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THE COLOMBIAN 1965-66 LIBERALIZATION EPISODE*

Carlos F. Diaz-Alejandro

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Chapter VII

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The purpose of this chapter is to examine in some detail the Colombian attempt to eliminate administrative controls over imports and over other transactions leading to purchases of foreign exchange, during 1965-66. Previous chapters have already touched upon not only that liberalization attempt, but also on the background to it, and on its aftermath. Here we will highlight aspects of those experiences which have not been discussed earlier, or which are particularly important to understand why shortly after imports had been almost fully liberalized by October, 1966, a return to drastic import exchange control was announced late the next month.

Previous chapters have quantified some key relationships in the Colombian economy which will provide a useful framework for analyzing particular cyclical situations. However, nothing has been done so far to quantify the dynamics of Colombian inflation, a quantification which is also part of the necessary framework for short-run analysis. This will be the first task of this chapter, which then will proceed to discuss the relevant background to the 1965-66 liberalization episode, the episode itself and its sweet-sour aftermath.

The Dynamics of Inflation

As in almost all countries, developed and developing, Colombian balance of payments policies have interacted with those in the monetary and fiscal fields, which are aimed at obtaining steady growth near "full capacity" and without much inflation. Programs for reducing the rate of inflation have been typically accompanied in Colombia by policies to improve the balance of payments, and/or improve economic efficiency by relying less on administrative controls over imports or foreign exchange transactions. Desirable policies, particularly regarding greater exchange rate flexibility, were frequently avoided or attacked on the grounds of their alleged inflationary impact. It is therefore important to obtain some idea about the major factors influencing Colombian inflation, and about whether inflation during key cycles was more or less "normal," in the sense of following patterns established for the whole period.

The approach pioneered by Arnold C. Harberger in the study of inflation dynamics[1] will be useful here. That approach uses multiple regression analysis to explain percentage rates of change of different measures of the price level as a function of rates of change in several other variables, assumed to be independent. The latter typically include measures of the money supply or total banking credit, wages, the exchange rate, etc. Alberto R. Musalem has applied this technique for the Colombian case, with interesting results.[2] What follows builds on his work, although modifying it to better suit the purposes of this chapter, and covering a different period.

The best results obtained after considerable, but far from exhaustive experimentation are presented in Table VII-1. The basic data, and data sources and elaborations, are listed in the appendix to this chapter.

Note first that while the dependent variables are quarterly percentage changes, the money, wage, and supplies variables represent yearly changes, while that for the import exchange rate represents a quarterly change also. The lagged money and supplies variables also represent non-overlapping yearly

Table VII-1

Regressions Explaining Quarterly Percentage Increases in Price Levels, 1958 Through 1969

(T-statistics in parentheses)

	Cost of living index	Wholesale price index	Wholesale price index, excluding foodstuffs
Constant	-2.87 (1.81)	-2.20 (2.01)	-0.78 (0.83)
Money plus quasi money (yearly change)	0.08 (1.22)	0.08 (1.75)	0.01 (0.15)
Lagged money plus quasi money	0.02 (0.37)	0.05 (1.03)	0.10 (2.59)
Average import exchange rate (quarterly change)	0.08 (1.52)	0.08 (2.24)	0.11 (3.32)
Lagged average import exchange rate	0.13 (2.45)	0.13 (3.50)	0.12 (3.96)
Wage rates (yearly change)	0.19 (4.60)	0.12 (4.16)	0.05 (2.20)
Real supplies (yearly change)	-0.03 (0.87)	-0.04 (1.89)	-0.06 (2.92)
Lagged real supplies	0.01 (0.44)	-0.01 (0.67)	-0.03 (1.61)
First quarter dummy	1.41 (1.48)	0.52 (0.79)	0.61 (1.09)
Second quarter dummy	3.43 (3.66)	2.18 (3.38)	0.71 (1.28)
Third quarter dummy	-3.02 (3.14)	-0.72 (1.08)	0.65 (1.15)
R^2	0.75	0.72	0.71
D-W	1.97	1.42	1.71
F-test	10.98	9.71	9.12

changes, while the lagged exchange rate variable remains a quarterly change. In other words, to explain, say, the change in the cost of living index between the first quarter of 1958 and the last quarter of 1957, the relevant regression uses the changes in money plus quasi money between the first quarter of 1958 and the first quarter of 1957, and the change in the same variable between the first quarter of 1957 and the first quarter of 1956. It also uses the change in the import exchange rate between the first quarter of 1958 and the last quarter of 1957, and the change for that variable between the last and the third quarter of 1957. It is not surprising that the different independent variables show varying lag structures; further experimentation would probably yield even further differentiation.

The variables are mostly self-explanatory. Money plus quasi money worked better than just money or total credit; the wage rates refer to average manufacturing hourly money wage rates. The real supplies variable is a bit unusual, as it only includes merchandise imports plus non-coffee agricultural and livestock output. The combination of these two strategic supply sources performed better in the regressions than others relying on more aggregated variables, such as the gross domestic product.

The fits are sufficiently good for our purposes, even though the regressions do not attempt to take into account expectation variables. Trends in the world price level are also ignored, with some justification for the period analyzed. As in the Musalem results, the story told does not support either extreme "monetarist"[3] or extreme "structuralist" explanations of the Colombian inflation. The regressions also show that changes in the import exchange rate do influence significantly changes in the price level. That influence is also quick (yearly changes for the exchange rate performed much worse), and of a quantitative weight of importance. A ten percent devaluation would be expected to increase prices by about two percent, ceteris paribus, according to these equations. It is noteworthy that when the 1956-58 period is included in the regressions, the exchange rate variable performs worse. The very large devaluations of those years affected the price level less than those of later years, for reasons which are not completely clear.[4] At any rate, even the 1958-69 results show that the extreme claims often heard in Colombia, which imply a coefficient of one for the sum of the exchange variable coefficients are exaggerated. The combination of short lags for the price effects of devaluations, somewhat longer ones for wage rate changes, and much longer (and less clear) ones for money, in turn influenced by fiscal and monetary policies, suggests an explanation for the popular but exaggerated identification of devaluations with inflation.

The 1962 Devaluation: Some Background

It will be recalled that the severe balance of payment crisis faced by Colombia after the coffee boom of 1954-56 collapsed was handled by a combination of a sharp devaluation, plus a tightening of import controls, and austere fiscal and monetary policies. Between the first quarter of 1957 and the first quarter of 1959, the average import exchange rate rose by a remarkable 175 percent, while money plus quasi money rose by a modest 23 percent. Money wage rates, in turn, rose by 29 percent. Thanks to this combination of policies, price increases were kept way below the exchange rate variation, yielding a substantial change in relative prices. The price increases were as follows:

Cost of living:	+32.4
Wholesale price index:	+31.9
Wholesale price index, excluding foodstuffs:	+36.3

It is worth noting that while Colombia's stabilization effort was regarded sympathetically by foreign creditors, in those years there were no foreign credit facilities as flexible as the "program loans" available after 1961. A good deal of civic enthusiasm, which viewed from the early 1970s looks almost naive, more than made up for the scarcity of foreign assistance. For the period 1957 through 1960, changes in Colombian gross foreign exchange reserves follow very closely movements in the balance of the merchandise trade account, which after a deficit of US $ 106 million in 1956, yielded an accumulated surplus of US $ 147 million during the three years of 1957-59, in spite of the fall in coffee prices.

By 1959 there was eagerness to resume a faster pace of growth; real GDP during 1958 was less than 5 percent above that reached in 1956, indicating a fall in *per capita* product. Merchandise imports during 1958 were nearly 40 percent below the 1956 levels. Inevitably, development-minded Colombians pressed for more expansive public policies. The new chapter (volume?) in interamerican relations started with the triumph of the Cuban Revolution had just been opened, and there were high hopes in Colombia for a large volume of aid from the U.S.

It has been noted that in spite of the substantial increase in the real import exchange rate between 1956 and 1959, administrative controls over imports were strengthened. In January 1959, in fact, a new Law institutionalized the revised controls. In May 1959 a more protectionist custom tariff was also put into effect. During 1957 and most of 1958, an essentially flexible exchange rate policy was followed. However, since about August 1958, the certificate import rate was kept at 6.4 Pesos, while the "free" rate fluctuated slightly around 8 Pesos, as many influential voices called for "consolidating" monetary stability by adopting less flexible exchange rates. Indeed, as a result of changes in the average mix of certificate and free rates charged to importers, the average nominal import exchange rate appreciated by almost 8 percent comparing the first quarter of 1959 with the second quarter of 1958.

By the end of 1959 this premature consolidation and appreciation of the average nominal import exchange rate had carried it to the level of the pegged certificate rate, at 6.4 Pesos. The expansionary fiscal and monetary policies were thus launched just as the import rate was being pegged.

Much to his credit, the Minister of the Treasury at that time, Dr. Hernando Agudelo Villa, quickly saw the dangers of that combination, and during March 1960 he and his colleagues began experimenting with what later was to be called a "crawling peg," moving the certificate rate by less than 5 percent to 6.7 Pesos. Unfortunately, this wise policy was met by heavy opposition, particularly from the then senator Dr. Carlos Lleras Restrepo, who, ironically, was to institutionalize the "crawling peg" under his Presidency, during 1967. In a remarkable and friendly debate, on April 4, 1960, Lleras Restrepo and Agudelo Villa discussed this and other aspects of the government economic policies (Lleras Restrepo was already regarded as the Liberal politician most knowledgeable in economics, and had been the main author of Law 1 of 1959, institutionalizing the new import and exchange control system).[5]

Lleras Restrepo challenged the notion that large imports during the first quarter of 1960 indicated the need for further devaluations. He warned against unifying the certificate and "free" rates by raising the certificate rate to the level of the latter (which was only about 6.9 Pesos at that time), and said such action would be "incomprehensible." Without hardly mentioning minor exports, he expressed the fear that the new policy would lead to gradual devaluations which would grow "...as the poet Jorge Rojas says, more or less insensibly, like the roses."

The reply by Agudelo Villa reads on the whole quite well, particularly in light of what came later. But politically the debate was finished after the Lleras blast. The certificate rate was to remain at 6.7 Pesos until November 1962, when after much fruitless and wasteful resistance it was raised by more than 34 percent to a new pegged level of 9 Pesos. Proposals for greater flexibility were again rejected. At the time of that new devaluation, Dr. Carlos Lleras Restrepo was widely regarded as the person in Colombia most to credit (or blame) for such an exchange rate adjustment.

The Impact of the 1962 Devaluation

The failure in achieving their own objectives of policies adopted in November 1962, early in the Presidency of Dr. Leon Valencia, can be easily summarized by the following indicators, showing percentage increases between the third quarter of 1962 and the third quarter of 1963:

Cost of living:	35.4%
Wholesale price index:	29.9
Wholesale price index, without foodstuffs:	27.0

Average nominal import exchange rate:	34.3%
Money plus quasi money:	21.0
Hourly wage rates:	40.6

The price level increased roughly in the same proportion as the nominal devaluation, in sharp contrast with the 1957-59 experience. Based on this unfortunate incident, many in Colombia reached the conclusion that devaluation "could not work." It may be worthwhile to look with greater detail at this inflationary episode, using the regressions developed in Table VII-1.

Table VII-2 presents actual and predicted quarterly price changes from 1960 through 1964; the predictions are those of the regressions in Table VII-1. It may be seen, first of all, that the period 1960 through 1962 was one of relative price stability, in spite of the more expansionary policies adopted since 1959. Real GDP rose by 4.3, 5.1 and 5.4 percent, in 1960, 1961 and 1962, respectively. Note, however, that by 1962 all three regressions were forecasting higher than realized rates of inflation; that was the year when attempts to maintain the 6.7 Pesos rate became most intense.

When devaluation came, after all, late in 1962, the following inflationary burst, after an apparently mild price response in December 1962, was concentrated in the first semester of 1963 beyond which the rate of price increase decline sharply. Note that most, but not all, of that price explosion is predicted by our "normal" regressions; for the whole of 1963 the regressions still underestimate the actual increase in the price level.

A more exact idea of the explained and unexplained sources of the inflationary burst of the first semester of 1963 is given by Table VII-3, which decomposes predicted price increases according to the contemporary and lagged values of the independent variables. The three equations yield

Table VII-2

Actual (A) and Predicted (P) Quarterly Changes
in the Price Level, 1960 Through 1964

(Percentages; averages for whole years in parentheses)

	Cost of Living		Wholesale Price Index		Wholesale Price Index, without foodstuffs	
	A	P	A	P	A	P
1960-1	1.99	1.42	0	0.59	0.33	1.10
-2	2.71	3.45	2.59	2.12	1.33	1.59
-3	-0.88	-0.47	0.19	0.76	0.89	1.92
-4	1.77	1.62	1.45	0.80	0.83	0.59
(1960)	(1.40)	(1.51)	(1.06)	(1.07)	(0.85)	(1.30)
1961-1	3.48	3.91	2.05	1.90	1.19	1.48
-2	7.71	5.64	3.69	3.38	2.13	0.93
-3	-3.91	-2.08	-0.41	-0.02	0.67	1.07
-4	-0.81	1.37	0.05	0.90	0.57	0.32
(1961)	(1.62)	(2.21)	(1.35)	(1.54)	(1.14)	(0.95)
1962-1	1.64	2.67	0.27	1.63	0.97	1.08
-2	1.61	5.42	1.49	3.91	1.43	2.13
-3	0	-1.38	-0.09	0.67	1.41	2.03
-4	1.59	3.90	2.09	3.56	2.32	3.62
(1962)	(1.21)	(2.65)	(0.94)	(2.44)	(1.53)	(2.22)
1963-1	13.54	10.48	11.51	8.24	12.79	8.19
-2	13.99	13.72	12.20	10.30	8.09	7.27
-3	3.02	4.13	1.71	4.32	1.79	3.65
-4	7.23	5.39	4.18	3.98	1.93	2.64
(1963)	(9.45)	(8.43)	(7.40)	(6.71)	(6.15)	(5.44)
1964-1	3.28	4.26	4.97	2.89	2.15	1.86
-2	10.23	5.49	6.11	4.29	1.66	1.79
-3	-6.80	-1.32	0.21	1.19	1.76	2.34
-4	-1.63	1.76	-0.12	1.63	1.14	1.33
(1964)	(1.27)	(2.55)	(2.79)	(2.50)	(1.68)	(1.83)

Table VII-3

Share of Actual Increases in the Price Level During the First and Second Quarters of 1963 "Explained" by Variables in Regressions of Table VII-1

(Percentages of actual total increases)

	Cost of living Regression	Wholesale price index Regression	Wholesale price index, excluding foodstuffs, Regression
Money plus quasi money	12.3	18.3	21.6
Import exchange rate	22.4	25.8	31.0
Wage rates	53.8	38.9	20.1
Real supplies	2.5	2.3	2.6
Seasonal factors	-3.3	-7.2	-1.2
Total: predicted inflation as percentage of actual one	87.8%	78.1%	74.1%
Actual inflation (sum of first and second quarters)	27.5%	23.7%	20.9%

remarkably similar predictions as to the absolute inflation to be expected from the change in the nominal import rate, all falling within the range of 6.1 to 6.5 percent inflation (the higher share in Table VII-3 for the inflationary contribution of the exchange rate to the increase in wholesale prices excluding foodstuffs is partly compensated by the lower inflation shown by that index). Clearly other factors aggravated the inflationary pressure, although for wages and monetary expansions the different regressions yield different quantitative estimates (particularly for wages).

During both 1961 and 1962 the Colombian national government incurred in large budget deficits, which were financed mainly by bank credit. Current revenues, which in 1960 were 95 percent of expenditures, fell to 77 percent of those expenditures in 1961, and to 72 percent in 1962. Net banking credit to the government, which at the end of 1960 represented 20 percent of all credit, accounted for 33 percent of the increase in all such credit between the end of 1960 and the end of 1962.[6] In the context of weak monetary policy tools, described in earlier chapters, such fiscal policy was an important factor in the expansion of 42 percent registered in money and quasi money between the last quarter of 1960 and the last quarter of 1962.

A legitimate preoccupation at a time of devaluation is how much the burden of adjustment will fall on the employed working class via decreases in real wages. Our wage rate series shows an upward trend in real wage rates (nominal rates deflated by the cost of living index) throughout 1960, 1961 and 1962; in spite of the devaluation, the upward trend continued during the early months of 1963. For the whole of 1963, real wage rates were 7 percent above those for 1962, although toward the end of 1963 a downward tendency was visible, which continued in 1964. For the whole of

1964, real wages were 3 percent below those of 1963, and about 2 percent above those of 1962. Public policy, under intense trade union and political pressure, had something to do with at least the timing of these movements.

Early in the discussions about a new devaluation, the government pledged to raise wages. Wages were in fact increased abruptly by a national law during the first quarter of 1963, with Congress going beyond the wage concessions suggested by the executive. The quarterly percentage changes in nominal hourly wages during 1962 and 1963 evolved as follows:

1962 - 1	2.1%
- 2	4.1
- 3	5.0
- 4	7.1
1963 - 1	14.1
- 2	12.4
- 3	2.4
- 4	3.0

The wage legislation also provided for an escalator clause, which was later abandoned, with the apparent approval of the trade unions.

According to our regressions, declines in real supplies during early 1963 contributed (slightly) to the inflationary burst. Import licensing had been severely restricted during late 1962, so during the first semester of 1963 the dollar value of merchandise imports was 20 percent below the corresponding period in the previous year. The non-coffee rural GDP practically stagnated between 1962 and 1963, due to bad weather (it rose by 0.7 percent), thus decreasing per capita agricultural supplies. It is quite possible that our clumsy way of taking into account rural real supplies leads to an underestimation of the inflationary impact of supply declines during early 1963. Real GDP as a whole rose between 1963 and 1962 only slightly higher than population growth, by 3.3 percent.

"Normal" seasonal factors should have helped to dampen the inflationary burst. These are mostly related to (the slightly peculiar) Colombian crop and weather patterns, which many have reported as being unusually unfavorable during early 1963, hurting mainly the output of key foodstuffs.[7]

As noted in Table VII-3, the actual inflationary burst went beyond that predicted by the regressions. One may speculate as to the reasons for this overshooting.

A first consideration, totally ignored by the regressions, is the timing of changes in a host of government-regulated prices, in such things as electricity, public transportation, etc., but also in a number of "basic necessities" (milk, sugar, cigarettes) subject to price controls, and other agricultural prices with minimum-prices. During 1962 the government held a strict line on these prices, which may explain part of the residuals of the regressions for 1962. Right after the devaluation, and under advice from international lenders, most of these prices were abruptly readjusted upwards. Early in 1963, for example, public transportation fares were increased between 50 and 75 percent, gasoline prices by 20 percent, and price ceilings on cement, cigarettes, milk and sugar went up between 15 and 20 percent.

More difficult to quantify is the inflationary impact, via expectations, of the <u>manner</u> in which the government went about the devaluation. As it is not unusual in cases of moving an adjustable peg, before the November 20th decision there was considerable discussion of the forthcoming devaluation, and a clear signal of what was to come when on November 7th all imports were temporarily placed on the prohibited list. A politically weak government publicly discussed options as to whether and how to devalue, before November 20th, adding to the climate of uncertainty and speculation.

While the regressions take into account changes in monetary conditions, the peculiar way in which money plus quasi money expanded late in 1962, at the time of devaluation, may have had greater than average inflationary impact, by the expectations it generated. As part of its agreement with the IMF, the government liquidated its sizable floating debt with domestic creditors by using bank credit, beginning in November 1962. As a result, of the total net increase in money plus quasi money between the end of 1961 and the end of 1962, an astounding 78 percent took place during the last two months of 1962. In other words, while money plus quasi money rose by 5.3 percent between December 31, 1961 and October 31, 1962, it rose by 17.4 percent between the latter day and the end of 1962.

After this sketchy review of the 1962 devaluation it can easily be seen why memories of its impact was the major obstacle facing those attempting after that date to use a more flexible exchange rate as a policy tool. The argument that such event is a textbook example of how not to manage a devaluation made little impression among most Colombians, whose feelings were accurately reflected by the then President Leon Valencia, who throughout 1963 and 1964 would warn his economic advisers not to mention the dreadful word in his presence, in spite of continuing balance of payments difficulties.

The 1965-66 Liberalization Episode: Origins and Implementation

The years 1963 and 1964 were melancholy ones for foreign trade policy in Colombia. The nominal import exchange rate was pegged and obviously overvalued, once again, while that for minor exports, one Peso higher, shared those two features (until the last quarter of 1964). Not surprisingly, foreign exchange difficulties continued to plague the economy, while real GDP grew at an average rate of only 4.3 percent per annum during 1963, 1964 and 1965.

Throughout 1964 import controls were progressively tightened, while the drain of exchange reserves from supporting the "free rate" at 10 Pesos become more burdensome. It will be recalled that this rate, applied to minor exports, was pegged at that level right after the November 1962 devaluation of the certificate import rate, under the pressing advice of the IMF, among others. Indeed, and quite incredibly when viewed in retrospect, the IMF urged at that time and throughout 1963 that the rates should be unified <u>at the 9 Peso level</u>, arguing that the 10 Peso rate gave minor exports a privileged position and an unjustified subsidy, while generating inflationary pressures! It should be noted that at that time Colombian officials in the executive branch <u>agreed</u> with IMF, but blamed Congress for the higher rate legislated for minor exports. As can be seen in Tables III-11 and IV-8, during 1963 the net real exchange rate applied to minor exports was below both what it had been in 1962 and what it was to be in 1970; the 1962 and 1970 rates were 15 percent higher than the 1963 rate. Table IV-8, in turn, shows that the real exchange rate applied to imports in 1958 was 24 percent above that for 1963, while the 1970 rate exceeded it by 22 percent.

Most cautiously, late in 1964 members of the "Junta Monetaria" began hinting to an embottled President the need to reconsider exchange rate policy. At that time the President was troubled not only by memories of the 1962 devaluation, but also by a very serious political situation, which included rumors of an imminent coup d'etat. Devaluation advice was severely rebuffed. Nevertheless, on October 1964 the Central Bank stopped supporting the pegged free rate, apparently then less politically sensitive than the certificate rate. The free rate quickly and more or less steadily depreciated, going from an average of 10 Pesos in October 1964 to a high of 19.2 Pesos in August 1965. By late 1964 the IMF was also advising devaluation, and had given up at last its opposition to a dual system including a higher rate for minor exports.

While during the second and third quarters of 1965 the net real exchange rate applied to minor exports reached, thanks to the freeing of the "free" rate,[8] high levels not reached either before or after, by the second quarter of that year the average real import exchange rate fell to its lowest point since early 1957. At that time, such real rate was about one third below the (almost identical) averages for 1958 and 1970. Import control administrators recall with horror the chaotic conditions of licensing during the first semester of 1965; delays and rejections of applications were at levels not seen since 1956-57. The zooming free market rate reflected widespread speculation and capital flight, also stimulated by severe political unrest. At this time, however, the increase in the price level was not particularly severe; the third quarter of 1965 saw a cost of living index 4 percent higher than that for the same period in 1964. The corresponding figure for the wholesale price index was 8 percent, while for that index excluding foodstuffs the increase was 11 percent.

In spite of the severe administrative restrictions on imports, at the end of the first semester of 1965 gross foreign exchange reserves were down to their lowest levels until then of the period since 1957, and were, at

$56 million dollars, only a little more than half of what they had been a year earlier. In this climate, official and public opinion attention first focused on the wild goings-on in the free exchange market. In a strange move, and alleging fears of inflation, at the end of June 1965 the rate applicable to minor exports was divorced from the free rate, and set at 13.5 Pesos, representing a sharp appreciation for minor exporters. The inflation argument, apparently, was related to the fresh need of the Central Bank for buying dollars in the free market to cover its commitment to importers in the certificate market; the loss from buying dollars at 18.8 Pesos (the average free rate in June 1965), and selling them at 9 Pesos was covered simply by printing Pesos. This move, at a time when the need to stimulate new exports was rather obvious, can only be understood given the severe political constraints under which economic policy makers operated. Even then, its wisdom is quite debatable.

Perhaps the best thing which can be said for the 13.5 Peso rate for minor exports is that once it was created, it provided a "plausible" and sound alternative to both the 9 Peso certificate rate (note that it was exactly 50 percent higher), and the eye-catching but thin free market. Indeed, allegedly the President was finally persuaded to go along with the *de facto* gradual devaluations of the average import exchange rate, started together with the import liberalization program in September 1965, by the argument that relative to the free market rate, the move toward 13.5 was really a *revaluation*, which would also bring down the free rate. Public opinion fixation with antics of the free rate had become such that one cannot be sure whether the acceptance of that thesis represented economic wishful thinking or the wiles of a subtle politician with a short-term horizon. In fact, between July and October 1965 the free rate declined.

On September 2, 1965, the certificate market was divided into a preferential and an intermediate section, with rates of 9 and 13.5 Pesos, respectfully. Imports were to be transferred gradually from the first to the second section, with the less "essential" imports going first, while simultaneously freeing them from administrative controls. Changes in import duties were also contemplated as part of the liberalization package; previous deposits were to fade out. The prohibited list, however, was to be maintained for the time being; capital goods imports were also expected to remain under licensing as part of the controls of development plans.

Several of the architects of the liberalization program, including IMF staff members, were from the start doubtful as to whether the 13.5 Peso rate was high enough. Originally, a 14 Peso rate had been mentioned, but the appeal of the already existing 13.5 Peso rate was too strong to resist. More importantly, the IMF and others now assumed that a more flexible exchange rate policy would be followed, and that if the 13.5 Peso rate were to prove insufficient once the transfer from 9 had been completed, further gradual adjustments would take place.

Regardless how a 13.5 Peso rate looked in September 1965, the inflationary burst of late 1965 and the first semester of 1966 robbed the gradual nominal devaluation of a good share of its real effect, although matters were much better in this respect than following the 1962 devaluation. By the time the new President, Dr. Carlos Lleras Restrepo, assumed office in August 1966, virtually all import payments were being made at 13.5 Pesos per dollar, while nearly all (non-prohibited) imports were on the free list.

The price level, however, was during the third quarter of 1966 substantially above that for the third quarter of 1965 (21 percent according to the cost of living index, 17 percent according to the wholesale price index, and 19 percent according to wholesale prices excluding foodstuffs).

Table VII-4 presents changes in the price level, actual and those predicted in the regressions of Table VII-1, for 1965 through 1969. It may be seen that the last quarter of 1965, and the first semester of 1966 witnessed sharp price increases, which were however quite "normal," in the sense that they were predicted to a very large extent by our regressions. This may be more clearly seen in Table VII-5, which also attributes to the different independent variables shares of the observed inflation, according to their coefficients and actual changes, contemporary and lagged.

As in the predictions for the first semester of 1963, the three regression equations forecast very similar absolute inflation rates forthcoming from the change in the average import exchange rate, most of which occurred during the last quarter of 1965. Such rates are 7.6, 7.6 and 8.1 percent. Inflationary monetary factors appear more important than for the first semester of 1963, while increases in nominal wage rates are less so.

Contrary to the case of the 1962 devaluation, national government finances do not appear to have been the major culprit for the hefty rates of expansion in money and quasi money observed in late 1965 and early 1966. Current revenues accounted for 87 percent of government expenditures in 1964 and for 91 percent in 1965. As liberalized imports rose, custom revenues (particularly from duties on autos) expanded sharply, and during 1966 the central budget showed a small surplus. Monetary expansion, which

Table VII-4

Actual (A) and Predicted (P) Quarterly Changes in the Price Level, 1965 Through 1969

(Percentages; averages for whole years in parentheses)

	Cost of Living		Wholesale Price Index		Wholesale Price Index, without foodstuffs	
	A	P	A	P	A	P
1965-1	2.09	3.29	0.56	2.37	1.98	2.85
-2	3.42	4.81	3.90	4.11	2.51	3.80
-3	0	-0.92	3.16	1.76	5.40	4.02
-4	5.79	4.81	5.69	5.19	6.23	6.49
(1965)	(2.83)	(3.00)	(3.33)	(3.36)	(4.03)	(4.29)
1966-1	7.81	6.83	5.02	6.03	4.90	6.13
-2	7.97	5.18	5.25	3.78	3.28	2.22
-3	-1.34	-2.08	0.45	0.17	3.08	1.70
-4	2.04	0.88	1.91	0.91	2.57	1.31
(1966)	(4.12)	(2.70)	(3.16)	(2.72)	(3.46)	(2.84)
1967-1	2.67	2.41	1.44	1.30	1.78	1.76
-2	3.25	4.63	1.58	3.40	1.95	2.56
-3	-0.63	-1.10	1.58	0.88	2.06	2.77
-4	1.27	2.22	1.31	1.88	0.90	2.08
(1967)	(1.64)	(2.04)	(1.48)	(1.87)	(1.67)	(2.29)
1968-1	2.50	3.23	1.60	2.16	1.47	2.17
-2	2.44	4.42	2.93	3.28	1.72	1.67
-3	-1.19	-2.03	0.17	0.55	0.48	1.55
-4	1.81	0.90	0.37	1.20	1.40	1.03
(1968)	(1.39)	(1.63)	(1.27)	(1.80)	(1.27)	(1.61)
1969-1	2.37	2.82	1.64	2.16	2.53	2.53
-2	6.47	4.77	3.25	3.31	2.96	1.94
-3	1.95	-1.59	1.23	0.46	2.32	1.89
-4	1.76	1.82	2.82	1.65	1.59	1.55
(1969)	(3.14)	(1.96)	(2.24)	(1.90)	(2.35)	(1.98)

Table VII-5

Share of Actual Increases in the Price Level During the Last Quarter of 1965 and the First Semester of 1966 "Explained" by Variables in Regressions of Table VII-1

(Percentages of actual total increases)

	Cost of living Regression	Wholesale price index Regression	Wholesale price index, excluding foodstuffs, Regression
Money plus quasi money	27.4	45.0	44.2
Import exchange rate	35.1	47.2	56.2
Wage rates	36.2	30.5	15.3
Real supplies	-3.2	-4.4	-5.7
Seasonal factors	-17.5	-24.4	-7.1
Total: predicted inflation as percentage of actual one	78.0%	93.8%	102.9%
Actual inflation (sum of three quarters)	21.6%	16.0%	14.4%

during the first quarter of 1966 ran 19 percent above a year earlier, can be blamed primarily on the imperfect tools available to the monetary authorities for restraining banking credit to the private sector. Such imperfection arises in part from the power of private banks to practically ignore reserve requirements imposed by the Central Bank. It also includes the power of the coffee growers federation to obtain credit, and a coffee policy encouraging such pressures. During 1966, while the domestic coffee price was fixed, the dollar price was falling. This, together with a good crop and the desire to withhold some of it to prop up the dollar price, led to credit demands a weak and lameduck government was unable to resist.

Increases in money wage rates were not encouraged by public policy during 1965/66, and were in fact modest. Real hourly manufacturing wages declined between the first three quarters of 1965 and the following three quarters by 4 percent, in spite of rising imports and output. If the first three quarters of 1965 are compared with those of 1966, a decline of 5.5 percent is observed in real wage rates. No wonder that the abrupt death of the liberalization episode in November 1966 evoked few tears from the working class.

Seasonal factors were even more favorable than in 1963, and the influence of changes in real supplies was, contrary to the previous major devaluation, to dampen inflation. As may be seen in Table II-2, merchandise imports reacted vigorously to the liberalization beginning in the first quarter of 1966; during the first semester of that year the dollar value of imports was 30 percent higher than the corresponding value for the same semester in 1965, and 43 percent higher than during the second semester of 1965. Non-coffee rural output rose by 2.8 percent in 1965 and by 3.9 percent in 1966, figures not far from normal trends.[9] Overall real GDP was expanding during 1966 at higher than trend rates, finishing that year with a 5.4 percent increase over 1965.

During 1965/66, the large gap between the free market rate and that applicable to merchandise imports was blamed by some for creating expectations contributing to inflation. As shown in Table VII-5, this is unnecessary to explain the behavior of wholesale prices. Its contribution to increases in the cost of living is also doubtful; a variable showing the ratio of those two exchange rates during 1958 through 1969 was found insignificant in regressions of the type shown in Table VII-1.

In August 1966 it appeared that the liberalization program was firmly established. The new President had pledged to continue it, and indeed early in his administration, on August 21, 1966, took measures to complete the transfer of imports from the 9 to the 13.5 Peso rate. The import surge was expected to abate, once pent-up import demand had spent itself.

Blow-up

As already noted, back in September 1965, it was the understanding of the IMF (and some others) that if, once the transfer to the 13.5 Peso rate had been completed, the balance of payments situation remained precarious, further adjustments would be made in the exchange rate. It was further understood by the IMF that in its "letter of intention" of 1965, the Colombian government had agreed to use quarterly targets in gross foreign exchange reserves as objective indicators of the state of the balance of payments, which would, if not met, trigger automatic devaluations. At the end of September 1965, the reserve target was not met. Indeed, Colombian *net* reserves were deep in the red.

Merchandise imports (dollar, cif values) had run during the first three quarters of 1966 at 44 percent above the corresponding period for 1965, while registered merchandise exports had declined slightly (by one percent). The export outlook was not very promising; coffee prices had been declining since April 1966, and minor exports were sluggish, and certainly below trend. For the whole of 1966, the change relative to 1965 was as follows:

Merchandise imports (dollars, cif):	+48.7%
All merchandise exports (dollars) :	- 5.8
Coffee exports (dollars) :	- 4.5
Registered minor exports (dollars):	+ 1.6
Crude petroleum exports (dollars) :	-20.0

Gross foreign exchange reserves at the end of the third quarter of 1966 stood at $52 million, or $11 million less than a year earlier, and represented only 8 percent of 1966 imports.

Under these circumstances, the IMF pressed for an immediate devaluation as a condition for releasing the last credit tranche of the stand-by signed in 1965 and renewing the stand-by agreement. The Colombian government, i.e., primarily President Lleras and his Minister of the Treasury, argued that such a move was not necessary at that time. Among younger economists and technicians, there was not such a strong opposition to devaluation. The Colombian government argued that both the fall in coffee and minor export earnings reflected basically exogenous declines in world commodity prices, and were to blame for the failure to achieve the reserve target. In particular, the link between the poor performance of minor exports in 1966 and the decline in the real minor export exchange rate between 1965 and 1966 was rejected. The government also insisted that the import surge had peaked, and a decline in imports could be expected. It pointed out that the liberalization program had been carried out at a faster pace than had been agreed in 1965. It rejected the idea of rigidly linking exchange rate movements to changes in reserve situation, using arguments similar to those used by the French in the 1973 discussions of international monetary reform. It denied that a firm commitment had been made in 1965 to that notion. The government went on to say that the circumstances called for, not devaluation, but an expanded volume of concessionary aid flows to Colombia, to support the liberalization program during those difficult circumstances. The critical breathing space to be purchased by aid referred not only to that needed to face allegedly temporary balance of pyaments difficulties, but also that required by the new government (inaugurated in August 1966) to get a firm hold of domestic policy tools, particularly monetary policy, which had been left in disarray by the previous administration.

The new government was very eager <u>not</u> to repeat the performance of that other new administration which four years before, in November 1962, had undertaken a devaluation under pressure from the IMF and aid-granting organizations. Indeed, the new President was very conscious that, whether justly or not, he was attacked as having been one of the key architects of the 1962 devaluation, with his political opponents dubbing him "Charlie the devaluator."

October and November 1966 witnessed frenzied shuttling between Washington and Bogota of national and international civil servants. The Colombian government was confident that the IMF did not represent the position of other credit institutions, such as the IBRD and AID. It also argued that it did not necessarily oppose the idea of eventual devaluations; it simply did not regard October 1966 as the right time. It noted that it had no intention of freezing the free market, then used mainly for capital and some "invisible" transactions (as well as smuggling), and which stood at about 16.4 Pesos in September 1966, considerably below the rates of a year earlier. It reaffirmed its intention to make sure that fiscal and monetary policies were under control and non-inflationary before further devaluing the certificate rate.

Things came to a head late in November, apparently triggered by the announcement of AID and the IBRD to Colombian officials that their aid would be conditioned to a Colombian agreement with the IMF, including firm commitments to a devaluation timetable. The IMF/AID/IBRD group charged that the Colombian government lacked a balance of payments policy, and said that under those conditions they could not go on lending money to it. The Colombian government claimed to have been surprised by this collusion among foreign creditors, and acted decisively. The apparently new AID position was first heard by Colombians on November 27 (a Sunday), and again the next day, together with that of the IBRD. A cabinet meeting showed most younger economists in favor of immediate devaluation, but the influential Minister of the Treasury opposed any such move. On November 29 (Tuesday), President Lleras went on television to announce the breakdown of the negotiations with foreign lending agencies, the elimination of the free market rate and the impoisition of rigorous import and exchange controls. Devaluation was out of the question; the import liberalization program had lasted slightly more than one year. Before attempting to draw lessons from this episode, and its dramatic end, it is important to examine what followed .

Sysyphus and Law 444

President Lleras was hardly off the air when, on the one hand, the energetic preparation of a new comprehensive law on foreign trade and payments began, and, on the other, discreet contacts were reestablished with foreign creditors. On the latter front, foreign personalities more diplomatic than those who had conducted earlier negotiations, drawn particularly from the IBRD, began an important role as "honest brokers" between the Colombian government and the international lending group.

The preparation of what eventually became Decree-Law 444, on March 22, 1967, absorbed most of the creative forces of the Lleras administration starting December 1966. The new law essentially codified and brought together existing regulations and practices in the field of foreign trade and payments. In retrospect, however, it marks a very important turning point in Colombian policy in those areas. Beginning at that time, the flexible exchange rate policy which should not have been abandoned in 1958 was reinstated.[10] Very cautiously, moves toward import liberalization were started once again, from square one. As of early 1973, however, the import administrative regime, including both licensing and previous deposits, had not reached the freedom reached in October 1966. After 1967, a year when imports had to be cut back drastically and real GDP grew below trend (at 4.2 percent), Colombia has witnessed an expansion in production and exports, accompanied with relative price stability, which by 1973 was without parallel in duration in the postwar II period. The next chapter will explore the extent to which this remarkable happy ending to the 1966 blow-up was due to exogenous and endogenous factors; here it will be sufficient to state that the new policies, particularly the crawling peg, by succeeding in breaking the stop-go cycles of earlier years, deserve much of the credit for the performance.

It should nevertheless be pointed out that the new policy course, now clear in retrospect, was not obviously foreseeable in March 1967, to either Colombians or the foreign lending agencies. Those agencies were apparently caught off guard and embarrassed by the November Colombian moves, which had a very favorable political impact within Colombia, and widespread repercussion and acceptance throughout Latin America. Throughout December IBRD officials had active conversations with Colombian representatives, and by February 1967 a new IMF mission was in Colombia to negotiate a fresh stand-by agreement, which was finally signed, in spite of the uncertainty regarding the pace at which the crawling peg was to be moved. On this score, President Lleras clearly won his argument, and obtained the resumption of aid without committing himself to a particular pace or timing of depreciation.

Throughout 1967 and 1968, in fact, the international creditors watched anxiously the crawling peg, with occasional spasms of fear that the process was about to cease, particularly as it approached the rate in the capital market (the old free rate) which had been pegged at 16.3 Pesos since November 1966. In fact, when the upward crawling certificate rate reached the pegged capital market rate, on June 1968, the unification did not mean, as feared, a new pegging. The upward crawl continued, even though the Colombian government temporarily and slightly slowed down its rate of increase before August 1968, as part of its preparation of a proper climate for the visit to Colombia that month of His Holiness Pope Paul VI.

Questions and Lessons from the 1965/66 Liberalization Episode and Aftermath

As noted earlier, the performance of the Colombian economy since 1967, as conventionally measured, has been better than average, when compared with the rest of the postwar period in the same country. Could all that plus the benefits of the import liberalization reached in October 1966, have been obtained by avoiding the November 1966 blow-up? Assuming that this is the case, and leaving until next chapter the discussion of exactly how much better performance would have been under those circumstances, the obvious question centers on the responsibility for the blow-up.

With the help of hindsight, and of Tables III-10 and IV-8, it may be seen that key exchange rates were overvalued during the third quarter of 1966 (unless one wishes to argue that 1970 rates were undervalued). Thus, the net real exchange rate for minor exports at that time was 17.6 percent below the 1970 average; it was also below the averages registered for 1961, 1962 and 1965. The real average import exchange rate of the third quarter of 1966 was 16.3 percent below the 1970 average, and below the 1958-59 rates. As dollar prices for coffee and other Colombian exports were, as claimed by the government, particularly weak during 1966 (see Table III-4), the ex-post case for declaring the 1966 exchange rates overvalued is strengthened.

The issue of the timing of the needed devaluation, however, is something else. Both political and economic considerations suggest the soundness of the Lleras reluctance to devalue until monetary and fiscal instruments were well under control. Foreign pressure to devalue during October and November 1966 was not only arrogant and unsensitive, but also economically dangerous, given monetary conditions. The latter had been made more explosive by the automatic release of funds previously frozen by prior import deposits. During the first semester of 1966 this had been offset by the sharp increase in imports, but during the second semester it threatened to add substantially to monetary expansion.

Most observers now agree that by October 1966 stocks of imported goods were bulging, and a downturn in imports, even at the existing exchange rate, was imminent. It can be plausibly argued that the maintenance of the external credit flow for at least a few more months would have saved the liberalization program <u>and</u> given the new Lleras administration time to prepare a non-inflationary setting for the needed devaluations.

If that had been done, would the pace of devaluations after 1966 have been as fast as that actually observed? Would the crawling peg have been maintained? It would have been pleasing to answer these questions with a clear yes. Yet serious doubts must remain. As noted earlier, President Lleras, who participated in the Bretton Woods conference of 1944, had in 1960 called for an end of a short-lived experiment with the crawling peg. More disturbingly, six years after Decree-Law 444 was promulgated, on March 1973, ex-President Lleras astounded admirers and foes by calling for an end of the crawling peg, as a way to fight inflation.[11] It would thus be difficult to argue that, without the 1966-68 pressure of foreign creditors, the Colombian exchange rate policy would have been the same as that actually observed.

There are some fairly straight forward lessons from the 1965/66 Colombian experience. A government which does not want to be caught between the alternatives of being pushed around by foreign creditors (with good or bad will is irrelevant here), and taking drastic trade and payments policies which it does not regard as desirable, should avoid launching import liberalization programs with low foreign exchange reserves and a commitment to a pegged import exchange rate.

It is also clear from Colombia's experience that import liberalization does not lead by itself to a fast expansion of output and exports (note 1965-66), as some of the most enthusiastic champions of liberalization have claimed in the past. Nor is drastic import liberalization a necessary precondition for export expansion (note 1967-73).

The large output gains to be obtained by avoiding stop-go cycles, and the need to coordinate foreign trade and payments policies with those in the fiscal and monetary fields to avoid those cycles, are also lessons emerging from the Colombian 1960s and early 1970s. And had the Peso been kept flexible, as it was in 1957 and early 1958, and again since March 1967, the growth and balance of payments performance during 1958-68 would have been clearly better. But more on this in the next chapter.

Footnotes to Chapter VII

* This chapter will contain quite a bit of journalism, particularly when dealing with the details of the 1965-66 liberalization episode. Following the journalistic tradition of not revealing all sources, I shall thank but leave unnamed many people who helped with their comments on, and recollections of that event. Christine Lanfer also helped me a great deal in the preparation of this chapter.

1. See Arnold C. Harberger, "The Dynamics of Inflation in Chile," in Measurement in Economics: Studies in Mathematical Economics and Econometrics in Memory of Yehuda Grunfeld, ed., Carl Christ et. al. (Stanford: Stanford University Press, 1963). For the Argentine case, the method has also been applied by Adolfo C. Diz, "Money and Prices in Argentina, 1935-62," (Ph.D. dissertation, University of Chicago, 1966), and by myself, most recently in Essays on the Economic History of the Argentine Republic (New Haven: Yale University Press, 1970), Essay 7, pp. 366-77.

2. See Alberto R. Musalem, Dinero, Inflación y Balanza de Pagos: La Experiencia de Colombia en la Post-Guerra (Bogotá: Banco de la República, 1971), Chapter II.

3. "Monetarist" is used here to refer to those who would explain variations of the price level exclusively as a function of changes in the money supply. There is, of course, a neo-monetarist view which argues that devaluation of the exchange rate works only insofar as it reduces the real value of cash balances, which requires a devaluation-induced increase in the price level.

4. A purely numerical reason may be involved: data on the average import exchange rate for those years are likely to exaggerate the abruptness of the real transition between the old 2.50 Peso rate, and the higher newer rates. The unusual political circumstances of 1956-58 may have also induced a restraint in the part of the importing community difficult to obtain under more normal and less enthusiastic circumstances.

5. The banquet at the Tequendama Hotel, sponsored by the "Economic Society of Friends of the Country," where the Lleras-Agudelo exchange took place was fully reported in the issue of April 5, 1960, of El Tiempo of Bogotá. Quotes in the text are from this source; translations are mine.

6. Data on the budget and banking credit obtained from IMF-IFS, 1972 Supplement.

7. Output indices of some key foodstuffs evolved between 1962 and 1963 much more unfavorably than the overall non-coffee rural output, as follows:

Rice	-6.0%
Beans	-6.4
Corn	-1.8
Potatoes	-34.2
Wheat	-44.5

Given its importance in the diet of the Colombian masses, and its special import difficulties, the decline in the potato output is particularly noteworthy. These figures suggest that the construction of a more refined index of supplies may be desirable. (Basic data from BdlR, National Accounts).

8. The Banco de la República apparently intervened somewhat in the free market until April 1965, after which date it withdrew almost totally.

9. Output indices of key foodstuffs evolved as follows (with 1964=100):

	1965	1966
Rice	114	114
Beans	90	75
Corn	90	92
Potatoes	103	113
Wheat	125	169

10. Officially, the post-March 1967 Colombian exchange rate is supposed to be the result of the "free play of supply and demand." But it is obviously a crawling peg set daily by the government, and changed every few days.

11. As reported in El Tiempo, March 23, 1973. It must say something about the Colombian political system that the same Ministers of the Treasury and Development who in 1960 received the Lleras blast against exchange rate flexibility, were to receive the new blast in 1973. The only difference was that in 1973 Dr. Agudelo Villa was Minister of Development, while Dr. Rodrigo Llorente, who in 1960 was Minister of Development, was in 1973 Minister of the Treasury.

Appendix to Chapter VII

The two tables of this appendix present the percentage changes used in the regressions of Table VII-1. The sources of the basic variables are as follows:

(1) Cost of living index. Obtained from IMF-IFS, without further changes.

(2) Wholesale price index, with and without foodstuffs. Obtained from BdlR-RdBdlR, without further changes.

(3) Money plus quasi money. End-of-the-month data obtained from IMF-IFS. Using these monthly data, centered quarterly series were obtained, by averaging four of those end-of-the-month observations.

(4) Average import exchange rate. This rate is obtained by dividing the value of merchandise imports in Pesos over that value in U.S. dollars. It corresponds to that shown in Table IV-8.

(5) Hourly average wage rates in manufacturing. It refers to nominal wages in manufacturing. Basic data from DANE-BME. There is a discontinuity in the methodology used to report such average wage in DANE publications around May, 1962. Where they overlap, the old series is about 14 percent lower than the new one. That coefficient was applied to earlier observations to obtain a homogeneous series.

(6) Real supplies. These include, expressed at 1958 Peso prices, the non-coffee gross domestic agricultural product, plus merchandise imports. The former series is only available annually, from the BdlR national accounts. It was simply divided by four to obtain quarterly estimates. Merchandise imports are available quarterly, but quantum estimates are shaky. The

quarterly series in 1958 Pesos was obtained multiplying the quarterly import data at current dollars by 7.06, the average import exchange rate for 1958. During 1958-69 the variation in average dollar import prices appears to have been small.

Table VII-Appendix-I

Quarterly Percentage Changes in Dependent Variables Used in Regressions Shown in Table VII-1

	Cost of living index	Wholesale price index	Wholesale price index, excluding foodstuffs
1958-1	2.09	2.71	3.06
-2	6.33	3.16	3.53
-3	-0.97	2.11	4.82
-4	0.97	1.53	1.70
1959-1	3.86	1.61	0.96
-2	2.94	4.75	2.16
-3	-2.86	1.56	3.35
-4	0.93	-0.25	0.33
1960-1	1.99	0	0.33
-2	2.71	2.59	1.33
-3	-0.88	0.19	0.89
-4	1.77	1.45	0.83
1961-1	3.48	2.05	1.19
-2	7.71	3.69	2.13
-3	-3.91	-0.41	0.67
-4	-0.81	0.05	0.57
1962-1	1.64	0.27	0.97
-2	1.61	1.49	1.43
-3	0	-0.09	1.41
-4	1.59	2.09	2.32
1963-1	13.54	11.51	12.79
-2	13.99	12.20	8.09
-3	3.02	1.71	1.79
-4	7.23	4.18	1.93
1964-1	3.28	4.97	2.15
-2	10.23	6.11	1.66
-3	-6.80	0.21	1.76
-4	-1.63	-0.12	1.14
1965-1	2.09	0.56	1.98
-2	3.42	3.90	2.51
-3	0	3.16	5.40
-4	5.79	5.69	6.23
1966-1	7.81	5.02	4.90
-2	7.97	5.25	3.28
-3	-1.34	0.45	3.08
-4	2.04	1.91	2.57
1967-1	2.67	1.44	1.78
-2	3.25	1.58	1.95
-3	-0.63	1.58	2.06
-4	1.27	1.31	0.90
1968-1	2.50	1.60	1.47
-2	2.44	2.93	1.72
-3	-1.19	0.17	0.48
-4	1.81	0.37	1.40
1969-1	2.37	1.64	2.53
-2	6.47	3.25	2.96
-3	1.95	1.23	2.32
-4	1.76	2.82	1.59

Table VII-Appendix-II

Percentage Changes in Independent Variables Used in Regressions Shown in Table VII-1

	Money plus quasi money (Yearly changes)	Average import exchange rate (Quarterly changes)	Wage rates (Yearly changes)	Real supplies (Yearly changes)
1957-1	12.33	0	25.32	-25.04
-2	8.40	0.40	27.16	-22.83
-3	14.95	112.35	39.29	-9.33
-4	6.25	7.69	34.83	-6.33
1958-1	7.30	12.89	23.23	15.95
-2	5.79	14.66	20.39	3.40
-3	8.33	-2.69	7.69	-15.67
-4	16.41	-1.66	5.83	-18.02
1959-1	14.27	-3.38	4.92	-10.52
-2	16.06	11.21	8.07	6.17
-3	13.87	-16.23	8.73	14.96
-4	12.64	0.16	12.60	9.28
1960-1	10.89	-0.16	12.50	20.74
-2	6.26	3.75	10.45	12.89
-3	8.85	0.90	20.44	10.72
-4	10.66	0	18.18	13.58
1961-1	12.00	0	20.14	0.05
-2	16.25	0	18.92	6.37
-3	17.17	0	10.91	1.16
-4	19.73	0	12.43	6.30
1962-1	23.23	0	12.14	12.82
-2	20.09	0	14.77	2.77
-3	15.79	0	15.85	8.14
-4	18.32	8.96	19.47	-8.61
1963-1	15.01	23.29	33.51	-16.01
-2	13.73	0	44.06	-1.17
-3	20.97	0	40.57	-2.11
-4	18.78	0	35.24	11.60
1964-1	24.58	0	22.01	21.80
-2	31.43	0	11.68	6.31
-3	25.52	0	11.75	8.19
-4	23.79	0	11.40	3.49
1965-1	19.75	0	10.44	-8.52
-2	16.95	0	9.85	-4.70
-3	17.54	4.11	11.11	-11.81
-4	17.85	30.31	11.99	-8.81
1966-1	18.90	1.72	13.75	12.52
-2	17.58	2.09	15.13	15.36
-3	15.03	3.55	13.78	29.89
-4	13.16	3.05	12.53	25.34
1967-1	13.09	-1.55	11.34	8.82
-2	13.78	2.70	10.46	-9.86
-3	12.28	4.83	9.74	-13.94
-4	14.93	4.95	9.98	-8.94
1968-1	17.97	3.92	10.63	7.45
-2	19.33	2.05	10.79	22.83
-3	23.32	1.88	10.39	19.02
-4	22.63	1.48	9.49	16.93
1969-1	19.74	1.70	9.00	-2.59
-2	19.24	1.43	8.55	3.68
-3	20.58	1.65	9.80	13.43
-4	23.27	2.02	10.02	9.58