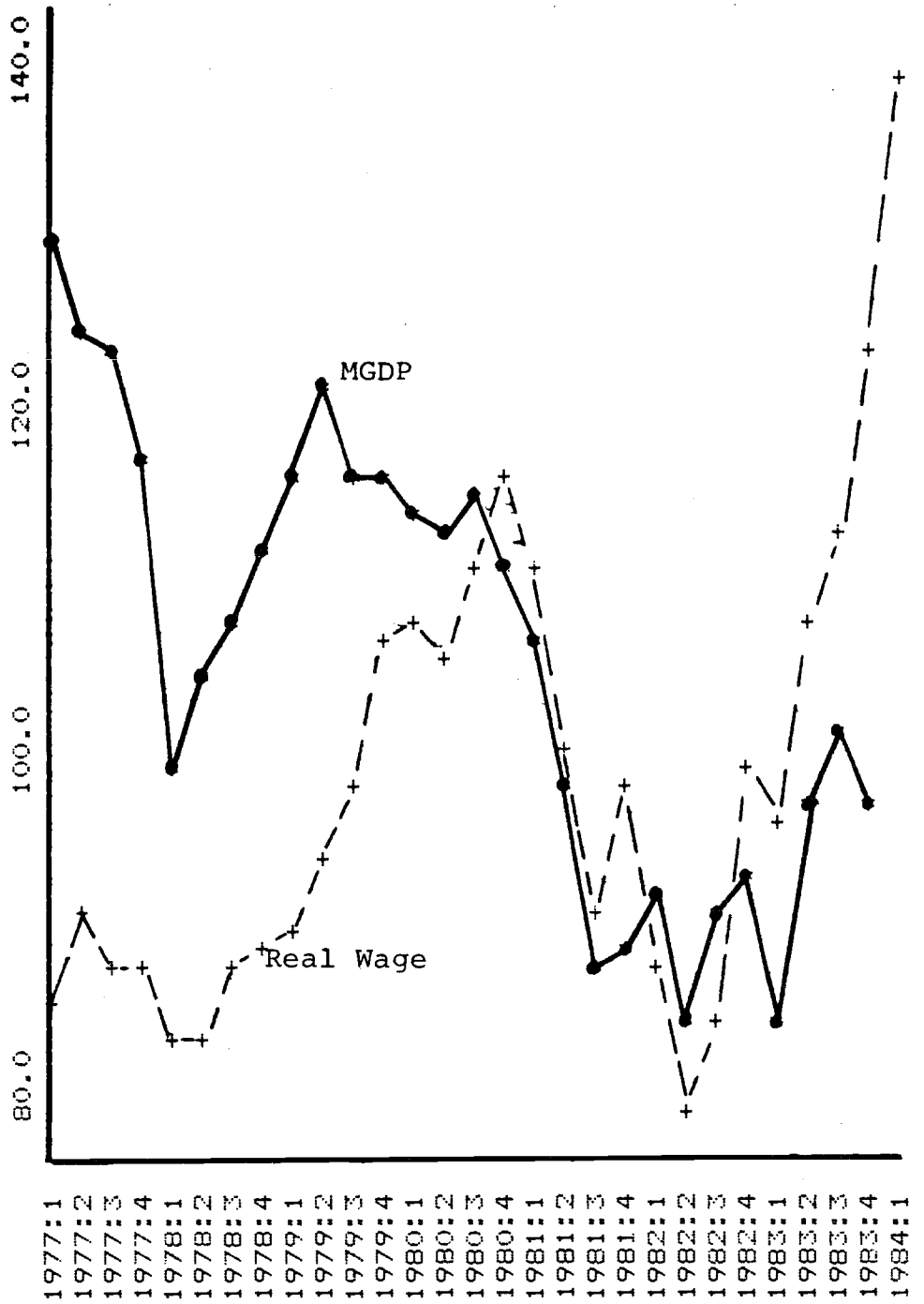


Figure 2 MANUFACTURING PRODUCT AND REAL WAGES
(Index 1980-82=100)



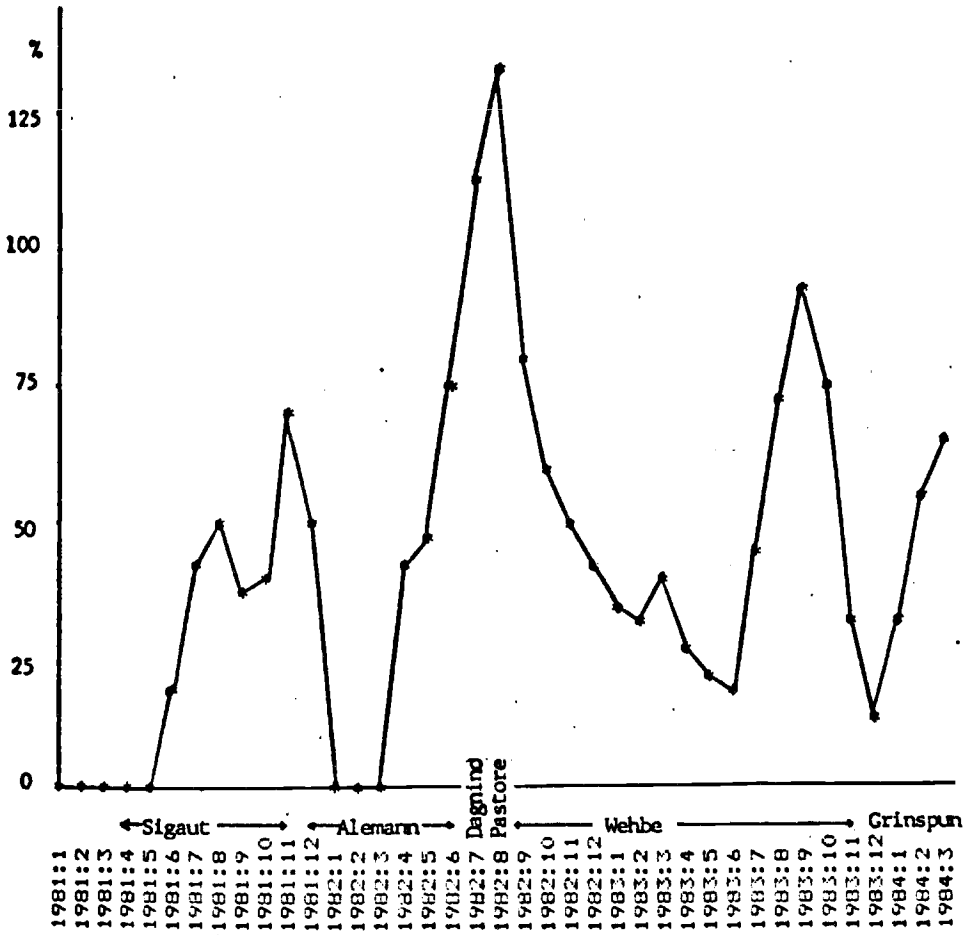
exchange rate is measured by the ratio of the WPI of imports to the WPI of non-agricultural domestic goods. This Figure brings out the striking real appreciation through 1981 and the corresponding gain in real wages. In the 1981-82:III period real wages decline and the real exchange rate depreciates. Finally from 1982:III on real wages and the real exchange rate show less of a correlation. The real wage rises in a sustained, steep manner while the real exchange shows some real appreciation. One of the interesting questions to be raised below is why real wages and the real exchange rate do not move (even) closer together, in particular in the 1982-83 period.

In Figure 2 we show manufacturing gross domestic product (MGDP) and the real wage. The sharp decline in output, following the 1978-79 peak, corresponds to the period of falling real wages and the upturn goes with the recovery of the real wage.

Finally Figure 3 summarizes the economic history of the period in terms of the premium of the parallel rate for dollars over the official rate. The premium is some measure not only of overvaluation but also of domestic political, economic and especially financial instability. In particular it represents it varies inversely with the anticipated return on Argentine assets. In that perspective the premium tells an obvious story. With the exceptions of the Martinez de Hoz period and a brief spell under Alemann the premium is significant and often very high indeed. The Figure highlights the financial panic of July-August 1982 and the pre-election uncertainty in the fall of 1983. But it is clear that by May 1984 things are again well on the way to acute instability. The behavior of the premium in the period surrounding the October 30th election is particularly striking. Between September 30th and October

FIGURE 3

The Premium in the Parallel Market



20th the premium was about 100% and on October 27tth it was still nearly eighty percent. By October 31st it had declined to about 40% and by December to Only 10%. But,it is clear.

We now consider first in some more detail the chief intervals of the 1981-1984 period. In later sections we deal with exchange rate policy and with the policy options involving real wages, activity and the external balance. As already noted in Figure 3 the April 1981 to April 1984 period saw five minsters of finance. A natural divion of the period is offered by the tenure of these ministers.

The Martinez de Hoz Legacy: Any discussion of the 1981-84 period must first come to grips with the initial conditions. Specifically one must decide whether Martinez de Hoz had in the 1978-80 period accumulated a significant overvaluation of the exchange rate, and with it financial instability and capital flight, as the counterpart of a reduction in inflation. That view is, indeed taken her.

The basic facts are well established: Having failed to reduce inflation in 1976-77 to very low levels Martinez de Hoz embarked on a radical experiment in the form of the "tablita". Exchange depreciation was preannounced and set at levels significantly below the prevailing rate of inflation. It was expected that the reduced depreciation would directly cut down inflation but also contribute by supporting an expectation of disinflation. Inflation did indeed come down to levels much below 100%, but the disinflation was only borrowed by overvaluation, not earnt by a thorough going domestic disinflation.

The claim that Martinez de Hoz presided over a significant overvaluation of the exchange rate is at first sight entirely uncontroversial. Surely inspection of Figure 1 shows a vast real

appreciation of the exchange rate index between 1977 and 1980. But that evidence, though plausible, has been challenged in three ways. The first, entirely unreasonable, questions the very fact of real appreciation by suggesting difficulties with price indices. That argument cannot be taken very seriously since on any sensible measure of real exchange rates there has been a large real appreciation.

The second challenge is based on the evolution of real activity. It is argued that the absence of significant increases in unemployment in 1979-80 proves that the real appreciation was not a move in a disequilibrium direction. This argument was very fashionable in 1979-80, but clearly with hindsight it has little merit. The data show a decline in unemployment in 1979 from 1978, but in 1980, especially in the second half, unemployment sharply increased. The evidence on work hours in industry and on industrial output stronly reinforces the evidence. But even if activity had not shown the adverse effects of overvaluation two further considerations are relevant. First, Martinez de Hoz did bring about a very large fiscal expansion in 1980 which must have partially disguised the employment impact of appreciation. Second, the Diaz-Alejandro effect--the shortterm expansionary impact of appreciation--would support employment via the spending effect of higher real wages for a while before the elasticities take their toll.

The third argument is due to Rodriguez and Sjaastad (See Fernandez and Rodriguez (1983, Appendix 2)) who argue that the overvaluation claim may have some justification, but that any overvaluation, at the time of their writing in 1979, was minor. The basis of their argument is a systematic relation between the relative price of domestic non-agricultural and agricultural goods, PD/PA, and the relative price of

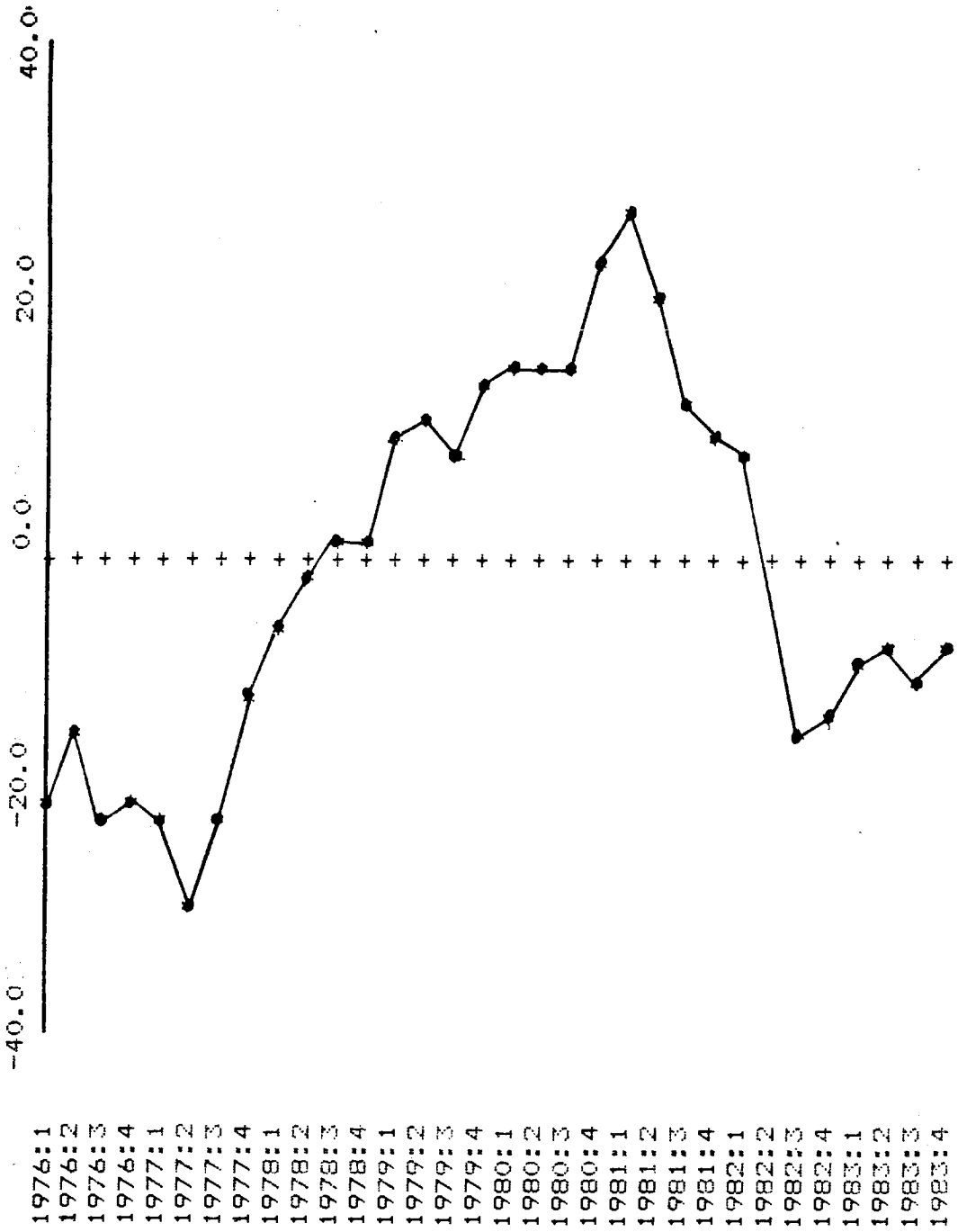
imports in terms of agricultural goods, PM/PA. Specifically they show that over a long sample period a decline in the real price of imports in terms of agricultural goods systemtically leads to a rise in the real price of domestic goods or real appreciation. They interpret deviations from that historical relationship as real exchange rate disequilibria. In 1979 their measure showed a 10 percent overvaluation.

Using their procedure we show in Figure 4 the time series of the deviation from the systematic relation they claim. Clearly by 1980 the real exchange rate, on this measure is more than 20 percent overvalued. But the uncomfortable fact is that in the spirit of this analysis the 1976-77 period was one of massive undervaluation. This is not a view that is widely held and it throws doubt on the oversimplified specification of the Rodriguez-Sjaastad formulation.

Perhaps an approach based on simple commonsense is justified. Any foreign visitor to Argentina in 1980 would have been baffled by the extraordinary price of services--a multiple of NY prices--and the extraordinary purchasing power of Argentinian incomes in terms of foreign goods. There was no plausible erxplanation that would have justified these real incomes in terms of productivity or other basic determinants. The simple answer was that the high real incomes corresponded to a massive exchange overvaluation. The overvalued rate represented a consumption subsidy for imports and Argentinians travelling abroad and a subsidy for anyone shifting their wealth from Argentinian assets into assets abroad.

By 1980 the public did start perceiving that the Martinez de Hoz program was running into difficulties. A massive deterioration of the current account, failures of financial institutions in early 1980 and

Figure 4 RODDRIGUEZ-SJAASTAD MEASURE OF OVERVALUATION
(Percent overvaluation)



Note:For explantion see text.

the prospect of a change in government in early 1981 led increasingly to capital flight. High real interest rates no longer proved enough to finance the current account and budget deficits. Reserves instead of rising started plummetting as the Central Bank maintained the tablita and sold foreign exchange to finance the capital flight.

Table 3 shows data for the trade balance, the current account balance and the increase in gross external debt. It is interesting to see the large shift in the current account toward a deficit and the reversal in the pattern of reserves. In the early period of the tablita high interest rates and confidence draw in capital flows, but in 1980 the direction is one of capital flight. In 1980, for example the combination of reduced foreign exchange reserves and increased gross debt sums to $US 10.9 billion, but the current account deficit is only half that amount. The remainder represents capital flight financed by selling off reserves and borrowing abroad.

Table 3 The Balance of Payments and External Debt
(Billion Dollars)

	1978	1979	1980	1981:I
Trade Balance	2.9	1.8	-1.4	-.3
Current Account	1.9	-0.5	-4.8	-2.1
Change in Reserves	2.3	4.4	-2.7	-3.0
Increase in Gross External Debt	2.0	6.5	8.2	NA

Source: Morgan Guaranty for debt and Indicadores de Coyuntura.

The capital flight financed by the Martinez de Hoz administration represents an unusual transfer within society. The benefits of exchange overvaluation accrue to those who avail themselves of the subsidized

foreign exchange: tourists and asset holders who shift part of their wealth into dollars, foreign securities or real estate abroad. Nobody questions that this occurred on a vast scale. But who pays? In the end the government has sold foreign exchange at privileged prices and incurred or assumed a foreign debt that has financed the transfer. But then subsequently depression of economic activity or real depreciation (i.e. reduced real wages) are required to generate the foreign exchange with which to service the external debts. In the end the disequilibrium exchange rate episode represents an outright transfer from the lower income part of the population toward those that had the wealth and advantage to shift assets abroad. This aspect, of course, makes the foreign debt question so controversial.

The legacy of Martinez de Hoz, in my judgment, was a very large liability: He had created through the "liberalisation" policy a financial betting parlor. High real interest rates and overvaluatiuon had started to impair economic activity and the sharp deterioration of the external balance and the increase in debt made the external balance a serious constraint. In late 1979 or early 1980 might have been the time to change policies in a sharp way toward external competitiveness and away from excessively free and speculative markets and capital mobility. Incomes policy and regulation would have been appropriate instead of "rules" that were plainly not working. Of course, there is always the argument that in another one, two, or three years everything would have worked perfectly. But that common claim does not carry much conviction in this instance.

1. Sigaut 1981:4 -1981:11. The Martinez de Hoz administration had allowed real interest rates to rise to significantly positive levels and,

at the same time, had brought about a gain in real wages and a large real appreciation of the currency. The rise in real interest rates throughout 1980 was required to check the capital flight induced by an increasingly conspicuous overvaluation, but of course had not been sufficient to avoid a massive outflow. Production in industry had declined nearly ten percent from the 79:II peak and GDP, likewise had declined, though by less. The peso was widely considered overvalued and reserves had been declining sharply. With an annual inflation rate of about 80% the depreciation of the exchange rate, between December 1980 and June 1981, alone amounted to 118%. The depreciation, necessitated by capital flight, of course led to an immediate acceleration of inflation.

The Sigaut administration inherited only problems. Inflation had been artifically lowered by the exchange rate policy, but this had been achieved at the cost of building up an external lack of competitiveness as well as a large external debt. Sigaut therefore had to restore competitiveness and could not avoid some increase in inflation. The measure of success is whether the required real depreciation could be achieved without bringing about a precipitous rise in inflation and matching wage gains that would erode the real depreciation. The evidence from Figure 2 is clear: more than 20% real depreciation and a cut in real wages were, indeed, achieved. But, of course, inflation performance deteriorated and, after June, high real interest rates and the real wage compression provoked a sharp cut in manufacturing output.

The real depreciation did not stop capital flight and failed to cope with the large current account deficit. In June a dual exchange rate regime was introduced which stayed in effect to the end of the Sigaut

period. The discrepancy between the commercial and the financial rate widened over time from 30 to 60 percent, reflecting a growing imbalance between the attempt to avoid the inflationary impact of depreciation and the need to check capital flight by a rapid depreciation of the financial rate.

In exchange rate matters the Sigaut administration introduced two practices that are important to note. One was exchange rate guarantees as an incentive for renewing and lengthening external liabilities of the private sector. The other was a preferential financial rate available for firms willing to lengthen their external debt. In an economy with extensive dollar liabilities of private firms the question of how private debt is dealt with, and what incentives are offered to maintain private external debt, are now common problems of borrowing countries that have had to resort to devaluation. The initial overvaluation made these questions particularly difficult in the Argentine context.

Even though some real depreciation was achieved it is clear that the trade-off between inflation and real depreciation was acutely present. This is apparent from the pattern of the real exchange rate in the third and fourth quarter. In the last quarter of 1981 some 10% real appreciation was allowed to dampen the tendency for inflation to accelerate in a very pronounced way. The inability of the Viola-Sigaut administration to solve the internal and external balance problems in a manner consistent with non-accelerating inflation led to their replacement in December 1981 by the Galtieri government with Roberto Alemann as the new minister of the economy.

2. Alemann 1981:12-1982:6. Alemann came into office with full powers

and particularly strong and unambiguous terms of reference: disinflation, denationalisation and deregulation. These terms were pursued by unifying and liberalizing the exchange market, by reducing credit creation and by controls on wages and public sector prices.(See Dagnino Pastore (1983) p.10).

The first quarter of Alemann showed a sharp turnaround relative to Martinez de Hoz and relative to Sigaut as seen in Table 3. Even taking into asccount the depreciation of the commercial exchange rate required to unify the exchange market there was no large increase in inflation. Of course, it must be noted that the inflation success was in part achieved by very low depreciation in January followed by zero depreciation in February. Output recovered somewhat and real wage cuts and real depreciation were maintained and reinforced.

Table 4 Key Macro Variables 1981-82

	1981:I	1981:IV	1982:I
Inflation (year over year)	82.3	122.7	147.5
MGDP	107.0	89.0	92.6
Real Exchange Rate	78.8	96.6	106.3
Real Wage	111.5	99.6	96.6

Note: Index numbers have base 1980-82=100

The outbreak of the Malvinas conflict brings to an abrupt end this stabilisation effort. Controls, not surprisingly, stabilize the economy during the hostilities. Inflation under the influence of controls falls to only 80 percent. But there is a lasting change that influences significantly the external conditions under which the economy operates. While previously capital had been readily available the hostilities, and

later the Mexican moratorium and Brazil's inability to service her debt, eliminate the possibility of external borrowing to finance interest and non-interest deficits. Payments arrears and renewed issue of Bonex -- dollar denominated IOUs of the Argentine government made their appearance.

3. Dagnino Pastore: 1982:7-1982:8. The Malvinas conflict severely weakened the miltary and Bignone who takes over at the end of the conflict has a particularly weak mandate since the navy and airforce had abstained from participating in the junta. On taking office Bignone committed his government to a process leading toward elections.

The new minister of the economy assumed office with a commitment to achieve stabilisation thus facilitating the task for the future democratic government. His main concerns were reactivation subject to the external constraints and the need to contain inflation. A particular concern of his administration and the large domestic debt overhang that was gradually drawing enterprises into bankruptcy by the sheer force of a rate of interest that far exceeds the profitability of capital. With bankruptcy, of course, go job losses and declining output.

Dagnino Pastore, and Domingo Cavallo at the Central Bank, shaped an agressive program of debt reduction. Here is how Dagnino Pastore (1983,p.13-14) described the intentions:

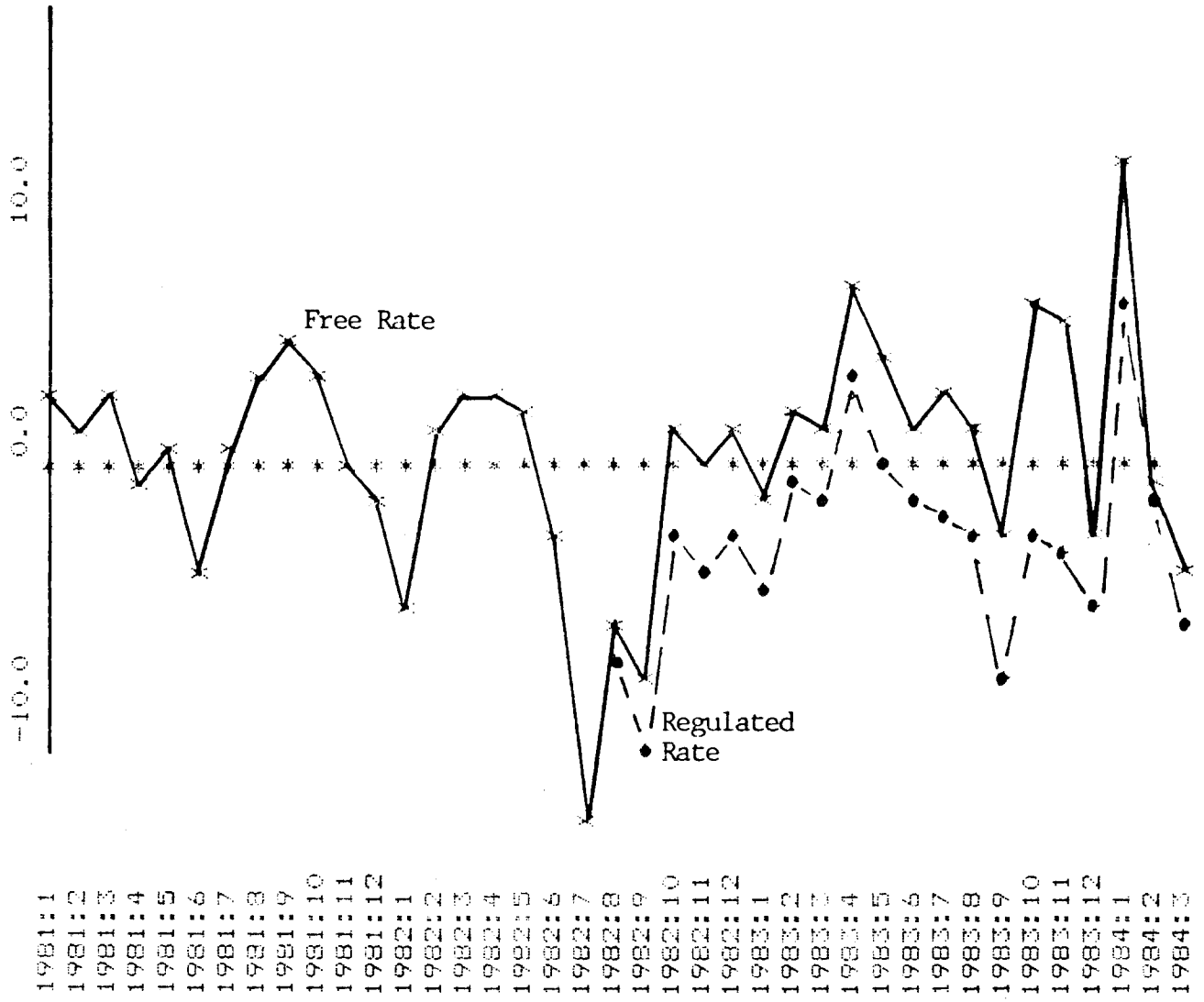
"...the strategy adopted in mid-1982 was more eclectic and unorthodox. It set as a high priority the alleviation of domestic recession and aversion of widespread bankruptcy.It chose the path of price controls and effective domestic debt relief, and accepted larger wage increases than would have been countenanced under more orthodox approaches"

Simplifying somewhat, the strategy amounted to reducing the burden of indebtedness of firms by a longterm restructuring of the debts of firms in manufacturing and services and legal ceilings were set for nominal active and passive rates at levels significantly below the rate of inflation. The effects of negative real rates are reinforced by an exchange depreciation. Figure 5 shows the real, free and the regulated loan rates. The effective loan rate was a weighted average with the regulated rate having an initial share of .9 and declining to only .3 by mid-1983. The negative effective real loan rate therefore continued to transfer wealth from creditors to debtors. It is clear that in the months of July and August 1982 debt burdens were sharply reduced. But this was achieved at the cost of a massive increase in inflation. The inflation increase was provoked both by overly high wage settlements but also by the portfolio shifts into real assets and the parallel market. The scare in financial markets drove the parallel market to a peak for the 1978-84 period.

The impact of these policies on real interest rates and inflation was entirely drastic. Inflation rose from only 150% in June to more than 500% in July and stayed at that level for three months. The real interest rate in the 3rd quarter of 1982 showed monthly average of averages -10% in the free market, -11.4 in the regulated market, and -12.2 on deposits. The negative real interest rates of course redistributed massively from debtors to creditors. The fear of hyper-inflation arose acutely and the policies put the economic team critically at odds with financial interests.

FIGURE 5

REAL FREE AND REGULATED LOAN RATES



It may be of interest to ask why inflation and negative real interest rates, rather than other forms of debt adjustment were chosen. Keynes in the Tract (1923,p.54-55) comments on why levies on wealth (or currency reform) and repudiation are politically inferior choices to depreciation and erosion of debts.

> "...The remaining, the scientific, expedient, the capital levy has never been tried on a large scale;and perhaps never will. It is the rational deliberate method. But it is difficult to explain, and it provokes violent prejudice by coming into conflict with the deep instincts by which the love of money protects itself."

The idea of a German style currency reform with debt adjustment, for example, had been rejected by Dagnino Pastore already months before (in reply to questions on the occasion of a talk in the U.S.) as a measure that requires more legitimacy and political support than Argentine governments of the time could muster. The remaining alternative of administered negative real interest rates did much the same in respect to debts, but of course did so with more chaos. But then reactivation and debt relief were the chief objectives, not inflation stabilisation. Inflation and the external balance appeared primarily as the constraints.

4. Wehbe 1982:8 -1983:12. Dagnino Pastore resigned on the issue of union claims for excessive wage increases and was succeeded by Jorge Wehbe who held office until the Alfonsin administration took over at the end of 1983. Wehbe's policy was to seek a consolidation of the economy with the help of an IMF stand-by agreement. Inflation was to be reduced and contained and the external balance strengthened.

Wehbe did not dismantle the changes in financial institutions or in exchange rate arrangements undertaken by the previous team. Loan markets

remained regulated, although the very large negative real rates were allowed to rise somewhat. Even so the real deposit rate showed a monthly average of about -3 percent over the next year and the real regulated loan rate was also negative. The unregulated rates, however, became positive.

In the exchange market the separation of a commercial and financial market, with exchange control, was maintained through October. Only at that time, and following a devaluation, were exchange markets unified. But exchange control remained and the premium in the parallel market, as seen from Figure 4, remained significant.

By early 1983 it might have been thought that the Wehbe policies had managed to return inflation to levels significantly below the third quarter of 1982, restore some measure of fiscal discipline and do so with rising real wages, growing output and without a deterioration in external competitiveness. But clearly by late 1983 none was left of that. Month to month inflation, annualized, in the third quarter had accelerated to 600 percent, and the gain in external competitiveness was eroding. But output and real wages retained their gain. In the fourth quarter inflation remained at that higher level, and real wages had increased further. The problems for the Alfonsin government were set with firm roots.

Table 5 The Wehbe Performance

	Realwage	MGDP	Real Exchange	Inflation
	(Index 1980-82= 100)			(annualized)
1982:IV	99.6	95.0	143.4	272.7
1983:III	114.0	102.1	121.5	601.7
1983:IV	124.0	99.3	126.1	629.6

5. Grinspun 1983:12- . General agitation and the possibility of a Peronist victory in the election had driven the parallel market to its second highest level in the recent past. The victory of the decidedly moderate Alfonsin government led to a rapid stabilisation of the premium, at least for a while. But the new government was saddled with three immense problems: record high inflation, an unexpectedly high real wages and an unwise promise of much more to come, and finally an external debt that demanded attention if not service.

Debt issues were postponed for six month, to June 1984, and attention focussed on the domestic front, delaying initially serious economic issues in order to build a political foundation. But large wage settlements kept up and threatened to accelerate inflation even beyond the 600 percent level. Arrears on the external debt service, highlighted at Punta del Este, forced a return to the IMF as part of the international debt rescheduling process. The dilemma of the day is how to cut real wages, especially in the public sector and thus have a chance to reduce the budget deficit. But cuts in real wages would certainly weaken the governments ability to get an upper hand in controlling and weakening the power of unions. Matters are made easier by the fact that

the external balance, not counting debt service, presents no difficulty at all. In all likelihood the deciding factor is not the external debt but the threat of explosive inflation that calls for immediate and drastic attention.

II. Exchange Rate Policy

The history of the period, starting with Martinez de Hoz, is particularly interesting because of exchange rate policy. The Martinez de Hoz experiment - stopping inflation through underdepreciation - gave rise to the need to undo the overvaluation. But, of course, in the process inflation accelerated. Increased inflation, in turn, called for more rapid depreciation. The spiral was broken, off and on, by a slowing down of the rate of depreciation and, inevitably and soon, by a catch-up depreciation forced by the difficulties of the external balance.

Figure 6 shows this pattern. The bars represent the depreciation rate of the commercial rate, end of month relative to the end of the preceding month. The smoother line shows the change in Argentine relative to US wholesale prices. We take this relative WPI inflation trend, a three month centered moving average, to represent very broadly the depreciation rate that would preserve purchasing power parity. It is clear that in the period 1981-82 there are alternations of underdepreciation followed by maxidevaluations, starting with the Martinez de Hoz devaluation in February 1981.

Is there any regularity to this exchange depreciation pattern? A hypothesis would run as follows: The exchange rate, other things equal, is depreciated at the PPP rate, indicated by the smooth line, so as to maintain external competitiveness. But there are two adjustments. First

an incoming finance minister will use the occasion to make an immediate corrective devaluation the size of which will depend on the overvaluation she encounters as well as on the parallel market premium. Second, a maxi-devaluation will always be somewhat forward looking and, for that reason, allows a slowdown in depreciation at least in the immediately following month.

In Table 6 we show a test of this hypothesis. We use a dummy that assumes a value of unity in the first month of a new minister's term. The explanatory variables are the dummy times the level of overvaluation, DUMOVER, and the dummy times the premium in the parallel market, DUMPREM. The variable PPP measures the depreciation rate indicated by the last months' change in relative wholesale prices. DUMPOST is a dummy that assumes a value of unity in the month following a maxi. The equation was estimated by OLS with monthly data for the 1981 to 1984:2 period.

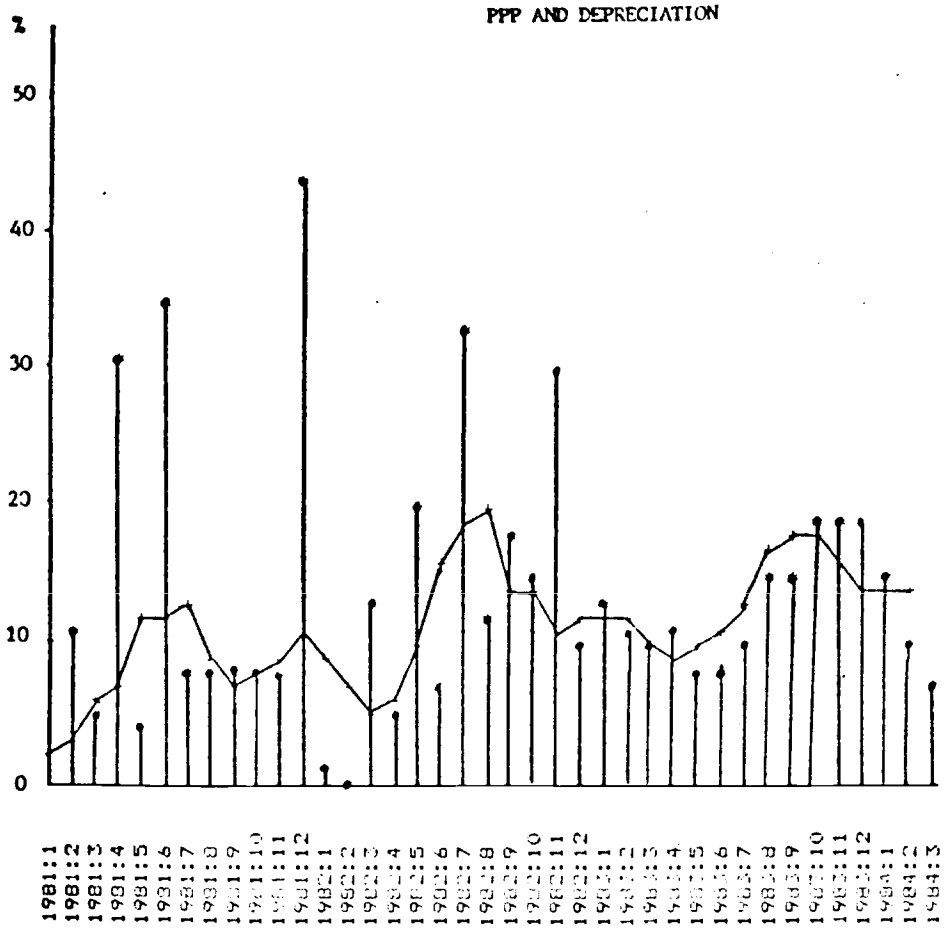
Table 6 Explaining Exchange Depreciation

Const	PPP	DUMOVER	DUMPREM	DUMPOST	R	D-W
5.53	0.74	0.70	0.26	-8.69	.57	1.86
(1.61)	(2.70)	(4.72)	(3.86)	(3.12)		

The empirical evidence offers support for the hypothesis. The PPP coefficient is not significantly different from unity, although the point estimate is only .74. There are strong first-month-of-office effects and these devaluations are, indeed, governed by an estimate of overvaluation (overvaluation is measured by the log of the real exchange rate relative to its average over the 1981-84:2 period). Likewise a premium in the parallel market prior to a new term leads to a higher depreciation.

FIGURE 6

PPP AND DEPRECIATION



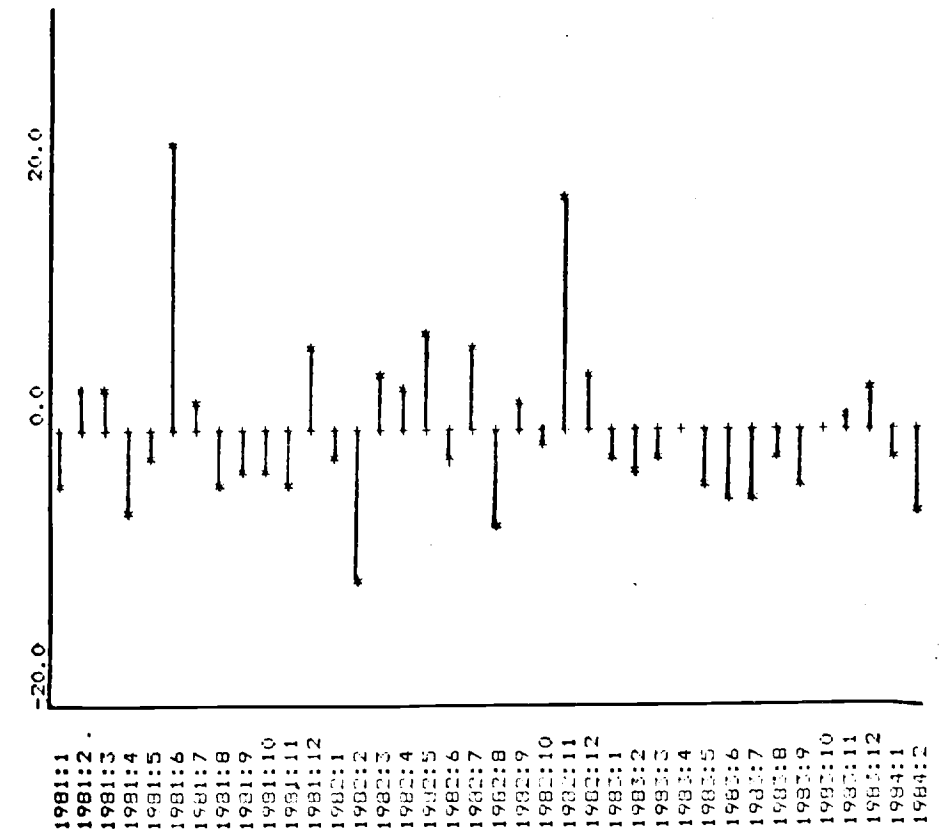


FIGURE 7

RESIDUALS FROM THE EXCHANGE RATE EQUATION

Finally the month after a maxi there tends to be strong reduction in depreciation relative to the PPP trend.

Figure 7 shows the residuals (=actual less predicted) of the exchange rate equation. The few episodes of large residuals are of interest. First, in April 1981 the first Sigaut devaluation is smaller than predicted for a first month of office devaluation. Next the June devaluation is an outlier because it does not coincide with a new term. In 1982:2 a large outlier shows and is easily identified from Figure 6. This outlier corresponds to Alemann's zero devaluation. Finally we note in 1982:8 an underprediction because Wehbe does not make the traditional first month devaluation. But there is a matching positive error in 1982:11 when he does devalue. Note finally that Grinspun's first month does not show up as an outlier because neither overvaluation nor the premium in the parallel market were particularly out of line.

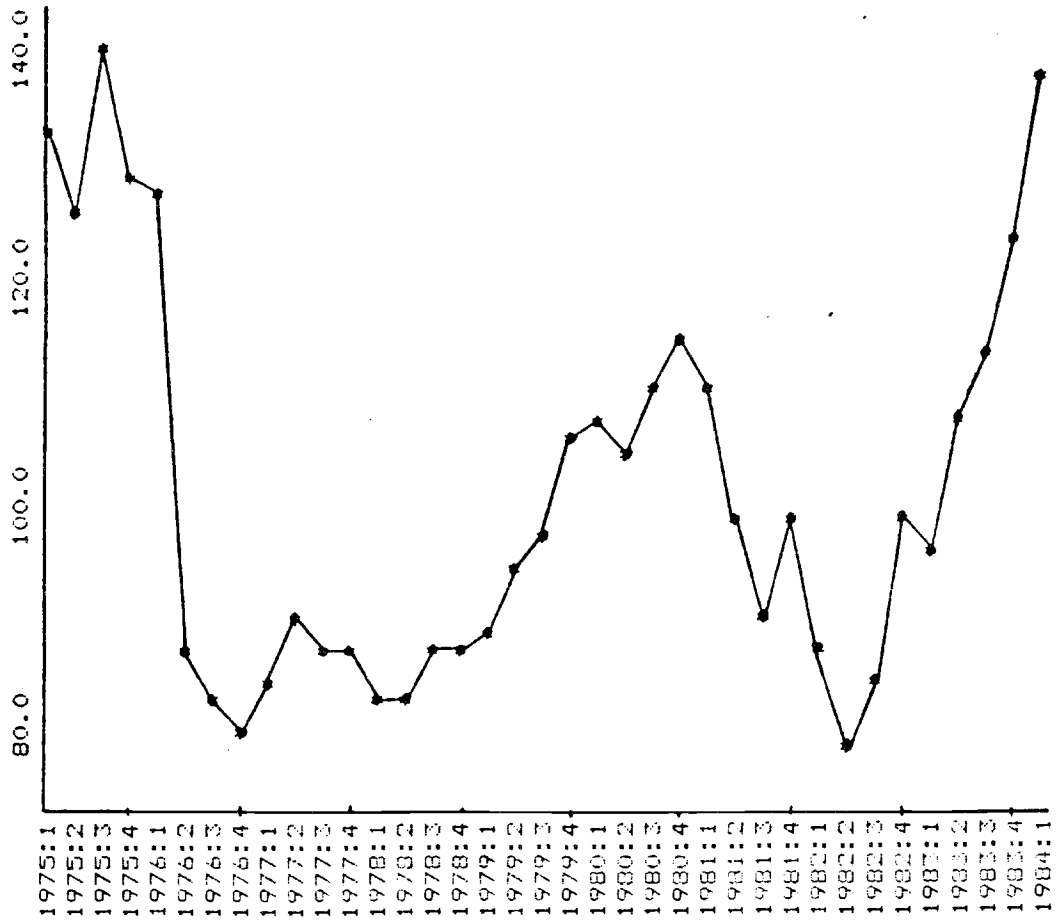
Even though the equation does leave some significant outliers it goes far toward offering a common sense explanation of the apparently wild depreciation behavior. It is interesting to note that neither reserve losses nor inflation, or inflation acceleration, appear to be significant determinants of the rate of depreciation.

III. Real Wages and the Real Exchange Rate

One of the impressive facts of the 1981-84 period is the large variation in real wages. Figure 8 shows once more the real wage in manufacturing. The Figure brings out the gradual real wage gains in 1977-80, following the large initial cut. Then, already under Martinez de Hoz but particularly under Sigaut and Alemann real wages decline reaching their bottom in the second quarter of 1982. From thereon they

FIGURE 8

THE ARGENTINIAN REAL WAGE
(Index 1980-82 = 100)



show a gain of fully 70 percent to their 1984:I levels. And, of course, the rise may still be continuing, given Alfonsin's commitments.

An interesting puzzle raised by the real wage behavior is the following: We know that in the 1982-84:I period the real exchange rate - WPI of imports relative to the WPI of domestic, non-agricultural goods- did not deteriorate significantly if at all. Yet during that period real wages increased by 70 percent in terms of the CPI and the product wage in terms of non-agricultural,domestic goods rose 58 percent. Where is the leeway for real wages to rise that much without generating a deterioration in competitiveness?

A likely explanation goes as follows. We define in equation (1) the real wage as the money wage deflated as the CPI. The latter is a weighted average of non-agricultural domestic prices (PD),import prices (PM), agricultural prices (PA) and prices of goods supplied by the public sector (PS)as shown in equation (2):

(1) $w = W/CPI$

(2) $CPI = CPI(PD,PA,PM,PS)$

(3) $PD = aW(1+r)$

Equation (3) shows the price of domestic goods as the unit labor requirement, a, multiplied by the money wage (W) and the financial cost where r is the effective real cost of capital. Combining equations (1) to (3) we obtain an equation for the real wage:[1]

(4) $w = w(PA/PM,PM/PD,PS/PD,a(1+r))$

Equation (4) shows that the real wage declines if agricultural prices rise relative to import prices. A real depreciation, a rise in PM/PD, likewise leads to a decline in real wages as does a rise in the real price of public sector goods. A rise in labor productivity, 1/a, or a

fall in the real financial cost raises real wages. The model thus identifies three key relative prices, as well as real financial costs as determinants of the real wage. Equation (4) could be further developed by expressing PA/PM in terms of the external terms of trade, import tariffs and export taxes. Similarly PS/PD might be expressed in terms of the average subsidy rate of public sector goods. In these terms a rise in the public sector subsidy would raise real wages, higher export tariffs on agricultural goods or lower import tariffs, likewise, would lead to increased real wages.

It is clear that the real wage expression in (4) has room for variables other than the real exchange rate PM/PD. Moreover, these other variables have moved significantly during the period and hence may help explain why the real exchange rate and real wages show only a correlation coefficient of -.50 for the 1981-84:1 period. At the same time these changes can explain why the CPI fell by nearly 35 percent relative to the WPI since early 1981.

The discussion of real wages already shows that income distribution between workers and producers of agricultural goods is tied up in the question. Compensated real depreciation for example, raises the real prices of imports in terms of agricultural goods while improving the budget through increased tax revenue and lowering real wages. By contrast, removal of import tariffs raises real wages and might worsen the budget while raising real prices to agriculture. Gaining real wage growth consistent with no deterioration of the real exchange rate clearly means either a deterioration in the world real price of agricultural goods or else a commercial policy that redistributes income away from

agriculture. Such a policy can, of course, worsen significantly the external balance.

The variables that influence the link between real wages and the real exchange rate have,indeed, changed significantly over the period. Table 7 shows the behavior of the average rates of export taxes, the real prices of public sector goods, the terms of trade and the real interest rate. The large movements in these variables make it clear that we should nopt expect anty simple relation between real wages and the real exchange rate. But it also means that a simple Rodriguez-Sjaastad real exchange rate equation referred to above is bound to be seriously misspecified.

Table 7 Determinants of the Real Wage-Real Exchange Rate Linkage

	1979	1980	1981	1982	1983
Export Duty (%)*	0.3	0.7	2.2	4.6	12.6
Real Public Sector Prices (1980-82=100)	94	100	110	89	97
Terms of Trade (1980-82=100)	136	101	100	100	114
Real Interest Rate (%)**	-4.6	12.7	25.3	2.4	-22/44

*Export Duties as a fraction of exports. **Free active rate and,for 1983,controlled and free rate respectively.
Source: Indicadores de Coyuntura and Carta Economica

There is another relation that we do not explore here in detail but that is worth noting. There appears to be strong empirical linkage between the real wage--wages deflated by the CPI--and manufacturing employment. The relation suggests that increased real wages have quite plausibly an expansionary impact on spending and production even within the current quarter. Interestingly the expected negative link between the product wage and employment does not appear in a striking way in the

data. The link between real wages and output is of course a critical issue for stabilization policy: attempts to control real wages in order to bring the budget under control have immediate adverse effects on output and employment.

IV. External Debt

The external debt situation is highly confusing because data are almost as sketchy as debt service. Three available sources offer the information shown in Table 9. The data come from Morgan Guaranty, the Banco Central de la Republica Argentina and the Bank for International Settlements.

Table 9 Argentina Gross Total External Debt
(Billion $US, December 1983)

	Total Debt	Debt To Banks	Debt/Export Ratio
Morgan Guaranty	38.5	27.0	4.8
BCRA	43.4	NA	5.4
BIS	NA	23.4	NA

We take as given that the debt, including arrears, is around $ 40 billion, 75 percent of which is owed to banks. The rest involves supplier credits and claims of official agencies. Official reserves at the end of 1983 amounted to $ 2.8 billion and arrears stood at $2.3 billion. Another important aspect of the debt is that it has a very short maturity. The BIS estimates that in mid-1983 more than half the bank debt of Argentina had a maturity of less than one year and 60% a

maturity of less than two years. There is accordingly not only a problem of debt service but also of amortisation.

The debt service problem is simple and obvious. In 1983 net financial services in the balance of payments showed a deficit of $ US 5.4 billion. This stood against a non-interest surplus of of $ US 2.9 billion. The non-interest surplus thus pays about half the debt service. The problem is how to cope with the other half. Of course, Argentina is not alone in this position, most Latin American countries are unable to service their debts entirely out of current earnings and, following the drying up of automatic capitalisation through fresh money, have been muddling through. Argentina is special in that she has allowed arrears to develop in an agressive fashion, even to the point of testing the NY banks ability to take losses in their quarterly statements. Her ability to do so stems in part from a large trade surplus and some reserves, in part from an indecisiveness of the lenders who cannot quite decide how to think about so much independence.

The confusion of the debt issue is increased by the fact that Argentinian residents conspicuously own assets abroad. Indeed that same banks that seek repayment of debts from the Argentinian government are the depositaries of Argentina's private capital flight. The data are incomplete but even so they tell an obvious story: In December 1983 banks in the major lending countries had claims of $23.4 billion on Argentina. With only partial reporting liabilities of these banks to Argentina amounted to $6 billion. These liabilities do not include the securities or real estate in which Argentinians have invested on a large scale. A significant part of the gross external debt is thus matched by private

Argentinian assets abroad. The debt crisis, in that perspective is an inability of the Argentinian government to control those foreign assets.

Assuming that policy makers in Argentina do pursue a deliberate strategy of building up arrears to develop a negotiating position, what can Argentina hope to achieve? A mild course is to bargain for longer terms, smaller spreads, and fewer strings. None of this is outrageous and, given the complete impossibility of actually retiring, as opposed to only servicing the debt, this is a likely course of events. Interest capitalisation that now is actively discussed appears a plausible step in this direction.

An alternative, much more confrontational option is to call for a complete renegotiation of the debt on concessional terms. The banking community and policy makers in the U.S. are not prepared, it would appear, to entertain such a possibility. European bankers, however, have advocated a low level interest cap at say 7 percent. With such a cap interest charges in excess of the cap are automatically capitalized. This is, of course, what has been effectively been happening with countries such as Mexico or Brazil where part of the interest has been paid and part has been borrowed. An explicit cap would render that process merely automatic thus replacing the periodic rescheduling. With a cap the debt servicing is lightened and the question whether the debt will ultimately be repaid is conveniently postponed to infinity.

V. Where Now?

Argentina is in the process of negotiating a new stand-by agreement with the IMF. If the events at Punta del Este are an indication she appears to have turned away from radical debt options. Raul Prebisch,

who is advising the President, and who in Argentinians domestic policy has always been conservative, has publicly called for wage discipline. A proposal is being considered for delaying ex-post adjustments of wages to a quarterly basis, thus cutting the real wage. But there is another strand that wants to hold the Alfonsin government to a commitment to increase further real wages. What direction will have the upper hand and will external considerations be the deciding factor?

The external debt situation, as Mr.Grinspun rightly remarked, is more a bankers' problem than a problem for Argentina. Argentina is running a trade surplus and has reserves. She can easily sell much of her exports in world markets and does not have a critical import dependence that would make it easy to enforce debtor discipline. The external situation by itself will therefore not be the deciding factor unless banks unwisely make it such, or unless an explicit political decision is made to use the debt issue to gain a broader domestic support for recovery and stabilisation - the "fortress Argentina" model.

The inflation problem, and with it the real wage-budget deficit link are much more likely to force a change of direction. The real wage gains of the past half year will lead to a dramatic deterioration of the budget since about 75% of non-interest outlays are for wage payments. Increased real wages then mean increased deficits and an increased financing requirement. Since external financing has stopped there is then a need to finance the budget domestically and that means largely inflationary money creation and still higher inflation. So far the non-interest current account is in a comfortable surplus so that, not counting the growing arrears, increased deficits that spill-over into external deficits can be financed without a crisis. That means inflation is the

key issue. More precisely, the question is what level of inflation is high enough to give Alfonsin a mandate for a 180 degrees turn toward orthodoxy. But firm orthodoxy is there a willingness for restraint and a disposition to use incomes policy rather than monetarism to control inflation.

In concluding it may be worth looking ahead to compare Alfonsin's task with that encountered by Martinez de Hoz in 1976. Table 8 shows data relevant to that comparison.

Table 8 Comparing the Beginning of Two Stabilisation Efforts

	Inflation	Budget (% of GDP)	Output (% of Peak)	Debt/Export Ratio
1976	443	12.9	98.7	2.1
1983	446	21.5	91.3	5.0

Today, more than seven years since the time stabilisation started, the chances for success certainly look as poor as they can be. Inflation and the budget are as bad as they were in 1983. But output is much lower which argues against austerity and the external debt is a liability altogether insignificant in 1976. The comparison then suggests pessimism.

TABLE A.1

	W/CPI	W/PD	PM/PD	PA/PD	GDP	MGDP	INFM	INFQ
1978:1	84	72	126	109	94	100	218	171
1978:2	84	74	114	110	98	106	180	189
1978:3	89	79	103	113	100	109	124	179
1978:4	89	80	93	120	100	113	188	167
1979:1	90	84	83	111	102	117	201	169
1979:2	95	87	83	110	106	122	151	157
1979:3	99	89	79	120	106	117	173	169
1979:4	108	101	79	109	107	117	73	149
1980:1	109	111	81	104	103	114	105	123
1980:2	106	112	78	106	104	114	99	113
1980:3	111	120	77	107	108	116	64	91
1980:4	116	132	76	93	110	111	90	89
1981:1	112	133	79	84	103	107	81	82
1981:2	101	112	93	85	104	99	160	89
1981:3	92	94	102	94	96	89	167	113
1981:4	99	98	97	101	94	89	134	123
1982:1	89	84	106	97	95	93	149	147
1982:2	80	70	124	102	94	85	85	130
1982:3	86	63	143	116	94	92	497	156
1982:4	100	73	144	112	95	94	273	203
1983:1	97	69	139	108	96	85	362	245
1983:2	108	80	137	106	97	98	296	314
1983:3	114	84	121	121	97	102	602	339
1983:4	124	91	126	112	95	98	630	404
1984:1	139	105	133	114	NA	NA	554	446

Note: Definitions: W-salario nominal, CPI-consumer price index
PD-domestic,non-agricultural wholesale price
PA-agricultural wholesale price
PM-wholesale price index of imported goods
GDP - real gross domestic product
MGDP- real gross manufacturing product
INFM- month-to-month inflation,annualized
INFQ- inflation,quarter over same quater of previous year

W/CPI is the real wage,W/PD the product wage and PM/PD the real exchange rate. The indices in the first six columns all have a base 1980-82=100.

Source: Indicadores de Coyuntura and IFS

Table A.2

	Prem	RFRate	RRate	RDRATE
1978:2	0	0.5	0.5	-1.1
1978:3	0	1.9	1.9	0.8
1978:4	0	-1.0	-1.0	-1.9
1979:1	0	-1.9	-1.9	-2.6
1979:2	0	-1.1	-1.1	-1.7
1979:3	0	-0.7	-0.7	-1.2
1979:4	0	4.0	4.0	3.3
1980:1	0	1.9	1.9	1.0
1980:2	0	0.4	0.4	-0.3
1980:3	0	3.2	3.2	2.2
1980:4	0	0.8	0.8	-0.1
1981:1	0	2.5	2.5	1.4
1981:2	16	-1.5	-1.5	-3.5
1981:3	42	3.0	3.0	1.0
1981:4	35	0.5	0.5	-0.9
1982:1	0	-0.3	-0.3	-1.3
1982:2	59	0.6	0.6	-0.7
1982:3	111	-10.0	-11.4	-12.2
1982:4	54	0.7	-3.3	-4.0
1983:1	35	0.7	-2.4	-3.1
1983:2	22	4.4	0.8	-0.2
1983:3	71	0.5	-4.5	-5.3
1983:4	40	3.2	-4.3	-4.2
1984:1	31	2.2	-0.4	-1.3

Note: Definitions: Prem- premium (%) of the parallel dollar rate over the official rate
RFRate-real free loan rate,% per month
RRate -real regulated loan rate
RDRate-real deposit rate

Source: BCRA and IFS

FOOTNOTES

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[1]Suppose the CPI has a Cobb-Douglas form so that in logs it can be written as follows: logCPI= blogPD+clogPA + dlogPM + flogPS where b=1-c-d-f.Using that restriction we can with some manipulation derive an expression for the real wage: log(W/CPI)=-clog(PA/PM)-(c+d)log(PM/PD)-dlog(PS/PD) + v,here v=log(a(1+r)) denoting the combined effect of productivity and financial costs . Now let e=log(PM/PD) denote the real exchange rate. Furthermore assume public sector prices are proportional to domestic prices: PS =KPD where K denotes one less the rate of implicit subsidy and k=logK for notational convenience. Suppose,too, that there is an export duty on agricultural goods so that the domestic price is linked to the world price by the relation PA*=TPA where t=logT denotes the log of one plus the rate of export duty. Finally denote the international terms of trade p*=log(PA*/PM*).

Substituting the shortcut notation in the real wage equation we have: log(W/CPI)= ct -cp*-(c+d)e- dk-v. The equation shows that increased export taxes or increased public sector subsides raise real wages. By contrsast a terms of trade improvement lowers real wages as does a real depreciation. Increased financial costs or reduced productivity, likewise,reduce the real wage.

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