THE MANAGEMENT OF COFFEE BONANZAS AND CRISIS: POLITICAL ECONOMY ISSUES

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I. Introduction

The analysis of the impacts of coffee bonanzas and crisis on the Colombian economy, given its importance, has been one of the favorite topics of research both by colombian and foreign economists, Cárdenas (1991); Carkovic (1992); Cuddington (1986); Ocampo (1994); Posada (1992); Urrutia and Suescún (1994). The political economy aspects behind the policy response by colombian authorities has not had similar emphasis in the literature. Such is the topic of this paper.

The article starts with a historical overview of the international coffee price with the purpose of identifying the major periods of bonanzas and crisis. In a chronological pattern, the paper discusses the main institutional and political economy issues that took place then and the extent to which they may explain the macroeconomic response to bonanzas and crisis.

The paper singles out the key role traditionally played by the coffee growers represented through the National Federation of Coffee Growers and poses the question of what should be its future role, in a country where coffee has lost its importance in foreign exchange earnings and in GDP, but where the coffee activity continues to be an important source of rural employment and where the coffee producers maintain a political and economic leadership in key regions of the country.

II. Coffee Bonanzas and Crisis

As may be appreciated in Graphs 1 and 2, the international coffee price has shown large instability through time. After all, coffee is a typical commodity characterized by low (less than unitary) price and income elasticities. Besides, it is an agricultural crop with a low gestation period: Under the traditional varieties its output begins at the third year and only after seven years reaches its peak, having a life span, with declining yields, of about forty years. New varieties are more precocious and the tree's output may become more stable through appropriate agricultural prunning procedures.

Price instability, to a large extent, has been caused by fluctuations in output due to weather problems (frosts and droughts) of the major world producing country, Brazil. On the marketing side, price instability has also been accentuated by the increasing concentration of the roasting industry. As a result of coffee price instability one its major institutional characteristics has been the attempt to stabilize prices through international coffee agreements, very common until the 1980's and through producers'arrangements since then.

From the point of view of this paper the price cycles analyzed are the following: The downswing at the end of the XIX century and the recovery up to the 1920's;. the slump of the Great Depression; the recovery after the Second World War, ending up in the boom of the early 1950's; the downswing of the 1960's; the 1975 coffee bonanza; the up and downswings of the 1980's, and the situation in the 1990's. The article ends with a section on future outlook.

III. Coffee Prices at the End of the XIX Century

Even though coffee began to be cultivated in Colombia since the end of the XVIII century, it was not until the latter part of the XIX century that it became a significant export crop. Its share in total exports passed from 20% in 1884 to 55% around 1895. The rise in the importance of coffee was the result of a supply response (from 173.000 bags in 1886 to 358.000 in 1895) originated in the combined impact of rising international prices (U.S 10 cents por pound in 1881 to 16 cents in 1895) and an improvement in the real-exchange rate, which has been estimated to have increased from an index of 100 in 1881; to 239 in 187 and maintained above 150 to 1895, Bustamante (1980).

At that point in time dates the first effort on the part of the Government to establish a specific tax on the coffee industry. In fact, in the midst of a fiscal crisis, the Caro Administration established a levy on tax on the coffee industry which was rejected by coffee producers, then represented by the Sociedad de Agricultores Colombianos established in 1874. The tax was suppressed a couple of years later.

During the last years of the XIX century, Colombia involved itself into a civil conflict known as the "Thousand Day War", which together with declining coffeee prices brought to an end the rising coffee industry. As shown in Table 1, the coffee sector reduced significantly its output; and its export levels. This can be said to have been the first major downswing of the coffee industry in Colombia.

IV. The Coffee Sector in the Period 1900-1930

With the pacification of the country and the economic program adopted by the Reyes Administration, starting 1905 the coffee economy began to regain its course of prosperity. Even though international prices continued to register relatively low levels up to 1910, coffee output reached and surpassed its half-million bags level and its share in total colombian exports raised to 60%, mainly as a result of the political and economic conditions of the country.

The international coffee price rose to US 16 cents per pound by 1914 and maintained an upward nominal trend, nearly doubling its level by the end of the 1920's. In terms of output its rate of increase was quite significant. Its 3.0 million bag level implied an annual rate of growth in the period 1905-1930 of 7.5%.. By then Colombia had become a respectable player in the coffee world, sharing 10% of world exports.

Even though the increase in international prices contributed, undoubtedly, to the rising output levels, the major positive factor behind this bonanza period was the increasing competiveness of colombian coffee, originated in the opening of new lands (the Antioquia and Caldas regions), facilitated by significant public investment in internal transport facilities. When measured in real dollar terms, coffee prices can be shown to have increased, but its rise did not imply a hike similar to that registered later on in the century.

A significant development in this output boom period was the creation of the National Federation of Coffee Growers in 1927, as the institution representing the interests of the coffee growers and, together with it, the self-imposition of an export tax (supported by the Government), as a means to facilitate the commercialization efforts and strengthening of the coffee industry. In fact, although the coffee producers had a major voice in the Colombian Agricultural Society the establishment of a Federation with financial support and full representation of producers from the different regions of the country was a decisive step in the structuring of an institution with policy power up to this day.

V. The Management of Coffee During the World Depression, 1930-1940

The international coffee price plummetted in the 1930's, declining from a level above US28 cents per pound in 1928 to US11 cents by 1931, a low level which was maintained throughout the whole decade. The question to be answered is how did Colombia manage the depression and to what extent did the newly created Federation intervene effectively to support the coffee producers.

A recent paper written by Bates (1994) shows that the Federation played a key role arguing the need and convincing the Government to devalue the exchange-rate. Another significant response was oppossing, up to the very end of the decade, the pressures by the Government to support an international quota system as a means to strengthen the international price.

As a result, it is found that the coffee producers compensated the falling prices with the devaluation of the exchange-rate and that, in the crisis period, Colombia continued to increase its coffee output and export levels, as well as its share in the world market.. In 1932 and 1933 the authorities devalued the exchange-rate mildly and by 1935 its impact had been quite significant. Although, the initial reaction of the government had been only to establish a exchange-control scheme, under the pressure of the coffee growers it finally opted also for the devaluation.

The other interesting response by the authorities had to do with the restriction of world supplies through control of exports of as a means to boost international prices. In an international conference held in 1931, Brazil proposed an agreement to establish export quotas, but the Coffee Federation flatly rejected it, arguing the competiveness of colombian coffee and its increasing share of the world market. Despite efforts by the Government to induce the coffee growers into a price and quota agreement, the curtailment of exports was again rejected in 1935 but accepted, though not fully implemented, in a Bogotá Conference held in 1936. The period 1930-1940, in the midst of a crisis, was then characterized (see Table 1) by an increasing volume of output and exports of coffee. The Colombian share in world exports passed from 10.0% in 1929 to 16% in 1938-39.

A final issue of dispute between the Government and the coffee growers regarded fiscal policy. One of the attempts of the López Government during the depression was to tax the coffee industry, as Caro had tried to do at the end of the century. The Government established a differential exchange-rate unfavorable to coffee exports. The protest by the coffee growers led to a partial dismanteling of the differential and a transfer back to the Federation of Coffee Growers of part of its proceeds, in order to facilitate the accumulation of inventories required by the international Bogotá Agreement.

Further declines in the international coffeee price occured at the beginning of the 1940's, when it fell below US$10 cents por pound. Among other factors, it was due to the onset of the World War and the large sell-offs of inventories by Brazil. The policy response in Colombia was the creation of the National Coffee Fund as a financial mechanism with public resources to be managed by the Federation, in order to provide for inventory accumulation, given the its support to the new Interamerican Coffee Pact signed by the Latin-American coffee producing nations as a means to strengthen prices through a coffee retention scheme.

In terms of the National Coffee Fund and as a last item in this section it is useful to point out that it was provided with resources from new taxes levied, two of which feel on cofeee exports: The pasilla tax established the obligation to exporters to hand to the Fund 6% of the volume of exports payable in lower quality coffee for which exporters were reimbursed at a loss; a tax on the sale of foreign exchange to importers equivalent to $0.05 per dollar, and a variable exchange-rate differential on coffee exports. The latter two taxes were abolished by 1945.

Given that the taxes were destined to the Coffee Fund for stocking purposes, they did not face the traditional bitter opposition by the coffee growers.

VI. The Second World War Period and the 1950's Bonanzas

The period from 1940 to the mid-fifties marked a recovery of coffee prices, culminating with a bonanza period between 1954-6, originated in Brazilian frosts and crop failures. Prices climbed to unprecedented levels. With the end of the War and the resumption of consumption and world demand prices reached US30 cents by the end of 1947; 53 by 1950 and 60 by 1953. Two severe frosts in Brazil in 1954 and 1956 provoked a further price jump, when they bordered 80 cents per pound. Even accounting for inflation, it is found that in real US dollar terms, at its peak level, the international coffee price was four times larger that of the period of the Great Depression.

The price recovery during the war years was, at the start, due to the restriction of exports agreed upon under the 1940 Interamerican Coffee Pact. Even though Colombia was forced to make a sacrifice in terms of export volumes, (Table 2), specially in 1941, prices increased due to an expanded coffee demand in the following years, which implied also significantly growing coffee export revenues and export volumes. They passed from 4.0 to 5.0 million annual bags during the forties, reaching around the level of 6.0 million bags by 1955. Coffee output increased from 6.0 to seven million bags in the period.

Despite the favorable price outlook, neither coffee output nor export volumes showed the spectacular trends of the previous decade. The result seems attributable to three major factors: the political violence that affected the coffee regions in the 1940's and 1950's; the course of the real exchange-rate, and the taxes imposed on the coffee sector.

Regarding exchange-rate management, Díaz-Alejandro (1976) showed that, in the period 1935-1948, the nominal rate hardly moved. As a result, the real rate (100=1935) dropped to 80 by 1939; 63 in 1945 and 54 in 1950. Such behavior, although indicative of a counter-cyclical response by the authorities, also evident during the period of the Great Depression, nevertheless, led to an increased overvaluation. As a result, in 1951 the authorities were forced to devalue the exchange-rate (a 28% increase in the nominal peso price of the US dollar), which was accompanied by a relaxation of exchange and import controls inherited from the period of the Great Depression.

As shown in Table 2, the largest coffee price increases ocurred in the period 1954-1956.There were two major policy measures adopted as a reaction to the incoming export boom. In the first place, government authorities proceeded to strengthen the import liberalization process begun in 1951. It had included the lifting of practically all import restrictions and the lowering of tariffs. With the unexpected rise in the international coffee price, early in 1954 the remaining controls,namely a list of prohibited import products of luxury and locally produced goods,was also eliminated, reaching ,at that point, Colombia its most liberal import regime since 1929. The use of the exchange control scheme,on this occasion, liberalizing it, was once again a major policy tool used as a means of regulating the foreign exchange market in periods of coffee booms and crisis.. As will be discussed in the following section, the liberalization process was not sustainable and a few months later even in the booming year of 1954, when prices began to decline it began to be reversed.

A second policy response measure, was to tax the coffee revenues, as a means of restricting the increase the real price to producers originated in external price increases of transitory nature. The scheme chosen by the authorities, in light of the nominal devaluation of 1951, was to establish a differential exchange rate to coffee exports. The specific mechanism used was to to cancel only a quarter of revenues at the new exchange rate. Given the pressures of the coffee growers through the Federation, the percentage was increased in the following years and the differential was finally eliminated in 1954, only to reappear later on.

Another partial victory by the coffee producers, at the time, was to obtain that the proceeds of the newly established tax were not channeled to ordinary public expenditures, but to the National Coffee Fund or to activities favorable to coffee producers. In the case of the differential, its resources went to the capitalization of the agricultural bank (Caja Agraria) and to the Fund. Table 2 shows that in the period 1940-1955 the increse in the price to producers was less than that of international prices, as a result of the combined impact of an appreciating real exchange rate and the tax impact on producer prices.

VII. The Coffee Crisis of 1956-1968

Coffee prices declined rapidly from 1956 to 1968. They fell to around 40 cents by 1961, and showed only a mild recovery by the end of the sixties, despite efforts to restrict exports through a newly negotiated international agreement. The impact of this coffee crisis on the colombian economy was quite severe since it originated a balance of payments problem ; a decline in economic activity and severe inflationary pressures.

In terms of the major coffee economy indicators, Table 2 shows that besides the international price decline there was also a stagnation of colombian export volumes, despite increasing output volumes. This result indicates the efforts made by the Colombian authorities to curtail supplies, given the adoption of several international agreements. In 1958 and 1959, they took the form of producers arrangements and, later on, in 1963 and 1968, Colombia subscribed the International Coffee Agreements backed by the major producing and consuming nations.In fact, the defense of the international coffee price through quota restrictions may be considered to have been the major mechanism used by coffee producing nations in periods of coffee crisis. Since the 1950's, the Colombian Federation of Coffee Growers ,which had so hardly oppossed the quota restrictions in the 1930's ,became the world leading organization in the promotion of export restrictions. The Table also indicates that, despite the agreements, coffee export revenues declined significantly from the more than half a billion annual dollar figures registered by the mid-fifties.

In order to finance the accumulation of inventories required to comply with the export quotas, the government established in 1958 the so-called retention duty,which implied the obligation by exporters to provide, free of charge, to the Federation a given percentage of their plannned exports volumes. Such flexible retention duty was initally payable in kind, but with the passage of time it also became payable in cash and the resources transferred to the Coffee Fund. The retention duty became the most powerful policy tool in the management of coffee policies.

Linked to the retention duty ,to the international price and to the exchange rate, a third major coffee policy tool used was the establishment of a domestic support price to producers. As explained above, the policy followed in the booms was to reduce the increment in the price payable to the producer through the establishment of a differential exchange rate. By the same token,in periods of crisis the National Coffee Fund could subsidize the producers transferring income beyond the value of exports.This domestic price stabilization scheme, Graph 3, was in fact used in this period. As shown in Table 2, even though the real domestic price to the producer was significantly reduced during the crisis,its fall was much less drastic than that of the international price.

The consequences of the coffee crisis on the economy were quite severe considering that the share of coffee in total exports had reached more than 80% by the mid-fifties and that the country, even at the hight of the coffee boom was already suffering from balance of payments problems. As shown by Diaz-Alejandro (1976), a booming demand for imports and foreign exchange led to growing payment arrears, and import and payment liberalization began to be reversed by late 1954 and controls once again tightened. Import controls were reinforced and maintained during the 1960's, despite an unsuccesful liberalization attempt in 1965-6. Available information indicates that throughout the 1960's there was a negative and growing current account deficit and that the reserve position was negative by 1968.

The macroeconomic policy response to deal with the foreign exchange situation also included changes in the exchange rate policy. An initial adjustment, in 1957, sought to eliminate the multiple rate system. Major nominal devaluations also took place in 1962 and 1965. On both occasions, however, its incidence was rapidly eroded as a result of increasing domestic inflation. Finally, a significant change in the overall foreign exchange regime was undertaken in 1967, through the well known Decree 444 which reinforced the existing exchange control system. As part of such reform, the country adopted a crawling-peg system, which was maintained until the 1990's.

Coffee growers, however, did not benefit completely from the devaluation of the nominal exchange. In fact, the establishment of an exchange-rate differential against coffee exports was a predominant policy during this period. The differential exchange rate was reintroduced in 1958, although its proceeds were remmitted to the National Coffee Fund. With the 1962 devaluation, a law signaled that nearly half of the differential per dollar exported would not be transferred to the coffee sector, but ,rather, it should go to finance the central government deficit. Such proportion of the differential going to the Coffee Fund was increased in 1965. With the reform introduced in 1967, the government substituted the coffee differential exchange rate with a 26% ad-valorem tax, four points of which were to be transferred to the coffee institutions. The elimination of the coffee differential ended the major policy dispute between the growers and the Government. In fact, the coffee growers were capable of convincing the authorities to eliminate the differential and reluctantly accepted the tax on the condition that it would be gradually reduced.

The balance of payments crisis originated in the decline of coffee prices had ,despite the import controls and the exchange rate adjustments, a very perverse impact on economic growth and inflation. In terms of growth, its annual rate declined from an average of 6% during the boom to around 3-4% in the conflicting 1962-5 period. However, the major impact of the crisis was on inflation. From rates typically less than 10%, annual inflation rose to an average of 16% in the period 1963-66, but, as a result of the 1967 stabilization program, they returned to their traditional levels.

The inflationary pressures , undoubtedly, had an origin in the foreign exchange policies ,both, as a result of the devaluations and the quantitative import controls which increased the prices of tradeable goods. However, they were also caused by the expansionary monetary policy followed by the authorities in order to finance the fiscal deficit, as well as the operations of the National Coffee Fund. The World Bank (1972) Report estimates that the consolidated fiscal deficit as a proportion of GDP reached 3.2%, 4.4% and 7.7% , respectively, in the years 1966 to 1968. In regard to monetary expansion, the figures in Table 3 show that the annual the increase in money supply surpassed 20% almost since 1960. Available information from the central bank indicates that nearly all of the increase of the monetary base in 1957-8 and an important share of 1964-66 was attributable to central bank financing of the Coffee Federation.

VIII. The 1970's and its Bonanza years

The international coffee price began to recover in 1969 and reached its maximum historical nominal and real levels in the period 1975-80. International coffee price levels passed from US40 cents per pound in 1969 to 236 in 1977, and remained above 160 to the end of 1980. As a consequence, the value of coffee exports went from its low annual US300 million plus at the end of the sixties to more than US 2 billion in 1980. While the initial price recovery in 1969 resulted primarily from the quota restrictions the unprecedented hike in the second-half of the 1970's was due to a severe frost in the brazilian coffee plantations.

In terms of coffee policy responses to the coffeee boom, there are three major areas to refer to. As to the export volume restrictions, it is worth pointing out that the quotas under the International Coffeee Agreement had already been temporarily dismanteled since 1972 and that, following OPEC, producers had adopted unilateral restrictions since 1973. In this form, it can be inferred that price recovery previous to the 1975 was estimulated by quota restrictions. Even though the 1975 frost brought an end to formal export restrictions and export volume increased that year, in 1976 and 1977 it seems that the authorities restricted exports if one compares output and export volumes (see Table 2). Significant increases in exports were not observed until the last three years of the decade.

A second and key policy response refers to the management of the domestic price to producers. As Table 2 indicates, the real domestic price to producers increased during the early seventies. With the price boom, the domestic price was significantly adjusted upwards in 1976. However, it is found that, overall, the real domestic support had a lesser percentage increase than that observed in the international price.

The regulation of domestic price supports in the boom period was a deliberate move by the authorities directed to stabilize the real price to producers, thus transferring past of the bonanza resources to the Coffee Fund, and a macroeconomic decision, whereby, the authorities sought to check aggregate demand increases and to prevent undue inflationary pressures. The principal mechanism used to capture and tax away part of the bonanza income from producers was the use of the retention duty. Such duty was increased, pari passu, with the international prices and in a very large proportion it had to be paid in cash rather than in kind, as it was originally designed.

The increase in the real domestic price to producers, together with the channeling of a portion of Fund resources to agricultural research and extension services in the coffee regions had a third major effect in the coffeee sector: The promotion of an output boom. As the figures in the table show , annual coffeee production went from nearly 7.3 million bags in 1971 to 13.5 million by 1981. This nearly doubling of output in ten years (a 7.2% annual increase) was the result of a "*green revolution*", estimulated by the Federation, characterized by the introduction of a new highly productive variety (*caturra*) with increasing tree density and high intensive fertilization, which the producers rapidly adopted given its prospective profitability at the ongoing prices.

The intervention in the domestic price, as in the past, was also implemented through the introduction of a differential exchange rate which, in this case, was put into force in the period 1977 to 1980. The differential acted as a tax. In terms of the ad-valorem tax on exports, it is useful to add that its rate was not increased during the price boom. On the contrary, the portion going to the government was reduced from 1975 onwards, declining from 20% to 15.8% by 1980. In this form, the tax rate decrease compensated partially the differential rate. By lowering export taxes the Lopez Administration argued that it was meeting its promise that "the bonanza revenues belonged to the producer".

The stabilization of the real price to producers, and the use of the retention duty and other fiscal and differential exchange rate measures, however, were only part of the mechanisms used by the authorities to redistribute the bonanza revenues. In fact, as had been the transition since the Lleras Administration, the Government also set up complementary agreements with the coffee growers, regarding the use to be given to the resources transferred to the Fund. Part of them would go to support agricultural extension services in the coffee regions and the excess liquidity was to be lent to the Government for its public expenditure programs. To the extent that upon rapidly increasing international prices the authorities did not raise immediately the "*reintegro*" or surrender reference price on which the export tax and the retention duty were based, the price boom also benefited the private exporters through larger margins, a policy highly criticized at the time.

In terms of the macroeconomic impacts of the *"price boom*", Table 3 shows that, as expected, it had a positive incidence on the current account of the balance of payments and on the international reserve position of the country, which from negative levels at the end of sixties rose to rose than US$5.0 billion by 1980. The elimination of the foreign exchange bottleneck, together with the increasing savings and investment ratios also permitted on acceleration of GDP. The fiscal position of the country also improved, not only as a result of the superavit of the Coffee Fund, but as a consequence of a fiscal reform and the impact of an accelerated economic growth. On the negative side, it is found that, despite policies directed to curtail the incidence of the boom on aggregate demand, inflation accelerated. On the other hand, there was a significant appreciation of the real exchange-rate, not only due to the inflationary pressures, but also to the slowing pace of the crawling-peg adopted by the authorities, as will be discussed below.

A recent paper by Montenegro (1996) analyzes in depth the macroeconomic impacts of the 1975 bonanza, by measuring the deviation from the trend of key economic variables. His first result is that there was a private and public savings windfall. As to consumption, he finds that although the government did an exceptional effort to restrict public expenditures at the beginning of the boom, government consumption increased beyond trend trend in 1979-80. He also finds an investment boom in the tradeable sector of the economy but not in construction. In terms of relative prices, he finds an increase of non-tradeable to tradeable goods, suggesting the presence of Dutch Disease as a result of the coffee boom. His findings coincide with most previous papers which identify that the coffee boom tended to appreciate the real exchange rate, Carkovic (1992); Ocampo (1994); Posada (1992).

The macroeconomic policy response to the coffee boom included four major action areas: Import liberalization; exchange-rate adjustment, as well as fiscal and monetary policy. It is worth noting that the effort to liberalize, which started-off in the early seventies, was deepened in 1976, both in terms of lowering tariffs and easing controls. The list of freely importable items rose from 20% in 1970 to 40% in 1974 and more than 50% in 1976. As a result, total imports nearly tripled from 1974-1980. Despite liberalization, the current account passed from negative balances to positive during the decade and international reserves accumulated both as result of the coffee boom and capital inflows.

As to exchange-rate management, Colombia maintained its crawling-peg system. However, except 1975, nominal devaluation was much less than inflation. As a result, the real exchange-rate tended to appreciate during the entire period, specially between 1975-80. The appreciation of the real exchange-rate was, then, the combined effect of a slow nominal devaluation and a very high domestic inflation fueled by monetary expansion originated in reserve accumulation, largely due to the official intervention to support the exchange rate. This result confirms the Dutch Disease pressures caused mainly by the coffee boom. A final aspect of exchange-rate policy was the establishment of the differential against coffee exports referred to above.

In terms of monetary and fiscal policies, it should be added that they were both guided to check the impact of the coffee boom on inflation. As to monetary policy, there were substantial efforts to sterilize the monetary impact of reserve accumulation. In regard to fiscal policy, the Government adopted in 1975 a substantial reform which together with the increased revenues derived from the impact of coffee boom on economic activity allowed it to obtain a surplus in the central Government Finances and a significant reduction in the non-financial consolidated fiscal deficit. Despite such efforts, Table 3 indicates that inflation accelerated reaching annual figures above 20%.

IX. The Difficult 1980's and the 1986 Boom

The decade of the 1980's had three contrasting periods for the coffee economy. The period 1980-5 felt the decline of the boom. Coffee prices, nevertheless, were maintained around 1.3 to 1.5 dollars per pound due to quota restrictions. Export volumes were reduced to levels a around 9.5 million bags per year, and annual export revenues amounted to about 1.5 annual billion dollars. Output was quite large (11-13 million bags) due to the supply response to the high prices, and the main coffee policy reaction was to reactivate the international agreement and its export quotas, which brought about a significat stock accumulation.

On the domestic side, the authorities attempted to defend the income of the producers through support prices, but the nominal increases were unable to compensate inflation. The real price to the producer was stabilized at a low historical level. Due to the fall in the international price and the required stock accumulation, the National Coffee Fund went into deficit and had to rely on debt issues.

The overall economic situation of the country in this period passed one of its most difficult times, given that the fall in coffee prices coincided with the Mexican Debt Crisis and its aftermath. As a result, Table 3 indicates that the Colombian economy was then characterized by low economic growth; rising unemployment; mounting fiscal deficits; and a growing current account deficit. Under such circunstances, the initial policy reaction was to reimpose strict import controls, notwithstanding which international reserves registered a significant fall. In order to face the fiscal and external disequilibria, the authorities adopted a severe adjustment program, which included, among other measures, a fiscal reform; slicing public expenditures and a significant devaluation of the currency. The latter helped to compensate coffee producers from their falling incomes.

It was under such circunstances that, during 1986, coffee prices had a significant climb to U.S. 2 dollars per pound, due to a drought in the Brazilian coffee regions. As shown in Table 2, the new boom permitted a rise in the export volume (US 11.4 billions bags in 1986) and in coffee export revenues (US 2.7 billions). The timely coffee price boom facilitated the adjustment process underway. As a joint result, economic growth accelerated and unemployment dropped. Also, the fiscal deficit was reduced reaching an equilibrium, and the current account deficit of the balance of payments was eliminated.

In terms of responses to the boom, perhaps, the major change in coffee policy had to do with the very high domestic price increase (a doubling in nominal terms) introduced as a result of the new international price situation. In fact, coffee producers beneffited from the combined effect of the higher international prices and the accelerated depreciation of the exchange-rate. Given that the economy had been lacking foreign exchange, the new boom did not effect adversely the inflationary pressures that traditionally eroded both the real exchange rate and real income to the producers. The income boom was of such magnitude that not only the producers gained from the higher support prices, but also the Coffee Fund finances were strengthened.

The last three years of the decade showed a new decline in the coffee indicators and culminated with the watershed year of 1989 during which the International Coffee Agreement, that had been in existence since the early sixties, came to an end, given its oppossition by the United States and some other major consuming nations. The International price fell to just above a dollar per pound, and coffee export revenues to its levels around US 1.5 billions registered during the first half of the decade.

Despite the efforts by the Federation to support the domestic price, the real price to the producer decreased from the high level reached in 1986, although it was maintained at a higher level than at the start of the decade . There were no other major policy decisions taken to compensate for the decline of coffee prices, given that it had not been severe and the economy was performing well after the adjustment. Table 3 shows that by the end of the decade there was a mild weakening of the principal economic indicators: higher inflation and a slight deterioration both in the fiscal deficit and the external accounts.

X. The Coffee Economy in the 1990's

The first-half of the 1990's marked the continuation of a period of decline in the Colombian coffee economy, despite the transitory international price recovery observed in late 1994 and 1995. Such weakening of what had been, during the century, the principal sector of the Colombian economic activity had two major motives behind it: The decline in the world coffee market, and the loss of importance of coffee in the economy, particularly in terms of its relevance as a key foreign exchange earnings activity.

In regard to the international coffee market various issues have been involved. In the first place, world consumption has declined its growth, given the low income elasticity of demand and as a result of a change in tastes. On the other hand, world output has continued to increase. As a consequence, the international prices declined from 1990 to 1994 and remained at historically low real levels. Although prices recovered at the end of 1994 and along the major part of 1995, given another drought in Brazil, the shadow of a declining industry has portrayed itself in the last few months.

From the political economy point of view what is worthwhile emphasizing is the fact that the consuming nations have not been willing to enter into quota agreements to prevent declining international prices. Such situation led to a very severe price fall in 1993 and to the need to recur to a producers' coffee retention pact initiated in 1993, abandoned during the 1994-1995 boom, and reestablished recently. The Federation of Coffee Growers of Colombia has been the leading institution in the promotion of the agreement given the lack of serious concern shown by the major producing nation, Brazil, on this matter.

In terms of domestic coffee policies, the authorities maintained the support price and its reliance on coffee taxes as a major implementing tools. To that end, an important innovation introduced was the establishment of the Coffee Contribution on export proceeds as a means to transfer resources to the Coffee Fund. The Contribution is levied on the difference between the international and the domestic support prices. The Contribution would become a subsidy paid by the Fund to exporters whenever the coffee authorities decided to pay a domestic price above the conrresponding border international price. The Coffee Contribution eliminated the need to use the retention duty as a tax instrument.

Despite the domestic stabilization efforts, real producer prices declined nearly 40% between 1989 and 1993, and although they showed a recovery in 1994 and 1995 as a result of the behavior of the international price, its real index remained below the 1989 level. The lack of success to support the real price to producers could be attributed to two main factors: In the first place, the National Coffee Fund did not have the resources to subsidize producers an a sustainable basis. Secondly, the exchange-rate appreciated in real terms even in the presence of declining coffee prices for the first time in the century.

In fact, by the beginning of the 1990's it was evident that coffee was rapidly losing its importance in the colombian economy. Coffee's share in total exports, which by the mid-eighties continued to be nearly 50% of the total, fell to less than 20% by the early nineties. What is most significant is that despite crumbling international prices in that period and in presence of the opening of the economy, the real exchange rate appreciated.

Such behavior indicated the loss of predominance of coffee in foreign exchange earnings and the end of the self-correcting nature of the exchange-rate in the presence of the coffee cycle. Up to then, coffee producers has defended their income in crisis periods in part because the exchange rate devalued as a result of falling international prices. The growth of other exports; the magnitude of external capital inflows and, more recently, the importance of oil exports, together with the liberalization of the foreign exchange market have altered the behavior of the exchange rate. The colombian authorities nowadays are neither willing, nor able to manage the exchange-rate in order to favor the coffee sector. The coffee growers have even been menaced and fearful of the Dutch Disease pressures that could be affecting them as a result of the oil boom from the Cusiana fields, Puyana (1994).

A final issue to be tackcled, given its incidence on the role of coffee in the colombian economy, regards the structural reforms adopted in the first-half of the nineties. Of particular relevance was the opening of the colombian economy undertaken since 1991. The liberalization of trade was far reaching, speedy and of a permanent nature and not simply a temporary response to an unexpected coffee export boom as it had been in the past. As explained above, it was adopted in the midst of a coffee depression.

A second structural change to be pointed out had to do with the renewed emphasis given to the control of inflation as a major policy objetive. To that end, the new Colombian Constitution established the Banco de la Republica as an independent central bank with the mandate of defending the value of the currency. Its autonomous governing Board became the monetary, credit and exchange-rate authority. The significance of the bank independence to the coffee sector has to do both with monetary and exchange rate policy.

In the first place, as a result of the mandate, the Colombian coffee sector would find it more difficult (if not impossible) to obtain central bank support in times of crisis, even in terms of preferential or subsidized interest rates to the coffee sector. Also, to the extent that the new independence limits central bank finance of government operations, it also implies little room for Government support of the coffee sector. In terms of exchange-rate management, the Bank authorities have introduced flexibility through the adoption of a band system. This implies that the exchange-rate will be guided by market forces, and that the coffee sector should not expect supports in periods of crisis, beyond the impact that coffee has on the foreign exchange market.

XI. Future Outlook

The description given above regarding the responses to coffee booms and crisis indicate that the authorities have traditionally adopted coffee sector and macroeconomic policies in which the coffee growers, through the Federation, have had a major influence. In terms of the coffee sector policies, a common response to crisis since the 1930's has been to engage into one sort or another of international quota agreements to restrict exports and strengthen international prices. In the domestic field, the major policy tool has been the stabilization of the real income to producers.

To provide the required resources for stabilization purposes, the coffee growers have accepted to tax themselves in boom periods through export taxes, retention duties and contributions and even, though reluctantly, exchange-rate differentials as long as the revenues were transferred to the Coffee Fund. In periods of crisis the coffee growers, succesfully, demanded from the Government the devaluation of the exchange-rate, and for many years the Coffee Fund obtained credit from the Central Bank. The coffee growers have estimulated and supported the anti-cyclical macroeconomic policies adopted by the Government in booms and crisis.

Beyond all, the coffee growers maintain a very strong representative organization, the Federation, with full powers to intervene and regulate coffee policies and with a strong say in macroeconomic policies, facilitated by its representation in key decision bodies such as the Councils of Political Economy and Foreign Trade, and because the economic team of the Government has made part of the decision-making body on coffee affairs, the National Committee.

In that context, to finish this paper it is wortwhile to explore the issues regarding the management of coffee booms and crisis in the coming years, in the light of the experience and the trends observed in the past, and the structural transformation that is taking place both in the coffee market and in the Colombian economy. The first issue to be pointed out is the fact that the expected economic impact of coffee booms and crisis will tend to shade-off in the future, both on account of the world coffee market and the loss of relative importance of coffee export earnings in the Colombian economy.

In regard to the coffee price cycles, quite probably their magnitude will be lessened to the extent that its disturbances have been primarily caused by weather problems (frosts and droughts) in Brazil, a country that has been transferring its coffee plantations to milder weather regions and which has been losing its share in the market. Besides, the new highly productive varieties being cultivated in the world respond more quickly to price incentives, thus reducing the cycle period. In this sense, one may conclude that, perhaps, a more significant source of coffee price instability will be the oligopolistic price reactions by the roasting industry.

If one adds the fact that the traditional international agreements are no longer a valid option to agree on quota restrictions to prevent price declines, the issue to be faced by the coffee authorities is the choice of the most adequate policy measures to face international price instability. The path chosen by the Colombian Federation of Coffee Growers, looked out with scepticism even by the

Government, has been the promotion of producers'pacts directed to restrict exports. However, the experience along the century was that they were always short-lived due to its nonfulfilment by all members, and to a lack of commitment by many of the producing nations. Even when succesful (such as 1972-3) the pact introduced more volatility to the markets. Under such circunstances an alternative to take is a wider use of fowards and futures commodity markets as a means to hedge against price fluctuations.

The coffee authorities must also analyze the proper ways to deal with the oligopolistic structure of the roasting industry. In particular, they should evaluate carefully whether a strong official intervention in the external marketing of coffee, such as that performed by the Federation is an adequate solution. In Colombia, the Coffee Fund shares half of total exports and the Federation regulates trade to the point of establishing supply allotments to buyers to be procided both be the Fund and the private exporters.

In terms of domestic policy responses to coffee booms and crisis, the relative loss of importance of coffee in the Colombian economy leads one to think that many of the tools used along the XX Century will no longer be available. In the first place, given the central bank mandate, it should not be expected that a future coffee crisis could be dealt with through expansionary monetary policies, directed either to extend credit to the Coffee Fund or even to the Government. Secondly, the exchange-rate is no longer managed by the Government and can not be tailored to fit the coffee sector interests. As a last issue, it is worth pointing out that the liberalization of trade and capital flows will tend to be strengthened, and will not be subordinated to the happenings in the coffee market, as was so common in the past.

As to the management of the domestic price to producers and the stabilization function performed through the Coffee Fund, it is expected that the coffee authorities could and, perhaps, should continue to implement it. Nevertheless, the need to stabilize the domestic price would be reduced in the extent that overall price instability is lessened. On the other hand, the capacity of the Fund to stabilize will be curtailed on various grounds. In the first place, the windfalls from price shocks will be less, and so will the capacity of the Fund to accumulate savings in boom periods. In the second place, the reduced access to central bank credit, and to government transfers will limit the Fund's resources in crisis periods. Finally, the Federation, probably will not have the same degree of Government support to subsidize producers, even on transitory grounds, in an activity that no longer has the global significance and macroeconomic impacts of the past. The official pressure, as has been the rule in the past few years, will be to follow a domestic pricing policy more in line with the signals of the international market.

As a result of the loss of importance of the coffee activity in the Colombian economy, it would not be surprising to find a parallel loss of importance of the Federation both in the formulation of coffee policies and its intervention in the coffee market, as well and, more importantly, in the design of macroeconomic policies.

TABLE 1
COLOMBIA
MAJOR COFFEE ECONOMY INDICATORS: 1896 - 1939

Year	External Price 1/	Export Volume 2/	Export Revenues 3/	Output 4/	Domestic Price 5/	Domestic Real Price (1995=100)
1896 - 1912:						
1896	15.7	0.5	9.8	475	*	*
1897	13.5	0.5	8.2	459	*	*
1898	11.5	0.5	8.1	531	*	*
1899	8.6	0.4	4.4	387	*	*
1900	7.0	*	*	*	*	*
1901	8.9	*	*	*	*	*
1902	10.7	*	*	*	*	*
1903	10.5	*	*	*	*	*
1904	11.3	*	*	*	*	*
1905	10.8	0.5	7.1	501	*	*
1906	10.6	0.6	8.9	636	*	*
1907	11.2	0.6	8.4	568	*	*
1908	11.5	0.6	9.2	607	*	*
1909	11.0	0.7	10.3	707	*	*
1910	15.2	0.6	11.3	570	*	*
1911	16.7	0.6	9.5	633	*	*
1912	15.6	0.9	16.6	932	*	*
1913 - 1930:						
1913	15.6	1.0	17.5	1,021	*	*
1914	15.7	1.0	14.9	1,032	*	*
1915	14.5	1.1	17.2	1,130	*	*
1916	14.4	1.2	15.4	1,211	*	*
1917	12.9	1.0	16.0	1,047	*	*
1918	16.4	1.1	24.3	1,149	*	*
1919	27.7	1.7	58.5	1,684	*	*
1920	21.6	1.4	32.3	1,444	*	*
1921	15.6	2.3	35.9	2,346	*	*
1922	17.5	1.8	33.2	1,765	*	*
1923	18.8	2.1	43.0	2,061	*	*
1924	24.9	2.2	68.3	2,216	*	*
1925	27.6	1.9	65.5	1,947	*	*
1926	28.5	2.5	84.4	2,454	*	*
1927	25.1	2.4	69.2	2,357	*	*
1928	27.3	2.7	86.3	2,660	*	*
1929	22.8	2.8	74.4	2,836	30	21.9
1930	17.2	3.1	59.6	3,118	20	18.2
1931 - 1939:						
1931	15.6	3.0	53.3		24	27.3
1932	11.4	3.2	41.0		20	30.3
1933	10.5	3.3	39.2		21	53.0
1934	13.7	3.1	51.5		36	67.2
1935	10.3	3.8	44.0		29	50.9
1936	11.3	4.0	51.8		32	52.8
1937	11.6	4.1	54.8		34	54.5
1938	11.0	4.3	54.3		31	44.9
1939	11.7	3.8	52.1		31	45.2

Sources and methodology:
* No available
1/ Colombian Coffee Price in New York, cents of dollar per pound.
2/ Millions of bags of 60 kilos of green coffee
3/ Millions of dollars
4/ Thousands of bags of 60 kilos of green coffee
5/ Pesos per 125 kilos of parchment coffee
Sources: National Federation of Coffee Growers of Colombia
Banco de la República
Beyer, op. cit.: Table 1, p.p. 355 - 357

TABLE 2
COLOMBIA
MAJOR COFFEE ECONOMY INDICATORS: 1940-1995

Year	External Price 1/	Export Volume 2/	Export Revenues 3/	Output 4/	Domestic Price 5/	Domestic Real Price (1995=100)
1940 - 1955:						
1940	8.4	4.4	43	4.8	23	35.3
1941	14.7	2.9	50	5.5	35	51.4
1942	15.9	4.3	63	5.3	37	48.4
1943	15.9	5.3	101	5.5	40	43.1
1944	15.9	4.9	94	5.5	48	43.9
1945	16.2	5.2	105	5.5	53	47.2
1946	22.5	5.7	157	6.5	73	54.5
1947	30.1	5.3	197	5.8	92	60.6
1948	32.6	5.6	225	6.1	103	59.2
1949	37.6	5.4	242	5.7	129	67.9
1950	53.3	4.5	307	5.0	185	82.2
1951	58.7	4.8	356	5.7	228	98.6
1952	57.0	5.0	380	6.6	260	109.6
1953	59.8	6.6	492	7.8	260	102.6
1954	80.0	5.7	550	5.7	340	128.5
1955	64.6	5.9	487	7.1	310	114.4
1956 - 1969:						
1956	74.0	5.1	413	6.8	317	108.8
1957	63.9	4.8	421	5.4	484	139.4
1958	52.3	5.4	391	7.3	468	124.4
1959	45.2	6.4	395	7.4	388	95.5
1960	44.9	5.9	353	7.2	430	98.9
1961	43.6	5.7	334	7.3	471	102.1
1962	40.8	6.6	349	7.1	478	97.0
1963	39.6	6.1	310	7.5	556	86.8
1964	48.8	6.4	387	8.6	718	102.6
1965	47.4	5.7	345	7.2	717	89.2
1966	44.1	5.6	339	8.7	757	83.2
1967	41.1	6.1	323	7.3	759	77.5
1968	41.3	6.6	352	8.1	889	85.1
1969	41.8	6.5	344	7.8	982	86.6
1970 - 1979:						
1970	54.0	6.5	467	8.3	1,304	107.3
1971	47.0	6.6	400	7.3	1,246	91.0
1972	52.3	6.5	430	7.5	1,500	96.1
1973	64.3	6.8	598	8.5	1,937	101.6
1974	67.8	6.9	625	6.9	2,207	92.5
1975	67.4	8.2	674	8.4	2,730	97.4
1976	144.8	6.3	977	6.7	5,532	157.3
1977	236.7	5.3	1,526	10.7	7,179	160.1
1978	164.8	9.0	1,994	11.4	7,300	136.0
1979	175.5	11.1	2,024	11.9	7,270	107.1
1980 - 1989:						
1980	156.2	11.1	2,375	12.1	8,663	102.5
1981	130.2	9.1	1,459	13.5	9,453	89.0
1982	142.1	8.9	1,577	12.1	11,171	84.6
1983	134.1	9.2	1,537	13.7	13,010	84.5
1984	146.6	10.2	1,799	11.6	15,429	84.8
1985	148.1	10.0	1,784	11.3	19,509	88.0
1986	196.7	11.4	3,046	10.7	37,510	139.2
1987	116.1	11.3	1,687	13.0	41,819	126.6
1988	142.9	9.8	1,697	11.8	49,392	117.1
1989	116.2	10.8	1,583	11.1	62,373	117.3
1990 - 1995:						
1990	95.1	13.9	1,473	14.1	76,973	109.8
1991	90.8	12.6	1,398	16.2	93,599	105.1
1992	69.0	16.6	1,321	16.1	90,978	82.0
1993	76.8	13.6	1,209	13.6	94,612	69.6
1994	157.3	11.8	2,101	12.0	157,844	94.7
1995	158.4	9.8	1,954	13.7	200,258	100.0

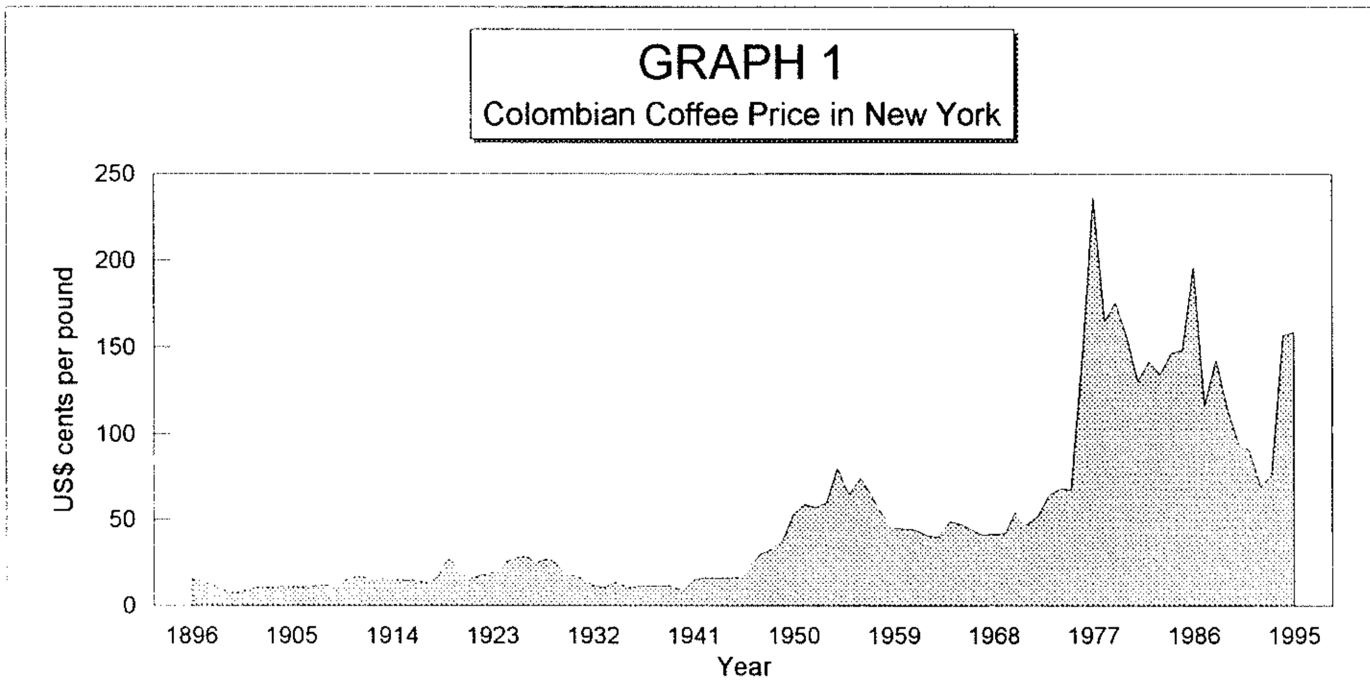
Sources and methodology
1/ Colombian Coffee Price in New York, cents of dollar per pound
2/ Millions of bags of 60 kilos of green coffee
3/ Millions of dollars
4/ Millions of bags of 60 kilos of green coffee
5/ Pesos per 125 kilos of parchment coffee
Sources: National Federation of Coffee Growers of Colombia
Banco de la República

TABLE 3

COLOMBIA
ECONOMIC INDICATORS

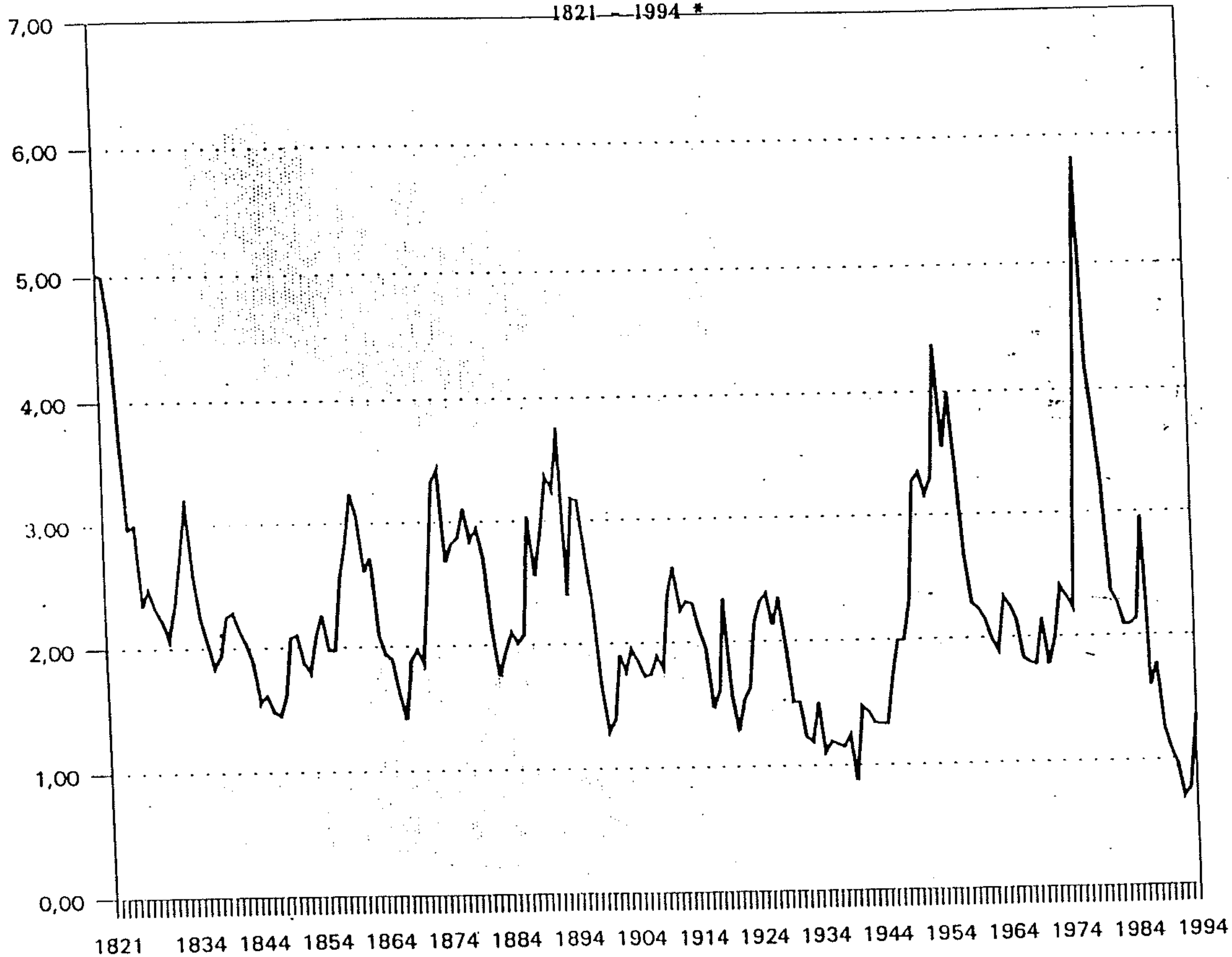
YEAR	GDP (%)	Inflation CPI (%)	Monetary Growth (%)	Current account (US)	Fiscal deficit (central goverment) GDP (%)	Real Exchange Rate Index (Dec 1986=100) 1/	Nominal Exchange Rate 2/
1956 - 1969							
1956	4.1	7.8	24.9	(17.0)	*	*	2.51
1957	2.2	20.2	13.6	122.6	*	80.82	5.38
1958	2.5	8.1	20.9	63.2	*	86.36	6.40
1959	7.2	7.9	12.0	62.7	*	79.83	6.40
1960	4.3	7.2	10.4	(84.7)	*	80.52	6.70
1961	5.1	5.9	24.6	(142.0)	*	76.30	6.70
1962	5.4	6.4	20.7	(137.9)	*	97.79	9.00
1963	3.3	32.6	12.2	127.6	(1.7)	73.57	9.00
1964	6.2	8.9	20.9	(122.1)	(1.1)	67.14	9.00
1965	3.6	14.6	15.7	(5.2)	(0.6)	59.87	9.00
1966	5.4	13.0	14.0	(280.1)	0.1	81.78	9.00
1967	4.2	7.3	21.9	(67.4)	(0.2)	91.03	13.50
1968	6.1	6.5	14.8	(165.8)	0.0	95.90	16.90
1969	6.4	8.6	19.5	(174.7)	(0.5)	96.45	17.83
1970 - 1980							
1970	6.7	6.8	17.2	(291.0)	(0.7)	86.50	19.09
1971	6.0	13.6	10.9	(456.0)	(1.0)	89.66	20.91
1972	7.7	14.0	24.4	(201.0)	(1.8)	88.45	22.79
1973	6.7	23.5	29.3	(77.0)	(1.2)	86.02	24.79
1974	5.7	26.0	19.6	(405.0)	(1.2)	86.90	28.63
1975	2.3	17.7	27.8	(127.0)	(0.5)	86.92	32.96
1976	4.7	25.7	34.7	189.0	0.6	79.97	36.32
1977	4.2	28.4	30.4	390.0	0.5	75.22	37.96
1978	8.5	18.8	30.3	330.0	0.3	75.02	41.00
1979	5.4	28.8	24.3	512.0	(0.8)	70.64	44.00
1980	4.1	26.0	29.1	104.0	(2.0)	73.08	50.92
1981 - 1989							
1981	2.3	26.3	19.7	(1,722.8)	(2.9)	70.66	59.07
1982	0.9	24.0	24.0	(2,885.0)	(4.1)	65.56	70.29
1983	1.6	16.6	26.0	(2,826.0)	(3.5)	67.30	88.77
1984	3.4	18.3	23.4	(2,088.0)	(4.4)	71.90	113.89
1985	3.1	22.5	28.2	(1,586.0)	(2.7)	92.38	172.20
1986	5.8	20.9	22.5	463.2	(1.3)	100.00	219.00
1987	5.4	24.0	33.2	(20.6)	(0.5)	99.70	263.70
1988	4.1	28.1	25.8	(215.6)	(1.4)	97.69	335.86
1989	3.4	26.1	28.9	(201.0)	(1.7)	105.02	433.92
1990 - 1995							
1990	4.3	32.4	25.2	543.5	(0.9)	116.93	568.73
1991	2.0	26.8	31.7	2,346.6	(0.3)	106.25	632.37
1992	4.0	25.1	41.0	900.2	(1.9)	103.85	737.98
1993	5.2	22.6	30.0	(2,114.6)	(0.8)	101.59	804.33
1994	5.7	22.6	25.3	(3,047.7)	0.7	93.29	831.27
1995	5.3	19.5	19.7	(4,235.0)	(2.7)	99.47	987.65

GDP 1993-1994 preliminary DANE
GDP 1995 Projection DNP
1/ From 1957-1969 corresponds to the bilateral real exchange rate peso-dollar. Since 1970 corresponds to the multilateral real exchange rate.
2/ 1956-1990 refers to the oficial exchange rate. Since 1991 corresponds to the market exchange rate.
Source: Economic Research Department, B. de la R.

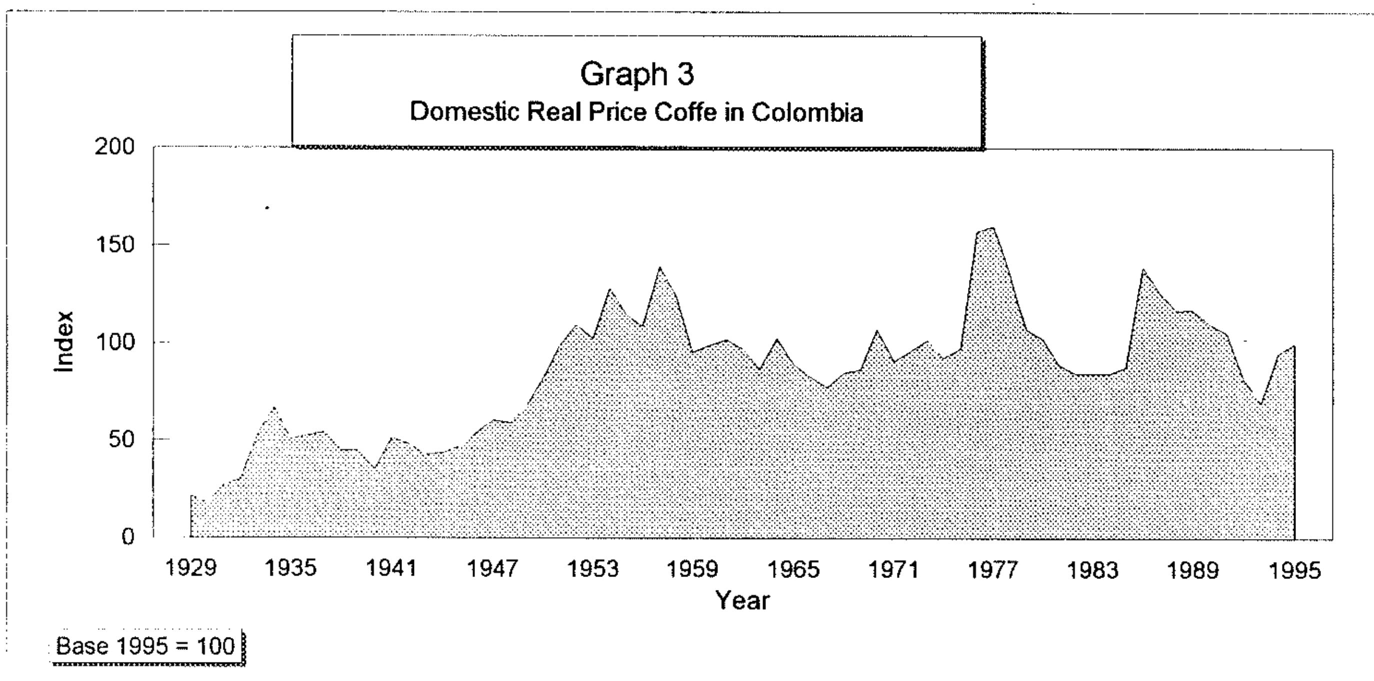

GRAPH 1
Colombian Coffee Price in New York
US$ cents per pound
250
200
150
100
50
0
1896
1905
1914
1923
1932
1941
1950
1959
1968
1977
1986
1995
Year

GRAPH No: 2

EXTERNAL REAL PRICE OF COLOMBIAN COFFEE
1994 CONSTANT DOLLARS
1821 – 1994 *



(*) Average January-August


Graph 3
Domestic Real Price Coffe in Colombia
200
150
100
50
0
Index
1929
1935
1941
1947
1953
1959
1965
1971
1977
1983
1989
1995
Year
Base 1995 = 100

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