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**THE EFFECTS OF TERMINATING THE MEXICAN
TWO-TIERED EXCHANGE RATE SYSTEM**

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The Effects of Terminating the Mexican
Two-Tiered Exchange Rate System

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Mexico has operated a two-tiered exchange rate system since it terminated its uncontrolled fixed rate system in August, 1982. In a two-tiered system, most current account transactions are channelled through an official exchange market at the "official" exchange rate, while capital account transactions are channelled through a "free" market. As in all such systems, one of the rationales for the Mexican exchange rate policy is to protect the real economy against exchange rate fluctuations arising from "financial speculation". Another important rationale is to allocate scarce foreign exchange in the face of critical situations in the balance of payments.

In the first few years of its operation, the Mexican policy generated a wide, though declining, divergence between the controlled rate and the "free" rate.¹ Occasionally, a financial crisis, such as that which followed the Mexico City earthquake in September, 1985, would cause a substantial, though temporary, jump in the divergence relative to its normal or trend value. During the last year, the normal divergence in rates has been less than 5%; and recently the rates have effectively converged, though the dual rate administrative apparatus remains in place.

When the divergence in rates is normally large, a dual exchange rate system can be interpreted, for those transactions forced through the official market, as an extra-budgetary mechanism to implement an export tax and an import subsidy

financed in part by the export tax. As such, the system presumably induces the movement of resources into industries using imports and away from export industries. To the extent that economic objectives are to favor imports, the dual system represents an administrative apparatus capable of generating the desired real resource shifts. While more direct budgetary measures might also foster the objectives, they apparently are more administratively or politically difficult to implement, given the empirical importance of dual exchange rate systems.

In addition to its real economic effects, the dual rate system impacts on a country's international accounts. Specifically, the dual system affects exchange rate dynamics, the degree of official intervention, and the composition of the balance on current and capital accounts.

With a normally small divergence, the substitution aspects of the tax-subsidy scheme become secondary, even in periods of financial crisis. Since large divergences are temporary and probably unexpected, representing major external shocks to the economy or speculative excesses, the income effects of the scheme across industries become predominant, with little substitution of capital and labor across industries.

The extent of the net subsidy to the trading sector for the Mexican case can be estimated as the private balance of trade multiplied by the differential between the free and the controlled exchange rates. In Graph 2 and Table 1, we present these data deflated by the Mexican consumer price index.

The existing theoretical papers on the evolution of dual exchange rate systems amount to standard analyses of systems of two differential equations in exchange rates and foreign assets or reserves. As such they are usually too highly stylized to be applicable to the complications of an actual dual exchange rate system in operation. Nevertheless, in section 3 we will interpret the Mexican system as it currently stands in terms of the theoretical literature to predict the financial effects of unification. Since the differences between official and free rates have been small over the last year and interventions have been negligible, the Mexican system is currently a de facto floating rate system. Explicitly eliminating the dual exchange administrative apparatus would therefore have little impact on the usual categories in the balance-of-payments accounts.

Alternatively, we will interpret the Mexican system as a combination of a unified floating regime which can shift temporarily into a dual system when triggered by extreme shocks. The dynamics of such a system would differ substantially from those of a pure unified floating rate regime.

In section 1, we will review the literature on dual exchange rate systems (henceforth DERS). In section 2, we will examine in detail the evolution of the Mexican dual exchange rate system to determine the applicability of the current theories. Section 4 contains conclusions.

1. The Dual Exchange Rate Literature

Recent papers have concentrated mainly on positive issues of exchange rate, balance-of-payments and balance of trade dynamics in different dual rate systems. Typically, feedbacks from the dual exchange rate system to the real economy, e.g. the level of economic activity or the resource allocation across productive sectors, have been ignored in formal analyses. In this literature, except for data series and charts on divergences between controlled and free rates, no one has provided an empirical implementation to determine how well existing models capture the wide range of observable experiences with DERS.

DERS have been adopted partially based on arguments that they insulate the domestic real economy from foreign disturbances, that they protect the real economy from sudden flights from the domestic currency, and that they permit an effective implementation of monetary policy.² While many papers derive one or more of these results, showing the effectiveness of the dual exchange rate mechanism, few are embedded in a framework rich enough to answer the normative question of why it is desirable for a government to implement such policies.

The basic machinery of all current models consists of a portfolio balance equation and a wealth adjustment or savings equation, components used by Dornbusch (1976), among others. Descriptions of the operation of a specific exchange rate regime

are added to this basic structure for use in determining the dynamics of key variables. Finally, various shifts in policies or disturbances to demands are imposed on the models to determine the effects on either the dynamics or the steady state of the model.

Recent papers employ rational expectation, following the work of Flood (1978). Flood (1978), Flood and Marion (1978) and Blanco (1986) provide the only analyses which model explicitly the random nature of the disturbances impinging on the economy. Since dynamic paths of exchange rate differentials, balance of payments, and outputs become random in such an environment, the door is open to examining the effects of various exchange rate policies on random fluctuations in variables of interest. For example, Flood and Marion (1982), assuming that a government aims to minimize fluctuations in actual output about its full-information value, analyze the effectiveness of various exchange rate policies in achieving this end. Blanco (1986) compares the variability of a managed floating rate in a unified exchange rate system to the variabilities of the controlled and the free rate in DERS to determine whether unification would increase or reduce variability.

Most other papers examine dynamics of a dual rate system under an assumption of perfect foresight. Hence, they cannot encompass one of the basic arguments for establishing a dual system: to insulate the real economy from exchange rate fluctuations caused by random financial speculation. Among

papers employing perfect foresight are those of Lizondo (1984),

(1987), Aizenman (1985), Dornbusch (1986) and Lizondo and Kiquel (1986).

While the literature contains an examination of a wide variety of dual rate systems, the dynamics analyzed are almost invariably restricted to a pure regime in that neither endogenous nor even predictable shifts in the basic regime are considered.² As usual in international finance, a vast taxonomy is available.

First, assumptions are required about the nature of the exchange market intervention: a central bank may intervene in both official and free markets, in only one market, or in neither market. If it acquires positive amounts of foreign exchange by intervening in one market, it may sell them in the other to avoid net acquisitions. It may be willing to spend unlimited amounts of foreign exchange to set a crawling rate, or it may set a maximum cumulative amount of intervention beyond which it alters the rate of crawl. It may fix the rate of domestic credit creation exogenously, or it may adjust this rate in response to shifts in the economic environment.

Second, the researcher must specify which transactions are forced through the controlled market. Perhaps all the current account transactions occur at the controlled rate. Alternatively, earnings on foreign assets may exchange at the uncontrolled rate. Some items, e.g. vital imports and merchandise exports, may pass through the controlled market while

the rest, e.g. service exports and "luxury" imports are transacted in the uncontrolled market. There may be over-invoicing of imports and under-invoicing of exports in the controlled market so that transactions gradually move from the controlled to the uncontrolled market. There may be more than two markets, i.e. the "free" rate may itself be controlled.

Finally, various completely unanticipated parameter shifts can be invoked within a given pure regime. Among these are a devaluation in a pegged exchange rate, an increase in the rate of depreciation of a crawling peg, a shift in the amount of goods passing through the controlled market, a sudden sale of reserves in the free market, a reduction in the rate of increase in domestic credit, and a shift in preferences toward foreign assets.

The combinatoric possibilities of just these categories are immense, far surpassing even the large number of cases examined in the papers cited above and guaranteeing full employment, though at low wages, to specialists in international finance into the foreseeable future.

The dissatisfying aspect of this literature stems from its concentration on minor policy shifts within a pure regime; it ignores endogenous changes from regime to regime. Therefore, the dynamics examined in these papers are unlikely to be of interest in analyzing the dynamics of a dual rate system undergoing a rapid and major evolution or a transition to a unified system. Unfortunately, the rapid changes in the Mexican system probably

undermine the use of the existing literature in explaining the Mexican experience prior to 1986.

2. The Mexican Experience with Dual Exchange Rate Regimes

Since August, 1982, Mexico has experienced four different varieties of DERS. Our description of these regimes will consist of a brief exposition of the motivation invoked in each instance and the regulations of each regime. Additionally, we present some empirical evidence on each of these DERS.

a. August 18, 1982

Motivation

The first dual exchange regime stemmed from:

- i. Significant limitations on financing the deficit in the current account.
- ii. The desire to use oil revenues to cover payments on external debt servicing and on essential imports (foodstuffs, capital, and intermediate inputs) in order to minimize the social cost and the impact on production and employment of the reduced flow of external funds
- iii. The desire to protect foreign reserves of the Banco de Mexico (henceforth, Banxico) against speculative transactions.

The main motivation of this legislation was to allocate scarce foreign reserves after the exchange rate crisis of August.

1982. No reference was made to the DESB property of insulating the real economy from future exchange rate fluctuations, though it was aimed partly at minimizing the impact of the current crisis on the import sector.

Regulations

The regulations driving this regime were as follows:

1. The entire public sector had to deposit its foreign financial assets and its receipts of foreign reserves at Banxico at a fixed exchange rate. This regulation did not apply to private exporters, who could sell their foreign exchange at the "general" exchange rate determined by demand and supply.
11. Banxico would sell foreign exchange at a preferential rate set every day depending on its availability for a) public debt servicing b) servicing private debt contracted before August 17, 1982 c) "essential" imports (to be determined by the Ministry of Commerce).

The Operation of the DESB

From the August 6, 1982 devaluation (from 49.34 to 79.0 pesos per dollar) until August 31, 1982, Banxico established a general exchange rate. This rate reflected to some extent the forces of supply and demand, which, as can be observed in Graph 3, followed somewhat closely the spot rate in the New York interbank market.⁴ The differential between the free New York interbank market rate and the preferential rate was substantial

and increased rapidly during this period (see Graph 4).

b. September 1, 1982 ("The Generalized Exchange Controls")

Motivation

This regime arose from the desire i) to eliminate excessive exchange rate fluctuations caused by speculative transactions and ii) to use foreign reserves "rationally."

Regulations

The operating rules in this system were as follows:

- i. All foreign exchange transfers with the rest of the world could be performed only by Banxico or by other agents with the specific authorization of Banxico.
- ii. There would be three exchange rates: the preferential rate, the ordinary or normal rate and the special rate;
- iii. Banxico would discretionally determine, in a permanent or temporary fashion, which operations should take place at the preferential rate;
- iv. The priorities for the use of Banxico's foreign exchange were: a) requirements of the public sector b) imports of foodstuffs, intermediate inputs and capital goods c) private debt service needs and payments of royalties d) travel expenses.
- v. All exporters, off-shore (maquiladoras) firms and foreign exchange firms would deposit their foreign exchange according to Banxico regulations.
- vi. All nationals were allowed a certain amount of foreign

exchange at the preferential rate for traveling purposes.

vii. All foreign tourists would exchange their currency for pesos at the port of entry.

The Operation of the DERS

With these regulations Banxico established a strict, full-fledged exchange control regime. It set the "ordinary" rate, applied to all non-controlled transactions, at 70 pesos per dollar, for the remainder of Lopez-Portillo's presidential term. Likewise, the preferential rate was pegged at 50 pesos per dollar, generating a high and growing differential with respect to the New York interbank rate (Graph 5). The dwindling level of foreign reserves and the substantial differences between the free rate in the New York market and the ordinary rate shown in Graph 6 imply that rationing must have been an important element of this market.

The impossibility of enforcing this regime was discussed at length in a subsequent Banxico publication, which may be considered a handbook on how to evade exchange controls. In practice, due to the extent of the frontier with the United States and the inherent problems in policing a strict system of exchange controls, this regime was not enforced very successfully.

c. December 13, 1982 (The de la Madrid Administration)

Yet a new regime was formed to undo the difficulties with regime b. and to establish the following principles:

- i. A regime whose regulations are commonly broken is undesirable.
- ii. A foreign exchange market outside of the banking system is highly inconvenient.
- iii. The productive sector should be protected against fluctuations of the exchange rate
- iv. Tourists should not be put through cumbersome regulations.
- v. Private firms should be protected against exchange rate losses.
- vi. Scarce foreign reserves should be allocated to high priority needs.

Regulations

This regime was implemented by establishing a "controlled" market and a "free" market. The controlled market included: a) all exports (except those that were impractical to control); b) off-shore production; c) interest payments and amortization; d) imports. The free exchange rate would be determined by the market, with no restrictions on buying, selling, or owning foreign exchange.

The Operation of the DERS

The actual operation of this classic dual exchange regime seriously violated the principle of no restrictions on trading in the free market. The "free" rate actually was controlled by

Banxico, as indicated in Graph 7. The differences between the exchange rate quoted by U.S. currency exchange houses, the "super-free" rate, and the "free" rate indicate that Banxico must have used some degree of rationing in the "free" market (Graph 9).

From Graphs 8 and 9, one can conclude that the strategy of Banxico was to decrease continuously the differentials between the controlled and "free" rates, but the "super-free" rate fluctuated above the free rate.

d. July 31, 1985

Motivation

The objectives of this regime were to:

- i. increase the inflow of foreign exchange in the controlled market to pay for necessary imports, service the debt, and increase Banxico's foreign reserves;
- ii. establish a more flexible system to determine the controlled rate which would promote non-oil exports and to give adequate protection to domestic producers;
- iii. establish a system of regulated floating where the exchange rate was determined by the supply of and demand for foreign exchange, the need to accumulate foreign reserves, the behavior of domestic and foreign prices, and "some other factors".

Regulations

To implement this new set of objectives, Banxico established

three exchange rates. The "equilibrium" controlled rate would be determined by a daily auction with the participation of financial intermediaries which would present their customers' offers to buy and sell. Banxico, however, could take a position on either side of this market. Some of these offers to buy and sell could be contingent on some exchange rate bounds. A "window" controlled rate would be determined between the financial intermediary and importers and exporters. A free rate would be determined in a market consisting of all transactions not included in the controlled market. In addition, private foreign exchange houses and (nationalized) banks were allowed to operate in the free market.

The Operation of the DERS

Actually, the auction system only operated until October, 1985. Subsequently, Banxico determined the controlled rate in accordance with the set of criteria presented above for the December 13, 1982 regime.

The July, 1985 regulations effectively created, for the first time in the Mexican experience, a domestic exchange rate which fluctuates freely. As evidence, the differentials between the free rate at the banks and at the currency exchange houses with the exchange rate at the U.S. currency exchange houses (Graphs 10 and 11) fluctuate narrowly about zero. Data on Banxico's intervention in this market are not available. Informal evidence, however, indicates that Banxico has intervened

on both sides of the free market as net seller and net buyer, but that it has most often been a net buyer. Most of the net acquisitions of foreign exchange have been used to intervene in the controlled market, but there has also been some accumulation of reserves.

The exchange differential, as can be observed in Graph 12, continued its declining trend until December, 1986, when it became negligible. During December, 1986 and January, 1987, the differentials among the different rates have displayed a different behavior. The controlled bid rate has sometimes exceeded the free bid rate at the nationalized banks or in private currency exchange houses, while the controlled ask rate is now higher than the ask rate at the currency exchange houses. These data are presented in Graphs 13 through 16, as well as in Table 2. It seems that Banxico wants systematically to increase its inflow of foreign exchange buying and selling at higher rates than the private exchange houses.

3. Financial Effects of Unification

In this section we will use Lizondo's unification model to assess the financial impact of a unification of the Mexican exchange rates. We will take the Mexican system as it has existed for the past year, with its small divergence between official and free rates, as the relevant version of the dual system from which the transition is to be made.

Alternatively, we will presume that the dual system exists

to provide subsidized insurance to importers against large random exchange rate fluctuations and consider the real impacts of removing this subsidy.

1. Unification in Lizondo's Model

Lizondo's (1987) model of unification, by assuming an exogenous, fixed real output level, examines the impact of unification on the short term dynamics of the post-unification exchange rate, the balance on the trade and capital accounts, and, in case of a crawling peg, on the balance of payments. Lizondo examines the case in the free exchange rate floats and the official rate follows a crawling peg. Domestic credit is created at a constant, unchanging rate throughout the analysis. All capital account transactions are undertaken at the free rate, and an arbitrary percentage of imports and exports are forced through the official market. All other goods are transacted at the free rate. Wealth consists only of domestic and foreign money, and the demand for domestic money depends negatively on the rate of depreciation of the free exchange rate.

Lizondo (p.65) then produces the dynamics and the steady state of a permanently existing dual system, computing in particular steady state values of real domestic and foreign money holdings and of the differential between the official and the free exchange rates. These steady state values depend on the quantities of goods forced through the official market, the rate of domestic credit creation, and the rate of depreciation of the

exchange rates.

Assuming that the country wishes suddenly to unify the exchange rate system, Lizondo analyzes the dynamics under two potential post-unification regimes. He derives the standard dynamics of both a unified floating system and a unified crawling peg regime. Then he assumes that the regime switch comes by surprise, with the steady state of the dual system serving as the initial conditions for the dynamics of the unified regime.

Specifically, in the case of a unified floating regime (p.66), he concludes that the new initial value of the floating rate will lie between the official and free rates in effect at the end of the dual system. Thus, there will be a depreciation with respect to the official rate and an appreciation with respect to the free rate. Also, he reasons that holdings of foreign assets is initially low relative to steady state values so that the regime shift will create a surplus in the current account as these assets increase.

Suppose that we assume that Mexico approximately satisfies the assumptions used by Lizondo in constructing his dual exchange rate regime. Given that the current differential between the official and free rates is approximately zero, a shift to a floating system would imply no discontinuity of exchange rates. Furthermore, if the rate of domestic credit creation equalled the rate of depreciation of the official rate in the dual exchange rate regime, the steady states in the two regimes would be identical.² A shift to a unified floating regime would then

have no effect on current account or capital account surpluses.

Effectively, in a perfect foresight model, a dual exchange rate system in which the official and free rates have converged is a unified system. An official switch to a unified system, as simply a recognition of the current regime, would have no impact. Hence, one could argue, based on this reasoning, that Mexico would be unaffected by a unification.

2. The Dual Rate as an Exchange Insurance Subsidy

Graph 12 indicates that the divergence between official and free rates, though near zero in the past year, is subject to occasional temporary jumps. Since large divergences represent major external shocks, the dual exchange rate system provides a form of insurance to importers against major loss or bankruptcy caused by large exchange rate fluctuations. To the extent that exporters are forced into the insurance pool and to the extent that the central bank expends reserves in the official market, net importers receive a subsidy on their insurance premia which may generate some substitution effects. In such circumstances the import sector would employ more resources than in an unsubsidized situation.

Since, until recently, exports consisted mostly of oil, the subsidy was paid from the rents to petroleum ownership which otherwise would have accrued to the government. Presumably, this would have had little impact on the resource allocation to the export sector. Since a much greater percentage of exports have

recently been produced in the private sector, extraction of the subsidy in this form would cut off the upper tail from export earnings and discourage the allocation of resources to this sector.

Given that the exchange rate divergence is usually zero, we can interpret the "dual exchange rate" system as a unified floating rate during normal periods, shifting periodically to a dual rate system. The dual rate system is a tax-subsidy scheme which, usually dormant, is triggered by unusual disturbances to the floating rate. Since agents in the economy would always attach a positive probability to a shift to a dual regime, the dynamics even of the unified phase would be enormously complicated.⁶

A termination of this scheme in favor of a unified floating system would end the insurance and lead to a flow of resources from the import sector to the export and non-tradable goods sectors. The effects of this shift can be offset through importer participation in the currency futures market to provide a hedge against adverse, large floating rate movements. In addition, the dual system, as it now stands, could be mimicked by providing a direct subsidy to importers hedging their position in the futures market.

4. Conclusion

Though they now constitute a large literature, theories of the operation of dual exchange rate systems are still too stylized

to be readily applicable, at more than a superficial level, to predicting the impact of a shift to a unified exchange rate regime in an operating economy. In the Mexican case, however, what is officially a dual rate system has operated de facto with almost equal official and free exchange rates. Though this creates a highly complex combination of contingent regimes, an analysis of the Mexican system with a standard model implies that it is in fact a unified regime. Thus, an official shift to a unified exchange rate would have little impact on balance of payments account items.

Footnotes

1 See Graph 1 for weekly data on this differential since December, 1982. In the first years of its operation, the "free" rate was effectively a black market rate or the exchange rate on the U.S. border or in the New York interbank market. Since August, 1985, however, a freely functioning market in foreign exchange has operated domestically both in private currency exchange houses and in the nationalized banks.

2 Flood and Marion (1982) have examined the insulative properties of dual rate systems; Aizenman (1985) has examined the independence of monetary policy; and Dornbusch (1986) has examined the dynamics of flight from currency in a dual exchange rate system.

3 Flood and Marion (1982) study transitions from dual regimes to unified regimes. Lizondo (1987) examines the dynamics of a unified regime after a sudden, unexpected shift from a dual regime in its steady state.

4. Before December, 1982, there are no data available on the exchange rate transactions at the border.

5. The assumption that the rate of crawl equals the rate of

domestic credit creation is the only one that makes sense in starting from the steady state of the dual system.

6. See Lizondo (1987), p. 63, note 12 for a discussion of the difficulties involved in modelling these anticipated recurrent regime shifts in a perfect foresight model.

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TABLA 1

IMPORTACIONES MENOS EXPORTACIONES PRIVADAS
 VALUADAS EN DOLARES FOR LA
 DIFERENCIA ENTRE EL TIPO DE CAMBIO SPOT EN
 N.Y. Y EL CONTROLADO. DEFLACTADO POR EL IPC.

IV TRIMESTRE 1982 (1)	-290510
I TRIMESTRE 1983	-1263860
II TRIMESTRE 1983	-267470
III TRIMESTRE 1983	110930
IV TRIMESTRE 1983	-312042
I TRIMESTRE 1984	-426520
II TRIMESTRE 1984	-148705
III TRIMESTRE 1984	239623
IV TRIMESTRE 1984	325272
I TRIMESTRE 1985	382716
II TRIMESTRE 1985	870456
III TRIMESTRE 1985	1656750
IV TRIMESTRE 1985	1473360
I TRIMESTRE 1986	105038
II TRIMESTRE 1986	135283
III TRIMESTRE 1986	51077
IV TRIMESTRE 1986 (2)	-38249

(1) SOLO DICIEMBRE 1982

(2) SOLO OCTUBRE Y NOVIEMBRE DE 1986

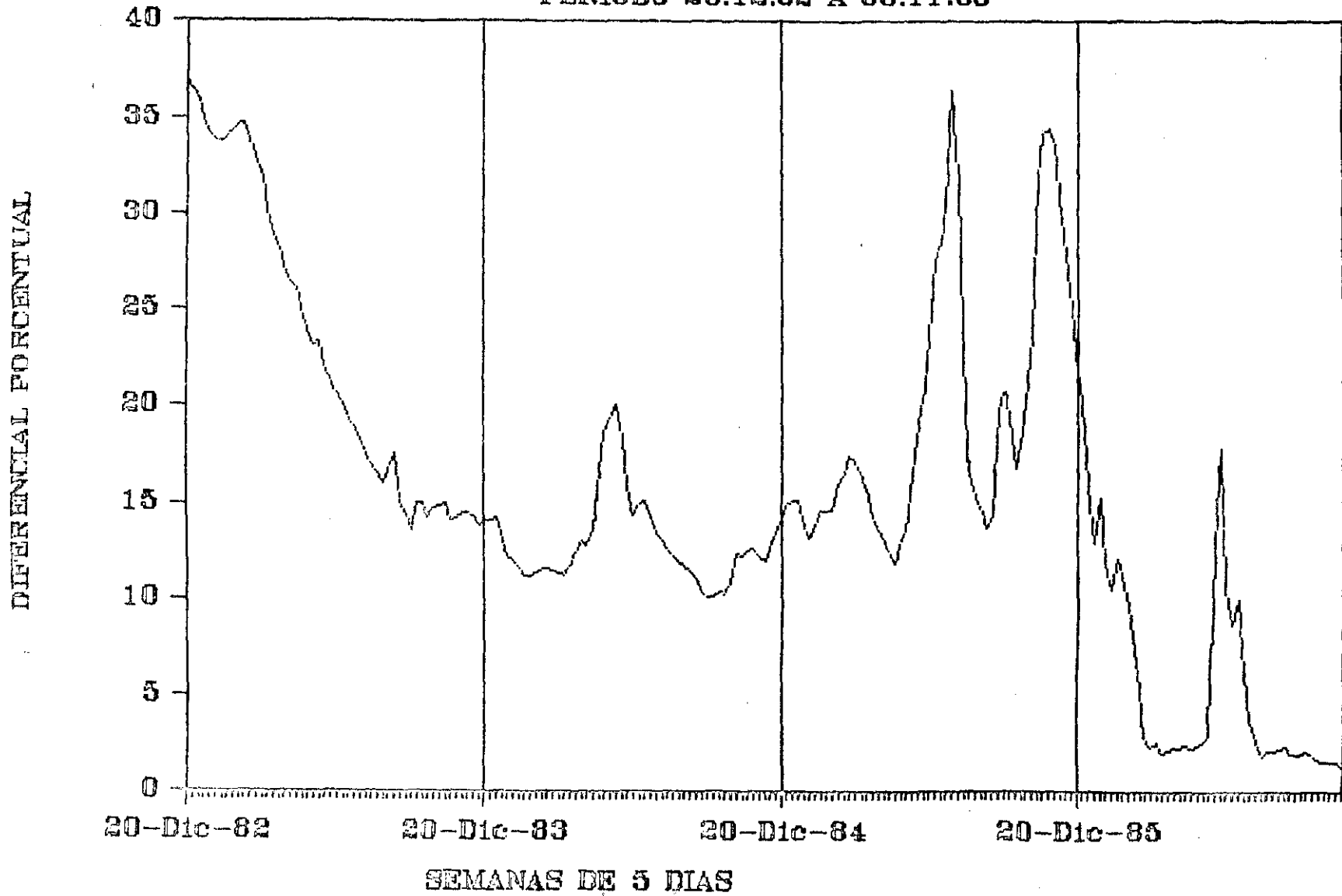
TABLA 2

TIPO DE CAMBIO	CONTROLADO		LIBRE BANCOS		LIBRE CAMBIO DE CAMBIO		
	COMPRA	VENTA	COMPRA	VENTA	COMPRA	VENTA	
DICIEMBRE 1986							
LUNES	1	861.2	863.5	868.0	880.0	870.0	872.0
MARTES	2	863.4	865.6	872.0	880.0	875.0	882.0
MIERCOLES	3	864.9	867.1	870.0	882.0	877.0	884.0
JUEVES	4	866.4	868.6	872.0	884.0	876.0	886.0
VIERNES	5	872.1	874.3	872.0	884.0	880.0	887.0
LUNES	8	872.1	874.3	876.0	884.0	881.0	889.0
MARTES	9	874.5	876.6	877.0	885.0	882.0	889.0
MIERCOLES	10	876.3	879.3	877.0	889.0	884.0	890.0
JUEVES	11	884.2	887.2	883.0	895.0	886.0	891.0
VIERNES	12	885.9	888.9	888.0	896.0	888.0	892.0
LUNES	15	885.9	888.9	888.0	896.0	890.0	892.0
MARTES	16	887.0	890.8	889.0	897.0	891.0	893.0
MIERCOLES	17	888.6	892.4	891.0	902.0	892.0	898.0
JUEVES	18	890.4	894.2	892.0	904.0	900.0	905.0
VIERNES	19	898.4	902.2	895.0	904.0	900.0	907.0
LUNES	22	898.4	902.2	895.0	904.0	900.0	909.0
MARTES	23	900.2	904.6	897.0	906.0	904.0	912.0
MIERCOLES	24	904.6	909.0	899.0	908.0	904.0	912.0
JUEVES	25	910.8	915.2	901.0	910.0	915.0	930.0
VIERNES	26	912.6	917.0	905.0	914.0	915.0	930.0
LUNES	29	918.7	923.3	910.0	919.0	908.0	930.0
MARTES	30	920.7	925.3	911.0	920.0	912.0	928.0
MIERCOLES	31	920.7	925.3	911.0	920.0	912.0	924.0
ENERO 1987							
JUEVES	1	920.7	925.3	911.0	920.0	912.0	924.0
VIERNES	2	922.0	926.2	919.0	928.0	919.0	927.0
LUNES	5	925.1	929.7	925.0	934.0	921.0	931.0
MARTES	6	926.8	931.4	926.0	935.0	925.0	932.0
MIERCOLES	7	928.0	933.2	928.0	937.0	930.0	936.0
JUEVES	8	930.5	935.2	930.0	939.0	930.0	939.0
VIERNES	9	932.4	937.1	932.0	941.0	930.0	938.0
LUNES	12	938.8	943.5	938.0	947.0	936.0	944.0
MARTES	13	940.8	945.5	940.0	949.0	933.0	948.0
MIERCOLES	14	942.7	947.4	942.0	951.0	940.0	949.0
JUEVES	15	944.8	949.6	944.0	953.0	944.0	951.0
VIERNES	16	946.7	951.4	946.0	955.0	944.0	952.0
LUNES	19	951.0	957.4	953.0	963.0	953.0	962.0
MARTES	20	954.9	959.7	954.0	964.0	956.0	962.0
MIERCOLES	21	956.5	961.3	956.0	966.0	955.0	964.0
JUEVES	22	958.3	963.1	958.0	968.0	957.0	967.0
VIERNES	23	960.1	964.9	960.0	970.0	960.0	968.0
LUNES	26	966.9	971.7	966.0	976.0	968.0	973.0
MARTES	27	969.1	973.9	969.0	979.0	970.0	977.0
MIERCOLES	28	971.2	976.0	971.0	981.0	970.0	976.0
JUEVES	29	973.1	978.0	973.0	983.0	972.0	980.0
VIERNES	30	975.9	980.8	975.0	985.0	980.0	988.0

GRAFICA 1

T.C. FRONTERA Y CONTROLADO

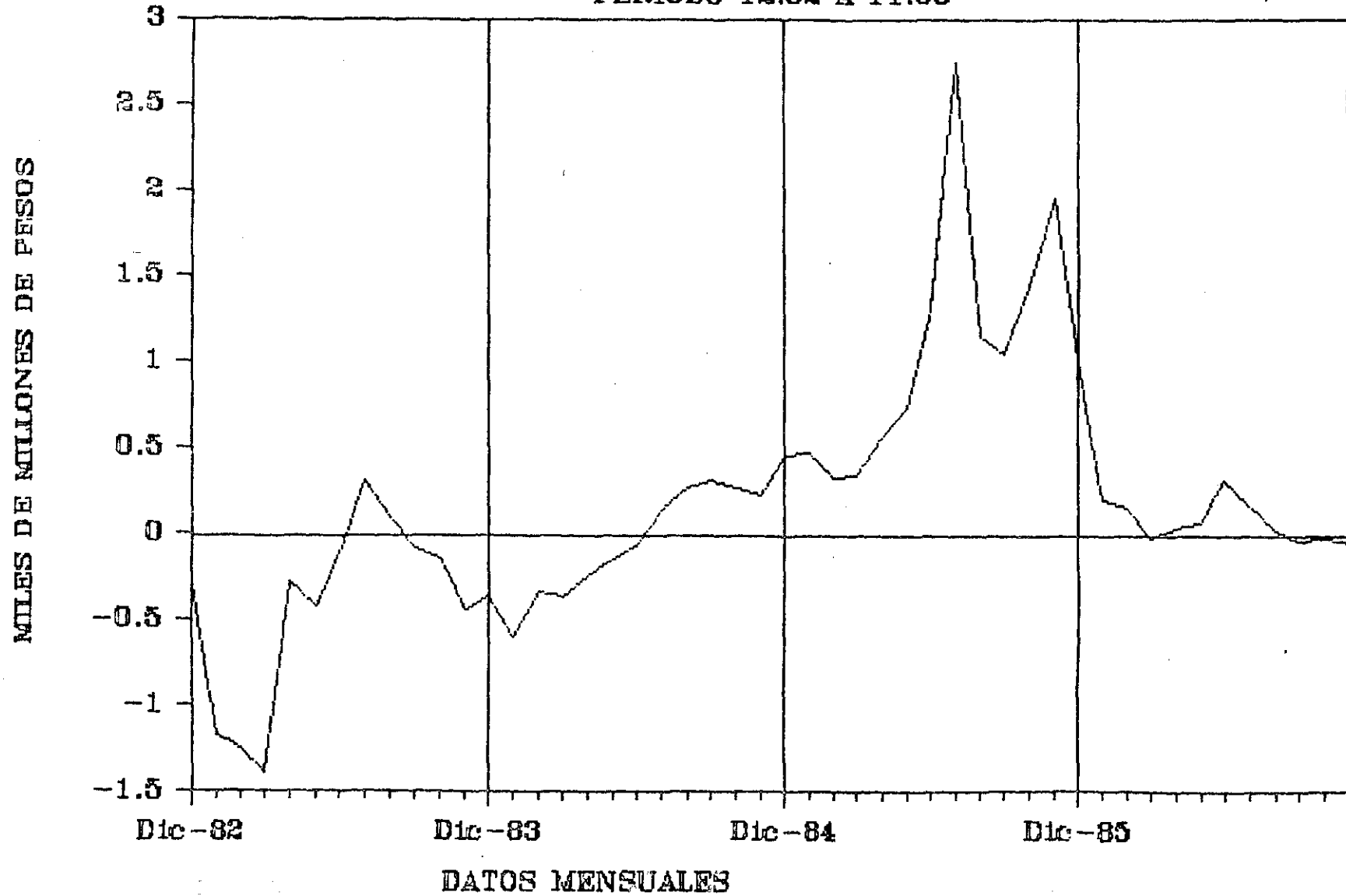
PERIODO 20.12.82 A 06.11.86



GRAFICA 2

ESTIMACION DEL SUBSIDIO

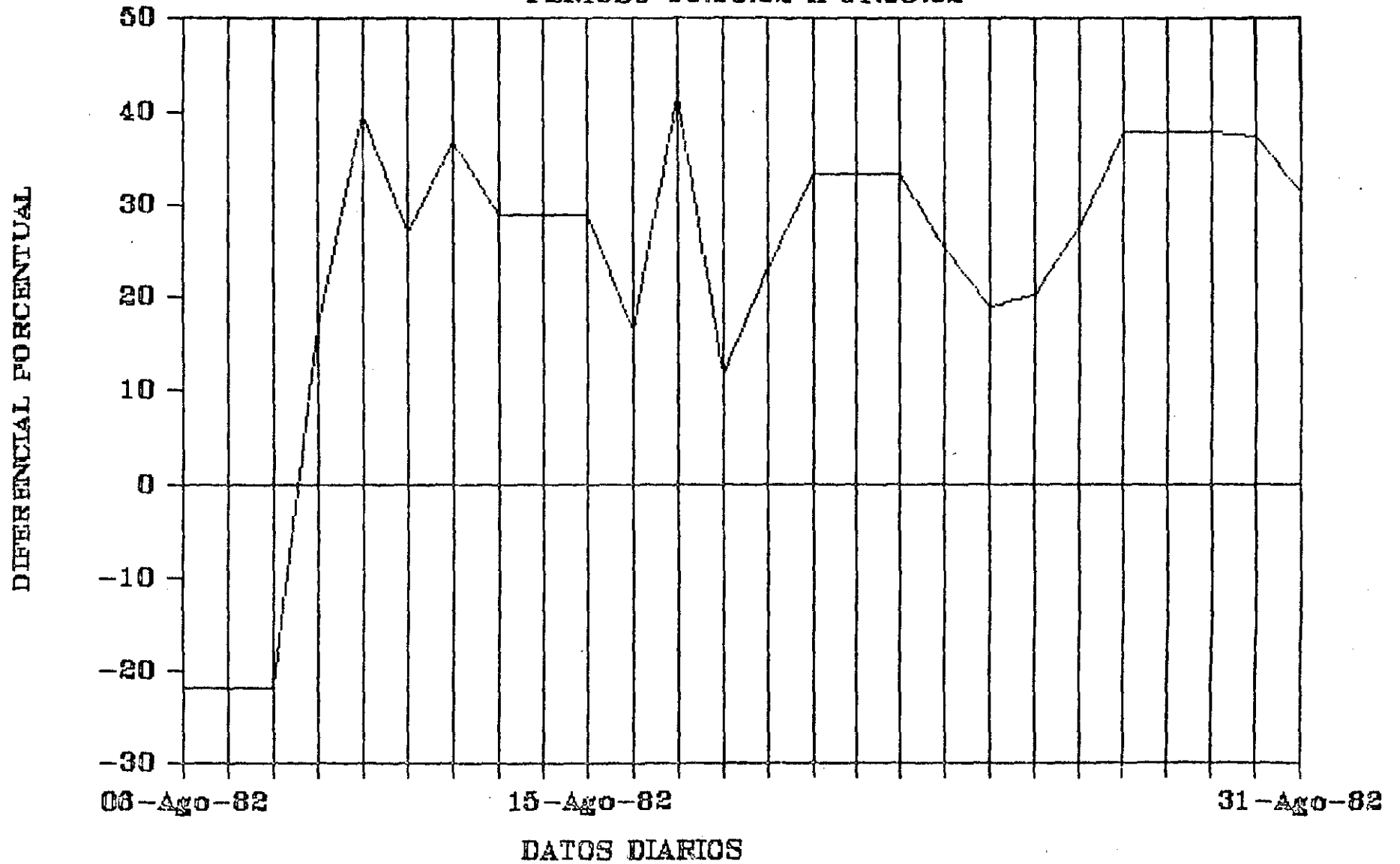
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GRAFICA 3

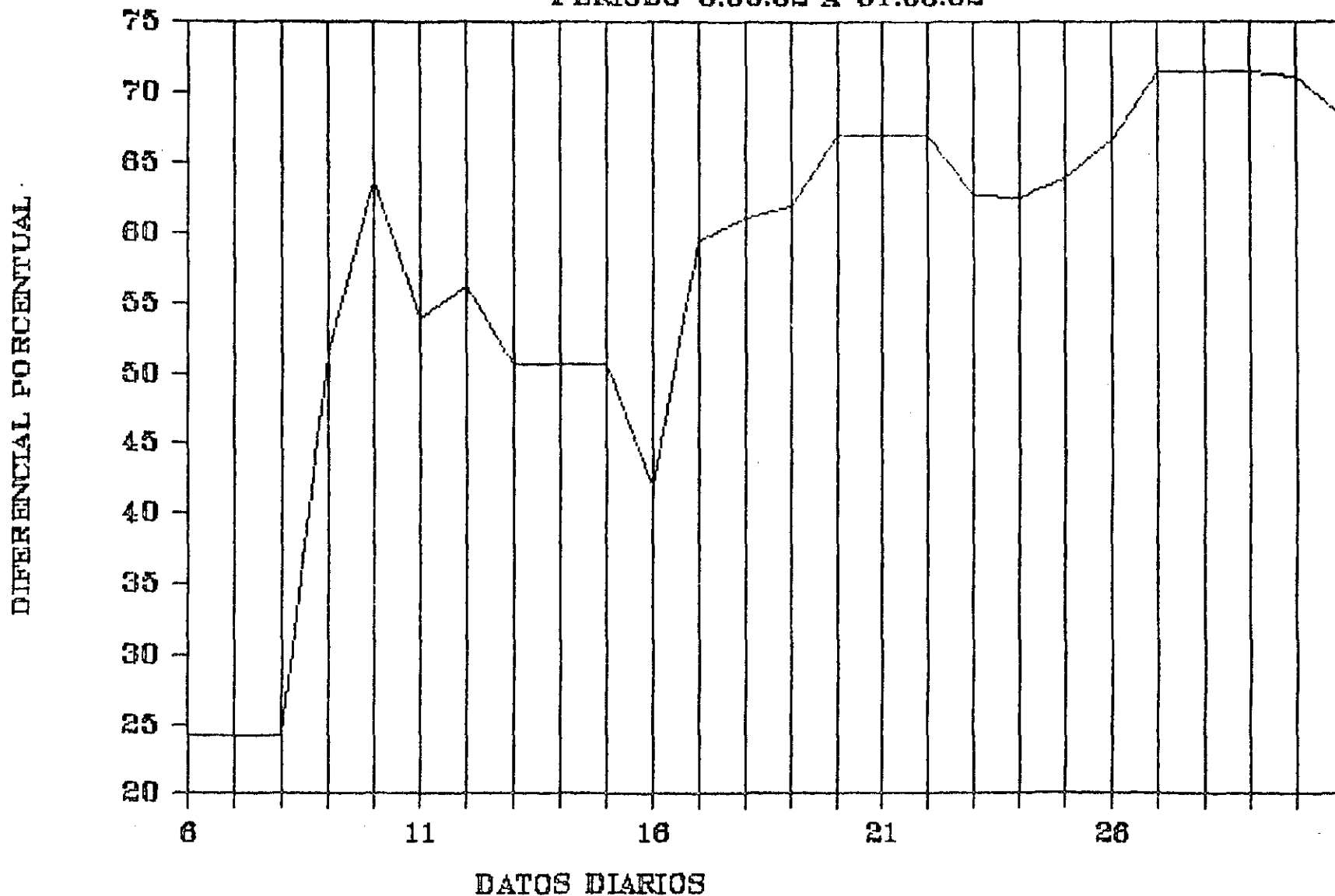
T.C. SPOT (NY) Y GENERAL

PERIODO 08.08.82 A 31.08.82



T.C. SPOT(NY) Y PREFERENCIAL

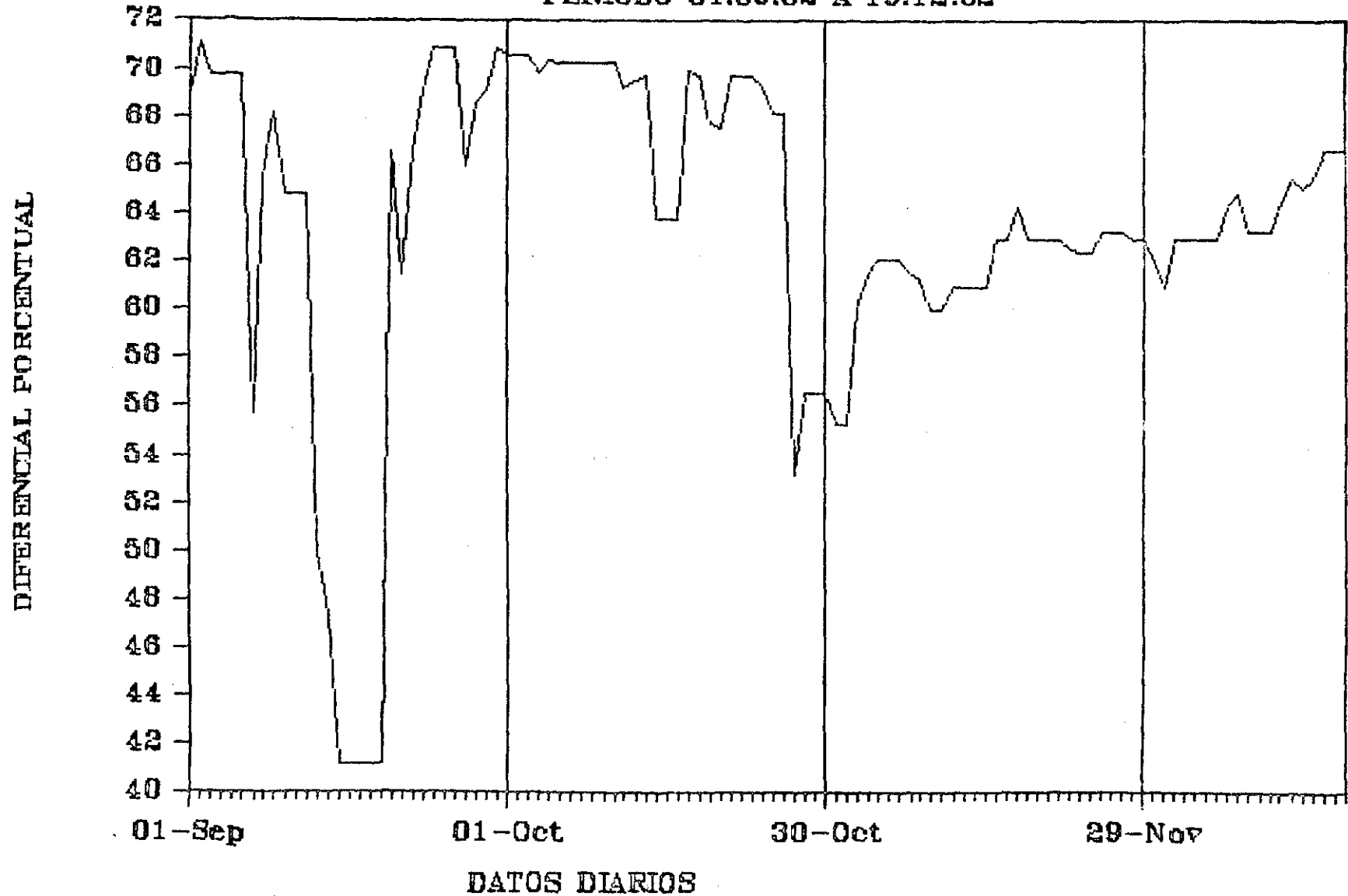
PERIODO 6.08.82 A 31.08.82



GRAFICA 5

T.C. SPOT(NY) Y PREFERENCIAL

PERIODO 01.09.82 A 19.12.82

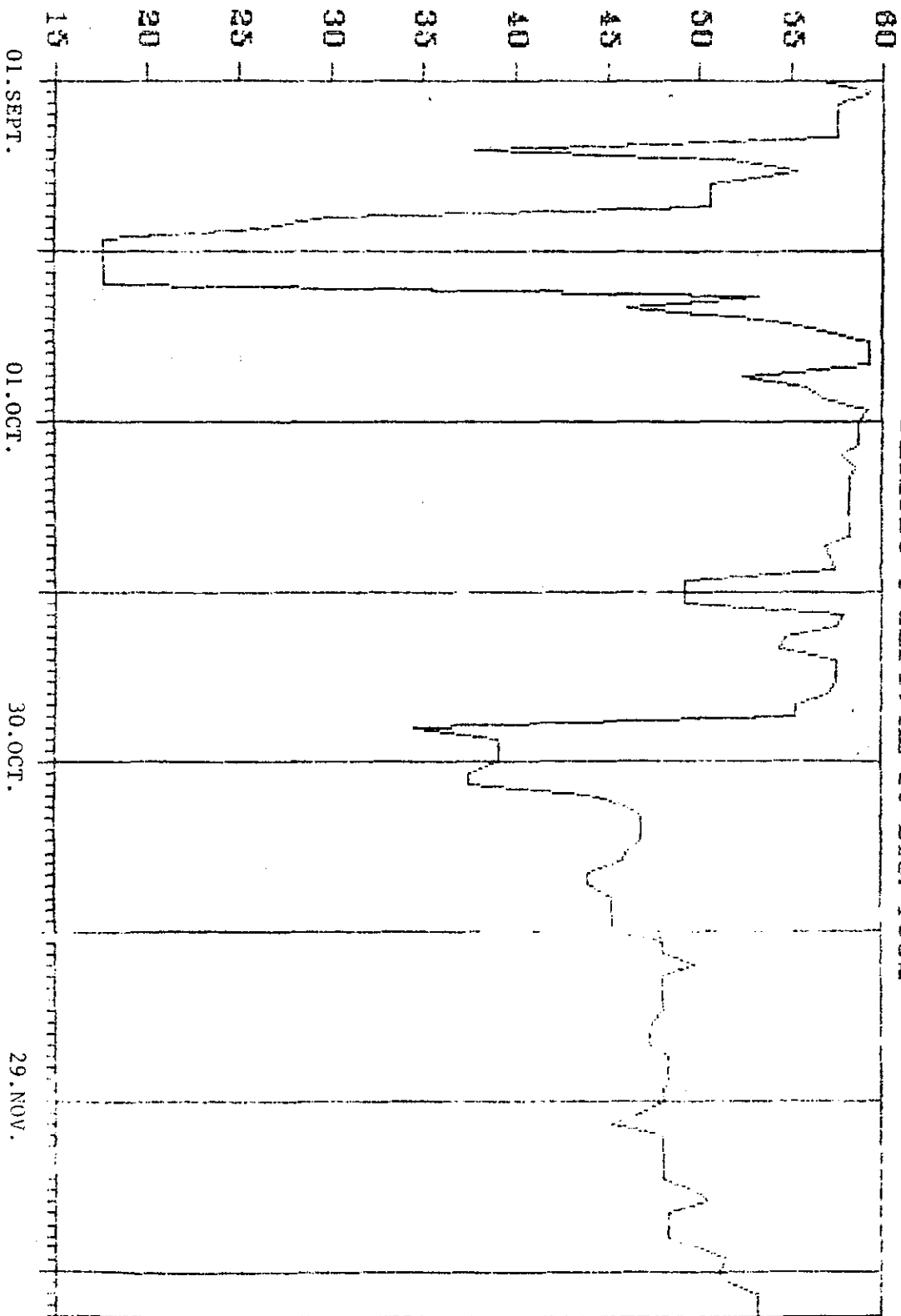


DIFERENCIAL PORCENTUAL

TIPO DE CAMBIO SPOT(NY) Y ORDINARIO

PERIODO 1 SEPT. AL 19 DIC. 1982

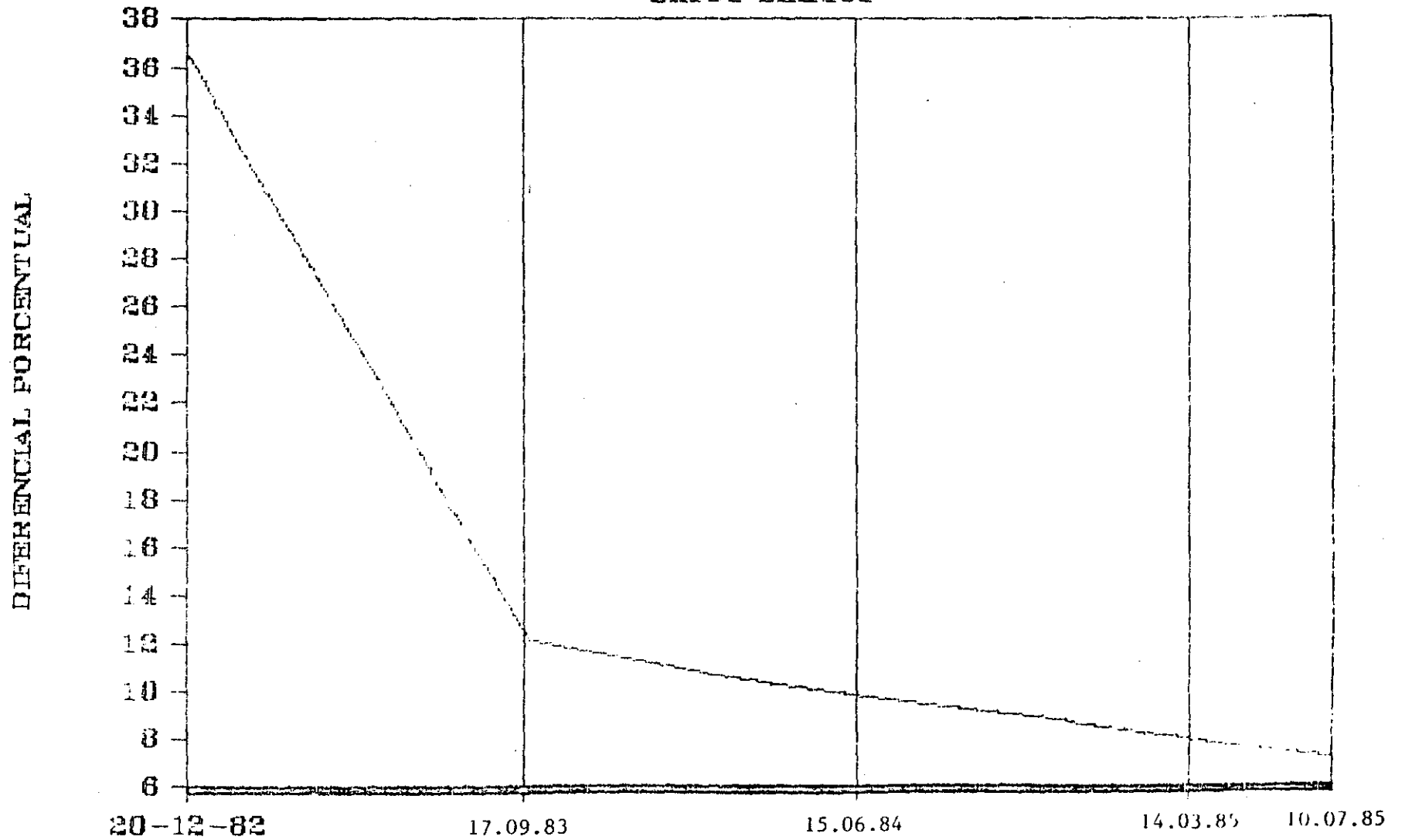
GRAFICA 6



GRAFICA 7

T.C. LIBRE Y CONTROLADO A LA VENTA

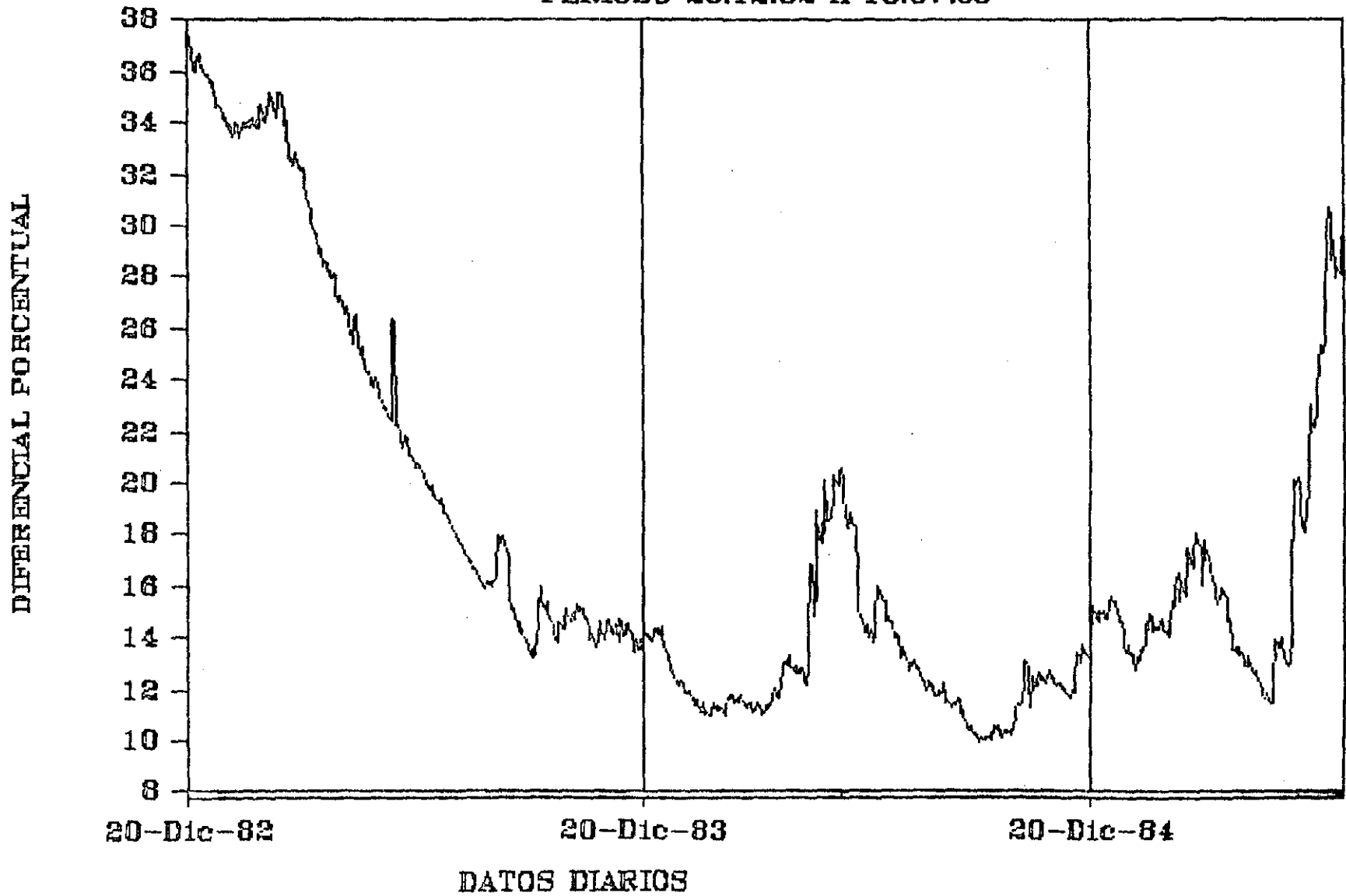
DATOS DIARIOS



GRAFICA 8

T.C. FRONTERA Y CONTROLADO

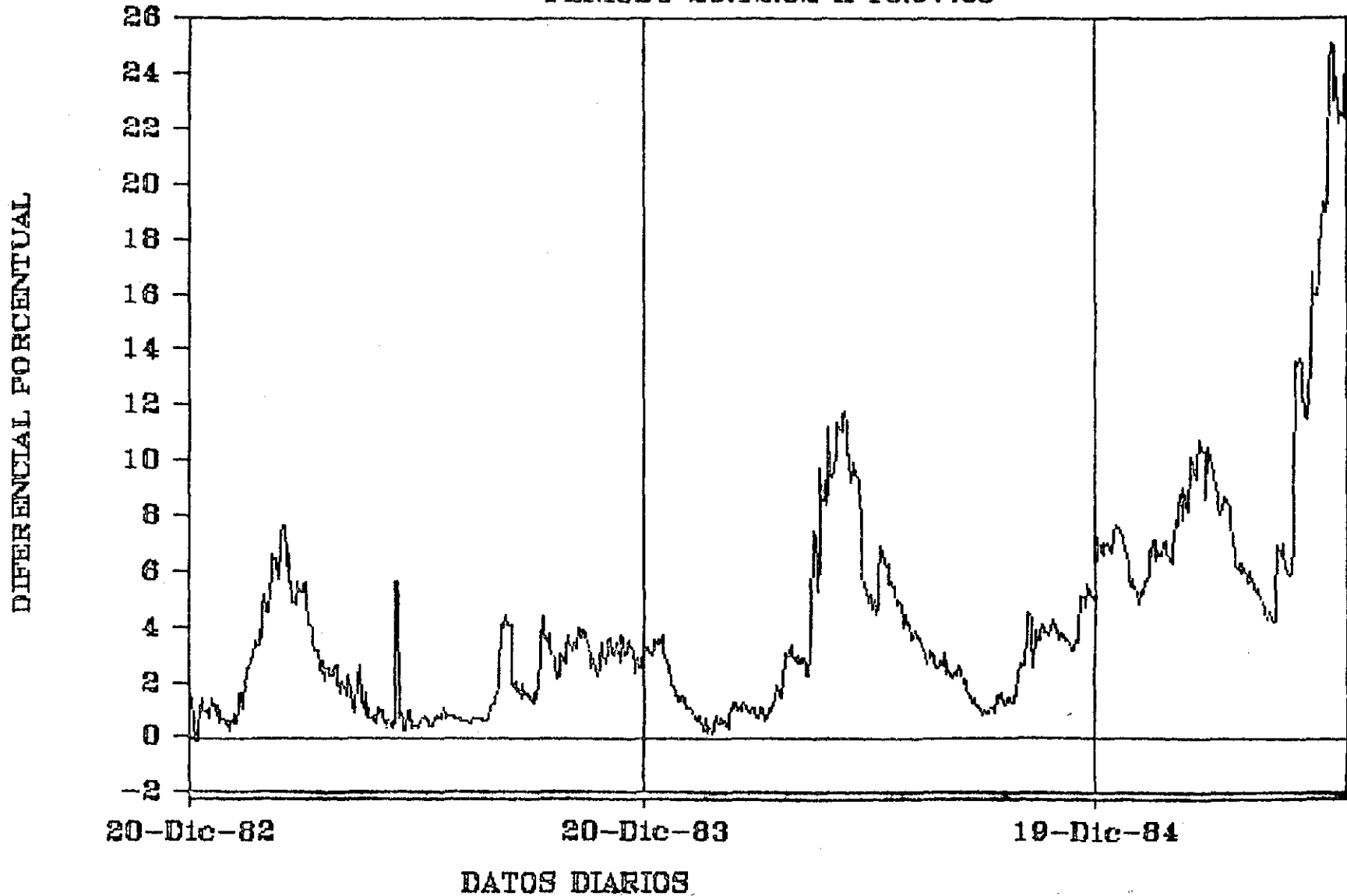
PERIODO 20.12.82 A 10.07.85



GRAFICA 9

T.C. FRONTERA Y LIBRE

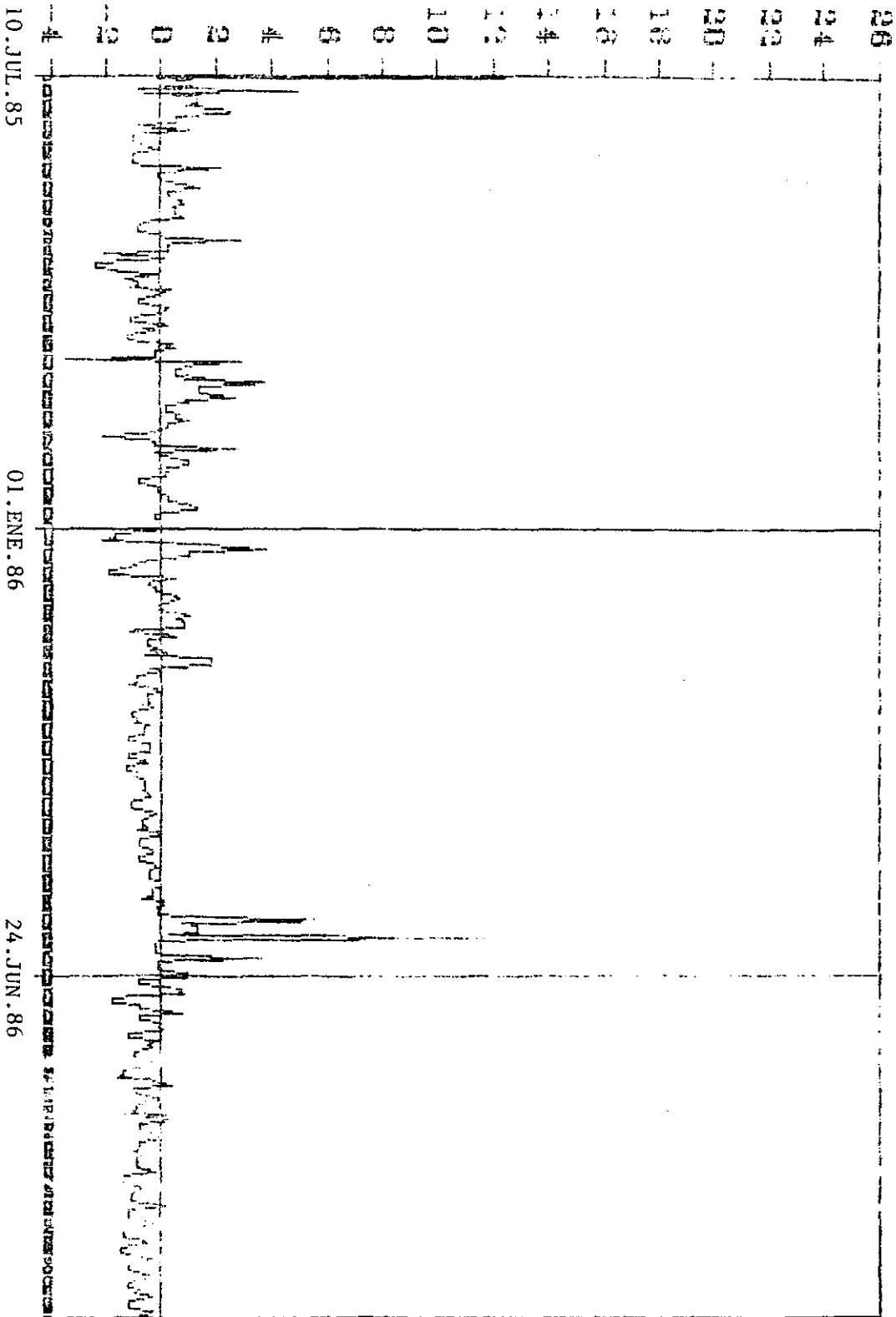
PERIODO 20.12.82 A 10.07.85



DIFERENCIAL PORCENTUAL

GRAFICA 10
T.C. FRONTERA Y LIB. (BANCARIO)

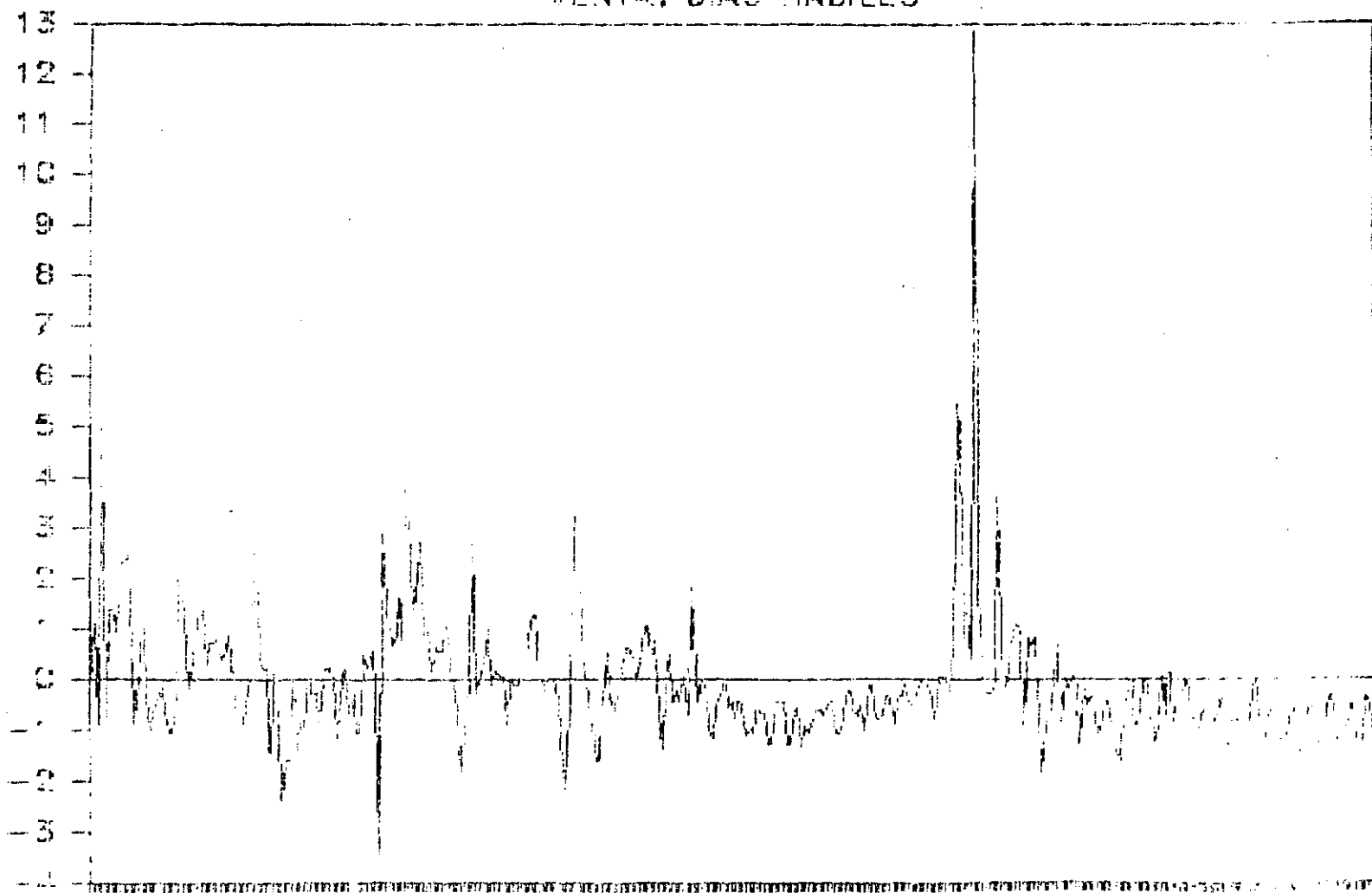
PERIODO 10.07.85 A 06.11.86



GRAFICA 11
T.C. EN FRONTERA Y LIBRE (C. CAMBIO)

VENTA. DIAS HABLES

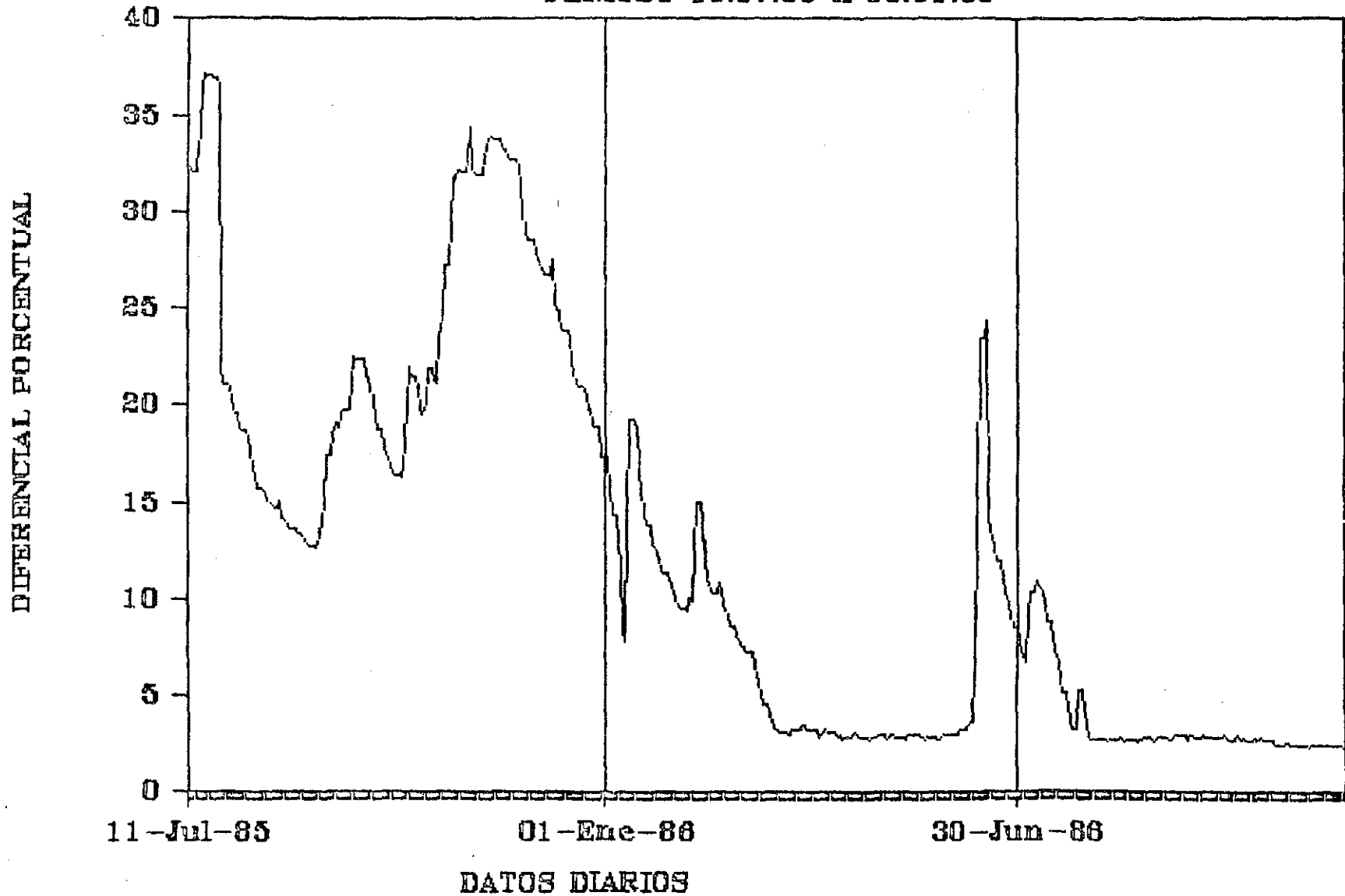
DIFERENCIAL PORCENTUAL



PERIODO 07.85-11.86.

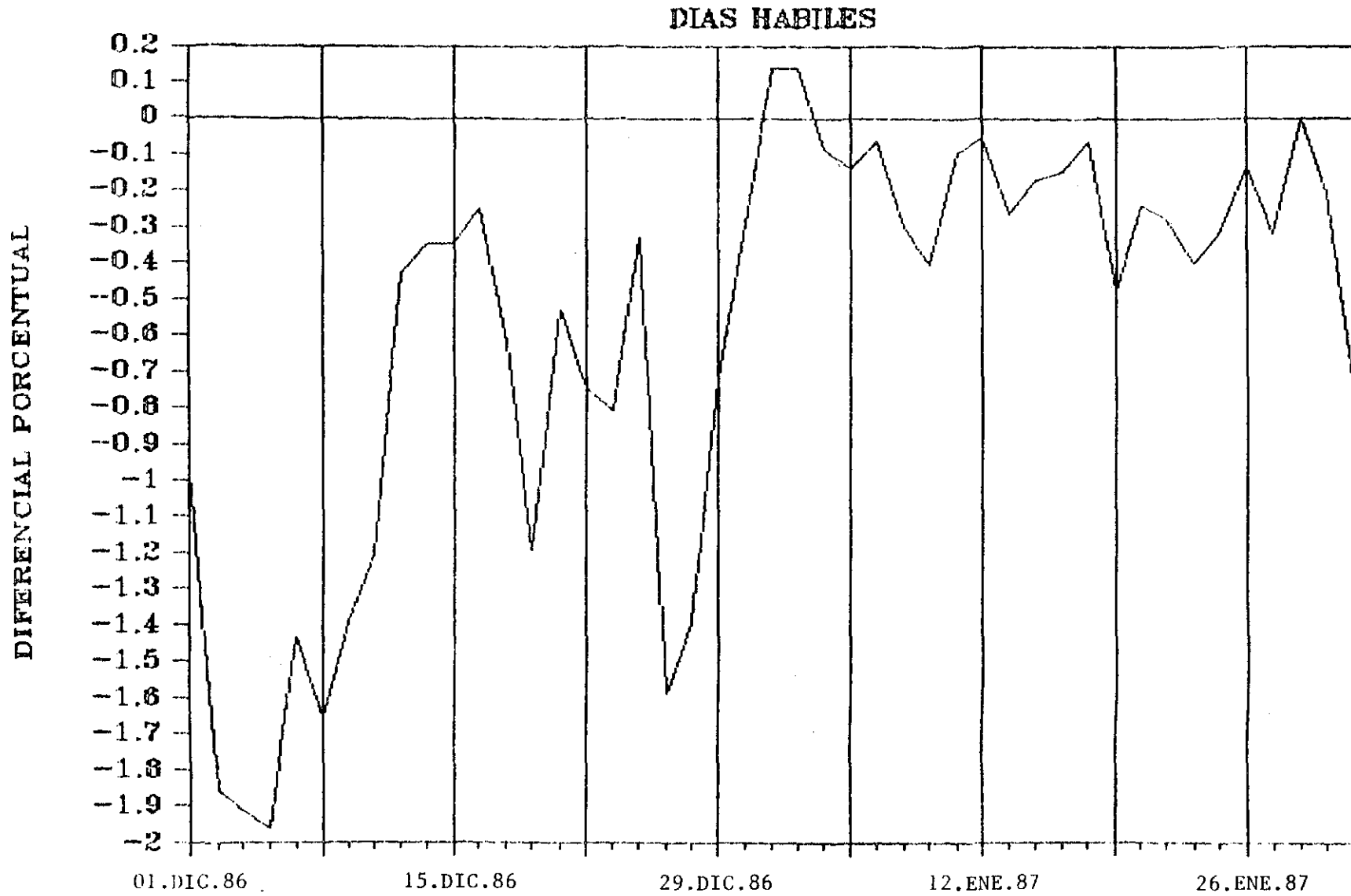
T.C. LIBRE (C.CAMBIO) Y CONTROLADO

PERIODO 11.07.85 A 06.11.86



GRAFICA 13

T.C. LIBRE C. CAMBIO (VENTA) Y CONTROLADO

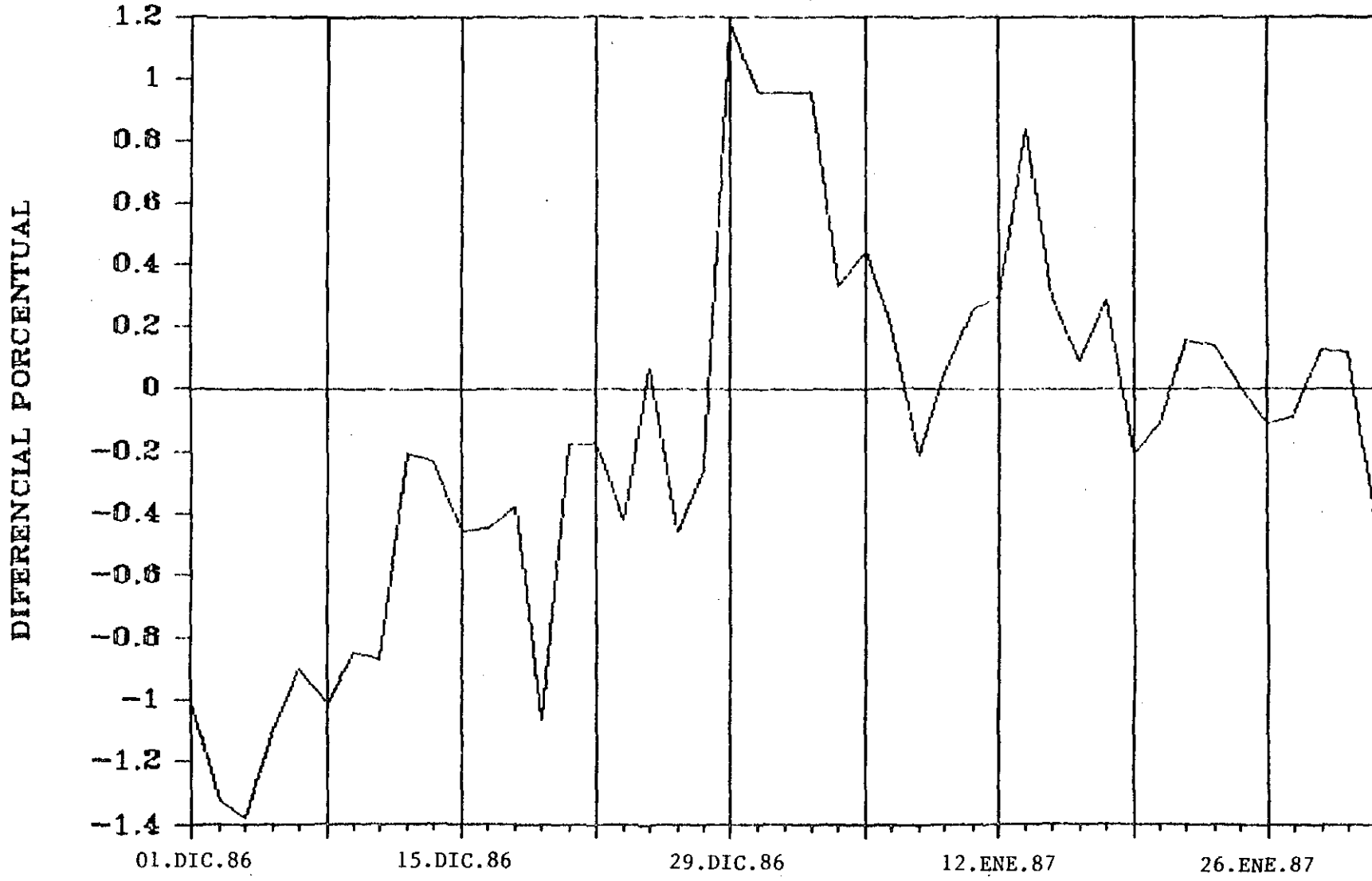


PERIODO 12.86-01.87

GRAFICA 14

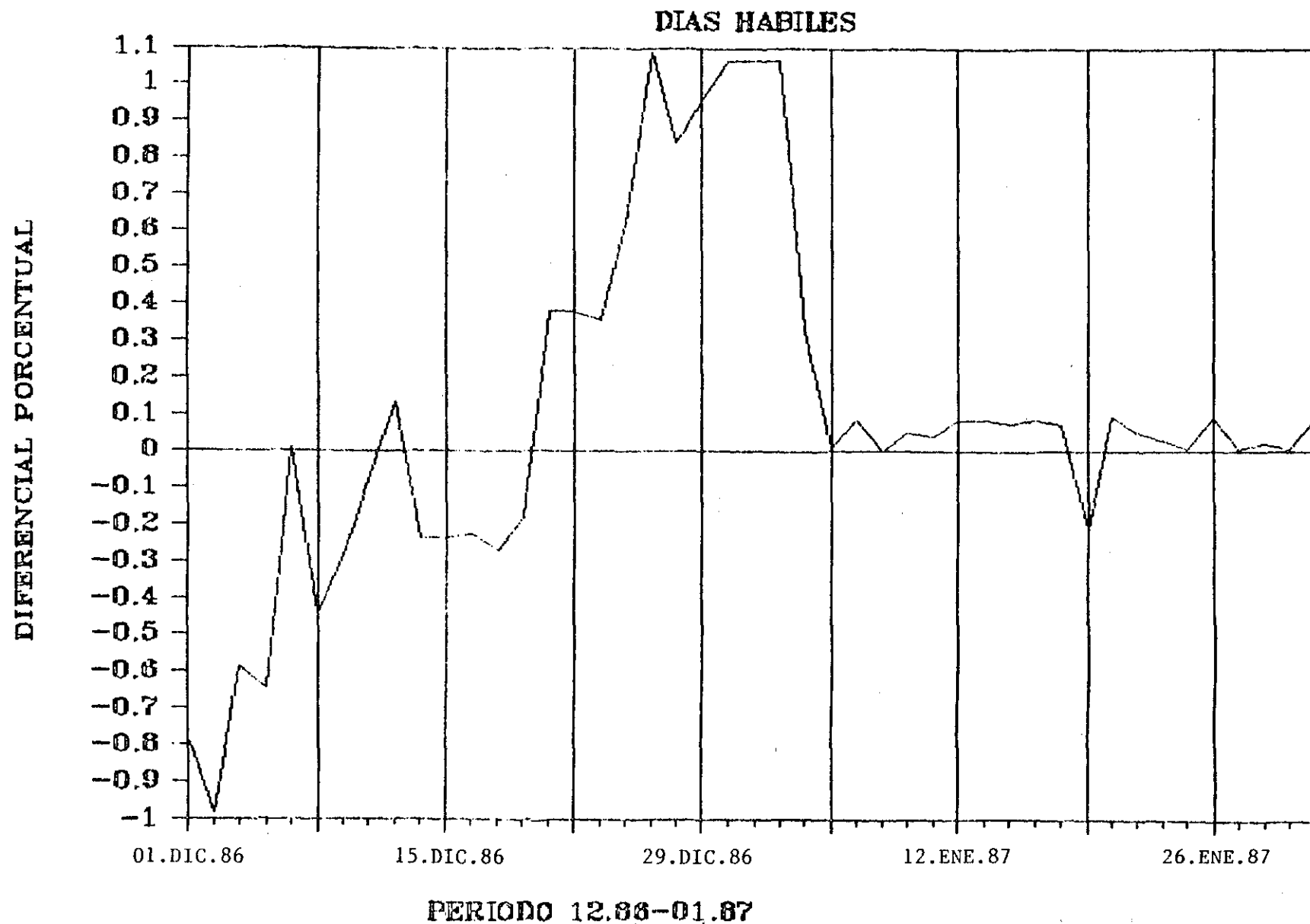
T.C. LIBRE C. CAMBIO (COMPRA) Y CONTROLADO

DIAS HABILES



PERIODO 12.86-01.87

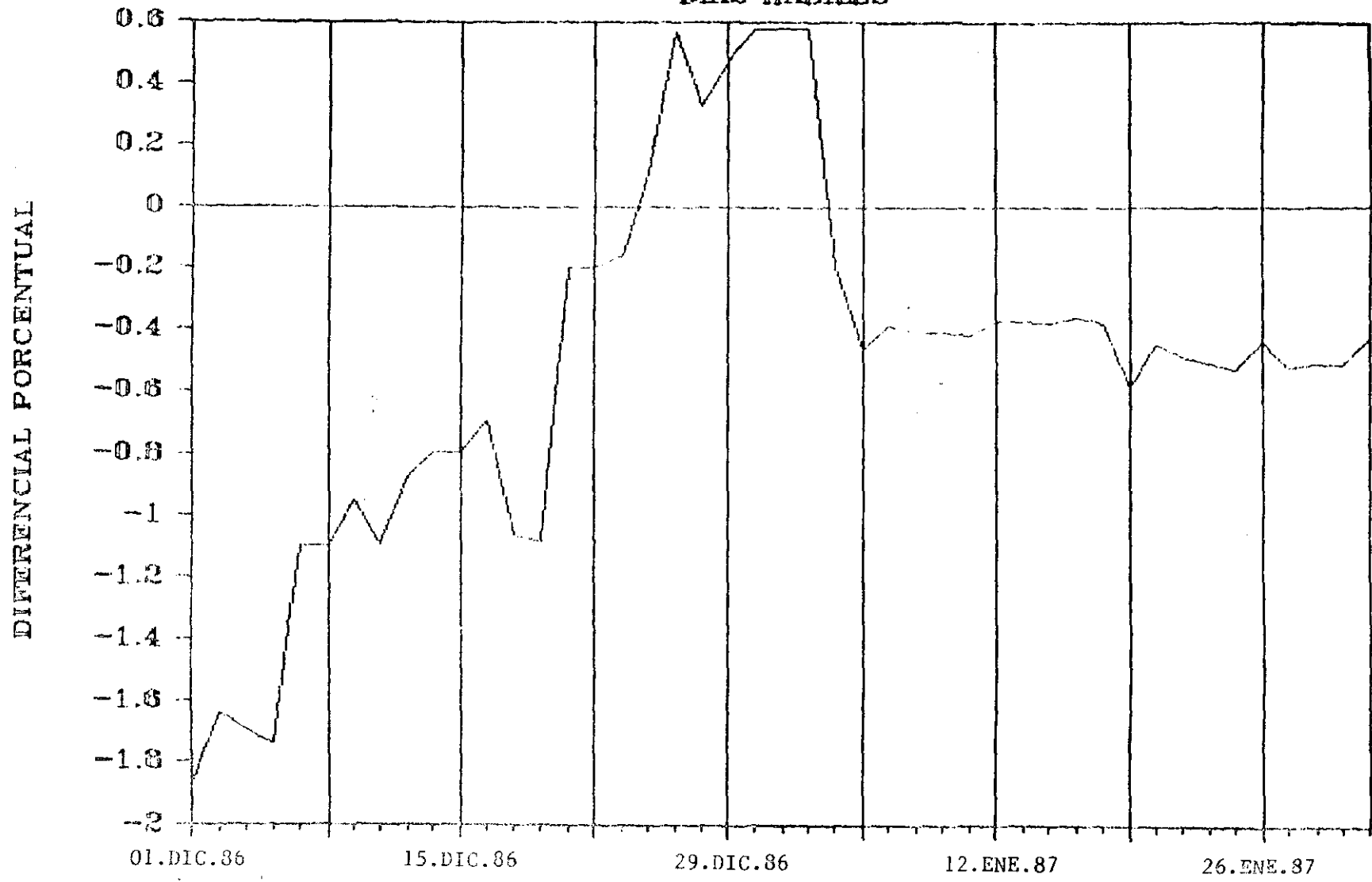
GRAFICA 15
T.C. LIBRE BANCO (COMPRA) Y CONTROLADO



GRAFICA 16

T.C. LIBRE BANCO (VENTA) Y CONTROLADO

DIAS HABLES



PERIODO 12.86-01.87

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