

BANCO DE GUATEMALA:
DECREE CT-2/2005
REPORT OF MONETARY POLICY TO JUNE 2005
Guatemala, July 2005

INDEX

REPORT OF THE MONETARY POLICY TO JUNE 2005

1. QUALITATIVE ASPECTS:

International Environment

Internal Environment

Inflation

Execution of the Monetary Policy

Financial sector

Situation of the Public Finances

Real sector

Employment

Balance of inflation risks

Persistence of high oil prices

Persistence of the macroeconomic misalignments of the economy of the
United States of America

Inflation expectations

II. EVOLUTION OF THE VARIABLES OF MONETARY POLICY

A. INFLATION GOAL

1. Consumer Price Index–ICP-
2. Hidden inflation
3. Imported inflation

B. INTEREST RATES

1. Open market operations
 - a) In National Currency
 - b) In foreign currency
2. Parameter rate
3. External competitiveness of the domestic liability rate of interest
4. Weighted average asset and liability rate of interest of the banking system
 - a) In national currency
 - b) In foreign currency

C. MONETARY ISSUE AND MONETARY PROGRAM

D. PAYMENT MEANS

E. CREDIT FROM BANKS TO THE PRIVATE SECTOR

1. Growth rate
2. Credit portfolio per economic activity
3. New loans, extensions and renewals

F. SURVEY OF THE INFLATION EXPECTATIONS TO THE PRIVATE ANALYSTS PANEL

G. MONETARY CONDITIONS INDEX –IMC-

III. CHANGES IN THE OPERATIVE FRAME OF THE MONETARY POLICY

- A. Amendments to the operational framework to make it consistent with the complete monetary scheme of inflation explicit goals
- B. Progress during the first semester of 2005
- C. Transition measures and developed arrangement

IV. DISCUSSION ABOUT TREND TOPICS, BASED ON ECONOMETRIC ESTIMATIONS

- A. Estimation of the pass-through coefficient of the normal exchange rate to the prices.

1. Introduction
2. Conceptual aspects
 - a) The pass-through coefficient at a theoretical rate
 - b) Determinants of the magnitude of the pass-through coefficient
3. International experience
4. Methodological aspects
 - a. Selection of variables
 - b. Determination and estimation of the pass-through coefficient
 - c. Construction of the Autoregressive Vectors (VAR) [Acronym in Spanish] model for the estimation of the pass-through coefficient
5. Results analysis

- B. Effect of the monetary issue deviations in the Consumer Price Index

- C. Structural model of inflation prognosis

V. STATISTICAL APPENDIX

ANNEXES

REPORT OF MONETARY POLICY TO JUNE 2005

I. Qualitative aspects:

The Monetary Board, in resolution JM-160-2004 dated December 29th, 2004, determined the Monetary, Exchange and Credit Policies for 2005, designed to continue the adoption process of a complete scheme of explicit inflation goals and oriented to consolidate the stability and trust in the main macroeconomic and financial variables. In this sense, the fundamental objective of the mentioned policy was specified as an inflation goal for the end of the year, established in a range between 4% and 6%, as well as the preservation of said range for the following twelve months.

The implementation of the monetary policy in 2005 has been consistent with efforts to advance in the adoption of an integral scheme of explicit inflation goals, which is based on the selection of the inflation goal as the economy's nominal anchor, and it is consolidated through the implementation of a regimen of flexible exchange rate, with the use of instruments of indirect monetary control (operations of monetary stabilization, giving privilege to the decisions of the market), as well as with the improvement of the transparency of the performance of the Central Bank, which will allow the continued consolidation of the stability and trust in the main macroeconomic and financial variables.

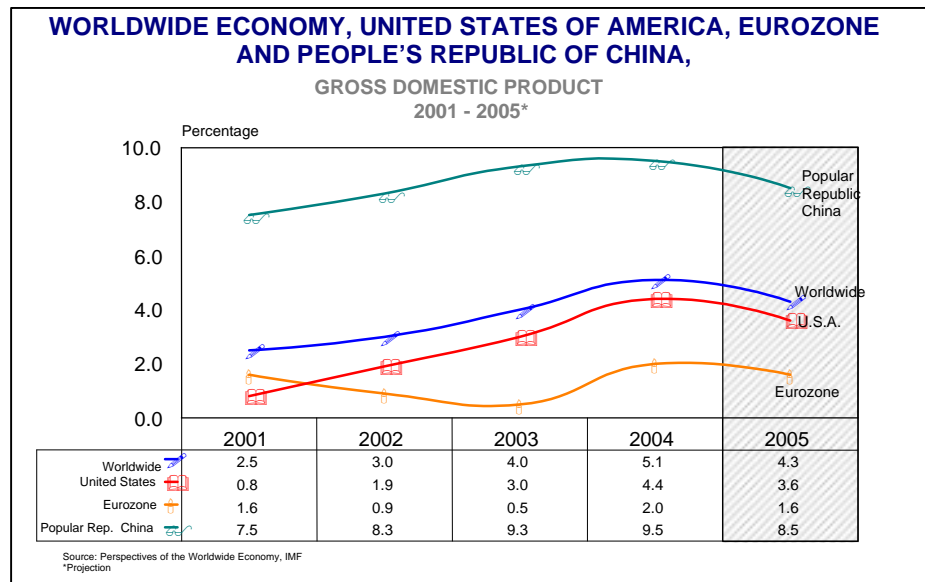
It is important to indicate that the inter-annual inflation rate has been decelerated during the first semester of the year, going from 9.23% in December 2004 to 8.80% in June 2005.

International environment (framework). Regarding the external determining factors of the monetary policy, it was observed that during the first semester of the year **the behavior to the rise in the international oil price** is still the fundamental factor that explains the behavior of the inflation rate, as it was during the year 2004. As a result, the inter-annual variation of the general price level was decelerated at a lower rate than the foreseen at the end of last year.

On the other hand, after the **worldwide economy** increased in about 5.1% in 2004 (highest rate in the last twenty years), it is foreseen that in 2005, it will grow in about 4.3%¹, a rate that still represents a high dynamism in the

¹ The worldwide economic growth projection remained in 4.3%, equal to the one projected at the end of 2004.

global economy. Said behavior is basically based on the evolution of economic growth of the United States of America, main commercial associate of the country, which is considers that it will register an economic growth rate of 3.6%, as well as on the behavior of the economy of the People's Republic of China, which, in spite of the macroeconomic restriction measures that were implemented in the first semester of the year, continues to register a significant growth, which is estimated in about 8.5% for 2005, higher than the foreseen at the end of 2004 (7.5%).

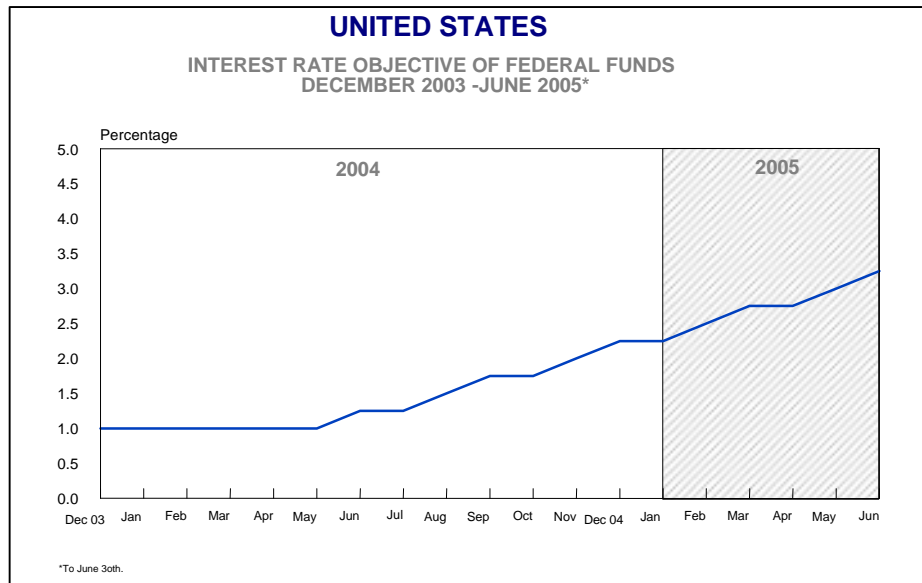


In the described environment, it is important to highlight that the International Monetary Fund (IMF) estimates that the risks persist, which are a menace to the worldwide economic growth, among them are the following:

- i) Global expansion is misbalanced, because it still depends on the economic performance of the United States of America and of the People's Republic of China. In contrast, the growth in the Euro zone and Japan has not had the expected performance, due to the weakness of the domestic demand and to the poor performance of their exportations. In that case, it is indicated that if this situation continues, the global misbalances might be extended and it might increase the probability of a later significant deceleration, mainly if the growth in the United States of America and in the People's Republic of China weakens simultaneously;

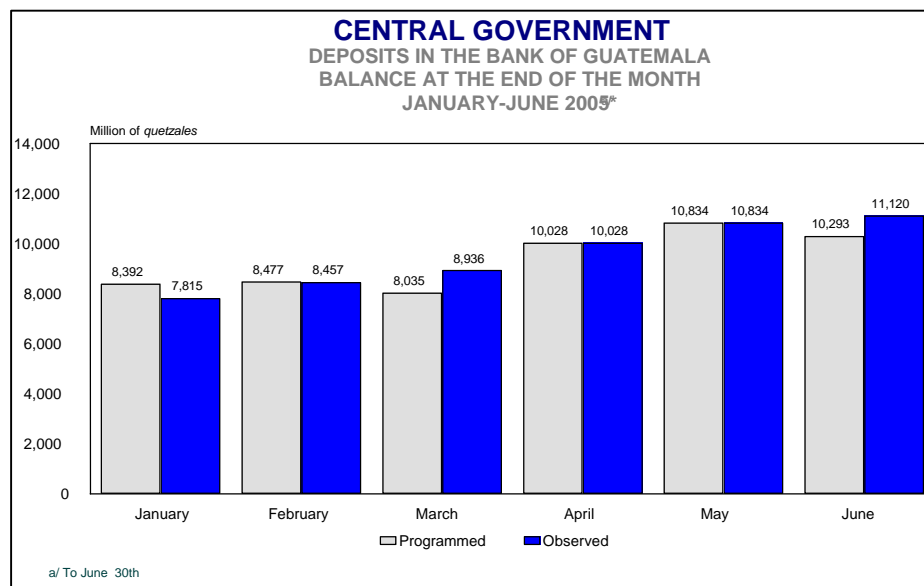
- ii) The probability of an abrupt increase in long-term interest rates, in case there are significantly restrictive conditions in the financing markets, would negatively affect the domestic demand;
- iii) The high oil prices and the vulnerability of said market to shock, continues to be a concern;
- iv) The expansion of global misbalances, particularly due to the constant increase of the external net liabilities of the United States of America;-
- v) The menace to the macroeconomic mid-term stability that is inferred by fiscal projections in many countries; particularly, the fiscal deficits of most of the industrialized economies; and,
- vi) The structural weaknesses that limit the growth in key areas and increase the vulnerability of shock, as the need to accelerate the reform in the labor and producing markets in the Euro zone and the strengthening of the investment climate in Latin America.

Regarding the **macroeconomic policy of the United States of America**, it continues with the fragility derived from the significant fiscal deficit and in the current account of the balance of payments. Regarding the fiscal policy, based on the behavior during the first five months of the year, experts foresee that for the October 2004-September 2005 fiscal period, it will be 3.0% of the GDP, which is still very high. On the other hand, regarding the monetary policy, during the first semester of 2005, the authorities of the Federal Reserve System continued increasing the interest rate objective of federal funds, which was repeated four times, with increases of 25 basic points in each of them: of 2.25% to 2.50% (February 2nd, 2005); of 2.75% to 3.00% (May 3rd, 2005); and, of 3.00% to 3.25% (June 30th, 2005). These adjustments, which have helped to keep the general level of prices under control, combined with the rise of the international price of petroleum, have not had effect on the North American economy yet, so that the estimated growth of 3.6% remains for the current year.



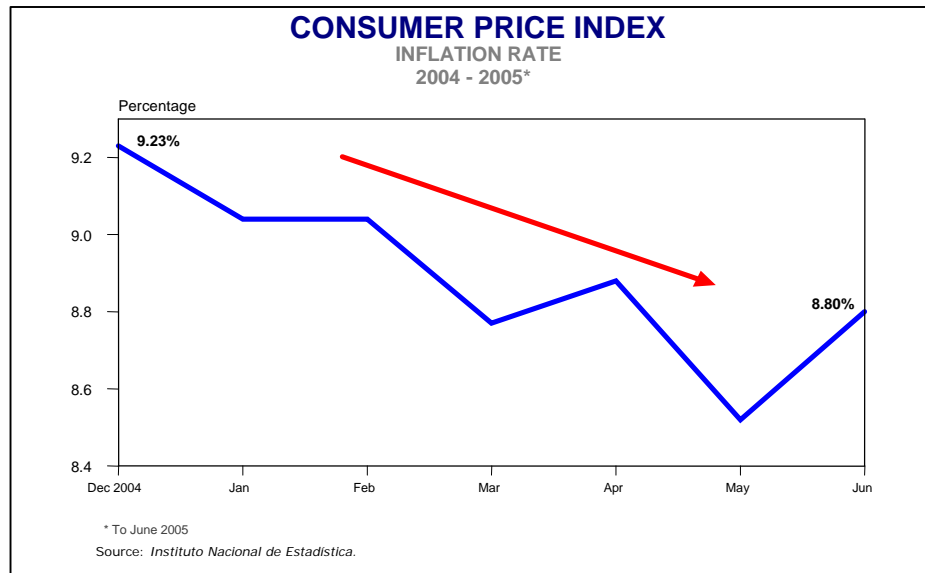
Regarding the deficit in the current account of the North American balance of payment, is foreseen that in 2005 it will be slightly above 6.0% as a proportion of the GNP, which might require an adjustment in the exchange rate, as well as a restriction in the public expenditure.

Internal Environment. On the other hand, in the internal order the support that the fiscal policy has given to the monetary policy has been important, through the maintenance of a deposit rate in the *Banco de Guatemala* higher than the planned; the demonetizing behavior of the remaining public sector, reflected in a major demand of LTDs of the *Banco de Guatemala*; and, the creation of positive economic growth expectations of the economic factors, derived not only from the mentioned behavior of the global economy, but also from the consolidation of the governmental management.



Inflation. During the first semester of 2005, the inflation rate, in the execution framework of disciplined monetary and fiscal policies, 0.43 percentage points were decelerated, from 9.23% in December 2004 to 8.8% in June 2005.

The described behavior follows the acceleration of the inflation rate registered in 2004, from 5.85% in December 2003 to 9.23% in December of the referred year, which was basically a consequence of the rise in the international oil prices².



The deceleration of the inflation rate in 2005, as it was indicated, has not been according to the foreseen magnitude. This is because the international price of the petroleum barrel, as estimated by international financial markets, would remain, as an average, at US\$42.38 per barrel in 2005; during the semester, it had a tendency to rise until it reached a historical rate of US\$60.54 in June.

² According to estimations of the technical departments of the *Banco de Guatemala*, the imported inflation started to significantly increase in March 2004; the highest incidences were shown during May, September, October and November of that year, when the inter-monthly inflations were of 0.83%, 0.78%, 0.98% y 0.99%, respectively.



EVOLUTION OF THE INTERNATIONAL PRICE OF PETROLEUM AND ITS DERIVATES IN THE FIRST SEMESTER OF 2005

The international price of petroleum has shown a constant trend to increase, registering historical records in several occasions, (On June 17, petroleum closed at US\$58.47 in the Mercantile Stock of New York, on June 20th it closed at US\$59.37, on June 27th it closed at US\$60.45, on July 6th it closed at US\$61.28 and on July 8th it reached the historical maximum of US\$62.10 during the respective session). Said behavior is explained by factors such as demand and offer, as well as by speculative movements of the market and by political aspects in different regions of the planet.

DEMAND FACTORS

Regarding the worldwide demand of petroleum, it is estimated that in the first trimester of 2005, it increased in 1.8 million of barrels per day, while in the second trimester the increase was moderate; however, it is estimated that the average growth for the current year could be between 1.8 and 2.2 million of barrels per day, mainly because there is still an important demand from the United States of America and the People's Republic of China.

In the United States of America, the demand of crude oil continues increasing at a firm rhythm, according to its economic growth; however, it must be highlighted

that due to petroleum importations of said country, combined with its internal production it has surpassed the consumption; an adequate inventory level has been kept, which helps to keep the pressure on the international price of the oil barrel relatively stable. On the other hand, in the People's Republic of China the demand of petroleum has remained in high levels registered in 2004.

OFFER FACTORS

Regarding the offer, the Organization of Petroleum Exporting Countries (OPEC), which generates about 40% of the worldwide offer of crude oil, has kept its exportations at 28.0 million of barrels per day (volume lower than the production generated in October 2004). On the other hand, it is important to indicate that the capacity of the refineries of the United States and Europe can not significantly increase in a short term, mainly because new installations have not been built (in the case of the United States the more recent ones were built thirty years ago).

Regarding the indicated offer restriction, it must be added that it is expected that in 2005 the producing countries that are not members of OPEC will increase their production in only 0.7 million of barrels per day, mainly because of the major production of Russia, which put its oil pipeline of Ceyhan, to work; which transports petroleum from Azerbaijan and probably from Kazakhstan.

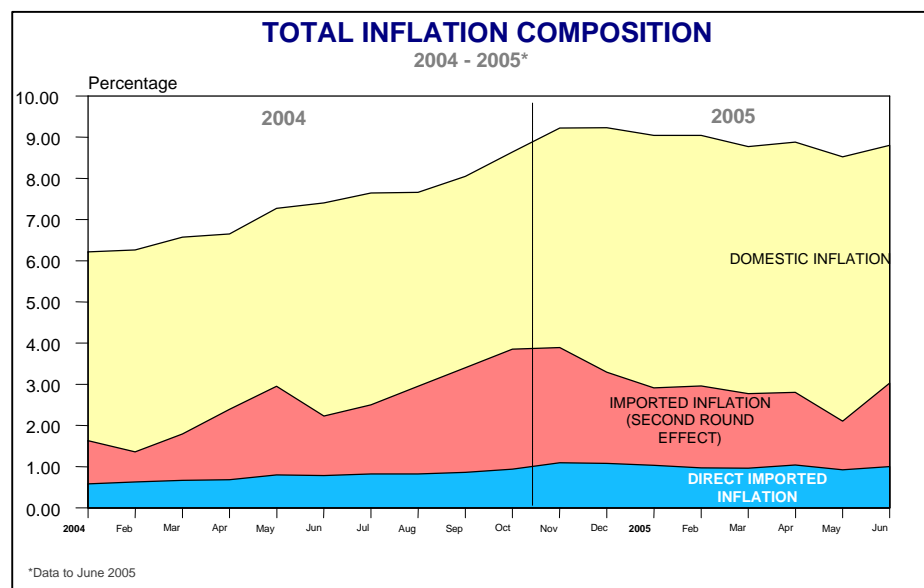
SPECULATIVE FACTORS AND OTHERS

Other factors that have generated pressure on the rise in the international prices of crude oil are the following:

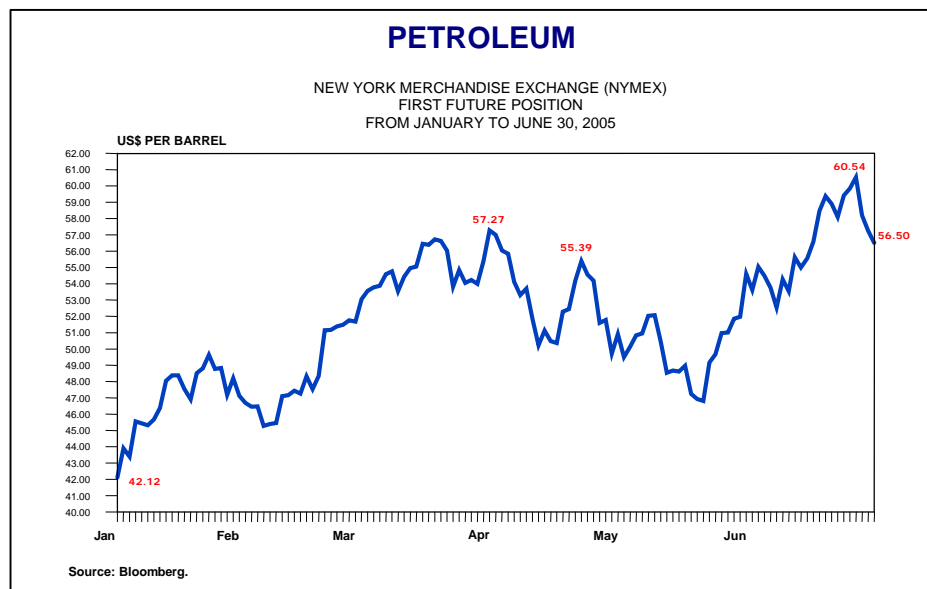
- The establishment of a new conservative court government in Iran, which indicated that they oppose foreign investments in the country;
- The uncertainty regarding the capacity of the refineries in the United States to process the needed fuel, to keep the current rate of energetic consumption required by the economy, which is in expansion;
- The uncertainty regarding the capacity and willingness of OPEC to increase its production;
- The reduction in the production of Iraq, due to the permanence of internal military conflicts;

- The government of Venezuela has been in favor of the rise in prices and against the increase of the production;
- Labor problems were found in the petroleum wells of Noriega (third world producer) in June; and,
- Internal conflicts in Nigeria, which are a menace to the production capacity.

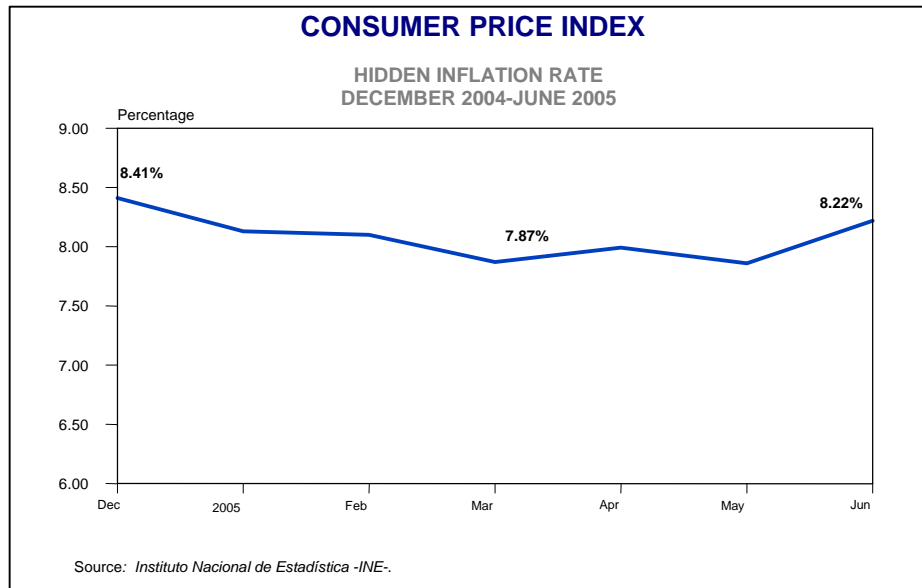
Due to the behavior of the international market of crude oil, the imported inflation was decelerated in only 0.26 percentage points, which, added to a deceleration of 0.16 in the domestic inflation, explains the reduction of 0.42 percentage points in the inflation rate. To June 30th, from the inflation rate of 8.80%, 3.03 percentage points belonged to the imported inflation, while 5.77 percentage points belonged to the domestic inflation. In this case, it is important to emphasize that although the inflation has an important exogenous component, of an imported nature, in which the monetary policy cannot influence; it can have incidence on domestic inflation, which still shows a rate of 5.77%; so that, the primary objective of the *Banco de Guatemala* is the stability in the general rate of prices, and taking into account that the inflation rate is still above the goal range established by the monetary policy for the end of 2005. It is important to continue in the second semester with actions of monetary policy that allow a higher deceleration of the referred variable. In this way, it contributes to creating a certain and reliable environment that helps to keep the buying power of the population and to generate a productive investment and, consequently, higher employment rates and welfare.



The behavior of the international oil market has caused, as it was indicated, that the inflation rates decelerate with less speed than foreseen. In this case, the last econometric projection carried out, which already incorporates the behavior to the rise in prices of crude oil during the first semester of the year, indicates that for December of the current year, the inflation rate will be in 6.65%, a little higher than the goal range established for the end of the year by the Monetary Board (4%-6%). Consequently, provided that the behavior of the general level of prices still reacts to an exogenous phenomenon, the necessary policy measures should be taken to reduce the 'second round' effects of imported inflation; so that, the total inflation gradually approaches the goal range between 4% and 6% established by the Monetary Board for the end of 2005 and that remains within said range during 2006.

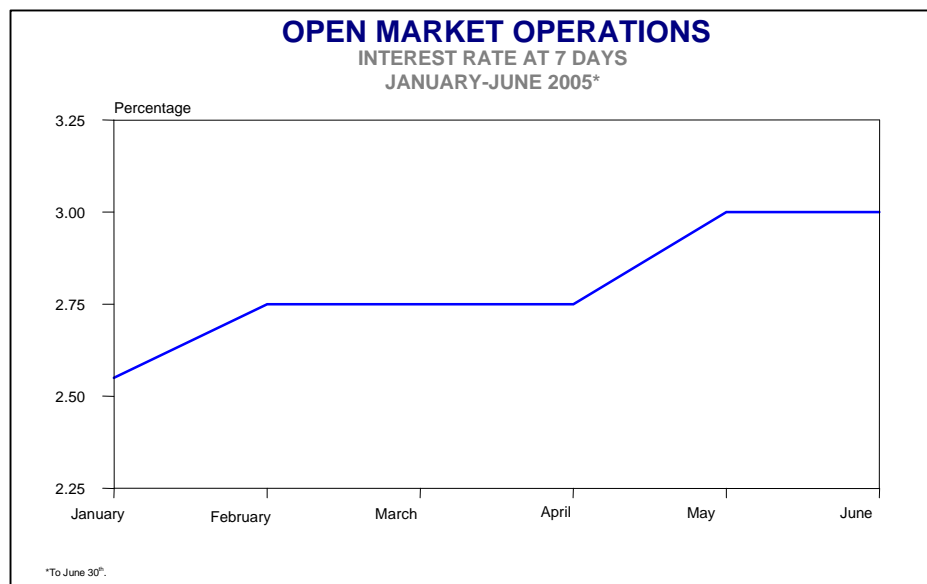


On the other hand, the hidden inflation rate also showed a trend towards deceleration, from 8.41% in December 2004 to 8.22% in June 2005 (reduction of 0.19 percentage points), which indicates that the adjustments of the interest rate of the open market operations that were implemented in 2004 and in February and May of 2005 and supported by the fiscal discipline, have positively affected the behavior of said variable.



Execution of the Monetary Policy. During the first semester of 2005, the management of the monetary policy was directed to take the measures that allow helping in the deceleration of the inflation rate. In this case, the Execution Committee of the *Banco de Guatemala*, in order to soothe the inflationary expectation of the economic factors and to send a message of certainty regarding the commitment of the *Banco de Guatemala* to continue watching for the stability of the general level of prices, on February 18th and May 20th of 2005 decided to increase the leading interest rate of the monetary policy –which correspond to LTDs for 7 day-terms from 2.55% to 2.75% and from 2.75% to 3.00%, respectively. Besides, in order to increase the effectiveness of the monetary policy, and according to the outlines of the Monetary Board, actions were adopted to improve its operative procedures, to advance in the adoption process of a complete monetary scheme of explicit inflation goals (Inflation Targeting). In this case, starting on January 4th, it established the creation of maximum fund-raising (quota) limits for each term, regarding the estimations of liquidity neutralization; besides, it was agreed that starting on January 24th the interest rate for the 7day-term in the Electronic Banking Table of Money (MEBD) and in the stock exchange

would be the leading interest rate of the monetary policy³, because this is the one that the most influence on inflation behavior. Also, it was agreed to reduce the frequency of bids from five to three per week starting on January 31st; on February 28th the LTDs for 28 day-terms which jointly with the LTDs for 7day-terms were the only ones that were operated in the MEBD and in the stock exchange; was changed to the bid mechanism, to which a determined quota was also established; and, in May 2005 the calculation method for the estimation of the daily monetization flow was modified, in order to improve the prognosis of the economy's aggregate liquidity and so the Execution Committee counts on a better projection of referred liquidity, which allows it to decide its participation in the money market. Besides, the administrative structure of the Department of Open Market Operations was modified, which has been denominated the Department of Monetary Stabilization Operations, which adopted an operational scheme of front office, middle office and back office, in order to implement an adequate segregation of functions, aspect that will contribute to the creation of a more appropriate management framework for the adoption of the complete regimen of explicit goals for inflation, to an adequate rendition of accounts and transparency in the operations of the Central Bank and to prudent risk management.

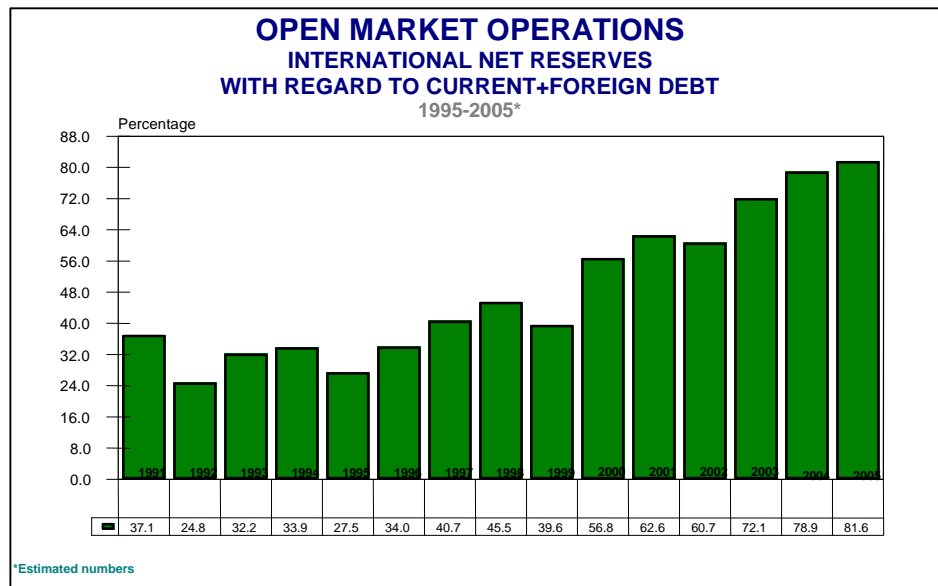


³ Starting from the indicated date the direction of the monetary policy is reflected in the behavior of said rate: the Central Bank increases it when the consecution of the inflation goal is in risk or reduces it when there are deflation risks.

Regarding the exchange market, it was established that starting on January 17th the *Banco de Guatemala* will participate applying an explicit rule, in order to eradicate the discretion of its participation and to reduce the volatility of the exchange rate, without modifying its trend. While applying said rule, the *Banco de Guatemala* bought US\$346.6 million between January and June 2005.

As a consequence of the above, the *net international monetary reserves* to June 30th were at US\$3,738.0 million, amount higher in US\$210.0 million to the rate registered on December 31st of 2004 and that represents 5.3 months of importation of goods and 4.8 times the amount of the external public debt service for one year; these indicators indicate the solidness of the country's external position. On the other hand, if the monetary reserves are related with other monetary variables, the RIN represents 1.6 times the monetary base, while the RIN as a percentage of money supply amply (M2) represents 42% to June 30th of 2005, which suggests that the country counts on a reasonable margin to cover the monetary obligations converted to foreign currency. Besides, another indicator of the country's external position would be given by the relation of the RIN rates regarding the deficit sum in the current account of the balance of payments, to the payments of the external public debt at one year and to the balance of the external private debt⁴. The result of said sum would indicate that with the current RIN rate, up to 81.6% of the referred obligations might be covered.

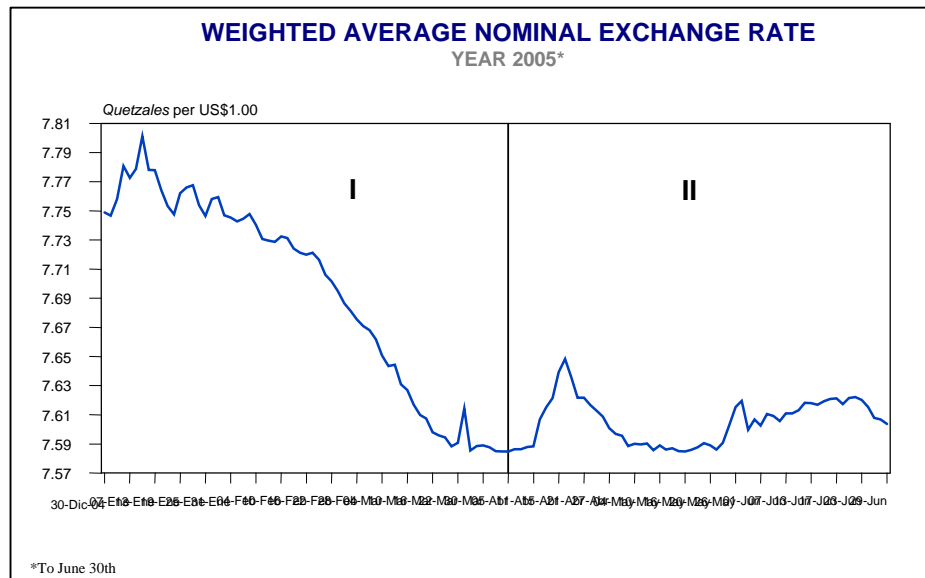
⁴ According to Sebastián Edwards and Rodrigo Vergara in their document "Monetary Policy and Macroeconomic Stability in Guatemala", November 2004, the country's external private debt is of about 10% of the gross domestic product.



It is important to mention that although the strengthening of the international monetary reserves favorably influence in the expectations of the economic factors, national and foreign; it is mainly due to the implementation of the adopted exchange rule, in an environment in which the nominal exchange rate has shown a trend to the appreciation.

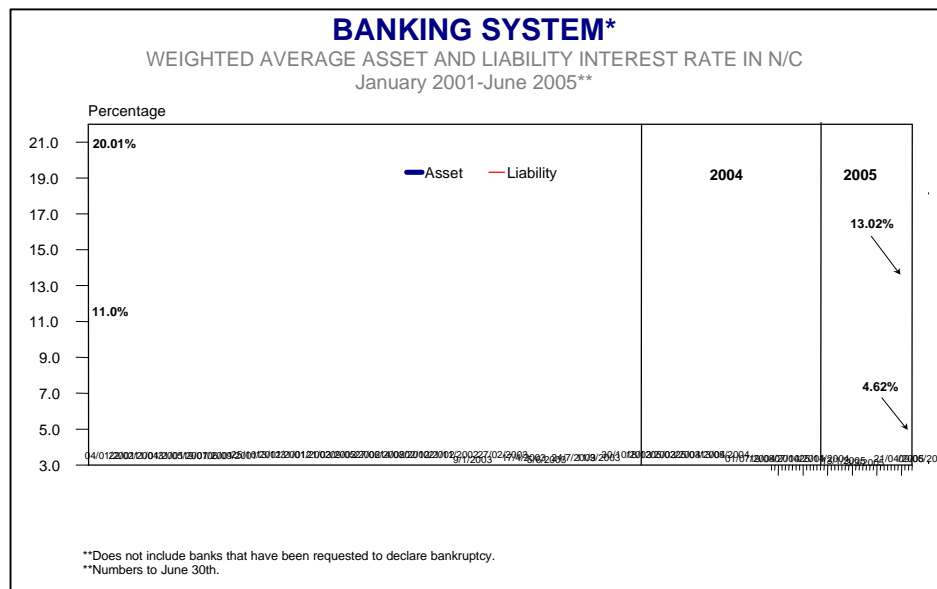
In effect, the nominal exchange rate was quoted at Q7.75 per US\$1.00 on December 30th of 2004 and on June 30th of 2005 was quoted at Q7.60 per US\$1.00 in the foreign currency market. However, it is important to mention that said behavior can be divided into two periods; the first covering from December 30th, 2004 to April 5th 2005, in which the exchange rate was appreciated in Q0.17 (2.19%) from Q7.75 per US\$1.00 to Q7.58 per US\$1.00. In that case, it is important to indicate that the referred behavior is mainly associated to the worldwide depreciation phenomenon of the dollar of the United States of America (derived from the relaxation of the fiscal and monetary policies that said country recently applied), which propitiated an income of capital in the emerging economies. Regarding the second period, covering from April 5th to June 30th of 2005, it was observed that the nominal exchange rate stopped appreciating, because from Q7.58 per US\$1.00 it increased to Q7.60 per US\$1.00; in other words, a depreciation of Q0.02 (0.26%). Said behavior can be associated to different factors, seasonal and factors derived from the application of the exchange rule of the central bank, and particularly, to a reduction of the income of capitals to the country, which

is derived from the reduction of the differentials between the internal and external interest rates, which at the same time is due to the increase in the interest rate objective of the federal funds by the Federal Reserve System of the United States of America.



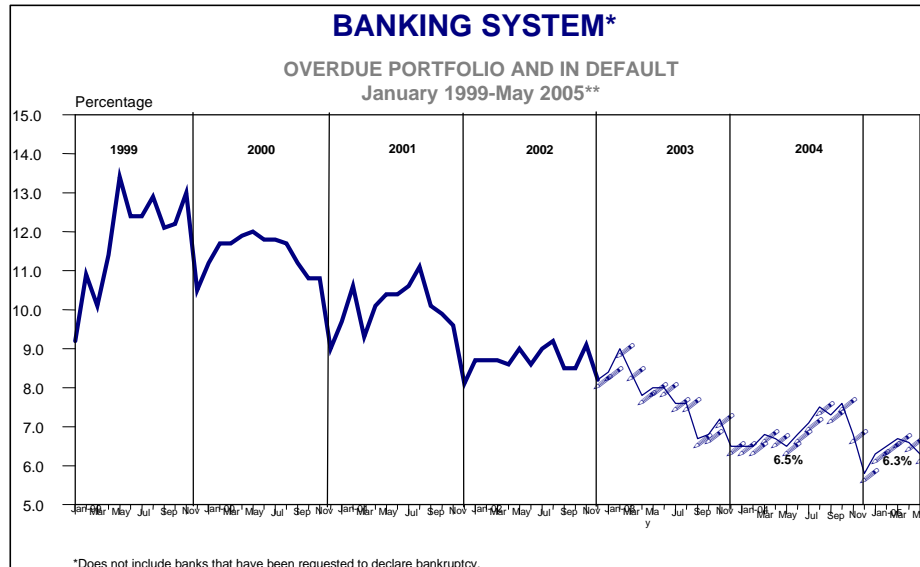
Financial sector. During the first semester of the year, the national financial sector continues showing positive behavior, which is reflected in the stability of the interest rates, credit expansion, improvement in the quality of the portfolio and reduction of the unproductive assets.

The weighted average interest rates in national currency of the banking system showed a stable trend, because from December 2004 to June 2005 the asset rate went from 13.50% to 13.02%, while the liability rate went from 4.54% to 4.62%. On the other hand, the weighted average interest rate of the operations of repurchase agreement has also shown stability, remaining at 3.2% during the first semester, behavior that reflects the short term conditions of the financial market.

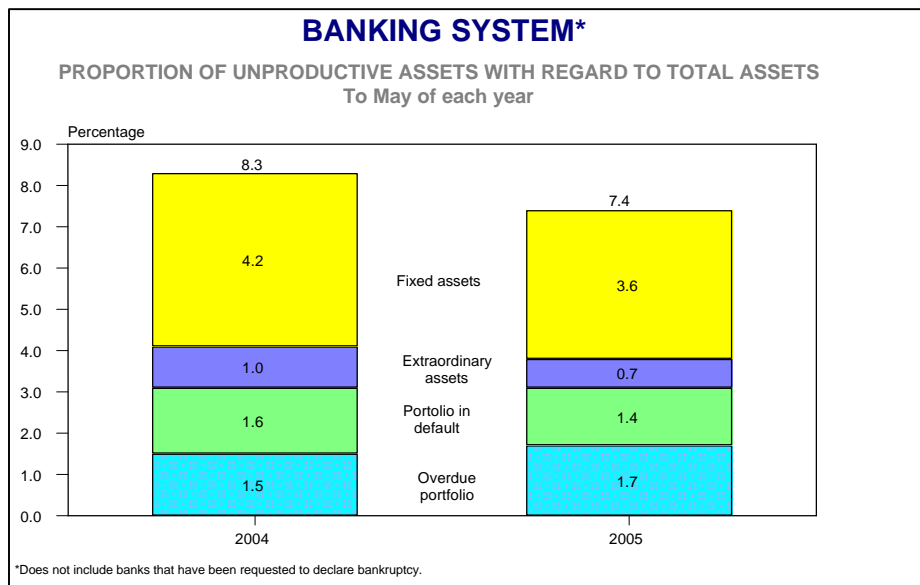


The banking credit for the private sector, to June 30th showed an inter-annual growth rate of 19.3%, which is located within the foreseen range for that date, according to the seasonality of that variable. The most important title of the banking credit for the private sector is the credit portfolio, which, without including the banks to which the declaration of bankruptcy has been requested, on May 31st, 2005 (latest information available) showed an inter-annual growth of 17.8%, determining that most of said portfolio (91.0%) is concentrated in the sector: *consumption and transfers, commerce, industry, construction and agriculture*.

Regarding the quality of the credit portfolio, it is perceived that the amount of contaminated portfolio (portfolio in default plus overdue portfolio), compared to the total credit portfolio of the banking system, has been showing an important improvement, most of all if it is considered that in May 1999 said indicator was in 13.4% and then it was reduced to 6.5% in May 2004 and to 6.3% in May 2005.



On the other hand, the indicator of unproductive assets (integrated by the contaminated portfolio, extraordinary assets and fixed assets) as a proportion of total assets; it also reflects an improvement, because it continues showing a trend toward the decline while it was positioned in 7.4% in May 2005, percentage that is lower than the one registered in the same date of the previous year (.8.3%).



Situation of Public Finances. To June 30th2005, according to preliminary data of the *Ministerio de Finanzas Públicas* [Equivalent to the Department of the Treasury], a fiscal deficit of Q125.6 million (fiscal surplus of Q254.9

million to June 2004) was observed. This result obeys the high dynamism observed in the public expenditure, because it increased in Q1, 506.6 million (14.6%) between January and June, while the total income increased in Q1, 126.1 million (10.7%). It is important to point out that the highest dynamism observed in the expenditures obeyed the impulse of the expenditure of capital, which registered an increase of Q993.9 million (44.4%).

On the other hand, it is important to indicate that the deposits that the central government has in the *Banco de Guatemala* were substantially less than the scheduled for the first semester; which constituted important support from the fiscal policy to the monetary policy in order to keep the macroeconomic stability. Particularly, it contributed to neutralizing the monetizing effect derived from the purchase of foreign currency of the Central Bank in the exchange market.

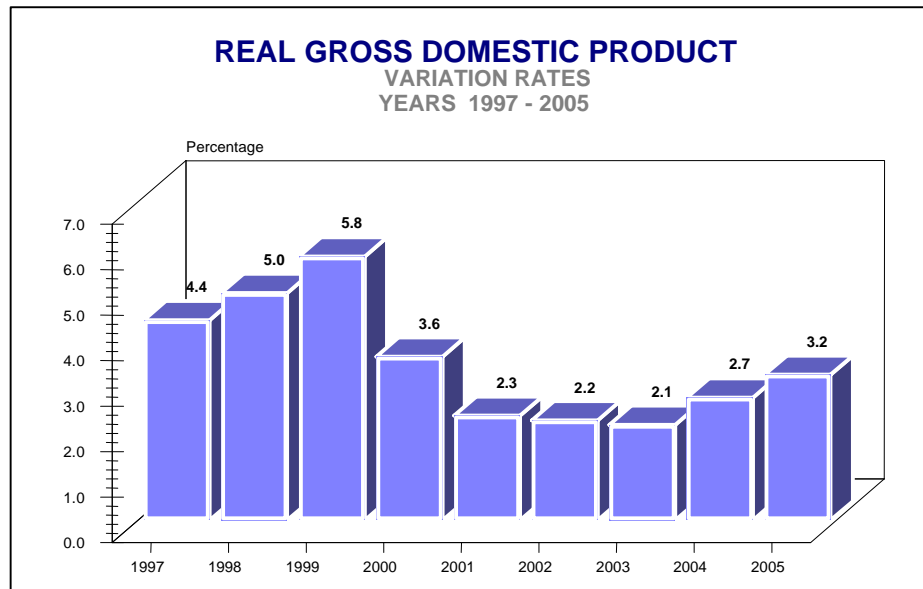
The preservation of the fiscal discipline is fundamental to consolidate the macroeconomic stability, as well as to create a certain and reliable environment, in which the economic factors can make adequate decisions regarding consumption, savings and investment; these factors are fundamental to propitiate the growth and organized development of the national economy.

Real sector. For the year 2005 it is estimated that the economic activity, measured by the Gross Domestic Product (GDP), in real terms registers an increase of 3.2%⁵, higher than the rate of 2004 (2.7%). In the external order, this behavior is based on a favorable environment, derived from the evolution foreseen in the economy of the commercial associates of the country, especially, from the expected growth of the United States of America; it is also derived from the expectation of the implementation of the Free Trade Agreement between the United States of America, Central America and the Dominican Republic (DR-CAFTA⁶) and from the strengthening of the Customs Union, mainly with El Salvador and Honduras. In the internal order, the expected growth has been benefited by the positive perspectives that the preservation of the macroeconomic stability generates, based on the application of disciplined monetary and fiscal policies; as well

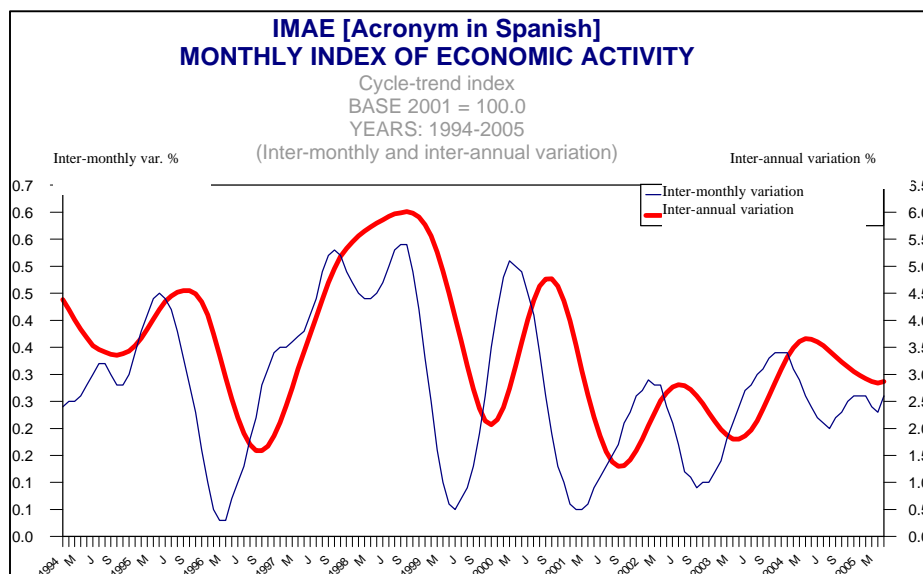
⁵ See annex

⁶ Dominican Republic – Central America-United States Free Trade Agreement

as on the improvement of the expectation of economic factors, derived from the consolidation of the governmental management.

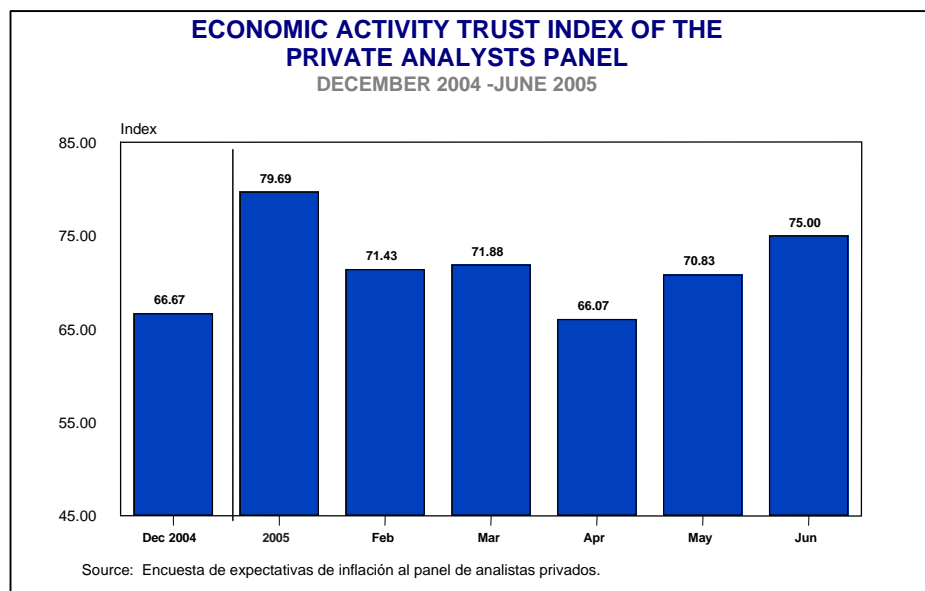


It is important to indicate that although the international oil price has become an adverse factor for the national productive activity, the impulse that the global economy still shows, provides support to the expected growth of the Guatemalan economy. In addition, it is important to mention that the Monthly Index of Economic Activity (IMAE), short-term indicator that measures the cycle-trend of the country's economic activity, demonstrates that starting from May its sector components show signs of recovery.



On the other hand, according to the Trust Index of the Economic Activity of the Private Analysts Panel⁷, during the first semester of the year, except April, the trust rate was higher than the one registered in December 2004.

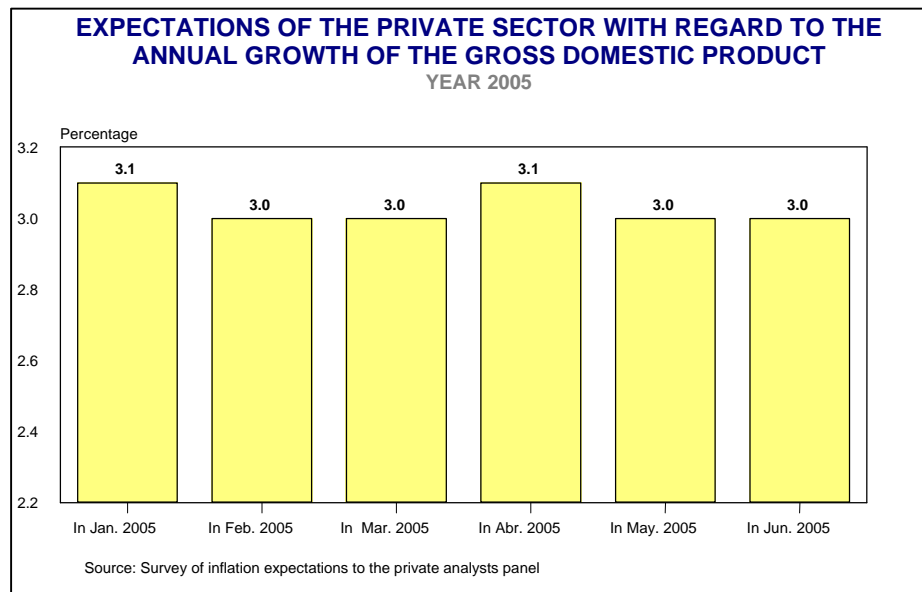
Another indicator that derives from the opinion of the Private Analysts Panel is the estimation of the growth of the GDP. In this case, said analysts foresee that the national economic activity will start to recover in 2005. In effect, according to the EEI of June, the GDP will grow to 3.0% for 2005, higher in 0.3 percentage points than the growth observed in 2004 (2.7%).



Employment: In order to obtain statistical information of employment in Guatemala, the *Instituto Nacional de Estadística* (INE) carried out the National Survey of Employment and Incomes 2004 (ENEI 2004) [Acronym in Spanish], which compiled information during the September to November 2004 period (2.7%).⁸

⁷ The objective of the Trust Index of Economic Activity of the Private Analysts Panel is to measure the perception of the economic factors of said sector, on the current economic situation and on the business environment, as well as on the economic evolution of the country in the near future. It is important to mention that the expectations of national and international experts of said sector are compiled through the Survey of Inflation Expectations (EEI) of the Private Analysts Panel, which since December 2003 is carried out monthly by the *Banco de Guatemala* and the results are published on its web site.

⁸ It is important to mention that according to the information of INE, the ENEI 2004 is not methodologically comparable with the previous surveys of employment and income, because, among



According to the results of this survey, the Working Age Population (PET) [Acronym in Spanish]⁹ was of 8.9 million people and the Economically Active Population (EPA) [Acronym in Spanish]¹⁰ was of about 5.0 million people, which resulted in a Participation Rate (PEA/PET) of 56.1%.

During the survey, the Working Population (PO) [Acronym in Spanish]¹¹ was of about 4.8 million people, which meant a Specific Working Rate (PO/PEA) [Acronym in Spanish] of 96.9%.

Regarding the PO [Acronym in Spanish] per branch of economic activity¹², to November 2004 the highest participation corresponds to Agriculture, with 38.3%; followed by Commerce, with 23.0%; while Industry

other aspects, in this opportunity a Master Sampling Frame was used, based on the XI Population Census of 2002, while for the previous the sampling frame used was based on the X Population Census of 1994.

⁹ People of 10 years of age or older.

¹⁰ People of 10 years of age or older, who in the mentioned week carried out some kind of economic activity and people that were available to work and were taking steps to find a job. It also includes people that during the referred week were not actively looking for a job due to market reasons, but they were eager to start a job immediately.

¹¹ All people of 10 years of age or older, who stated that they worked at least one hour during the referred week.

¹² Classifies employed workers according to the type of product or service that they generate for the company, business or institution where they work during the referred week.

participated in 13.6%. The three mentioned branches of economic activity represent, in conjunction, 74% of the total.

The Visible Sub-employed Population (PSV) [Acronym in Spanish]¹³, in the period from September to November reached 0.8 million people, which means a Visible Sub-employed Rate (PSV/PEA) of 16.3%.

On the other hand, the Total Open Unemployed Population (PDAT)¹⁴ was of 0.2 million people, which gives a Total Open Unemployment (PDAT/PEA) of 3.1%.

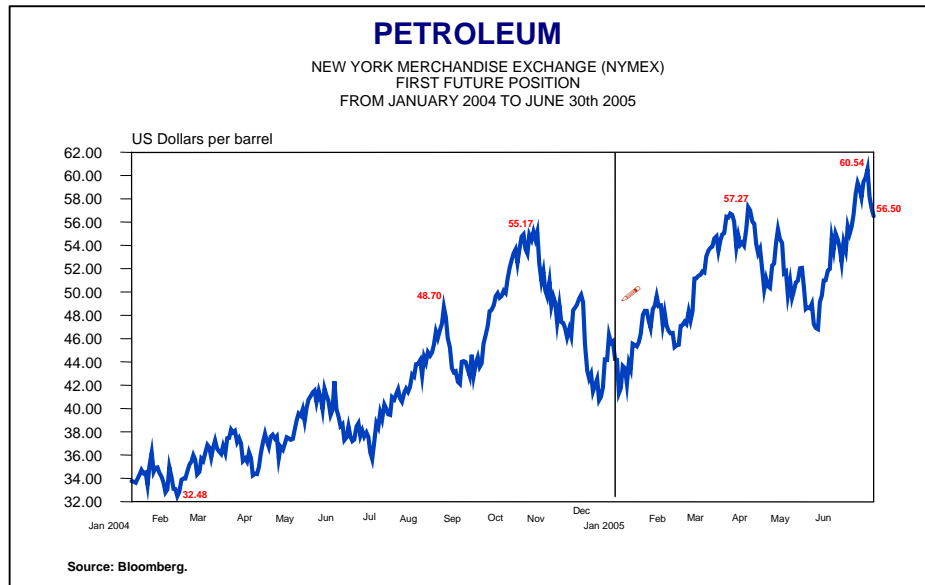
It is important to highlight that the ENEI [Acronym in Spanish] is important progress in the production of the country's economic statistics and that, as it continues to systematically perform, and it will allow its users to carry out more profound analysis about the employment and national economic activity.

Balance of inflation risks: Persistence of high oil prices. The main inflationary risk for the countries that, as Guatemala, are net importers of oil is the uncertainty that has been generated regarding the evolution of the crude oil prices. In fact, its volatile behavior and its increase during the first semester of the year is the main response to why the inflation rate in the country has not been decelerated with higher speed.

During the first semester of 2005 the international oil price increased again until it reached the highest historical rate in June of US\$60.54 per barrel, and it is expected to situate the price of crude oil around it for the remainder of the year.

¹³ People that involuntarily work less than the normal work (40 hours/week in the Public Sector and 48 hours/week in the remaining sectors) and that would like to work more hours.

¹⁴ The open active unemployed population and the open passive unemployed population; the first category refers to people of 10 years of age or older, that although they were not busy during the referred week they looked for a job and who had immediate availability to do it. The second category includes people that were not actively looking for a job due to market reasons; bad time or they were waiting for a reply to their job applications.



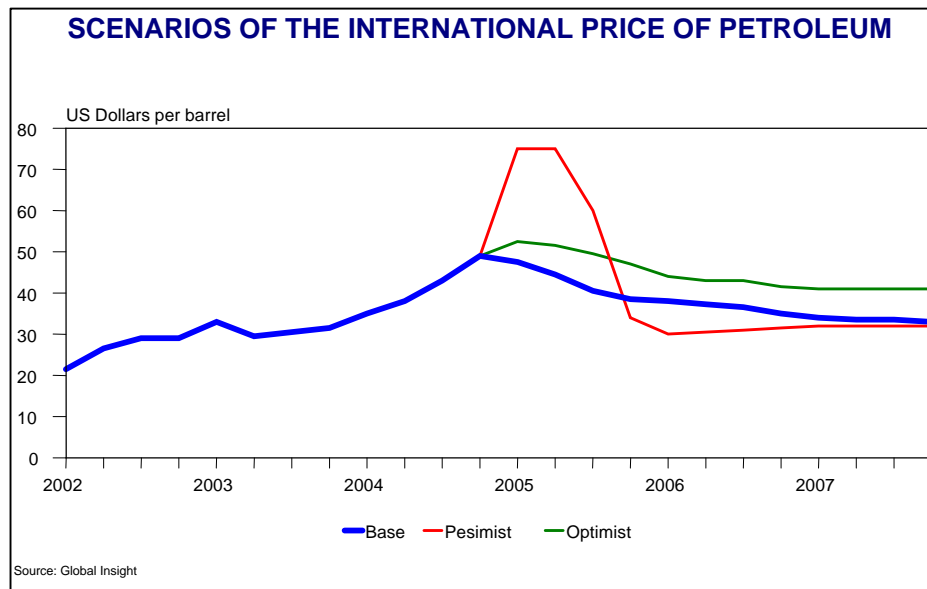
In a base scenario, that considers that during the second semester of the year the international price of an oil barrel would remain at rates near US\$60.00 per barrel, it is expected, based on econometric projections of the *Banco de Guatemala*, that the inflation rate for December 2005 will be of 6.65%, a little higher than the superior limit of the goal range established by the Monetary Board (4%-6%).

In spite of the indicated, it is convenient to highlight that the petroleum market continues registering a high volatility and sensibility to any change in the offer and demand of the same. On this particular, the International Monetary Fund¹⁵ has indicated that this situation is because there is a much reduced gap, of about 1.5 million barrels per day, in offer and demand, and indicates that in order to stabilize the volatile behavior of the international price of petroleum, said gap should be between 3 and 4 million of barrels per day. This will give stability to the market and major certainty of the short-term behavior of the international oil price; however, this gap may not vary during the rest of the year.

For that reason, it must not be discarded that exogenous events may occur and might change the expected scenario. For example, Global

¹⁵ Oil Market Development and Issues. March 2, 2005.

Insight, a company of international, recognized prestige in the analysis of the crude oil market, considers that if the worldwide economy would decelerate more than the foreseen, the price of petroleum might be reduced to US\$40.00 per barrel (optimistic scenario); in contrast, if a shock offer emerges –such as a bellicose conflict in the crude oil producing countries-, the price might reach US\$75.00 per barrel.



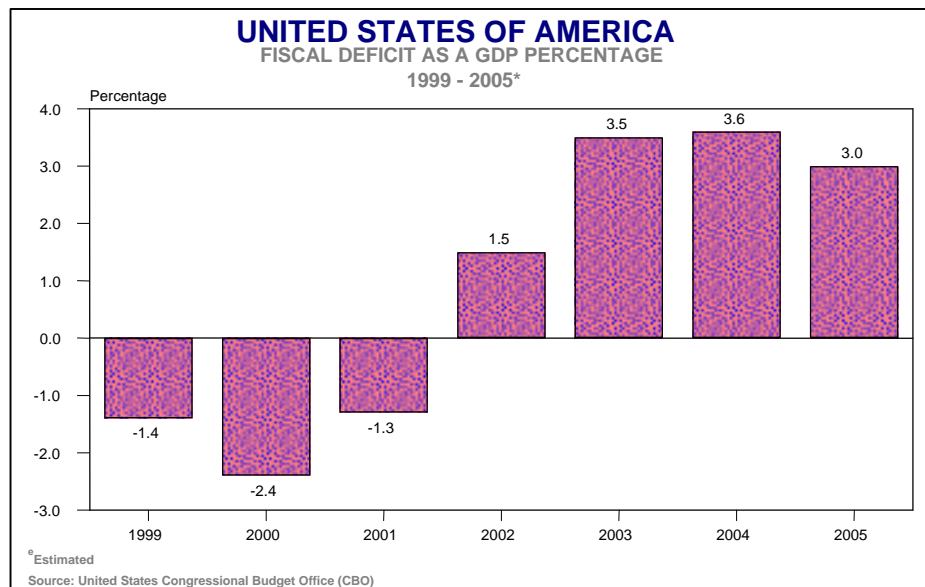
Also, it must not be discarded that other international analysts have estimated prices higher than US\$80.00 per barrel. For example, Morgan Stanley¹⁶ considers that the international price of petroleum might reach a maximum of US\$85.00 per barrel.

According to the indicated, the monetary authority should pay attention to the evolution of prices of crude oil, in order to implement the monetary policy with great caution, to avoid the denominated *effects of second round* in the general level of prices, not neglecting the preservation of the stability in the rest of macroeconomic variables.

Persistence of the macroeconomic misbalance of the economy of the United States of America. The worldwide economic trend is characterized by a high rate of uncertainty which is mainly due to the ambiguity of the high fiscal deficit and the deficit in the current account of the payments balance of the United States of America are going to be

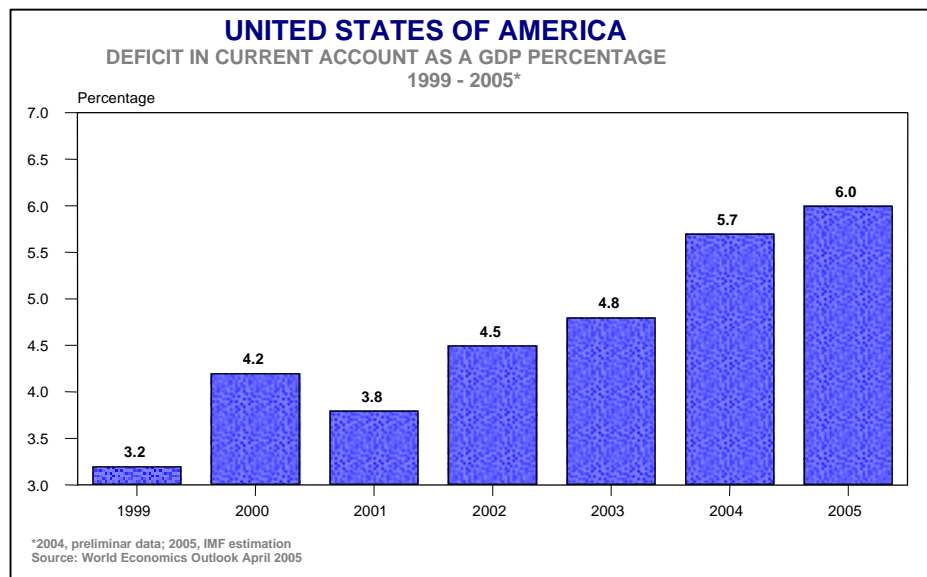
¹⁶ According to the publication of The Economist, June 23rd. 2005.

corrected -and with celerity. Regarding the fiscal deficit, according to the budget department of the United States of America, in the October 2004-June 2005 period it was of US\$251.0 billion, which means a reduction of US\$76.0 billion compared with the one executed during the same period of the previous fiscal year. In this context, this year's previsions indicate that the fiscal deficit will be in US\$365.0 billion, which will be equivalent to 3% of the gross domestic product, which means a reduction of US\$47.0 billion compared with the deficit registered in 2004. In spite of that, the fiscal deficit would continue in high rates and the mid-term perspectives are not positive, because experts believe that if the reduction of taxes already granted remain, regarding expenditure compromises that do not cede, suspecting a panorama in which the fiscal pressure will continue, as a minimum, in the next two years.



Regarding the deficit in the current account of the payments balance, the main short-term indicator is the commercial balance, which in April 2005 was of US\$57.00 billion, with this result it is foreseen that by the end of the year, the deficit in the current account will be in 6.0% of the GDP, which is also a very high percentage. In this case, if an inflated deficit in current account of the payments balance continues, it might generate an increase in the capital outflow of the United States of America –*which has partially been reduced due to the restriction of the monetary policy of that country, because of the*

relaxation of the monetary policy in Europe and because of the weakening of the Euro, caused by the recent results in France and Holland regarding the ratification of the European Constitution- which will again complicate the execution of the monetary policy in emerging markets. Therefore, it is expected that this will happen around 2006, so that from the point of view of the monetary policy, the scenario for 2005 is relatively stable.

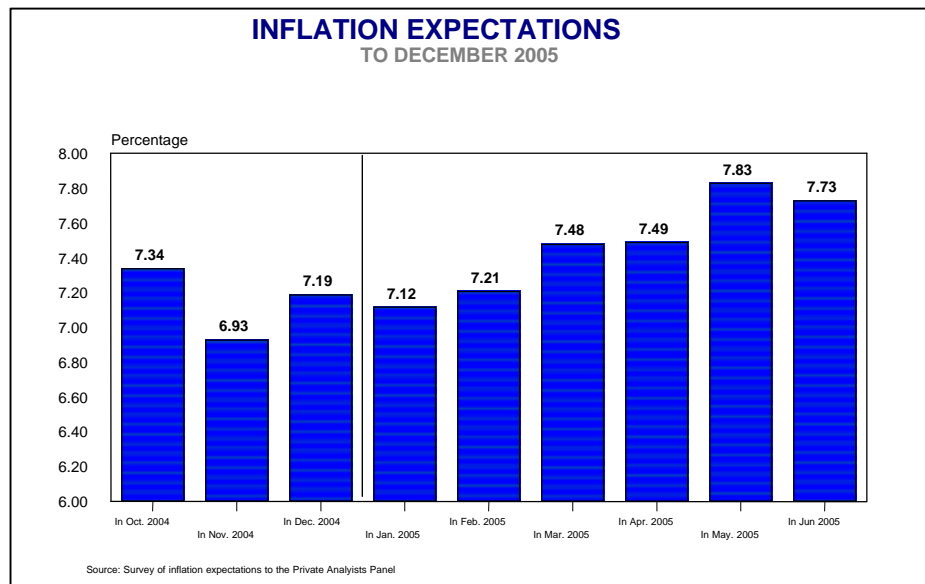


Regarding the Monetary Policy, during the first semester of 2005 the authorities of the Federal Reserve System continued increasing the interest rate objective of federal funds, which was repeated four times, with increases of 25 basic points in each of them; the first time it was increased from 2.25% to 2.50% (February 2nd); the second time to 2.75% (March 22nd); the third time to 3.00% (May 3rd); and, the last time to 3.25% (June 30th). The continuity of this policy must reduce the net capital outflow of the North American economy.

As was indicated, this restriction of the monetary policy of the United States of America has helped to moderate the capital flow to the rest of the world, so that the pressure upon the monetary policies of emerging markets has been reduced. As was indicated, it is believed that this fact will remain during the rest of the year; however, in a mid term, when this restriction ends, unless a substantial correction of the deficit in current account of the payments balance of said country has not been started, it might again

generate capital flow, which will again complicate the execution of the monetary policy in countries such as Guatemala. In a pessimistic scenario, it could also generate a severe deceleration of the economic growth of the United States of America (hard landing) which would affect the rest of the world.

Inflation Expectations. The inflation expectations of private analysts still estimate that the inflation rate for the end of the year could be above the superior limit of the goal range established by the monetary authority, which recommends maintaining the monetary discipline. Particularly, the respective survey indicates that currently said expectations have been increasing. In effect, the inflation expected by said analysts for December 2005, according to surveys carried out from January to June 2005, is of 7.12%, 7.21%, 7.48%, 7.49%, 7.83% and 7.73%, respectively.



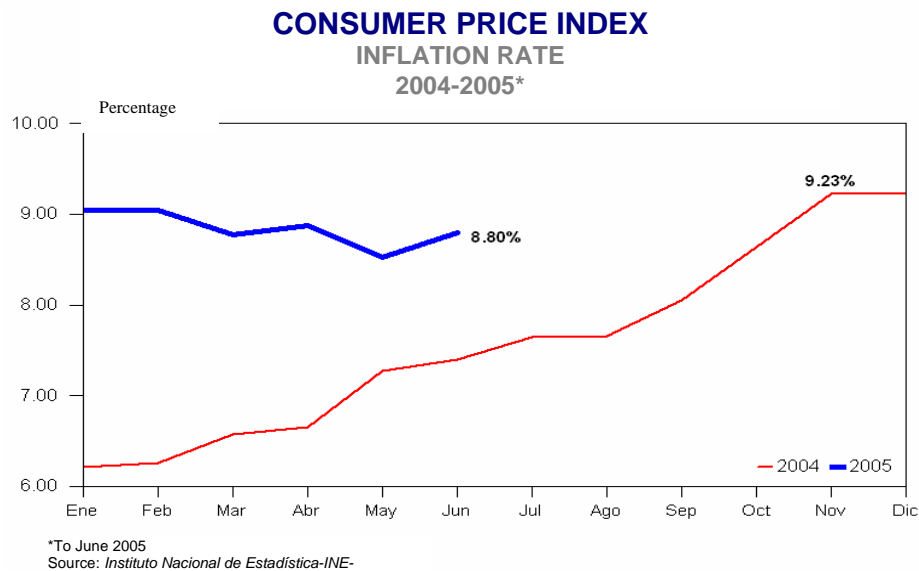
Finally, supposing that the monthly inflation of the second semester of the year are similar to the those observed during the same period in 2001, 2002, 2003 and 2004, it is foreseen that for December 2005, the inflation rate will be of 9.18%, 6.37%, 6.99% and 8.80%, respectively, all are higher than the foreseen goal range.

II. EVOLUTION OF THE MONETARY POLICY VARIABLES

A. INFLATION GOAL

1. CONSUMER PRICE INDEX –CPI-

According to the CPI prepared by the *Instituto Nacional de Estadística-INE-*, on June 30th 2005, at a national level, an inflation rate of 8.80% was registered; percentage that is higher than the goal for the end of the year established by the Monetary, Exchange and Credit Policy for 2005 and for the following twelve months (between 4.0% and 6.0%). The referred percentage is higher in 1.40 percentage points regarding the one observed in June 2004 (7.40%).



The behavior observed in the inter-annual inflation to June 2005 mainly reflects, the increase that the expenditure division **Food, Non-alcoholic beverages and take-out foods** registered in the CPI (weighting 38.75%), with an inter-annual variation of 12.95%, which explains the 60.98% of the inter-annual variation of the CPI. Due to its participation, the inter-annual increase in the index of the expenditure groups *Bread and Cereals* (28.88%); *Vegetables, legumes and tubercles* (18.87%) and *Fast food and snacks* (5.34%) outstand, which in conjunction represent 79.98% of the inter-annual variation of said expenditure division. On the other part, the basic expenditures that registered the major increase in the inter-annual rate are the tortilla products (43.52%), bread (32.55) and black beans (28.52%), which in conjunction represent 38.06% of the total inflation to June 2005.

The expenditure division **Transportation and communications** (weighting 10.92%) registered in June an inter-annual variation of 9.02% and

represents 10.03% of the inflation rate. In said behavior the average prices of *Fuel* (16.02%); *extra urban transport* (20.61%); *Air transport* (20.34%); and, *Urban Transport* (11.63%) mainly fell.

The expenditure division **Furniture, house equipment and routine house maintenance** (weighting 7.95%) registered an inter-annual variation of 6.53% and represents 5.62% of the total inflation rate, outstanding the increase in *Household Maintenance Services* (7.83%).

The expenditure division **Housing, water, electricity, gas and other fuels** (weighting 10.00%) registered an inter-annual variation of 4.41% and represents 4.70% of the total inflation rate, outstanding the increase in the average price of *real housing lease* (5.16%) and *Electricity service* (3.43%).

The behavior of these four expenditure divisions represents 81.33% of the inflation rate observed to June 2005.

**CONSUMER PRICE INDEX
INFLATION RATE
NATIONAL RATE
(Base: December 2000= 100.0)
June 2005**

EXPENDITURE DIVISION	EXPENDITURE WEIGHTING	JUNE 2004	JUNE 2005	INFLATION RATE	PARTICIPATION OF THE INFLATION RATE/2	PARTICIPATION OF THE INFLATION RATE AS PERCENTAGE/3
GENERAL INDEX	100.00	128.51	139.82	8.80	8.80	100.00
1. Food, non-alcoholic beverages and take-out food	38.75	137.41	155.20	12.95	5.36	60.98
	7.94	119.12	123.61	3.77	0.28	3.16
2. Clothing and shoes	10.00	120.72	126.04	4.41	0.41	4.70
3. Housing, water, electricity, gas and other fuels	7.95	122.35	130.34	6.53	0.49	5.62
4. Furniture, house equipment and routine house maintenance	5.48	125.14	131.96	5.45	0.29	3.31
	10.92	115.01	125.38	9.02	0.88	10.03
5. Health	6.83	129.59	135.41	4.49	0.31	3.52
6. Transportation and communications	5.60	124.50	143.47	6.67	0.39	4.44
7. Recreation and culture	6.53	125.70	133.05	5.85	0.37	4.24
8. Education						
9. Properties and other services						

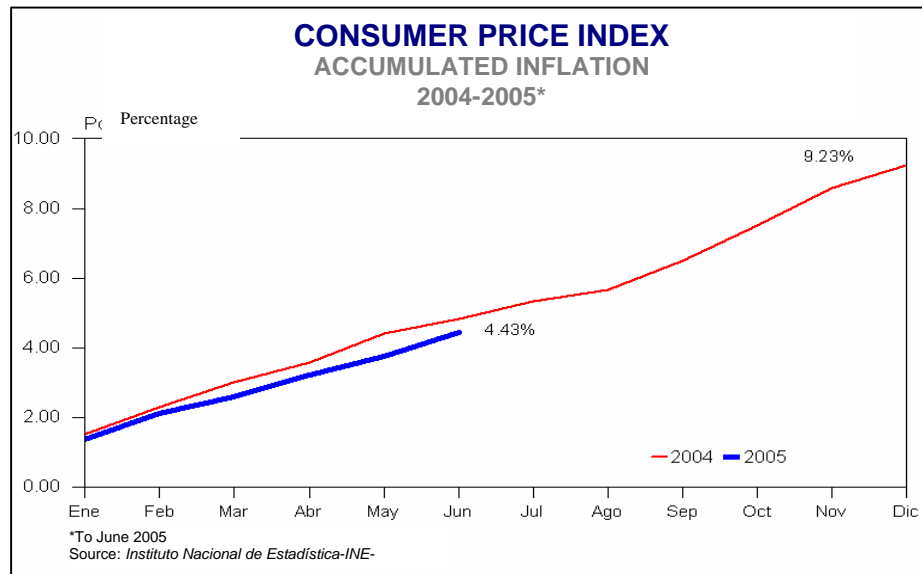
Source: *Instituto Nacional de Estadística* –INE–

1/ Variation rate of the referred month regarding the same month of the previous year.

2/ Incidence in the variation.

3/ Participation in the variation: (Incidence/total variation)*100

The accumulated inflation to June of the current year, at a national rate, reached a variation of 4.43%, lower in 0.41 percentage points to the one registered in the same month of the previous year (4.84%).

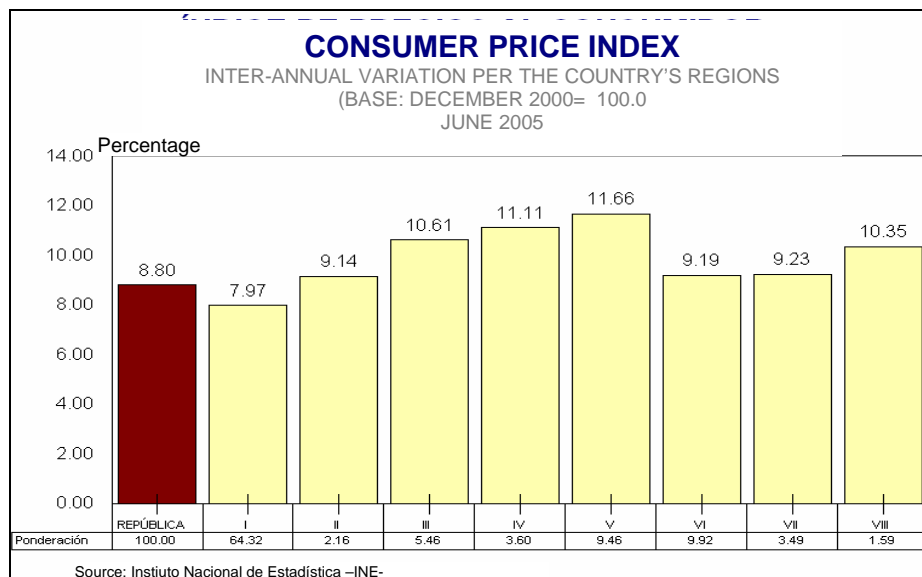


At a regional rate¹⁷, Region V (Central) registered a very high inflation rate, 11.66%; Region IV (Southeast) registered an inter-annual variation of 11.11%; and, region III (Northeast) registered a variation of 10.61%. On the other hand, Region I (Metropolitan), which has a weighting of 64.32% in the total CPI, showed the lowest inflation rate, registering a variation of 7.97%, which is lower in 0.83 percentage points than the weighting average at the national level (8.80%).

In Region V (Central), with a weighting of 9.46% within the structure of the region, increases higher than 50% were registered regarding the same period of the previous year; such is the case of the average price of bread (54.75%) and of other dry fruit (52.77%). On the other hand, tortilla products and corn registered variations of 20.42% and 15.74%, respectively. It is important to indicate that the mentioned increases represent, in conjunction, more than 40% of the inter-annual variation of said region. The increase

¹⁷ Region I, Metropolitan (Guatemala); Region II, North (Alta Verapaz and Baja Verapaz); Region III, Northeast (El Progreso, Zacapa, Izabal and Chiquimula); Region IV; Southeast (Santa Rosa, Jalapa and Jutiapa); Region V; Central (Chimaltenango, Sacatepéquez and Escuintla); Region VI, Southwest (San Marcos, Quetzaltenango, Totonicapan, Retalhuleu, Suchitepéquez and Sololá); Region VII, Northwest (Huehuetenango and Quiché); and, Region VIII, Petén.

observed in region IV (Southeast), with a weighting of 3.60% mainly obeys an increase registered in bread (55.44%), tortilla products (36.16%), other vegetables (99.80%) and black beans (38.41%); products that, in conjunction, represent more than 60% of the variation of said region. In region III (Northeast), with a weighting of 5.46 within the regional total, the registered inter-annual variation is mainly due to the increase in the average price of the tortilla products (64.77%); bread (31.74%), black beans (34.89%) and other vegetables (47.94%); products that in conjunction represent 44.86% of the variation of the mentioned region.



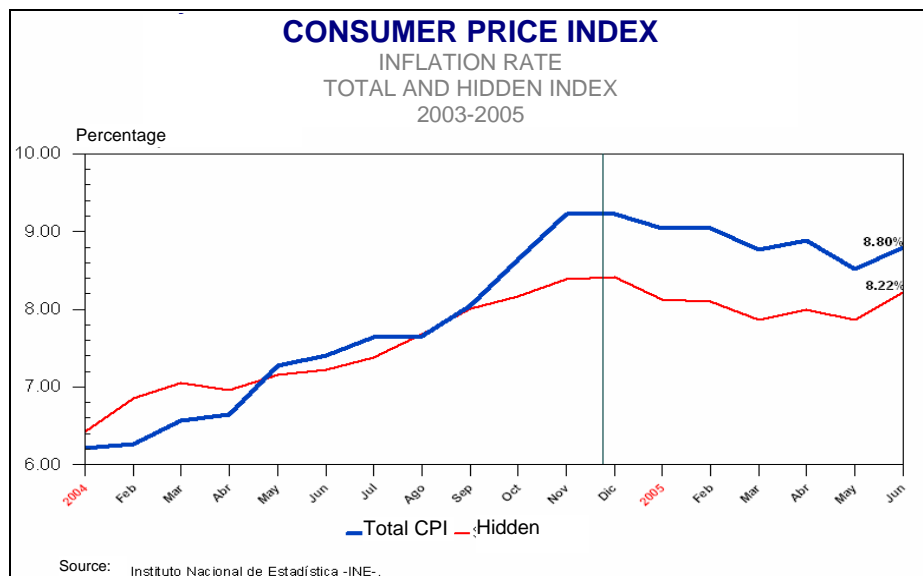
2. HIDDEN INFLATION

Hidden inflation is the growth rate of a price index that, in order to eradicate distortions in its calculation, excludes some goods and services that have very volatile prices or are subjected to external crashes. Therefore, in the case of Guatemala, the indexes of expenditure groups *Vegetables, legumes and tubercles; Manufactured and natural gas and gases melted from petroleum; and, fuels* are excluded, whose weighting in the CPI are 1.28%, 3.77%, 1.09% and 2.04, respectively, for a total of 8.18%.

In this case, the national hidden inflation registered an inter-annual variation of 8.22% in June 2005, lower in 0.58 percentage points regarding the total inflation (8.80%); this difference is mainly because the titles that registered

significant increases were eradicated: vegetables, legumes and tubercles (18.87%); fuel (16.02%); fruit (12.84%); and, propane gas (1.93%).

In hidden inflation rate behavior, the evolution of the price of bread and tortilla products is determining, which in conjunction represent 36.91% of the hidden inflation to June 2005.



3. IMPORTED INFLATION

The behavior of the inflation rate registered during the semester was significantly influenced by the imported inflation, which, at the same time, mainly responds to the increase in the international oil prices.

For analysis purposes, the imported inflation can be divided in direct and indirect. The direct imported inflation refers to the effect that the international price of petroleum has in the price of 32 goods and services of the basic food basket, which in its costs structure intensively uses products derived from crude oil. The estimate of the same is possible because now the statistical information of the national accounts –SCN93- allows us to count on the structure of production costs of these goods and services. On the other hand, the indirect imported inflation, or second round, refers to the increase in the prices of goods and services that in their cost structure do not incorporate the

ones derived from petroleum, but that are indirectly affected by aspects such as the increase in the price of transportation, electricity and others.¹⁸

CALCULATION METHODOLOGY OF THE DIRECT IMPORTED INFLATION

The structure of intermediate consumption of the base year 2001 of the *Sistema de Cuentas Nacionales, Cuarta Revisión-SCN 93-* [National Account System, Fourth Revision] is used to estimate the direct imported inflation; so that, the percentages that petroleum derivatives represent in the production costs of 32 goods and services are established.

Subsequently, the calculation is made considering the cost of the referred goods and services that are not affected by petroleum derivatives, in the following way:

Supplies

$$Ia = Ia_{-1} \left[1 + \left(\frac{VINDP}{100} \right) \right]$$

VINDP= Variation of the index of each good or service, excluding petroleum derivatives.

Vo= Index variation (original)

INDP= % of supplies not derived from petroleum

The new index for the 32 basic expenditures is obtained.

Supplies

$$Ia = Ia_{-1} \left[1 + \left(\frac{VINDP}{100} \right) \right]$$

VINDP= Variation of the index of each good or service, excluding the petroleum derivatives.

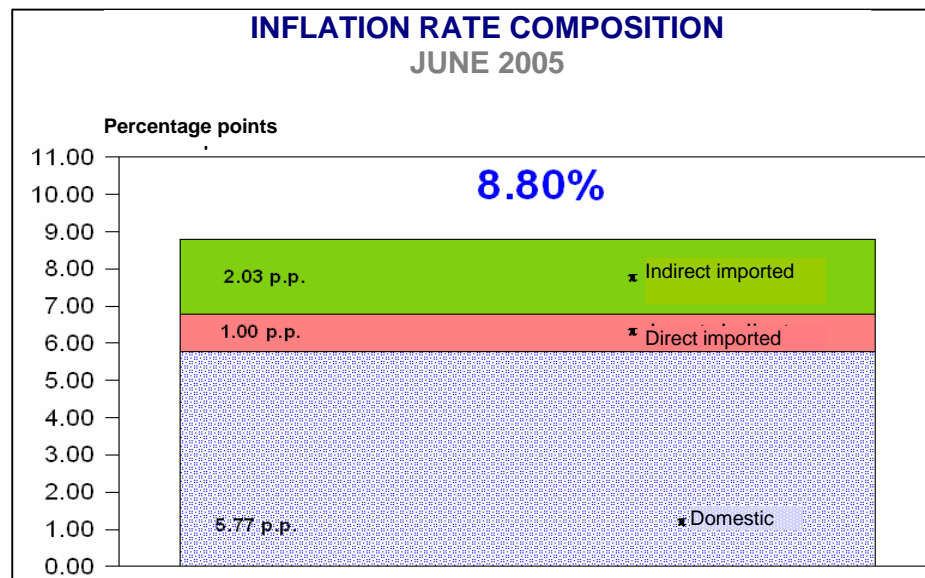
¹⁸ The calculation of the indirect imported inflation is made according to the methodology contained in the Memorandum Informativo Conjunto I-2004, dated October 22nd 2004, related to the link between the monetary policy and imported inflation, which is found in the web page of *Banco de Guatemala* www.banguat.gob.gt/publica/bgdocto031.pdf

I_a = Current adjusted index

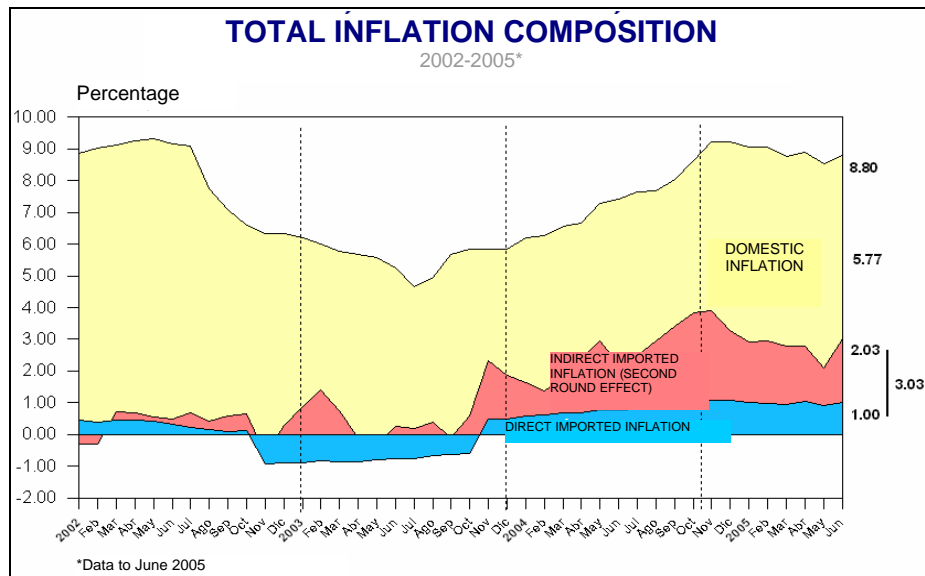
I_{a1} = Previous adjusted index

Subsequently, a new price index is obtained, which is the result of the consolidation of new indexes of the 32 goods and services (that now do not include the variation effect of prices of petroleum derivatives) with the indexes of the remaining 186 goods and services that constitute the CPI.

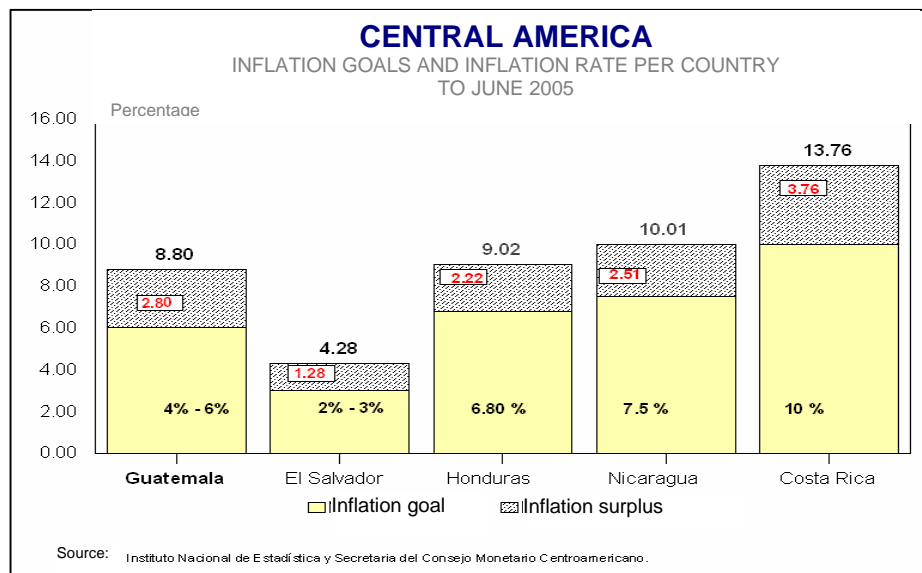
Finally, the inflation rate is calculated as the new index, which is deducted from the inflation rate of the total CPI, obtaining the direct imported inflation.



To June 2005 the imported inflation represents 3.03 percentage points of the inflation rate (8.80%), from which 1.00 percentage points correspond to the direct imported inflation and 2.03 percentage points to the indirect imported inflation.



Finally, it is important to indicate that the impact of the imported inflation is also observed in the Central American countries, in which, as a result, the inflation rate is higher than the foreseen goal.



B. INTEREST RATES

1. Of Open Market Operations –OMAs- [Acronym in Spanish]

a) In national currency: During the period between January and June 2005, in the short-term open market operations that are carried out in the Electronic Banking Table of Money –MEBD- and in the stock exchange, the interest rate of

certificates of term deposits –LTDs- for 7 days¹⁹ registered nominal increases of 20 and 25 basic points from 2.55% to 2.75% and from 2.75% to 3.00%. The above was derived from the decisions adopted by the Execution Committee of the *Banco de Guatemala* on February 18th and May 20th, respectively, in order to help beat down the inflationary expectations.

Regarding the interest rate of said operations for a 28 day-term, it remained at 3.24% during January and February. Starting on February 28th of 2005 the Execution Committee agreed to switch said fund-raising option to the bid mechanism, according to the principle of participation in the money market, which is contained in the monetary policy for 2005, in order to use a single leading interest rate for the short-term open market operations.

On the other hand, the interest rate of the open market operations for the bid mechanism were determined by the market conditions, because the Execution Committee agreed that starting on January 4th, 2005, the *Banco de Guatemala* should modify its participation in said mechanism. Therefore, in order to eradicate the practice of assigning the interest rates for terms longer than 28 days²⁰, it determined the creation of maximum limits (quotas) for each term, which was established according to the monetary spaces determined in agreement with the monetization flow. Bids were carried out daily until January 28th, but starting on January 31st, the Execution Committee decided that the *Banco de Guatemala* must call for bids three times per week (Monday, Wednesday and Friday); this measure was adopted in order to gradually reduce the frequency of the bids, and at the same time, being careful that the markets were informed of said changes with anticipation and in an adequate way.

In order to adjust the fund-raising liquidity to the estimated monetization flow and to give privilege to the gradual neutralization of liquidity for longer

¹⁹ The Execution Committee, in their meeting dated January 21st, after knowing the result of the technical studies, established that starting on January 24th the interest rate for 7 day-terms will be the leading interest rate of the monetary policy, because this is the one that has more influence on inflation behavior.

²⁰ Starting on February 28th 2005, the fund-raising option for 28 day-term was switched to the bid mechanism. During March and April, weighted average rates of 3.18% and 3.24% were registered for that term, similar to the ones observed in January and February (3.24%), when said operations were carried out in the mechanism of the MEBD and stock exchange.

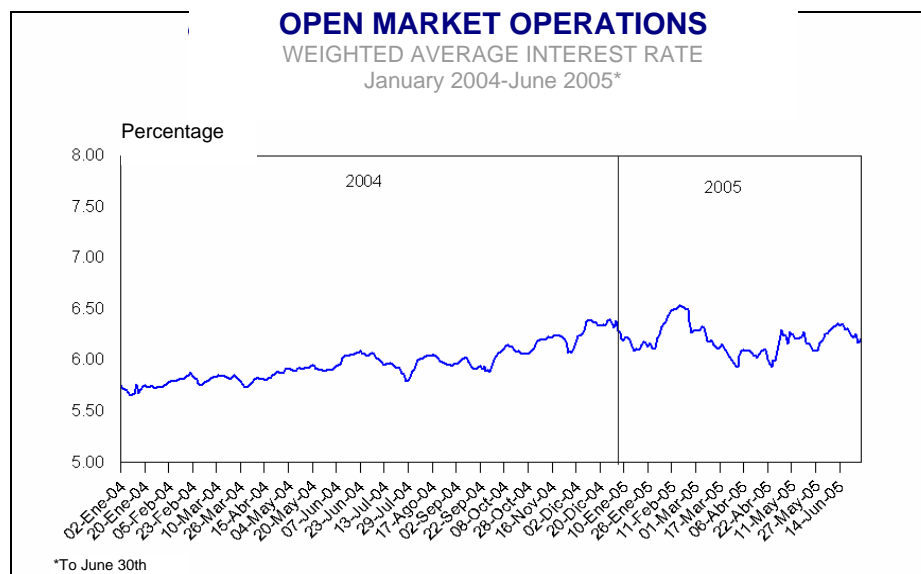
terms, the Execution Committee decided that starting on May 3rd; the call for bids must be made only for 364 and 728 day-terms.

In the following table, the monthly weighted average interest rates in the different terms showing slight variations during the first semester 2005 can be observed, in general, showing in February the highest rates for most of the terms.

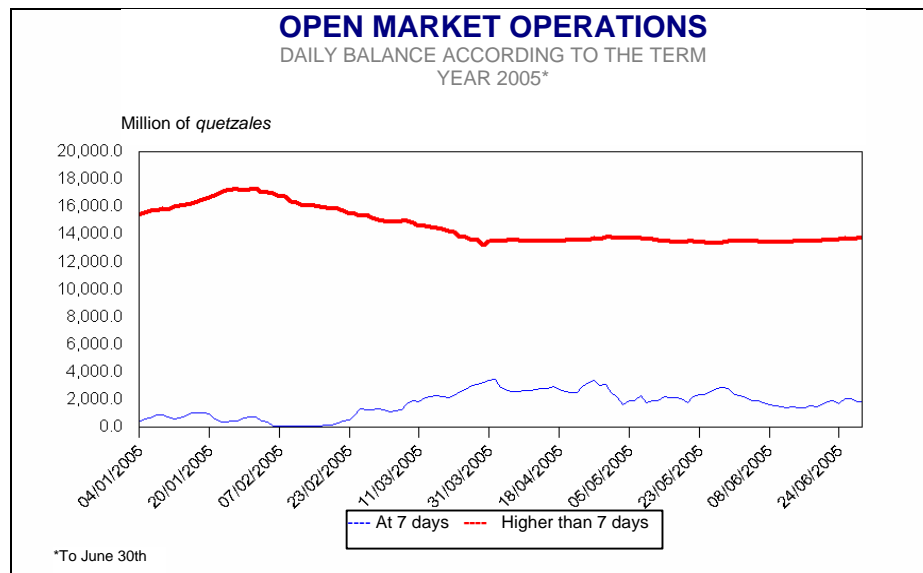
**MONTHLY WEIGHTED AVERAGE INTEREST RATES
OF THE OPEN MARKET OPERATIONS
BID
FROM JANUARY TO JUNE 2005
-In percentages-**

TERM IN DAYS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
28	--	--	3.18	3.24	--	--
91	5.77	5.99	5.53	4.94	--	--
182	5.84	6.11	5.94	5.52	--	--
364	6.13	6.50	6.48	6.30	6.12	6.26
728	6.83	7.06	7.04	7.01	7.00	7.05
1092	7.85	7.95	7.96	--	--	--
1456	7.97	--	8.02	--	--	--

Regarding the weighted average interest rate of the total balance of the open market operations, during the period of January to June 2005, showed a trend to decline, from 6.32% to 6.21%.



While analyzing the open market operations per fund-raising term, they can be divided in operations of 7 days (associated to the leading interest rate of the Monetary Policy) and to longer terms. As can be observed in the following chart, during the analyzed period said operations have been mostly concentrated to terms longer than 7 days, reaching a maximum of Q17,279.40 million (96.1% of the total) on February 1st 2005 and a minimum of Q13,206.40 million (80.2% of the total) on March 30th 2005. On the other hand, the operations to 7 days registered a maximum of Q3, 432.6 million (20.3% of the total) on April 1st 2005 and a minimum of Q21.8 million (0.1% of the total) on February 7th 2005. The total balance of the open market operations registered on June 30th 2005 was of Q15, 539.2 million.²¹



On the other hand, regarding the operations of injection of liquidity, the Execution Committee agreed during the first three weeks of January to maintain liquidity bids for 7 day-terms, at an initial rate of about 11.0%. Subsequently, on January 21st, 2005, said Committee agreed to reduce the referred interest rate to 7.65%, in order to reduce the gap between the asset leading interest rate (of injection) and the liability (of placement). Said gap has also been reduced by the increase of 45 basic points in the liability leading interest rate of the monetary policy registered during the semester. The purpose to start a reduction process of the referred gap is to propitiate the conditions so that the

²¹ Includes overdue balance pending a payment of Q4.7 million.

short-term interest rate does not reach a significant volatility. Said volatility is undesirable, first, because it causes disturbances in the bank-financial intermediation process and, second, it interferes in the appropriate transmission of the monetary policy through the banking system.

b) In foreign currency: During the first semester of 2005 the *Banco de Guatemala* continued calling for bids of term deposits in US dollars, in order to reduce the volatility observed in the exchange rate. The bids were carried out daily until January 7th 2005, date in which the Execution Committee decided that the *Banco de Guatemala*, starting on January 10th, must call for this type of bids only on Tuesdays and Thursdays. Therefore, it considered, on one hand, that a major demand had not been shown in the market, and on the other hand, that said measure would be consistent with the reduction of the frequency of bids expressed in *quetzales*.

In the described context, to June 30th 2005 the total fund-raising of said operations was of US\$29.6 million, the highest amount (US\$25.0 million) was shown during the first trimester. The weighted average rate for 91 day-terms (the only one that has been recruited) showed a slight increase in March from 2.85% to 2.889%.

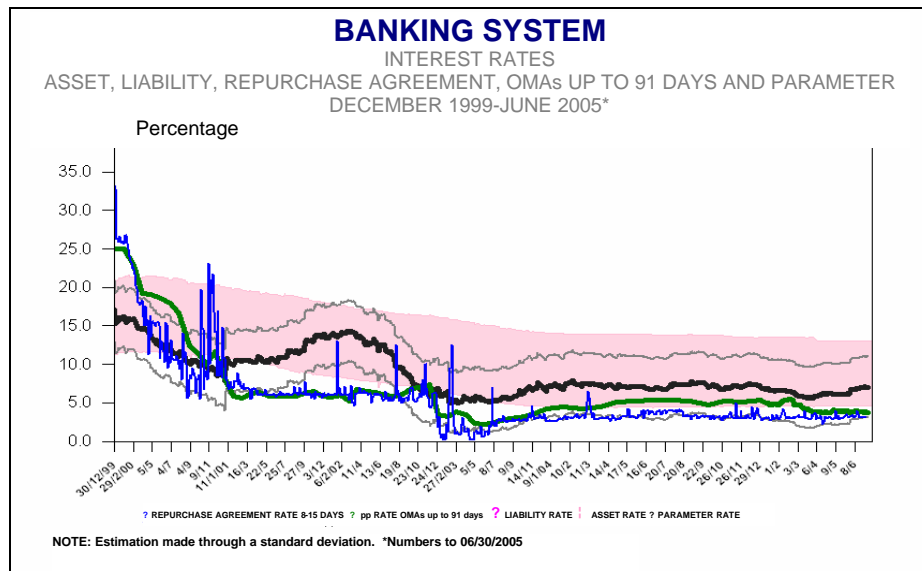
2. Parameter rate

The parameter rate is an indicator based on the “Taylor Rule”²², which incorporates adjustments on the base rate (or neutral) regarding differentials of inflation, aggregate demand and nominal exchange rate, so that the resultant interest rate indicates the levels of interest rate that should be retired from the market in order to be compatible with the current inflation rate. The Monetary, Exchange and Credit Policy for 2005 establishes that the parameter rate will be compared with the weighted average interest rate of the repurchase agreement operations for terms of 8 to 15 days, as well as with the relevant interest rate of the open market operations.

To June 30th, 2005, the parameter rate was of 7.04% and its ceiling and floor, calculated with a standard deviation, were of 10.99% and 3.09%,

²² The Taylor Rule is an indicator that is used by many central banks to guide the decisions of participation in the monetary market, because it reflects the adjustments of the interest rate caused by inflation and by excessive demand, which are compatible with the main objective of the monetary policy. In the case of Guatemala, it has been considered necessary to add an adjustment because of exchange movements, for that reasons it is denominated “Parameter rate”.

respectively. It is important to indicate that due to the positive volumes of liquidity observed in the banking system during the first semester, the repurchase agreement rate for the term of 8 and 15 days has remained a little higher than the floor specie points of the parameter rate, which was of 3.10% to June 30th. On the other hand, on the same date, the weighted average interest rate of up to 91 day-terms of the certificates of term deposits –LTDs- [Acronym in Spanish] (relevant interest rate of the open market operations) was of 3.72%, placed between the mentioned ceiling and floor, which indicates that the monetary policy was neutral; however, it is important to indicate that, while the parameter rate shows a slight trend to increase, the money market rates trend to decline, indicating that a relaxation of the policy has been produced regarding its ‘neutral’ rate.



3. External competitiveness of the domestic liability interest rate

The external competitiveness of the domestic liability interest rate in national currency can be evaluated if it is compared with the parity interest rate. This is defined as the sum of three elements: (i) a comparable international interest rate; (ii) a risk exchange premium, and; (iii) a risk-country premium.

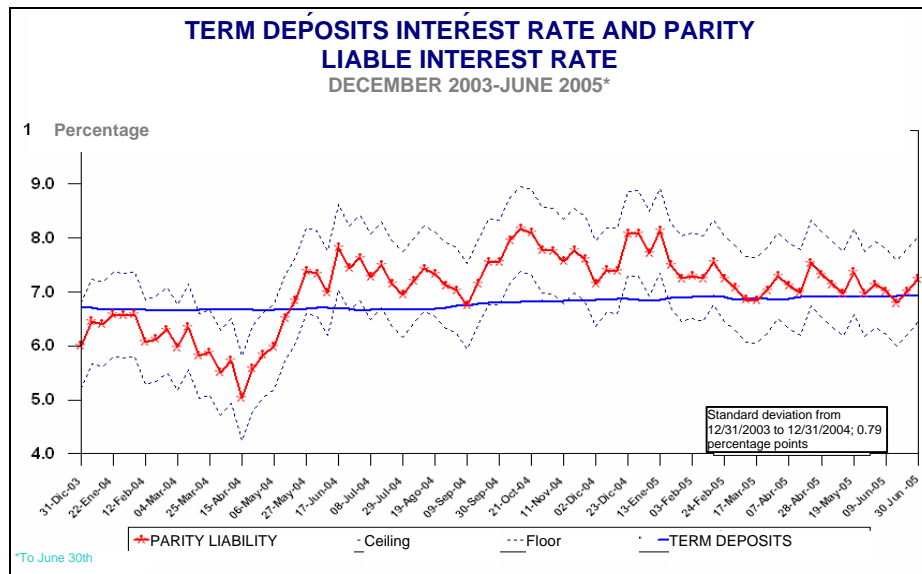
For measurement purposes, in the present analysis an interest rate for the deposit of a 6 month-term in the domestic market of the United States of America is used, as an external liability interest rate comparable with the

domestic liability interest rate in national currency (weighted average interest rate of the national banking system for term deposits). Besides, as an approximate measurement of the risk exchange premium, the difference between the observed average exchange rate (purchase and sale) and the average exchange rate (purchase and sale) negotiated in the Guatemalan future markets is used. At the same time, to roughly measure the risk-country premium, the difference between the return rate of Guatemalan bonds in the international financial market (weighted average of the issues 1997, 2001, 2003 and 2004) and the return rate of the Treasury bonds of the United States of America for a 10 year-term is calculated.

During the period of January to June 2005, it was observed that the weighted average interest rate of term deposits (domestic liability rate), in general terms was lower than the parity liability rate. To June 30th 2005, the weighted average interest rate of term deposits of the banking system reached 6.92%, while the liability parity rate was of 7.24%. Without considering the transaction costs, said situation indicates that economic factors during the first semester of 2005 indicate it would have been better to save abroad.

Regarding the monetary policy orientation that the mentioned variable provides, it was observed that when the interest rate for term deposits was compared with the tolerance margin of the liability parity rate²³, during the first semester of 2005 it was positioned within said margin, except the first two weeks of January; therefore, the orientation of said variable indicated that the monetary policy should remain invariable.

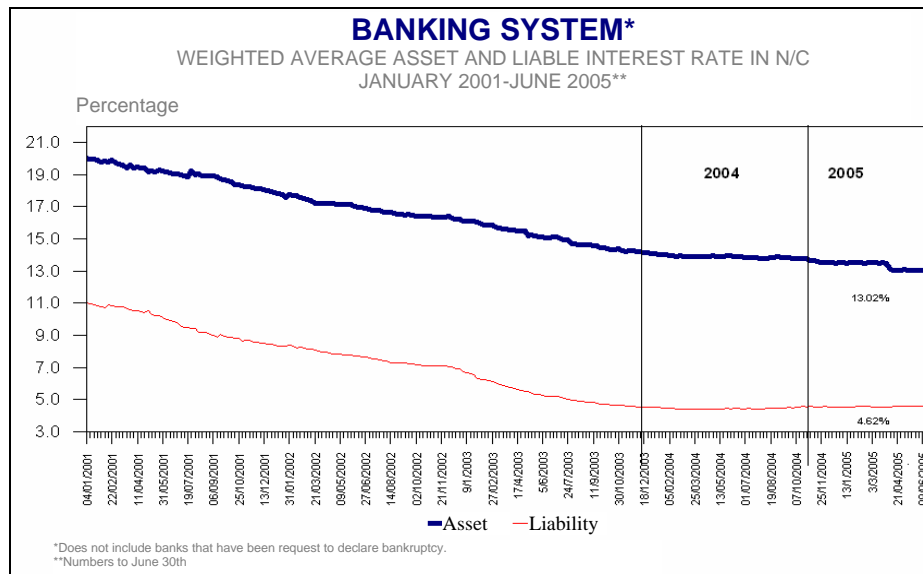
²³ The Monetary Board in resolution JM-160-2004 dated December 29th 2004, agreed that in the liability parity rate, a tolerance margin of +/- standard deviation should be included. While considering a weekly series of information compiled between December 31st 2003 and December 31st 2004, it was established that a standard deviation is equivalent to 0.79 percentage points.



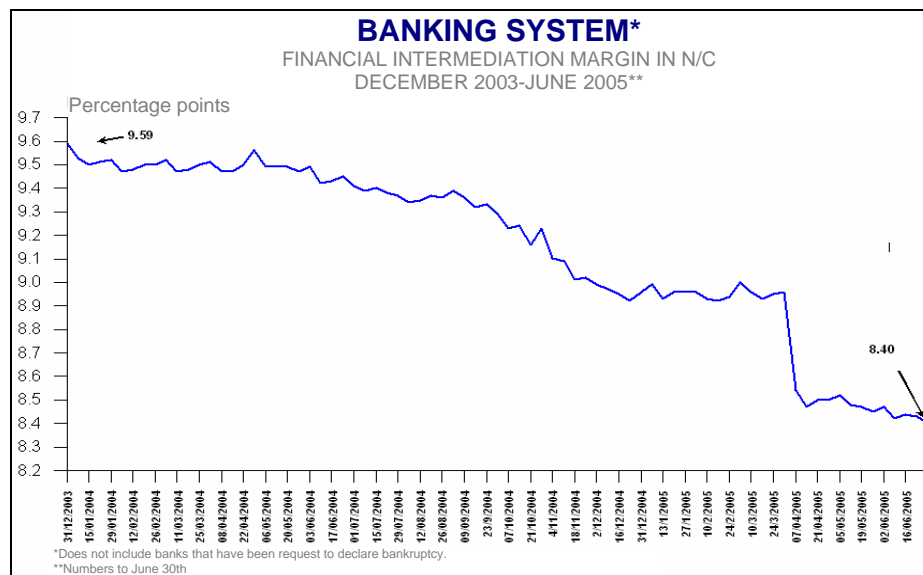
4. Asset and liable weighted average interest rate of the banking system.

a) In national currency

From January to June 2005, the weighted average interest rate continued with stable behavior. In effect, the asset interest rate, weighted average, to June 30th was of 13.02% annual, lower in 0.48 percentage points than the one observed at the end of December 2004; while the liability rate was of 4.62%, higher in 0.08 percentage points than the one registered on December 31st 2004. It is important to mention that in the case of the asset interest rate, the observed behavior is due to the fact that starting on April 7th the data does not include information of the banks that have been requested to declare bankruptcy, which represents a reduction of about 0.41 percentage points, while in the liability rate the effect was null.



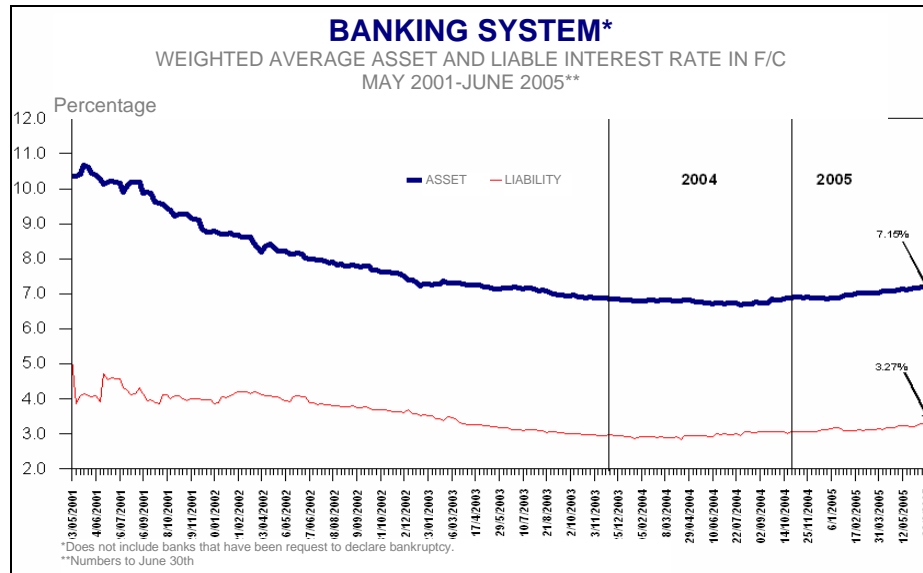
As a result of the trend that the asset and liability weighted average interest rates registered, the financial intermediation margin, in national currency, was of 8.40 percentage points, lower in 0.56 percentage points than the observed at the end of December 2004. This result was also affected by the exclusion of the banks that have been requested to declare bankruptcy.



b) In foreign currency

The asset and liability interest rates in foreign currency, weighted average, during 2005, have shown stable behavior, with a slight trend to increase. In effect, the asset interest rate to June 30th was 7.15%, higher in

0.30 percentage points than the one observed in December 31st 2004; while the liability rate showed an increase of 0.16 percentage points, placed at 3.27% on June 30th.



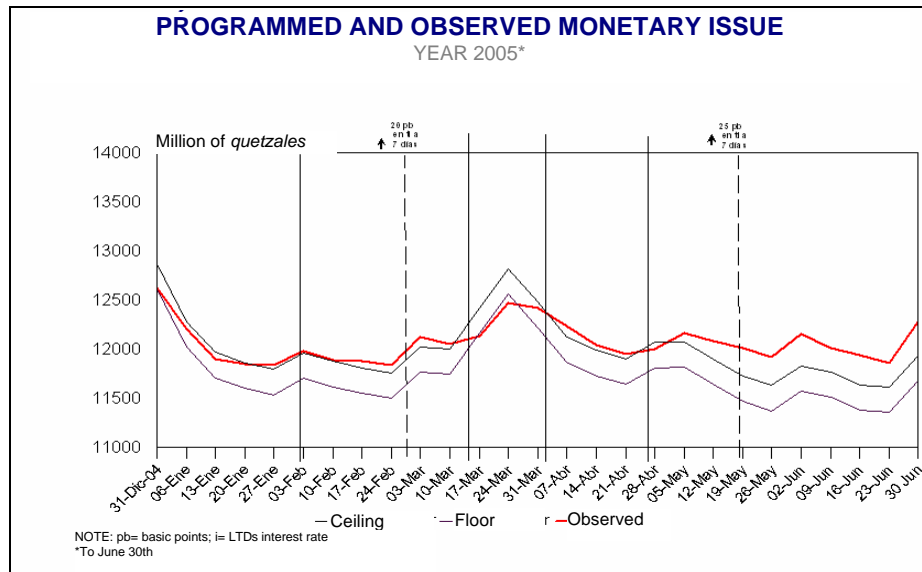
As a result of the behavior of the asset and liability interest rates, the financial intermediation margin, in foreign currency, increased in 0.14 percentage points, from 3.74 percentage points in December 2004 to 3.88 percentage points to June 30th, 2005.

C. MONETARY ISSUE AND MONETARY PROGRAM

1. Monetary Issue

According to the revised monetary program for 2005, it is considered that by the end of the year the demand of currency issue will grow in about 8.0% compared with the rate observed at the end of 2004, which is compatible with an expected growth rate of the economic activity of 3.2% and with the inflation goal of about 4% and 6%.

The behavior of the monetary issue during the first semester of 2005 can be observed in the chart.



Until January 20th, 2005, the history of the monetary issue remained within the programmed broker, due to the demonetizing effect that until said date was generated by the increase of the open market operations with the private sector which was of about Q1, 645.0 million. Starting on the last week of January and until March 10th, the monetary issue was a little higher than the ceiling of the referred broker, registering an average deviation of Q54.5 million. The issue surplus that was observed since the end of January is mainly due, regarding the offer, to the major foreign monetization; which according to net terms was of Q652.0 million (US\$81.5 million), mainly originated by the purchase of foreign currency that the *Banco de Guatemala* performs in the exchange market²⁴, which was highly compensated by the demonetizing effect caused by the increment of the position of the remaining public sector in about Q785.4 million, that includes a higher rate of the deposits of the Central Government in the *Banco de Guatemala* of about Q584.1 million. On the other hand, the behavior of the open market operations with the private sector during that period was monetizing, while reducing the balance of said operations in Q1, 024.7 million. In the period between March 17th and 31st, the monetary issue was under the floor of the programmed broker, and then to end within the referred broker. Said situation is explained by the demonetizing effect derived from an increase in the deposits rate of the Central Government in the *Banco de Guatemala* of about Q493.0 million. During April, the monetary issue, in

²⁴ The Banco de Guatemala, according to the Monetary, Exchange and Credit Policy, started to participate in the exchange market on February 22nd, buying US\$106.4 million from that date to March 10th.

general, was around the ceiling of the programmed broker, registering an average deviation of Q71.8 million. Particularly, a reduction of Q273.9 million in the monetary issue was observed in the mentioned period, which was mainly due to two offer factors: the first one is related with the demonetizing effect of the increment of deposits of the Central Government in the *Banco de Guatemala* of about Q1, 092.8 million, and the second one is related with the increment of the total position of the banks from the system with the *Banco de Guatemala* of about Q328.2 million. It is important to indicate that the mentioned demonetizing effects were counteracted, on the one hand, due to the reduction in the total balance of the open market operations of about Q568.0 million and, on the other hand, due to the foreign monetization of Q568.8 million (about US\$71.0 million), which is mainly derived from the purchases of foreign currency that the *Banco de Guatemala* performs in the exchange market of about US\$65.0 million. Starting on the first week of May and until June 30th, the behavior of the monetary issue was above the ceiling of the programmed broker and registered an average deviation of Q257.7 million. The monetary issue surplus observed in the mentioned period, is due, related with the offer, to the foreign monetization of Q382.1 million (US\$50.3 million), associated to the purchases of foreign currency of the *Banco de Guatemala*; it is also due to the internal monetization derived from the balance reduction of the open market operations with the private sector in national and foreign currency of about Q1,135.1 million, and to the reduction of the total position of the banks of the system with the *Banco de Guatemala* of about Q398.0 million. The mentioned monetizing factors were partially compensated by the increase of the deposits of the Central Government in the *Banco de Guatemala* of about Q1, 091.6 million.

1. Analysis of the monetary program for the first semester of 2005.

The Monetary, Exchange and Credit Policy for 2005 determined, among other aspects, the trimester monetary program that contains the estimated behavior of the main accounts of the balance of the central bank, in which it is estimated that the demand of monetary issue will grow in about 8.0%, compared with the rate observed at the end of 2004; this is compatible with an estimated growth rate of the gross domestic product, in real terms, of about

3.2% and an inflation goal between 4% and 6%; however, due to the fact that in the first semester some events that were not contemplated in the original monetary program were observed, which emerge from the monetary offer, it was necessary to review the monetary program approved by the Monetary Board in December 2004.

The revision of the monetary program was heard by the Monetary Board in their meeting of June 8th and some adjustments were made, which were derived from the addition of the monetizing effect derived from the purchase of foreign currency that the *Banco de Guatemala* performs in the exchange market, in order to moderate the exchange volatility observed in the second trimester of the year and, on the other hand, from the revision carried out by the *Ministerio de Finanzas Públicas* [Equivalent to the Department of the Treasury] to review the disbursement amount of external debt. The monetary program for the first semester of 2005 is shown in the following table.

**MONETARY PROGRAM OF THE BANCO DE GUATEMALA 2005^{a/}
 FLOWS FROM DECEMBER 31st, 2004 TO JUNE 30th, 2005.
 -Million of *quetzales*-**

CONCEPT	ACCUMULATED		
	PROGRAMMED	OBSERVED	DEVIATION
I. NET INTERNATIONAL RESERVE	2301	1680	-621
US\$	288	210	-78
II. NET DOMESTIC ASSETS	-1691	-2136	-445
1. Position with the consolidated Public Sector	-2463	-3523	-1060
Central Government	-2078	-2906	-828
Remaining Public Sector	-384	-617	-233
2. Position with banks and financing companies	-190	487	677
Credit to banks and financing companies	-2	-2	0
Remunerated and non-remunerated reserve	-188	489	677
3. Other net assets	466	-75	-541
Expenditures and products	352	314	-38
net assets without classification	114	-389	-503
4. Open market operations	496	975	479
III. SURPLUS (-) OR SHORTAGE (+) OF LIQUIDITY	-1541	-473	1068
IV. DEMAND OF MONETARY ISSUE	-930	-930	0
Memo: Total of OMAs	-1441	368	1809

^{a/}Refers to the monetary program revised to May 31st, 2005, which was known by the Monetary Board to follow-up, on June 8th, 2005.

The behavior of each of the factors that intervene in the generation of monetary issue is commented below.

a) External monetization: The monetary program foresaw for the first semester of 2005 an increase in the rate of the International Net Reserves (RIN) [Acronym in Spanish] of Q2, 301.0 million (US\$288.0 million); however, to June 30th the RIN exhibits an increase of \$1,680.00 million (US\$210.0 million)

regarding the rate observed at the end of the previous year, amount lower in Q621.0 million (US\$78.0 million) than the programmed for the first semester of 2005. The referred deviation is basically because of the third disbursement of US\$50.0 million of the finance loan sector of the World Bank, that was not received, which was programmed for the second trimester of the year.

b) Position with the Public Sector: From January to June of the current year, the central government increases its deposits in the *Banco de Guatemala* in about Q2, 906.0 million, higher in Q828.0 million than the programmed for the first semester of 2005.

The increase in the deposits of the government in the *Banco de Guatemala* is mainly due to the domestic financing obtained through the deposit of treasury bonds of Q4, 316.0 million, from which Q2, 483.7 million are derived from the bid mechanism; Q1, 176.9 million are derived from the auction mechanism and Q655.4 million are derived from the mechanism of direct negotiation.

On the other hand, the remaining public sector observed a demonetization of Q617.0 million, higher in Q233.0 million than the programmed for the first semester of 2005. This result is derived from the increase registered in the investment of LTDs of about Q606.0 million and from the increase of the deposits in the *Banco de Guatemala* of Q11.0 million.

c) Position with banks and financing companies: According to the monetary program, during the first semester the banks of the system would register a demonetization flow of Q190.0 million, derived from a foreseen increase of the bank reserve of said entities in the central bank. It is important to indicate that the behavior observed during the semester was monetizing in about Q487.0 million.

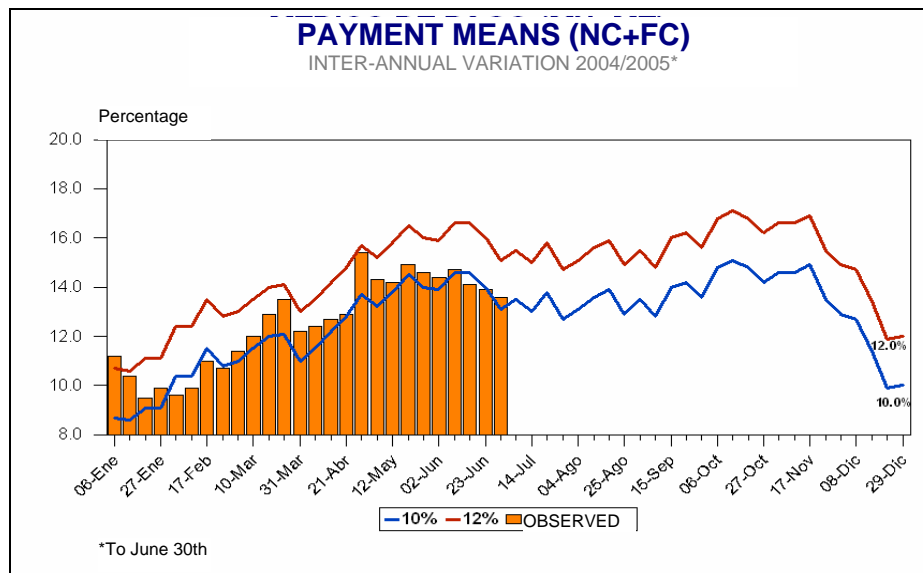
d) Operative result of expenditures and products: The net result of expenditures and products in the *Banco de Guatemala* to June 30th was monetizing about Q314.0 million, lower in Q39.0 million regarding the programmed. Said monetizing effect is mainly associated to the payment of interests of the open market operations and to the net result of functioning, which was counteracted by the yield of the international monetary reserves.

e) Open market operations: The monetary program foresaw that in the first semester of 2005 the open market operations (OMAs) of about Q1, 441.10

million should be carried out, to neutralize the primary liquidity surplus in the economy. To June 30th, the total balance of the OMAs registered a reduction of Q368.0 million regarding the rate observed to December 31st, 2004, which generated a deviation of said variable of Q1, 809.0 million.

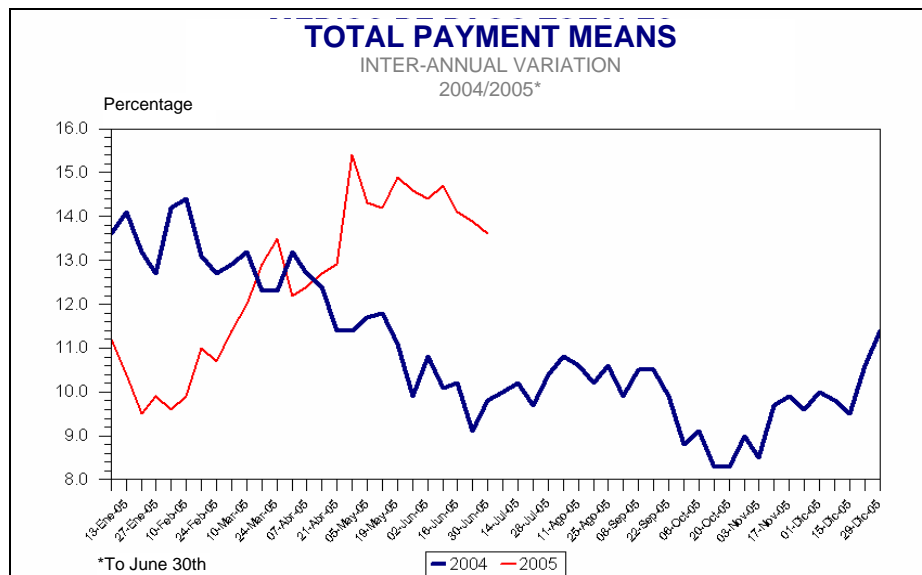
Said deviation is mainly integrated by the reduction in the balance of the OMA with the private sector and banks in national currency of about Q968.0 million, moderated by the increase in the investment of LTD's of public entities of about Q600.0 million.

f) Payment means²⁵: In the Monetary, Exchange and Credit Policy for 2005 it was estimated that by the end of the year the total payment means (M2) will increase between 10% and 12%, according to inter-annual terms, which coincides with the growth of the economic activity, with the inflation goal and with the speed of the circulation of money,. To June 30th, 2005, the inter-annual variation of the payment means was of 13.6%, which is placed within the expected range for that date (13.1%-15.1%).

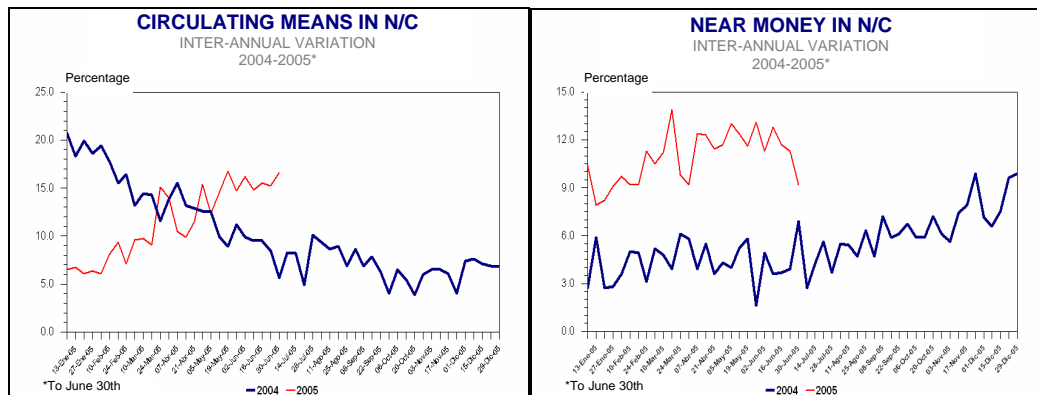


On the other hand, the monetary aggregates M2 in national currency registered to June 30th of 2005 a balance of Q59, 738.0 million, with an inter-annual growth of 12.6% (Q6, 680.2 million).

²⁵ It does not include entities which have been requested to declare bankruptcy.



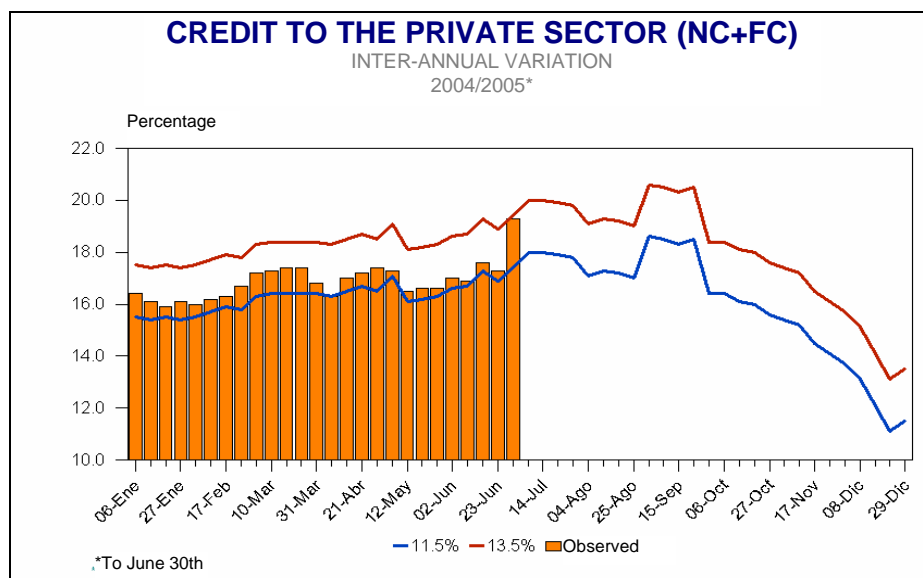
Within the components of the payment means (M2) in national currency, the near money registered an inter-annual growth rate of 9.2% (Q2, 619.7 million) and the current mean registered one of 16.6% (Q4, 060.5 million). The payment means (M2) in foreign currency registered to June 30th a balance equivalent to Q7, 896.5 million, with an inter-annual growth of Q1, 424.2 million (22.0%). In foreign currency, the near money increased in about Q692.4 million (18.2%) and the monetary deposits in about Q731.8 million (27.5%), both according to inter-annual terms.



D. BANKING CREDIT TO THE PRIVATE SECTOR²⁶

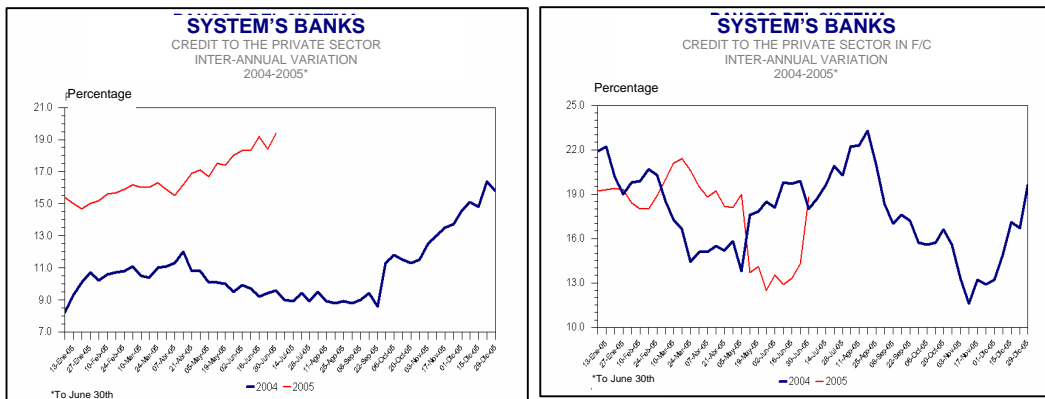
1. Growth rate: In the Monetary, Exchange and Credit Policy for 2005, it was estimated that for the end of the year the banking credit to the private sector would reach an inter-annual growth rate between 11.5% and 13.5%, which is similar to the growth of the payment means, to the inflation goals and to the expected economic growth.

To June 30th 2005, the inter-annual variation of the banking credit to the private sector was of 19.3%, which is placed within the expected range for that date (17.4%-19.4%).



The credit to the private sector in national currency was of about Q31, 583.5 million, with an inter-annual growth rate of 19.4% (Q5, 137.6 million). On the other hand, the credit to the private sector in foreign currency registered a balance of about Q10, 981.3 million, with an inter-annual growth of 18.8% (Q1, 740.5 million).

²⁶ It does not include entities which have been requested to declare bankruptcy.



2. Credit portfolio per economic activity: To May 31st 2005 (latest information available), without including the banks which have been requested to declare of bankruptcy, the credit portfolio of the banking system was of Q38,134.2 million, higher in Q5,758.9 million (17.8%) than the one registered in the same period of the previous year. It is important to indicate that 91.0% of the banking credit portfolio is concentrated in the following sectors: *consumption and transferences; commerce; industry; construction; and, agriculture.*

Regarding the variation of the credit portfolio per economic activity, from January to May 2005, it has been distributed in the following manner:

Bank System^{1/}

Credit Portfolio per Economic Activity

December 2004 and May 2005.

-Million of *quetzales* and in percentages-

DESTINE	DECEMBER 2004 (A)	MAY 2005 (B)	ACCUMULATED VARIATION		STRUCTURE %	
			ABSOLUTE B-A	RELATIVE (%) B/A	DECEMBE R 2004	MAY 2005
Total	36,495.7	38,134.2	1,638.5	4.5	100.0	100.0
Agriculture, livestock, forestry, hunting and fishing	2,612.9	2,390.3	-222.6	-8.5	7.2	6.3
Exploitation of mines and quarry	7.8	12.8	5.0	64.7	0.0	0.00
Manufacturing industry	3,476.9	3,435.4	-41.5	-1.2	9.5	9.0
Electricity, gas and water	608.7	686.5	77.8	12.8	1.7	1.8
Construction	2,749.2	3,227.7	478.5	17.4	7.5	8.5
Commerce	6,961.4	6,730.9	-230.5	-3.3	19.1	17.7
Transport and storing	228.6	313.7	85.1	37.2	0.6	0.8
Financing companies, real estate and services rendered to companies	1,355.1	1,543.7	179.6	13.3	3.7	4.0
Communal, social and	946.6	907.3	-39.3	-4.2	2.6	2.4

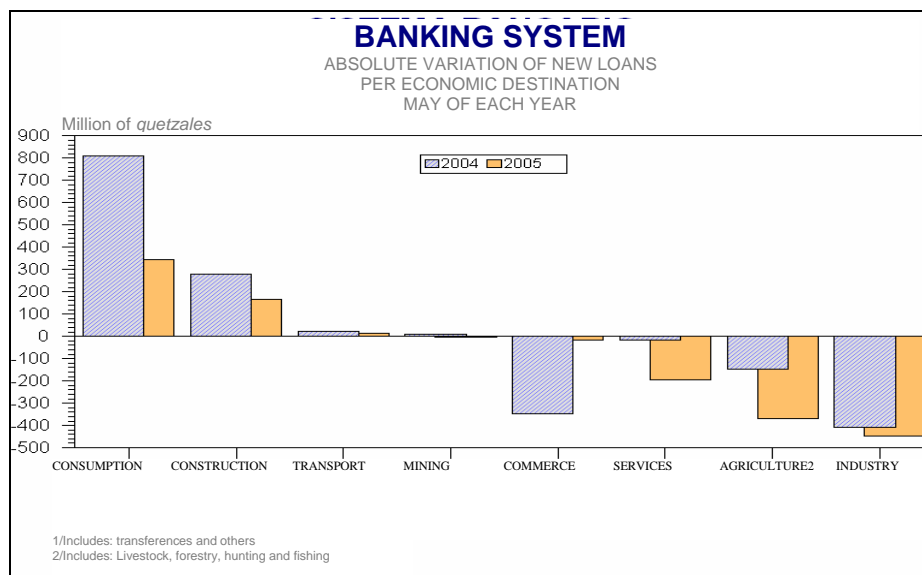
personal services						
Consumption, transferences and others	17,548.5	18,894.9	1,346.4	7.7	48.1	49.5

^{1/} Does not include the banks which have been requested to declare bankruptcy.

Source: *Superintendencia de Bancos*

3. New loans, extensions and renewals: To May 31st, 2005 (latest available information), the amount of new loans, that include extensions and renewals, was of Q10, 620.9 million, lower in Q503.3 million (4.5%) than the registered in the same period of the previous year.

The reduction of new loans is due to the decrease of the financing channeled to the industry in Q448.6 million; to agriculture in Q367.2 million; to services in Q194.4 million; to commerce in Q16.7 million; and, to mining in Q1.9 million. This was compensated by the increase registered in the financing to consumption, in about Q345.3 million; to construction, in Q166.7 million; and, to transportation in Q13.5 million.



E. SURVEY OF INFLATION EXPECTATIONS BY THE PRIVATE ANALYSTS PANEL

The inflation expectations are defined as the public belief on the future price behavior in the economy. The inflationary expectations, to create economic factors for a certain period, in some circumstances can substantially

influence (and independent from the behavior of the economy fundamentals) the determination of the inflation rate shown at the end of said period.

According to the Survey of Inflation Expectations to the Private Analysts Panel (EEI)²⁷ carried out in June 2005, interviewers foresee that for December of the current year, the inflation rate will be 7.73%, higher than the goal established in the Monetary, Exchange and Credit Policy for 2005 (4.0%-6.0%), while for December 2006 they estimate that it will be in 7.12%.

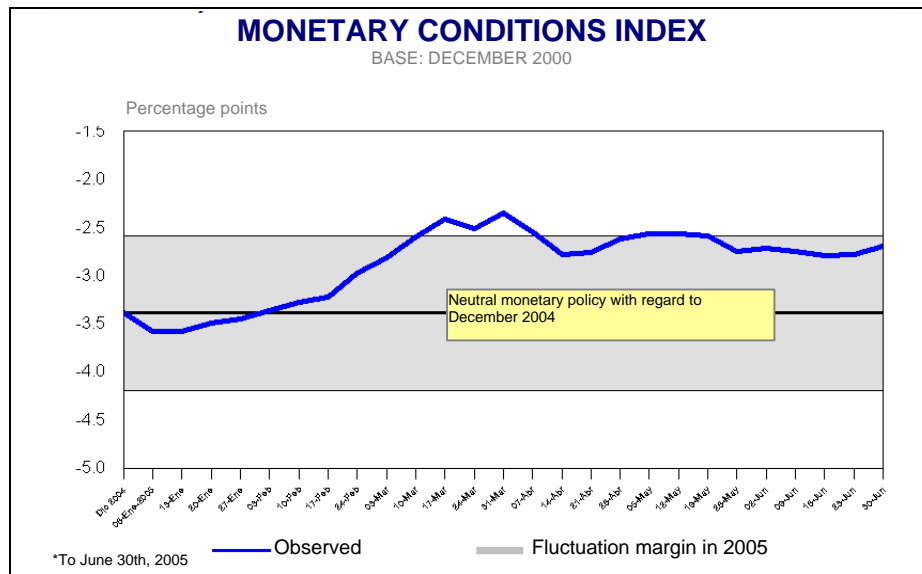
F. MONETARY CONDITIONS INDEX -ICM-

The Monetary Conditions Index –ICM- [Acronym in Spanish] is an indicator that is estimated, considering the changes in the interest rate and exchange rate regarding a predetermined base year. The interpretation of the ICM is based on the idea that the relation between the exchange rate and the interest rate can indicate if the monetary policy has been more or less restrictive. In the Monetary, Exchange and Credit Policy for 2005, in order to track said indicator, a broker was established that has a central point ICM value for 2004 (base year) and its ceiling and floor values will be placed in (+/-) 0.8 percentage points²⁸ regarding the central indicator value; an ICM value that is higher than the indicated broker is interpreted as the presence of a restrictive monetary policy; however, when the value is lower than the broker's value is interpreted as the presence of an expansive monetary policy.

While observing the ICM between December 31st 2004 and March 31st, an increasing behavior is obtained, because the nominal appreciation of the exchange rate was not compensated by a reduction in the interest rate, which during some weeks situated said index above the estimated broker; however, this behavior was reverted during the second trimester of 2005, because the behavior of the nominal exchange rate was stabilized, so that during the last weeks the ICM was placed within the estimated broker. It is concluded that the monetary policy has been neutral throughout the period.

²⁷ Monthly survey directed to national and international analysts, who are aware of the operative procedures of the monetary policy; this survey will help to measure their perception regarding the future evolution of the inflation rate in Guatemala.

²⁸ The 0.8 percentage points correspond to a standard deviation of the Monetary Conditions Index (IMC) average registered during the years 2003-2004.



III. CHANGES IN THE OPERATIVE FRAME OF THE MONETARY POLICY

In order to advance towards an operative scheme on the execution of open market operations consistent with a complete monetary scheme of explicit goals inflation, there are a series of amendments that should be included and that the *Banco de Guatemala* has been evaluating with the support of international experts²⁹, from which the following can be mentioned:

- i. Choose a single leading interest rate of monetary policy and do not assign interest rates in the other terms of the yield curve;
- ii. Reduce the frequency of LTDs bids, with fixed amounts (quotas) for each term;
- iii. To improve the participation of the *Banco de Guatemala* in the mechanisms of direct placement (MEBD and stock exchange), in order to reduce the volatility of the short-term interest rate;
- iv. To help reduce the volatility of the interest rates; therefore, it would be necessary that the Execution Committee defines the meetings in which the decisions regarding the leading interest rate of the Monetary Policy will be made; preferably, not more than once a month;

²⁹ An ample exposition of the topic can be found in the Report of Sebastián Edwards and Rodrigo Vergara dated November 2004; in the report prepared in March 2005 about the mission that IMF carried out in September 2004, for the “Evaluation of the Advances in the Instrumentation of an Inflation Goal Regimen”; and, in the seminar carried out by the Monetary Authority on April 25th, 2005, in which experts of the IMF gave the following conferences: “Inflation goals. Strategy, Challenges and International Experience”, “Seminar about inflation goals and its application in Guatemala”, “Inflation goals in Chile” and “The inflation goal system in Brazil 1999-2005”.

- v. Alternate the terms of the bid, in order to reduce the competitiveness within them;
- vi. To adapt the liquidity projection method to a calculation basis of offer and demand of banking reserves; this is the appropriate in a formal regimen of inflation goals.
- vii. To modify the structure of the Department of Open Market Operations under the scheme of front office, middle office and back office;
- viii. To reduce the number of terms in each bid; and,
- ix. To start with the issue of fungible LTDs³⁰, in order to promote the development of the secondary market.

x. Progress during the first semester 2005

To gradually implement the mentioned amendments, the *Banco de Guatemala*, during the first semester of 2005, adopted the following measures:

- i. Regarding the selection of the leading interest rate of the Monetary Policy, the Execution Committee, after knowing the result of the respective technical studies, established that starting on January 24th said interest rate should be the corresponding to the 7 day-term;
- ii. Regarding the reduction of the frequency of the bids, the Execution Committee determined that starting on January 31st bids will be limited to three per week (Monday, Wednesday and Friday). Besides, regarding the establishment of quotas per term, the referred committee established, starting on January 4th 2005, the quotas for terms that are called through bids, according to the estimations of liquidity neutralization;
- iii. Regarding the volatility of the interest rate that might occur due to the competitiveness of the mechanisms of direct placement (MEBD and stock exchange) for the 7 day-term, starting in January 2005 the fund-raising quota was eradicated, which allows the stability of the interest rate in

³⁰ Bearer instruments, values or goods which are equivalent, substitutable and interchangeable.

the operations of the monetary policy of the *Banco de Guatemala*, in the mentioned term;

- iv. The decisions of the Execution Committee regarding the interest rates, on January 7th, 2005, it determined that it was convenient to schedule them; preferably, for the immediate session after the 15th day of each month, which was based on the fact that for that date, it would be possible to know and analyze the monthly inflation data with enough time, in order to make an adequate and studied decision;
- v. Regarding the alternation of the bid terms in order to reduce the competitiveness among them, the Execution Committee, on June 24th 2005, agreed that starting on July 4th of that year, on Mondays the LTDs will be bid for a 91 and 364 day-terms; on Wednesday to 182 and 728 day-terms; and, on Fridays to 1456 day-terms (4 years), of 2184 day-terms (6 years) and 2912 day-terms (8 years);
- vi. Regarding the adaptation of the liquidity projection method to an estimation basis of offer and demand of the banking reserves, starting on May 13th 2005, the first amendments of the estimation of the monetary flow were carried out; and,
- vii. Regarding the administrative structure of the Department of the Open Market Operations, the Monetary Board, in resolution JM-106-2005 dated June 22nd, 2005, decided, within other matters, to modify the name of said department to Monetary Stabilization Operations, which will adopt an operational scheme of front office, middle office and back office, in order to implement an adequate segregation of functions, which will contribute to the creation of a more adequate management frame for the adoption of the complete regimen of inflation explicit goals, as well as for an adequate rendition of accounts and transparency of the operations, and careful risk management.

C. Transition measures and developed arrangement: In the countries that have progressed in the adoption of explicit inflation goals, the central banks adopt an operational frame (developed arrangement) in which their operations influence on the market (leading) interest rate, in contrast with the current procedure that is followed in Guatemala, through which the Central Bank directly assigns the interest rate of the monetary policy. Knowing that the transition to the developed arrangement should be in a mid-term process, it is convenient to carefully consider the gradual adoption of the following measures:

i. Transition measures

Measures	Progress
To alternate the bid terms, offering only two terms in each of them.	The Execution Committee, on June 24 th 2005, agreed that starting on July 4 th of the same year, every Monday the LTDs will be bid to 91 and 364 day-terms; on Wednesday to 182 and 728 day-terms; and, on Fridays to 1456 day-term (4 years), of 2184 day-term (6 years) and 2912 day-term (8 years).
To maintain the balance of operations of short-term monetary stabilization within certain limits. The total amount to be bid should be established, so that the balance of open market operations of 7 day-terms remain limited. On the other hand, the distribution among the different terms should follow the demand criteria. In order to have an idea of the demand distribution, the <i>Banco de Guatemala</i> might use the results of previous bids or consult with banks.	The Execution Committee, on June 24 th 2005, agreed that starting on July 4 th of the same year and in order to estimate the quotes for the bids, the expiration of the bids scheduled for each week must be considered and to add a percentage of the LTDs' scheduled expirations to said amount, which are derived from fund-raising of 7 days. In order to establish the corresponding placement terms, it was considered the expiration profile of the LTDs and of the treasury bonds,

	the monetary program, as well as the demand of papers to different terms by the banks of the system.
To reduce the frequency of the operations with LTDs of 7 days.	Pending
To initiate fine-tuning operations through daily interventions, to retire and inject liquidity, based on the liquidity projections.	Pending

ii. Developed arrangement

- To intervene in the short-term money market (overnight) when the liquidity projection indicates it;
- To converge to the use of the overnight rate (market) as the leading interest rate of the monetary policy. The goals for the overnight rate should be determined by the *Banco de Guatemala*. It is understood that, after reaching this phase, the *Banco de Guatemala* will no longer perform operations with LTDs of 7 day-terms, because it would not have any benefit from the management of liquidity.
- To use the mechanism of repurchase agreements to inject and absorb market liquidity.
- To use the mechanism of permanent ease to establish an interest rate broker around the leading rate of the monetary policy, which will limit the volatility of the inter-bank overnight rates; and,
- To call for bids once a week, with less number of terms in each bid.

IV. DISCUSSION ABOUT TREND TOPICS, BASED ON ECONOMETRIC ESTIMATIONS

A. Estimation of the pass-through coefficient of the nominal exchange rate to prices

1. Introduction: Currently there is ample consensus that in the long-term inflation is a monetary phenomenon. In that context, the adoption of a scheme of explicit inflation goals demand monetary and fiscal policies oriented to reach the stability of prices. However, in the short and mid-term the inflation could be

affected by different factors besides the money offer, such as: salary increase, shocks of external character and variations in the nominal exchange rate.

Considering the above mentioned, in this part of the report, it is proceeding to estimate the incidence of the variations of the nominal exchange rate on the domestic prices. This process is known in economic literature as 'pass-through effect'.

2. Conceptual aspects:

a) Pass-through coefficient at a theoretical rating: The pass-through effect, as it was mentioned, is the relation between the variations of the exchange rate and the domestic inflation in a determined period, establishing as a minimum one month-delay to the inflation response of the inflation regarding variations in the exchange rate.

In this environment, the pass-through effect is shown through an increase in the domestic inflation as a result of depreciation of the nominal exchange rate. The magnitude of said effect will depend on how perfect the markets are, of the goods characteristics, of the elasticity of the adjustments of the supply prices and of the opening grade of the economy.

On the other hand, the empiric evidence indicates which variations in the nominal exchange rate have a limited effect on the prices of the non-transferable goods in virtue of the lower utilization of imported raw material and the payment of salaries expressed in domestic currency (which are not usually indexed by the nominal exchange rate); subsequently, the pass-through effect to the price of non-transferable goods is of less magnitude and acts with more delay in the case of transferable goods.

b) Determinants of the magnitude of the pass-through coefficient: The determinants of the pass-through coefficient are associated to the characteristics of the economy that is being analyzed; however, the empiric evidence is focused toward some determinants that are common among countries, which are described below:

- i. **Instability of the exchange rate:** the frequent variations in the nominal exchange rate force the importers of goods and services to be more careful in the establishment of their prices in domestic currency. To modify the prices represent a cost for

importers (menu costs), so they evaluate if the benefit to change the prices surpasses the cost to do so.

- ii. **The objective of the inflation fixed by the Central Bank:** in a scheme of explicit inflation goals the behavior of internal prices depends on, on one hand, the evolution of the monetary policy and, on the other hand, on the inflation expectations of the economic factors. When a disturbance in the nominal exchange rate occurs (for example: a profound and accelerated depreciation), in a short-term an increase in the inflation can be observed; however, in the long-term, if the inflation goal set by the Central Bank is trustworthy due to the continuity of the monetary discipline, the inflation will tend to be placed again, around its long-term trend.
- iii. **Credibility of the central bank:** the credibility of the central bank impedes that an exchange adjustment affects the inflationary expectations of the economic factors relevantly and, subsequently, it would not reflect significantly on the inflation.
- iv. **Inflationary environment:** the adoption of a restrictive monetary policy, as corroborated by the empiric evidence, implicates that the pass-through coefficient tends to reduce. In that case, the inflationary environment can determine the willingness of the companies to increase their prices if they face an increase in their costs, so that in an economy with a history of low inflation, the companies will modify their prices with less frequency.
- v. **Economic cycle:** when the companies increase their sales, as a result of an increase in the demand of their products in the market, they find major ease

in transmitting their cost increase to the final prices or, on the contrary, when sales fall. In that case, important depreciation in the nominal exchange rate does not necessarily mean significant increases in the prices when the economy declines, because the companies do not adjust their prices in proportion to the exchange adjustment.

- vi. **Grade of commercial opening:** The opening grade of the country to the rest of the world, can also affect the magnitude of the pass-over coefficient. A higher opening motivates the competence in the internal market, which complicates the transmission of the increases in the costs to the final prices. However, the major opening can cause a higher dependence from the industrial producers on non-transferable goods of imported supplies and, consequently, a higher sensibility of the prices of said goods to variations in the nominal exchange rate.

3. International experience: In order to compare the results obtained in the application of empiric models that look for the establishment of the magnitude and determinants of the pass-through coefficient in countries similar to Guatemala, a table that summarizes the experience in Brazil, Costa Rica, México, Venezuela and Peru is below.

Countries	Model	Authors	Explicable variables	Period	Results
Brazil	VAR	Belaisch (2003)	Inflationary inertia, petroleum prices, industrial production, nominal exchange rate	July 1999-December 2002	Using the IPC: Pass-through coefficient of 0.06 in 3 months and 0.17 in one year. ^{a/} Using the Index of wholesale prices: Pass-through coefficient of 0.33 in 3 months and 1.00 in one year. ^{b/}
Costa	MCO	Murillo, Morera	Inflationary inertia,	January 1991-	Pass-through

Rica		y Ramos (2001)	nominal exchange rate, misalignment of the real exchange rate, product gap, commercial opening	June 2001	coefficient of 0.16 in 2 months and 0.55 in a long-term. ^{c/}
Mexico	MCO, using Cobb-Douglas	Baqueiro, Díaz de León and Torres (2003)	Natural logarithm of the nominal exchange rate.	Period of high inflation: October 1996-December 1999 Period of low inflation: November 1999-June 2002	Pass-through inflation of 1.35 in the period of high inflation and -0.48 in the period of low inflation. ^{d/}
Venezuela	VAR with slight logistic transition (LSTVAR)	Mendoza (2004)	Commercial opening, gap of non-petroleum products, depreciation rate of the nominal exchange rate, monthly variation of the price index of wholesale prices of national products and the monthly variation of the IPC	Julio 1989-November 2002	If pronounced acceleration of the exchange rate exists, the pass-through coefficient is of 0.495 in one year. ^{e/} If the shock in the nominal exchange rate is little and there is low inflation, the coefficient is of 0.298 in two years. ^{f/} In case of high inflation the pass-through coefficient is of 0.392 in two years. ^{g/} Price of imported goods: pass-through coefficient of 0.83 in a long-term. ^{h/}
Peru	VAR	Miller (2003)	Price of petroleum, production gap, nominal exchange rate, inflation of imported prices, inflation of prices to the producer, inflation of prices to the consumer.	January 1995-December 2002	Price of imported goods: pass-through coefficient of 0.83 in a long-term. ^{h/} Prices to the consumer: pass-through coefficient of 0.16 in a long-term. ^{i/} From the prices of imported goods to the prices to the

					consumer: coefficient of 0.33 in a long-term./
--	--	--	--	--	--

^{a/} An increase of 1.0% in the nominal exchange rate, increases the Consumer Price Index in 0.06% with a left-over of three months and in 0.17% with a left-over of one year.

^{b/} An increase of 1.0% in the nominal exchange rate, increases the Wholesale Prices Index in 0.33% with a left-over of three months and in 1.0% with a left-over of one year.

^{c/} An increase of 1.0% in the nominal exchange rate, increases the Consumer Price Index in 0.16% with a left-over of two months and in 0.55% in the long-term.

^{d/} An increase of 1.0% in the nominal exchange rate, increases the Consumer Price Index in 1.35% in a period of high inflation and reduced in 0.48% in the period of low inflation.

^{e/} An increase of 1.0% in the nominal exchange rate, increases the Consumer Price Index in 0.495% with a left-over of one year, in the existence of pronounced acceleration of the nominal exchange rate.

^{f/} An increase of 1.0% in the nominal exchange rate, increases the Consumer Price Index in 0.298% with a left-over of two years, if the shock in the nominal exchange rate is small.

^{g/} An increase of 1.0% in the nominal exchange rate, increases the Consumer Price Index in 0.392% with a left-over of two years, if the shock in the exchange rate is high.

^{h/} An increase of 1.0% in the nominal exchange rate, increases the Price Index of the imported goods in 0.83% in a long-term.

^{i/} An increase of 1.0% in the nominal exchange rate, increases the Consumer Price Index in 0.16% in a long-term.

^{j/} An increase of 1.0% in the Index of Prices of imported goods, increases the Consumer Price Index in 0.33% in a long-term.

4. Methodological aspects: There are several methodologies used by different countries for the determination of the pass-through coefficient, which starts from simple models of simple regression, passes through models of autoregressive vectors and of correction of errors, and ends in complex models of general equilibrium. However, in this case a methodology that includes the main determinants of the internal price rate and helps to make an adequate estimate of the pass-through coefficient was hoped to be used. For that reason, in the search of said methodology, models applied to economies with characteristics similar to the ones of Guatemala were evaluated, finding that the model proposed by Goldfajn and Ribeiro (2000), applied to 71 countries and which was later adapted by Leon, Morera and Ramos (2001) to the Costa Rican economy, has the ideal characteristics to implement in the Guatemalan economy.

Besides, at the end of this section, the estimation of a model of Autoregressive Vectors (VAR), similar to the one used by Belaisch (2003) in the Brazilian

economy, in order to validate the results obtained in the model used in this report.

a) Selection of variables: To estimate the proposed model, monthly data is used from January 2000 to December 2004. It is considered that the size of this sample is considerably ample to carry out a consistent econometric analysis and it is avoided to incorporate the distortion derived from the composition of the basket of the Consumer Prices Index (IPC) considering the change in the same starting in the year 2000.

- i. **Accumulated inflation (p):** was created starting from the series of the IPC (base: December 2000=100), taking the accumulated percentage variations compared to December of the previous year.
- ii. **Accumulated Variation of the Nominal Exchange Rate (e):** Using the weighted average exchange rate purchase/sale (last day of the month) observed in the exchange market, the accumulated percentage variations were calculated regarding the ones of December of the previous year.
- iii. **Misalignment of the Real Effective Rate of Exchange (TCR) [Acronym in Spanish]:** taking the series of the Index of the Real Effective Rate of Exchange (ITCER) [Acronym in Spanish], the Hodrick-Prescott filter was applied to obtain the trend of the series, which represent its long-term rating and, subsequently to obtain the difference between the original series and its trend, as a proportion of this last one $[(ITCER-ITCER^*)/ITCER^*]$, to determine the misalignment grade of the ITCER.
- iv. **Economic Cycle (GAP):** an approximation of the economic cycle was obtained while applying the Hodrick-Prescott filter to the series of Monthly Index of the Economic Activity (IMAE) [Acronym in Spanish]³¹ to obtain the long-term trend of the series and to calculate the difference between the original series and its trend, as a proportion of this last one $[(IMAE-IMAE^*)/IMAE^*]$, which represents a cyclical component of the IMAE.

³¹ The IMAE was used as an approximation of the economic activity instead of the real GDP, because this last variable is only available with annual periodicity.

- v. **Opening grade (APE):** To calculate this variable, a series was created using the coefficient resulted from the combination of the total of importations and exportations within the nominal gross domestic product (M+X/GDP).

b) Determination and estimation of the pass-through coefficient: In this part the model for the estimation of the pass-through coefficient of the depreciation of the nominal exchange rate to the inflation is defined, for that purpose, as it was previously indicated, the model that will be used is the proposed by Goldfajn and Ribeiro (2000), which is defined in the following equation:

$$p_t = b_0 + b_1 e_{t(-1)} + b_2 TCR_{t(-1)} + b_3 GAP_{t(-1)} + b_4 p_{t(-1)} - b_5 APE_{t(-1)}$$

To estimate the mentioned model, the Method of Minimum Ordinary Squares (MCO), with a statistical significance of 5%. It is important to mention that prior to carry out the estimation, it was necessary to evaluate the seasonality of each variable, using the Increased Dickey-Fuller test, determining that the variables of misalignment of the real rate of exchange (TCR) and opening grade (APE) were not stationary in levels, being necessary to differentiate them in order to convert them to stationary.

In their original form, it could be observed that the model showed serial correlation problems in the residues (autocorrelation), which was corrected through an auto-regressive process of first order AR (1). On the other hand, it can be observed that all the variables are significant to 5%, except the variable relative to the opening grade (APE) which is at about 10%.

Besides, it was observed that the 12 month-delay was the highest, which applies to all the explicative variables, except the commercial opening (APE), whose effect on the dependent variable is contemporaneous. It is important to indicate that all the observed coefficients are consistent with the signs expected by the utilized model.

Regarding the statistical benefits of the model, it can be indicated that the specification of the same is appropriate. In effect, the determining coefficient (R^2) indicates that the benefit of the model's adjustment is of 61.5%, which is considered acceptable due to the size of the selected sample. Besides, it is important to highlight that the variables are significant, individually (t test) and in conjunction (F test).

Variable	Coefficiente	Signo esperado	T estadística	Probabilidad
$e_{t(-12)}$	0.188	+	2.545	0.0138
$\nabla TCR_{t(-12)}$	0.343	+	2.895	0.0055
$GAP_{t(-12)}$	0.056	+	2.591	0.0123
∇APE_t	-0.491	+ / -	-1.745	0.0866
C	4.278	+ / -	4.197	0.0001
AR(1)	0.826	+ / -	9.454	0.0000
R²	0.615		F estadística	17.286
R² ajustado	0.580		Probabilidad	0.0000

Período: Enero 2000 - Diciembre 2004

c) Creation of Auto-regressive Vectors model (VAR) for the estimation of the pass-through coefficient: In order to verify the results obtained in the estimation of the model MCO, they proceeded to create a VAR model that helps obtain consistent results, conserving the same model's specifications. However, due to the characteristics of the VAR models, it is necessary to count on a higher number of observations, so in this case, the period to be analyzed includes information from February 1996 to December 2004. Said model can be expressed in the following manner:

$$\begin{aligned}
 \Delta TCR_t &= \sum_{i=1}^{12} a_i \Delta TCR_{t-i} + u_t^{\Delta TCR} \\
 \Delta APE_t &= \sum_{i=1}^{12} b_i \Delta APE_{t-i} + b_{13} u_t^{\Delta TCR} + u_t^{\Delta APE} \\
 GAP_t &= \sum_{i=1}^{12} c_i GAP_{t-i} + c_{13} u_t^{\Delta TCR} + c_{14} u_t^{\Delta APE} + u_t^{GAP} \\
 e_t &= \sum_{i=1}^{12} d_i e_{t-i} + d_{13} u_t^{\Delta TCR} + d_{14} u_t^{\Delta APE} + d_{15} u_t^{GAP} + u_t^e \\
 \pi_t &= \sum_{i=1}^{12} f_i \pi_{t-i} + f_{13} u_t^{\Delta TCR} + f_{14} u_t^{\Delta APE} + f_{15} u_t^{GAP} + f_{16} u_t^e + \pi_t
 \end{aligned}$$

Regarding the results obtained in the VAR, we can observe that the results are consistent with the ones obtained in the original model, and the expected signs remain. In addition, it is confirmed, through the Akaike

information criteria, that the optimum delay for the pass-through coefficient is of 12 months.

Variable	Coefficient	Expected sign ¹	Standard error	Statistic T
$e_{t(-12)}$	0.114	+	0.095	1.1915
$\nabla TCR_{t(-12)}$	0.146	+	0.206	0.7078
$GAP_{t(-11)}$	0.020	+	0.056	0.3631
$\nabla APE_{t(-12)}$	-0.389	+ / -	0.651	-0.5983
C	0.947	+ / -	0.906	1.0453

Period: February 1996-December 2004

5. Results analysis: According to the results obtained from the application of the econometric models detailed in the previous section, it is observed that the pass-through coefficient of the nominal exchange rate in the prices, in the case of Guatemala, fluctuates between 11.4% (VAR Model) and 18.8% (MCO), with a delay of 12 months. Said pass-through coefficient is evidently less than the pass-through coefficient found in studies carried out with samples of countries in which Guatemala is included or that were carried out for countries with similar characteristics to Guatemala's. Besides, this result is consistent with studies which are indicated for those countries that have experimented low and stable inflation, the pass-through coefficient tends to be lower.

On the other hand, regarding the other explicative variables included in the models, is the fact that the misalignment effect of the real exchange rate is considerable, fluctuating between 14.6% (VAR model) and 34.3% (MCO model), which indicates that depreciation is higher than the necessary to reestablish the equilibrium rate in the exchange market in order to improve the country's competitiveness, which would introduce significant inflationary pressure.

In the case of the coefficient of the gap product 0.020 (VAR model) and 0.056 (MCO model); and of the economic opening grade (APE) -0.389 (ARV model) and -0.491 (MOS model), the results would indicate that regarding expansive cycles the producers of goods and services have ease in charging an increase in their costs to the consumers, because in this case the participation loss in the market, due to the substitution of goods that occur when the price of goods increases, is less than the one generally observed in periods of recession. In addition, the econometric models provide statistical evidence that

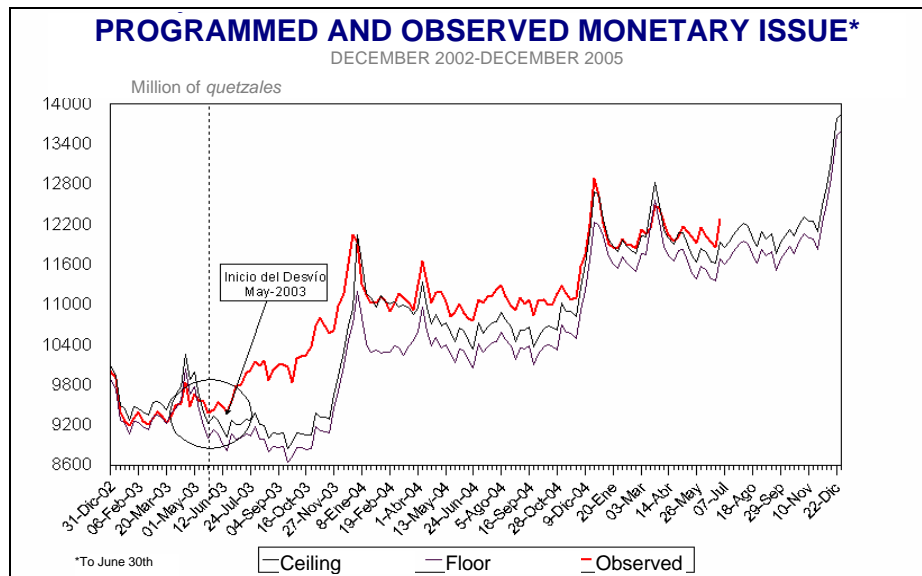
might confirm that in the opening, the effect of a higher competence is predominant, because when it increases, there is a higher amount of imported goods that are more sensible to variations in prices. This would indicate that traders prefer to absorb part of the increasing costs in order to avoid loss in the market. Finally, it is important to consider that the pass-through coefficient is not a fixed value, but its dynamic modifies it according to the employed period of time, so that the rationality of its calculation is to identify if the current rate is high or low.

B. Effect of the monetary issue deviation in the Index of Consumer Prices:

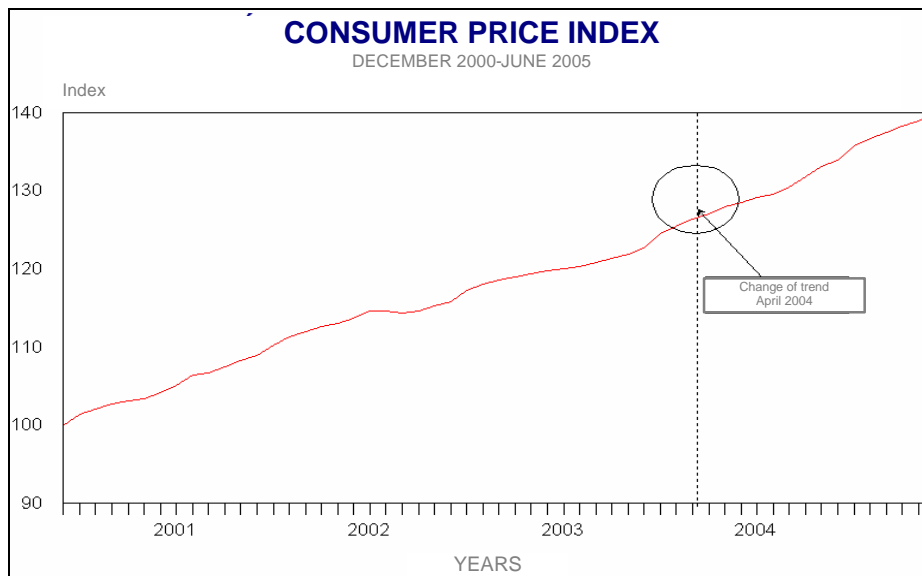
The purpose of the present section is to determine the effect that the monetary issue deviation might have on the behavior of the Consumer Prices Index (IPC). For said purpose, an econometric model was created to establish the sensibility grade of the ICP regarding the variations in the monetary issue deviation.

The model includes monthly observations covering between December 2004 and June 2005. Besides, it incorporates a dummy variable in order to distinguish the period in which monetary issue deviation has existed regarding the ceiling of the programmed broker for said variable.

According to the mentioned, the evaluation of the effect of the monetary issue deviation in the IPC requires the performance of an econometric analysis of structural change, so that it is considered convenient to start with a graph analysis that can evidence if the dependent variable really shows a change in its behavior starting with the existence of the referred deviations. In this case, the chart shows the behavior of the monetary issue regarding its programmed broker in the period from December 2002 and December 2005. In said chart are the monetary issues that have had deviations, in general, above the ceiling of the cited broker, which started in May 2003.



On the other hand, the chart shows the IPC series from December 2000 and June 2005, in which is seen that there is an apparent structural change (which could be of level or trend) twelve months after the date in which the deviations began to be registered in the monetary issue.



As indicated, in order to determine if the structure change in the monetary issue is given and if the change is of level or trend, the Chow³² test was used. The result of said test indicates with about 95% of certainty that the referred series show a structural change that coincides with the one detected in the graph analysis (April 2004), but said test does not allow to determine if the structural change is of level or trend. For this purpose, two econometric regressions³³ were made, which divide the period in two parts: first, before the deviation effect of the monetary issue (from December 2000 to March 2004) and, the second, after the mentioned effect has started (from April 2004 to June 2005). The results of both regressions indicate that statistically there is a change in the inclined regression, which would confirm that the structural change is in the trend.

Considering the above mentioned, they proceeded to carry out the analysis of issue elasticity –CPI, using the following model:

$$\text{Ln}(\text{IPC}_t) = \beta_0 + \beta_1 \text{Ln}(\text{EM}_{t-12}) + \beta_2 \text{Ln}(\text{EM}_{t-12} * \text{dummy}) + \text{residuals}$$

Where:

Ln= natural logarithm

IPC= Consumer Price Index, base 2000

EM= Monetary issue in million of *quetzales* (unseasonable)

Dummy= dichotomous variable (0 for periods without deviation and 1 for periods with deviation)

The econometric results are consistent³⁴ and statistically significant in 5%, and indicate that the effect of the deviation of the monetary issue in the behavior of the ICP are a little relevant; besides, it was established that the more significant delay is of 12 months.

³² The Chow test consists of estimating the original econometric model, dividing the sample in two sub-periods in the point in which a change in behavior is given, evaluating if there are significant differences between both sub-periods; if that is the case, there would be a structural change.

³³ The employed model has the following functional form: $\text{IPC}_t = \beta_0 + \beta_1 \text{dummy} + \beta_2 \text{monetary issue}_t + \beta_3 \text{monetary issue}_t * \text{dummy} + \text{residuals}$. If the coefficients associated to the dichotomous variable are statistically significant, the structural change would be in the level and inclination. In our case, only β_3 was significant, so that the structural changes are in the incline (trend).

³⁴ The model showed the problem of serial correlation of the residues (autocorrelation), which was corrected through a Process of Movable Average of First Order MA (1).

Issue estimation for the elasticity coefficient –CPI
(Minimum ordinary squares)

Variable	Coeficiente	T estadística	Probabilidad
$\text{LnEM}_{t(-12)}$	0.50232	11.769	0.0000
$\text{dummy}_{t(-12)}$	0.00345	2.658	0.0105
C	0.19969	0.521	0.6044
MA(1)	0.73197	7.697	0.0000
R^2	0.966	F estadística	484.923
Period: December 2000-June 2005			0.0000

Período: diciembre 2000 - junio 2005

From the obtained results, it can be concluded that, in the absence of the monetary issue deviations, the issue elasticity-CPI is of 0.50232, which means that regarding variations of 1.0% in the monetary issue rate, the CPI varies in about 0.5%, with a delay of 12 months. On the other hand, if the effect of the monetary issue deviations is considered, said coefficient increases to 0.50577 (0.50232 + 0.00345) and the delay remains in 12 months.

C. Structural model of the inflation prognosis: The development of a structural prognosis model, MEP [Acronym in Spanish], constitutes an important phase in the transition of monetary policy towards a scheme of explicit inflation goals. Said models help to quantify the direction and magnitude of the relations among the main macroeconomic variables, as well as the predictable evolution of the same in the future, considering the reaction of the economic factors regarding the decision of the central bank regarding the monetary policy.

It is important to indicate that the purpose of the MEP is to help the central bank in the interpretation of the economic status and to make policy decisions that contribute to achieve its fundamental objective. Consequently, said model must reflect a vision of consensus of the directive and technical organs of the central bank about the mechanism through which policy actions, through the diverse transmission channels, affect the general rate of prices. In this way, the MEP constitutes an analytic frame that helps to discuss the implementation of policy actions to combat the diverse inflationary pressures precisely and orderly.

The MEP for Guatemala is being constructed with the help of specialized personnel in the creation of this type of models and that has been part of the International Monetary Fund missions, which has provided technical assistance to the *Banco de Guatemala* in matters of Inflation Targeting³⁵. The main equations that constitute said model³⁶ are described below:

Equation of aggregate demand

$$\bar{y}_t = A_1 \bar{y}_{t-1} + A_2 \bar{R}_t + A_3 \bar{z}_t + \varepsilon_t^{AD} \quad (1)$$

Where:

\bar{y}_t : product's breach in the t period

\bar{R}_t : real interest rate breach of the long-term policy in the t period

\bar{z}_t : real exchange rate breach in t period

ε_t^{AD} : demand shock in the t period

Equation of aggregate offer (Phillips curve)

$$\pi_t = B_1 \left(\frac{1}{2} (\pi_{t-1} + \pi_t^e) + B_2 \bar{y}_t \right) + (1 - B_1) (\pi_t^p + zt_t) + \varepsilon_t^O \quad (2)$$

Where:

π_t : inflation

π_t^e : inflation expectations in the t period

π_t^p : imported inflation in the t period

zt_t : trend of the real exchange rate in the t period

ε_t^O : offer shock in the t period

Imported inflation

³⁵ In an initial phase the advice of experts of the Centre for Central Banking Studies of the Bank of England was received.

³⁶ The complete model includes 35 additional equations, which include definitions and equations that represent long-term trends.

$$\pi_t^P = C_1 \pi_{t-1}^P + (1 - C_1)(\pi_t^* + \hat{s}_t) + \varepsilon_t^P \quad (3)$$

Where:

π_t^* : foreign inflation in the t period

\hat{s}_t : Nominal exchange rate variation in the t period

ε_t^P : Shock of imported prices in the t period

Monetary Policy Rule

$$i_t = D_1 i_{t-1} + (1 - D_1)(i_t + D_2(\pi_{t+1} - \bar{\pi}_{t+1})) + \varepsilon_t^{PM} \quad (4)$$

Where:

i_t : nominal interest rate of the short-term policy in the t period

i_t : Trend of nominal interest rate of short-term policy in the t period

$\bar{\pi}_t$: inflation goal in the t period

ε_t^{PM} : shock of the monetary policy in the t period

Uncovered parity for the Interest rate

$$i_t - i_t^* = (s_t^e - s_t) + \rho_t + \varepsilon_t^{MD} \quad (5)$$

Where:

i_t^* : short-term foreign nominal interest rate in the t period

s_t^e : expected nominal exchange rate in the t period

s_t : nominal exchange rate in the t period

ρ_t : premium per risk country in the t period

ε_t^{MD} : shock of exchange rate in the t period

Fisher equation

$$r_t = i_t - \pi_t^e \quad (6)$$

Where:

r_t : real interest rate of short-term monetary policy in the t period

Inflation expectations

$$\pi_t^e = W_1 \pi_{t+1} + (1 - W_1) \pi_{t-1} + \varepsilon_t^E \quad (7)$$

Where:

ε_t^E : shock of inflation expectations

Exchange rate expectations

$$s_t^e = W_2 s_{t+1} + (1 - W_2) \left(\pi_{t-1} + \frac{1}{2} (z_t + \bar{\pi}_t - \pi_{ss}) \right) + \varepsilon_t^{TC} \quad (8)$$

Where:

ε_t^{TC} : shock of exchange expectations

π_{ss} : seasonal inflation value

According to the MEP, the monetary policy of the central bank is transmitted to the economic system and to the general rate of prices through the following channels: the channel of aggregate demand, the channel of exchange rate and the channel of inflation expectations.

The channel of aggregate demand consists of the effects that are produced in the product level regarding a variation in the nominal interest rate of the monetary policy of the central bank. According to said channel, the increase in the nominal interest rate of policy will produce an increase in the real interest rate of the financing system, according to equation (6), which at the same time will generate an increase in its gap regarding its long-term trend. In addition, this will generate a reduction in the level of planned investment, in the

consumption of durable goods and, consequently, in the gap of the product, according to equation (1). The reduction in the gap of the product, according to the Phillips curve, contributes to reducing the inflation. Besides, the increase in the interest rate of the monetary policy produces a positive variation in the differential of the interest rates (left side of equation (5)). This propitiates an inflow of capital toward the country because investors look for the best return rates for their capital. At the same time, a major capital flow generates an increase in the offer of foreign currency in the country and results aiding in the appreciation of the exchange rate. Said appreciation in the exchange rate reduces the exportation income, and reduces the gap of the product, according to equation (1). As it was previously mentioned, the reduction in the gap of the product contributes to reducing the inflation according to equation (2).

The channel of exchange rate consists of the direct effect that an exchange variation has in the domestic price rate. According to equation (3), a depreciation of the exchange rate increases the imported inflation. At the same time, as it is described in equation (2), an increase of the imported inflation produces an increase in the domestic inflation.

Finally, the expectations of the economic factors play an important role in the determination of the price rate. The MEP contemplates inflation expectations, equation (7), and exchange expectations, equation (8). The inflation expectations are formed by a process that incorporates inertia and rational expectations, according to equation (7). Then, they will directly influence in the inflation through the Phillips curve (equation (2)). The exchange expectations are formed according to the described process, through the equation (8) and affect the economy through capital flow (equation (9)) and from the imported inflation (equations (3) and (2)).

Currently, the Department of Economic Research, with the support of the technical assistance staff of the mission of the International Monetary Fund for Guatemala, in matters of Inflation Targeting, is calibrating the parameters of the equations (1) and (8), so that the relation among the different variables that compound the MEP correspond with the channels of transmission of the monetary policy previously indicated and with the historical behavior of the same in Guatemala. It is expected that the calibration of the model is ready for

December 2005 and that the first inflation prognosis derived from the SMP are available in January 2006.

Sincerely,

V. STATISTICAL APPENDIX

A. REAL SECTOR

**ORIGIN PER ACTIVITY OF THE GROSS DOMESTIC PRODUCT ACCORDING TO THE MARKET'S PRICES
2000-2005**
Million of quetzales of 1958

CONCEPT	2000	2001	2002	2003	2004 ^{p/}	2005 ^{e/}	Variation rate					
							2000	2001	2002	2003	2004	2005
GROSS DOMESTIC PRODUCT	<u>5,073.6</u>	<u>5,191.9</u>	<u>5,308.7</u>	<u>5,421.9</u>	<u>5,566.4</u>	<u>5,747.3</u>	<u>3.6</u>	<u>2.3</u>	<u>2.2</u>	<u>2.1</u>	<u>2.7</u>	<u>3.2</u>
Agriculture, forestry, hunting and fishing	1,157.9	1,171.3	1,192.5	1,230.3	1,275.2	1,317.6	2.6	1.2	1.8	3.2	3.7	3.3
Mines and quarries exploitation	26.4	26.6	29.2	30.4	27.9	27.3	-8.5	0.7	10.0	4.2	-8.3	-2.1
Manufacturer industry	668.2	675.6	681.0	688.0	704.1	724.7	1.9	1.1	0.8	1.0	2.3	2.9
Construction	98.6	110.6	93.7	90.6	72.8	70.0	-18.3	12.1	-15.3	-3.3	-19.7	-3.8
Electricity and water	210.9	204.6	223.2	233.1	247.0	260.3	17.4	-3.0	9.1	4.4	6.0	5.4
Transport, storing and communications	489.6	522.7	552.3	578.7	631.9	672.4	7.6	6.8	5.7	4.8	9.2	6.4
Wholesale and retail commerce	1,249.5	1,282.9	1,319.2	1,343.7	1,387.3	1,418.5	4.1	2.7	2.8	1.9	3.2	2.2
Banking, insurance and real state	265.6	260.6	265.3	269.2	275.1	283.3	3.1	-1.9	1.8	1.5	2.2	3.0
Housing	232.6	239.0	245.4	252.5	259.8	266.3	3.1	2.7	2.7	2.9	2.9	2.5
Public administration and defense	384.7	398.1	395.8	383.0	350.7	359.3	5.1	3.5	-0.6	-3.2	-8.4	2.4
Private services	289.7	300.2	311.2	322.3	334.6	347.6	3.8	3.6	3.7	3.5	3.8	3.9

Note: Due to rounding-up, some numbers may show slight differences.

p/Preliminar numbers

c/estimated numbers

Source: *Banco de Guatemala*

**GROSS DOMESTIC PRODUCTS EXPENSES ACCORDING TO THE MARKET'S PRICES
2000-2005**
Millions in quetzales of 1958

CONCEPT	2000	2001	2002	2003	2004 ^{p/}	2005 ^{e/}	Tasas de variación					
							2000	2001	2002	2003	2004	2005
1. Consumption expenses of people and non-profit private institutions	3,913.4	4,061.3	4,213.0	4,348.9	4,507.9	4,694.2	3.5	3.8	3.7	3.2	3.7	4.1
2. Consumption expenses of the general government	478.7	504.4	493.7	490.7	441.3	461.8	7.9	5.4	-2.1	-0.6	-10.1	4.6
3. Gross geographical formation of fixed capital	593.0	603.9	629.2	601.3	610.1	626.1	-8.8	1.8	4.2	-4.4	1.5	2.6
3.1 Private	455.4	429.7	471.0	467.0	508.0	547.3	-4.6	-5.7	9.6	-0.9	8.8	7.7
3.2 Public	137.6	174.2	158.1	134.3	102.1	78.8	-20.5	26.6	-9.2	-15.1	-23.9	-22.8
4. Stock variation	63.4	94.4	184.6	229.2	278.8	224.5	--	--	--	--	--	--
GROSS EXPENDITURE OF THE NATION	<u>5,048.5</u>	<u>5,264.0</u>	<u>5,520.5</u>	<u>5,670.1</u>	<u>5,838.1</u>	<u>6,006.5</u>	<u>4.0</u>	<u>4.3</u>	<u>4.9</u>	<u>2.7</u>	<u>3.0</u>	<u>2.9</u>
5. Goods and services exportation	906.4	870.2	820.4	809.8	863.0	886.4	3.8	-4.0	-5.7	-1.3	6.6	2.7
6. Less: Goods and services importation	881.3	942.2	1,032.2	1,058.0	1,134.7	1,145.6	6.0	6.9	9.6	2.5	7.2	1.0
GROSS DOMESTIC PRODUCT	<u>5,073.6</u>	<u>5,191.9</u>	<u>5,308.7</u>	<u>5,421.9</u>	<u>5,566.4</u>	<u>5,747.3</u>	<u>3.6</u>	<u>2.3</u>	<u>2.2</u>	<u>2.1</u>	<u>2.7</u>	<u>3.2</u>

Note: Due to rounding-up, some numbers may show slight differences.

p/Preliminar numbers

c/estimated numbers

Source: *Banco de Guatemala*

B. MONETARY SECTOR

B. MONETARY SECTOR
2000 - 2005
Millions of quetzales

CONCEPT	2000	2001	2002	2003	2004	2005 ^{e/}
International Net Reserves (million in US\$ Dollars)	1,874.1	2,347.9	2,369.6	2,919.3	3,528.0	3,853.0
International Net Reserves in NC ^{1/}	14,992.8	18,783.2	18,956.8	23,354.2	28,223.8	30,823.8
Monetary issue	8,214.2	9,475.9	9,999.6	11,924.4	12,626.0	13,594.0
Total of credit to the private sector ^{2/}	27,235.9	31,251.7	32,531.2	35,420.4	39,828.2	44,607.6
Total of banking fund-raising	32,216.3	38,883.9	42,749.1	47,578.1	53,614.6	59,902.5
Payment means M2 in NC	39,497.4	45,173.3	48,180.7	53,286.1	57,760.6	62,433.2
Payment means M2 in F/C ^{2/}	0.0	2,054.9	3,293.3	4,900.5	7,066.3	9,519.3
Total payment means M2 (NC + FC) ^{2/}	39,497.4	47,228.2	51,474.0	58,186.5	64,827.0	71,952.5
Monetary policy cost	547.1	1,260.8	1,015.5	990.4	1,186.0	1,016.0
OMAs balance	8,612.9	11,011.7	11,158.7	14,508.5	15,906.0	18,494.0
Total M3	44,237.5	49,601.7	55,179.8	61,402.0	68,248.3	75,755.6
Nominal GDP	149,743.1	164,870.1	182,274.7	196,696.0	213,092.9	234,997.1
MONETARY INDICATORS YEARS 2000 - 2005 Percentages						
CONCEPT	2000	2001	2002	2003	2004	2005 ^{e/}
RIN in NC / Monetary issue	182.5	198.2	189.6	195.9	223.5	226.7
RIN in NC / OMAs	174.1	170.6	169.9	161.0	177.4	166.7
RIN in NC / Total M2	38.0	39.8	36.8	40.1	43.5	42.8
OMAs / Monetary issue	104.9	116.2	111.6	121.7	126.0	136.0
Credit to the total private sector/ Nominal GDP	18.2	19.0	17.8	18.0	18.7	19.0
Total M2 / Nominal GDP	26.4	28.6	28.2	29.6	30.4	30.6
M2 in FC / Total M2	0.0	4.4	6.4	8.4	10.9	13.2
OMAs / Total M2	21.8	23.3	21.7	24.9	24.5	25.7
OMAs / Nominal GDP	5.8	6.7	6.1	7.4	7.5	7.9
Monetary policy cost / Nominal GDP	0.4	0.8	0.6	0.5	0.6	0.4

1/ Exchange rate: Q8.00 X US\$1.00

2/ Does not include entities *out of market*

e/ Estimated numbers

Source: *Banco de Guatemala* and *Superintendencia de Bancos*

C. FISCAL SECTOR

Report of Monetary Policy to June 2005

PUBLIC FINANCES
2000-2005
Millions of Quetzales and Percentages

Concept	2000	2001	2002	2003	2004	2005 ^{e/}
Tax burden	9.4	9.7	10.6	10.3	10.1	10.1
Tax elasticity	1.1	1.3	2.0	0.6	0.8	1.0
Total incomes (GDP %)	10.4	11.1	11.4	11.0	10.8	10.8
Indirect taxes / tax incomes	76.5	75.7	73.6	74.1	75.5	73.8
Total expenditures (GDP %)	12.2	12.9	12.4	13.3	11.8	12.5
Capital expenditures/Total expenditure	29.4	27.8	30.1	33.1	31.5	31.7
Social expenditure / Total expenditure	40.8	42.2	41.1	39.9	41.7	41.7
Social deficit (GDP %)	1.8	1.9	1.0	2.3	1.0	1.8
Surplus/Primary deficit (GDP %)	-0.6	-0.5	0.3	-1.2	0.2	-0.3
Saving in current account	2,316.2	2,251.8	4,590.0	3,762.8	5,650.7	4,809.0
Service of total public debt/tax incomes	67.2	75.3	33.8	27.9	27.3	29.0
Service of foreign public debt/exportation of goods and services	6.5	8.1	7.8	7.6	9.6	8.9
Balance of domestic public debt/total public debt	29.6	28.8	25.1	28.6	29.6	33.1
Balance of foreign public debt/total public debt	70.4	71.2	74.9	71.4	70.4	66.9
Balance of total public debt (GDP %)	19.5	19.6	17.9	19.5	20.0	19.9
Balance of domestic public debt (GDP %)	5.8	5.6	4.5	5.6	5.9	6.6
Balance of foreign public debt (GDP %)	13.7	13.9	13.4	13.9	14.1	13.3
Balance of foreign public debt/exportation of goods and services	64.8	69.3	75.6	80.7	80.4	76.4

^{e/} Estimated numbers

Source: *Ministerio de Finanzas Públicas* and *Banco de Guatemala*.

D. SECTOR EXTERNO

PAYMENT BALANCE
2000-2005
Millions in US Dollars

CONCEPT	2000	2001	2002	2003	2004 ^{p/}	2005 ^{e/}
Current Account balance	-1,049.0	-1,252.9	-1,234.9	-1,039.1	-1,188.3	-1,250.0
FOB exportations	2,711.2	2,463.6	2,473.2	2,631.8	2,938.7	3,346.7
Main products	1,178.3	949.7	958.4	970.5	1,003.5	1,180.6
Other products	1,532.9	1,513.9	1,514.8	1,661.3	1,935.2	2,166.1
CIF importations	5,171.4	5,606.4	6,304.1	6,721.5	7,811.6	8,537.7
Services	545.8	893.1	619.7	588.7	678.9	693.6
Current transferences (Net)	865.4	996.8	1,976.3	2,461.9	3,005.7	3,247.4
Family remittances (Net)	524.3	571.3	1,503.7	2,026.3	2,518.1	2,750.0
Capital and financial account balance	1,703.4	1,726.7	1,256.7	1,588.7	1,797.0	1,575.0
Capital transferences (Net)	85.5	93.4	124.2	133.8	135.3	137.6
Official and banking capital	147.6	208.9	53.8	285.5	249.3	189.6
Private capital	1,470.3	1,424.4	1,078.7	1,169.4	1,412.4	1,247.8
RIN Variation ((-) Increase, (+) Reduction)	-654.4	-473.8	-21.8	-549.6	-608.7	-325.0
Internacional Net Monetary Reserves Amount	1,874.1	2,347.9	2,369.7	2,919.3	3,528.0	3,853.0
RELATION WITH REGARD TO GDP						
Current Account balance	-5.4	-6.0	-5.3	-4.2	-4.4	-4.1
FOB exportations	14.1	11.7	10.6	10.6	10.8	10.9
Main products	6.1	4.5	4.1	3.9	3.7	3.9
Other products	7.9	7.2	6.5	6.7	7.1	7.1
CIF importations	26.8	26.7	27.0	27.0	28.6	27.9
Services	2.8	4.3	2.7	2.4	2.5	2.3
Current transferences (Net)	4.5	4.7	8.5	9.9	11.0	10.6
Family remittances (Net)	2.7	2.7	6.4	8.1	9.2	9.0
Capital and financial account balance	8.8	8.2	5.4	6.4	6.6	5.1
Capital transferences (Net)	0.4	0.4	0.5	0.5	0.5	0.4
Official and banking capital	0.8	1.0	0.2	1.1	0.9	0.6
Private capital	7.6	6.8	4.6	4.7	5.2	4.1
Importation months of goods financed with RIN	4.0	4.5	4.2	4.5	5.0	5.1
Importation months of non-factorial goods and services financed with RIN	3.7	4.1	3.9	4.1	4.6	4.7
FOREIGN COMMERCE						
EXPORTATION –MAIN PRODUCTS						
Coffee	572.3	300.8	269.0	294.5	325.7	459.0
Volume (thousands of qq)	6,316.8	5,282.8	4,528.5	4,982.1	4,303.1	4,645.0
Average price (US\$ per quintal)	90.60	56.94	59.40	59.11	75.69	98.82
Sugar	179.6	259.5	208.2	189.2	191.1	210.7
Volume (thousands of qq)	26,606.1	31,380.3	27,329.7	27,481.1	25,713.9	26,139.0
Average price (US\$ per quintal)	6.75	8.27	7.62	6.88	7.43	8.06
Banana	187.8	193.0	233.0	230.6	233.5	265.4
Volume (thousands of qq)	16,121.0	16,962.7	20,817.6	20,736.9	20,795.1	23,818.0
Average price (US\$ per quintal)	11.65	11.38	11.19	11.12	11.23	11.14
Cardamom	79.4	96.1	93.1	78.9	73.8	64.1
Volume (thousands of qq)	315.4	331.6	414.9	621.4	621.0	720.1
Average price (US\$ per quintal)	251.74	289.81	224.39	126.97	118.84	89.02
Petroleum	159.2	100.3	155.1	177.3	179.4	181.4
Volume (thousands of qq)	7,370.3	7,104.6	8,401.3	8,237.5	6,765.6	5,749.1
Average price (US\$ per quintal)	21.60	14.12	18.46	21.52	26.52	31.55
IMPORTATIONS-CUODE ECONOMIC GROUP						
Consumption goods	1,435.9	1,784.3	2,003.6	2,188.8	2,480.9	2,628.4
Raw materias and intermediate products	1,778.4	1,873.4	2,133.7	2,139.1	2,528.0	2,761.6
Fuels and lubricants	540.4	595.9	650.2	908.4	1,088.5	1,307.0
Construction materials	142.3	156.4	148.1	154.2	166.8	192.5
Capital goods	1,274.4	1,196.4	1,368.5	1,331.0	1,547.4	1,648.2

p/Preliminar numbers
e/Estimated numbers
Source: Banco de Guatemala

**RELEVANT MACROECONOMIC VARIABLES
PER SELECTED REGIONS AND COUNTRIES
YEARS 2000 - 2004 AND EXPECTATIONS FOR 2005
(Percentage variation)**

	2000	2001	2002	2003	2004	2005
ECONOMIC GROWTH						
Worldwide economy	4.6	2.5	3.0	4.0	5.1	4.3
Advanced economies	3.8	1.2	1.6	2.0	3.4	2.6
United States of America	3.7	0.8	1.9	3.0	4.4	3.6
Eurozone	3.6	1.6	0.9	0.5	2.0	1.6
Japan	2.4	0.2	-0.3	1.4	2.6	0.8
Asian emerging economies ^{1/}	6.5	5.8	6.5	8.1	8.2	7.4
China	8.0	7.5	8.3	9.3	9.5	8.5
Emerging markets and developing countries	5.8	4.2	4.7	6.4	7.2	6.3
Africa	3.2	4.0	3.6	4.6	5.1	5.0
Middle East	5.4	3.3	4.1	5.8	5.5	5.0
Western Hemisphere (Latin America and the Caribbean)	3.9	0.5	-0.1	2.2	5.7	4.1
Argentina	-0.8	-4.4	-10.9	8.8	9.0	6.0
Brazil	4.4	1.3	1.9	0.5	5.2	3.7
Uruguay	-1.4	-3.4	-11.0	2.5	12.0	5.0
Chile	4.5	3.4	2.2	3.3	6.0	6.1
Mexico	6.6	--	0.6	1.6	4.4	3.7
Venezuela	3.7	3.4	-8.9	-7.7	17.3	4.6
Perú	2.9	0.2	4.9	3.8	5.1	4.5
Colombia	2.9	1.5	1.9	4.0	4.0	4.0
Costa Rica	1.8	1.0	2.9	6.5	4.2	3.2
El Salvador	2.2	1.7	2.2	1.8	1.5	2.5
Guatemala ^{2/}	3.6	2.3	2.2	2.1	2.7	3.1
Honduras	5.7	2.6	2.7	3.5	4.2	4.0
Nicaragua	4.2	3.0	1.0	2.3	4.0	3.5
Central and Eastern Europe	4.9	0.2	4.4	4.6	6.1	4.5
Independent States Community	9.1	6.4	5.4	7.9	8.2	6.5
INFLATION						
Advanced economies	2.2	2.1	1.5	1.8	2.0	2.0
United States of America	3.4	2.8	1.6	2.3	2.7	2.7
Eurozone	2.1	2.4	2.3	2.1	2.2	1.9
Japan	-0.9	-0.7	-1.0	-0.2	--	-0.2
Asian emerging economies ^{1/}	1.9	2.7	2.1	2.6	4.2	3.9
China	0.4	0.7	-0.8	1.2	3.9	3.0
Emerging markets and developing countries	7.1	6.7	6.0	6.0	5.7	5.5
Africa	13.0	12.1	9.8	10.6	7.7	7.7
Middle East	5.9	5.4	6.5	7.1	8.3	8.6
Western Hemisphere (Latin America and the Caribbean)	6.7	6.1	8.9	10.6	6.5	6.0
Argentina	-0.9	-1.1	25.9	13.4	4.4	7.7
Brazil	7.1	6.8	8.4	14.8	6.6	6.5
Uruguay	4.8	4.4	14.0	19.4	9.2	7.0
Chile	3.8	3.6	2.5	2.8	1.1	2.5
Mexico	9.5	6.4	5.0	4.5	4.7	4.6
Venezuela	16.2	12.5	22.4	31.1	21.7	18.2
Peru	3.8	2.0	0.2	2.3	3.7	2.1
Colombia	9.2	8.0	6.3	7.1	5.9	5.2
Costa Rica	11.0	11.3	9.2	9.4	12.3	10.5
El Salvador	4.3	1.4	2.8	2.5	4.5	2.8
Guatemala ^{3/}	5.1	8.9	6.3	5.9	9.2	5.0
Honduras	11.0	9.7	7.7	7.7	8.1	7.8
Nicaragua	11.5	7.4	4.0	5.2	8.2	6.5
Central and Eastern Europe	22.7	19.4	14.7	9.2	6.6	5.2
Independent States Community	24.6	20.3	13.8	12.0	10.3	11.4

^{1/}Covers Asia in development, the Asian economies that were recently industrialized and Mongolia

^{2/} Although the data published for Guatemala is of 3.1%, the Department of West Hemisphere of the International Monetary Fund -IMF- indicated that was a mistake and that the IMF estimates a growth rate of 3.2%

^{3/} Although the data published for Guatemala is of 5.0%, the Department of West Hemisphere of the International Monetary Fund -IMF- indicated that it was a mistake and that the IMF estimates an inflation rate of 6.0%

Source: Worldwide Economic Perspectives, International Monetary Fund, to April 2005.

**RELEVANT MACROECONOMIC VARIABLES
PER SELECTED REGIONS AND COUNTRIES
YEARS 2000 - 2004 AND EXPECTATIONS FOR 2005
(Percentage variation)**

	2000	2001	2002	2003	2004	2005
BUDGET RESULT OF THE CENTRAL GOVERNMENT/GDP						
Advanced economies	0.2	-1.0	-2.4	-3.0	-2.9	-2.8
United States of America	2.0	0.5	-2.4	-3.3	-3.3	-3.4
Eurozone	-0.4	-1.6	-2.0	-2.3	-2.0	-2.0
Japan	-6.9	-6.3	-6.9	-7.1	-7.0	-7.0
Asian emerging economies ^{1/}	-4.3	-4.1	-4.1	-3.5	-3.1	-2.9
China	-3.6	-3.1	-3.3	-2.8	-2.4	-2.0
Emerging markets and developing countries	-2.9	-3.3	-3.6	-3.0	-1.9	-1.6
Africa	-1.3	-2.1	-2.5	-1.9	-0.7	--
Middle East	4.2	-0.5	-2.3	-0.2	3.4	4.7
Western Hemisphere (Latin American and the Caribbean)	-2.4	-2.6	-3.1	-3.1	-1.6	-2.1
Guatemala ^{2/}	-1.8	-1.9	-1.0	-2.3	1.0	-1.8
Central and Eastern Europe	-5.4	-7.6	-8.6	-6.5	-5.0	-4.3
Independent States Community	0.3	1.8	1.0	1.2	2.7	4.8
CURRENT ACCOUNT/GDP						
Advanced economies	-1.0	-0.8	-0.8	-0.8	-1.0	-1.1
United States of America	-4.2	-3.8	-4.5	-4.8	-5.7	-5.8
Eurozone	-0.5	0.2	0.8	0.3	0.4	0.5
Japan	2.5	2.1	2.8	3.2	3.7	3.3
Asian emerging economies ^{1/}	2.1	1.8	2.9	3.1	3.3	2.8
China	1.9	1.5	2.8	3.2	4.2	4.2
Emerging markets and developing countries	--	--	--	--	--	--
Africa	1.5	-0.3	-1.7	-0.3	0.2	0.8

^{1/}Covers Asia in development, the Asian economies recently industrialized and Mongolia

^{2/} Data of *Banco de Guatemala*

Source: Worldwide Economic Perspectives, International Monetary Fund, to April 2005.

E. BANKING SECTOR

Report of Monetary Policy to June 2005

BANKING SECTOR ^{1/}

Years: 1998 - 2005
In million of quetzales

CONCEPT	1998	1999	2000	2001	2002	2003	2004	2005 ^{a/}
Total Asset	35,854.4	38,964.0	49,812.5	55,910.2	61,510.5	66,217.3	75,909.1	79,728.1
Total credit portfolio (Gross)	19,486.4	22,128.8	24,081.5	25,963.3	28,097.9	31,126.6	36,495.7	38,134.2
In national currency	19,486.4	22,128.8	24,081.5	20,153.3	20,960.8	22,506.3	26,168.6	27,578.0
In foreign currency				5,810.0	7,137.1	8,620.3	10,327.1	10,556.2
Overdue portfolio and in default	1,482.5	2,312.8	2,176.7	2,113.0	2,226.6	2,007.7	2,111.7	2,416.4
Unproductive Assets ^{2/}	3,212.8	5,231.0	5,730.9	5,691.1	5,895.3	5,593.6	5,617.9	5,883.9
Weighted affected assets per risks	22,735.7	26,386.5	29,153.6	31,100.7	33,513.8	36,477.1	41,216.3	42,837.1
Investment on national securities ^{3/}	8,022.0	7,112.1	12,047.7	15,178.3	15,667.8	18,270.3	21,236.7	23,313.6
Total liabilities	32,958.2	35,072.2	45,290.9	51,041.4	55,980.8	60,257.0	69,185.2	72,953.0
Total deposits	22,986.5	24,047.2	32,749.3	39,098.6	44,180.3	48,949.0	57,057.5	60,655.4
In national currency	22,986.0	24,047.2	32,749.3	37,089.8	40,587.4	43,513.9	49,645.0	52,520.2
In foreign currency				2,008.8	3,592.9	5,435.1	7,412.5	8,135.2
Foreign credit	3,305.1	3,442.9	4,741.9	5,166.4	5,297.4	5,785.2	6,446.9	6,075.5
Countable estate	2,828.1	3,664.5	4,156.7	4,431.2	5,044.0	5,320.4	6,024.9	6,072.0
Net profit	301.4	450.1	445.9	542.0	439.0	716.1	968.8	552.5
Paid capital + reserves	1,923.3	2,681.3	3,554.9	3,747.1	4,420.6	4,450.9	4,778.7	4,961.3

NUMBER OF POPULATIONS AND NUMBER OF BANKING AGENCIES

Years: 1998 - 2005

CONCEPT	1998	1999	2000	2001	2002	2003	2004	2005 ^{a/}
Number of inhabitants	10,799,133	11,088,362	11,225,403	11,503,653	11,791,136	12,087,014	12,390,518	12,700,992
Number of agencies	978	1,093	1,164	1,217	1,257	1,245	1,343	1,328

BANKING INDICATORS

Years: 1998 - 2005
In percentage and number

CONCEPT	1998	1999	2000	2001	2002	2003	2004	2005 ^{a/}
Credit portfolio / Total Asset	54.3	56.8	48.3	46.4	45.7	47.0	48.1	47.8
Structure of the credit portfolio per exchange rate								
Portfolio in national currency/total portfolio	100.0	100.0	100.0	77.6	74.6	72.3	71.7	72.3
Portfolio in foreign currency/total portfolio				22.4	25.4	27.7	28.3	27.7
Overdue portfolio and in default/total portfolio	7.6	10.5	9.0	8.1	7.9	6.5	5.8	6.3
Overdue portfolio and in default/total portfolio	9.0	13.4	11.5	10.2	9.6	8.4	7.4	7.4
Investments in national securities/total asset	22.4	18.3	24.2	27.1	25.5	27.6	28.0	29.2
Deposits/Total liabilities	69.7	68.6	72.3	76.6	78.9	81.2	82.5	83.1
Deposits in national currency/total deposits	100.0	100.0	100.0	94.9	91.9	88.9	87.0	86.6
Deposits in foreign currency/total deposits				5.1	8.1	11.1	13.0	13.4
Foreign credit/total liabilities	10.0	9.8	10.5	10.1	9.5	9.6	9.3	8.3
Foreign credit/total portfolio	17.0	15.6	19.7	19.9	18.9	18.6	17.7	15.9
Estate solvency								
Countable estate/assets weighted per risk	12.4	13.9	14.3	14.2	15.1	14.6	14.6	14.2
Profitability ^{4/} (Net profit / paid capital plus reserves)	15.7	16.8	12.5	14.5	9.9	16.1	20.3	
Banking (number of inhabitants/number of banking)	11,042	10,145	9,644	9,452	9,380	9,708	9,226	9,564

^{1/} Starting from 2001 does not include the banks: Metropolitano, S.A, Promotor, S.A. and Empresarial, S.A., to which has been requested to declare bankruptcy.

^{2/} It is referred to those that do not generate financial incomes (fixed assets, extraordinary assets, overdue portfolio and portfolio in default).

^{3/} Includes temporal and long-term investments.

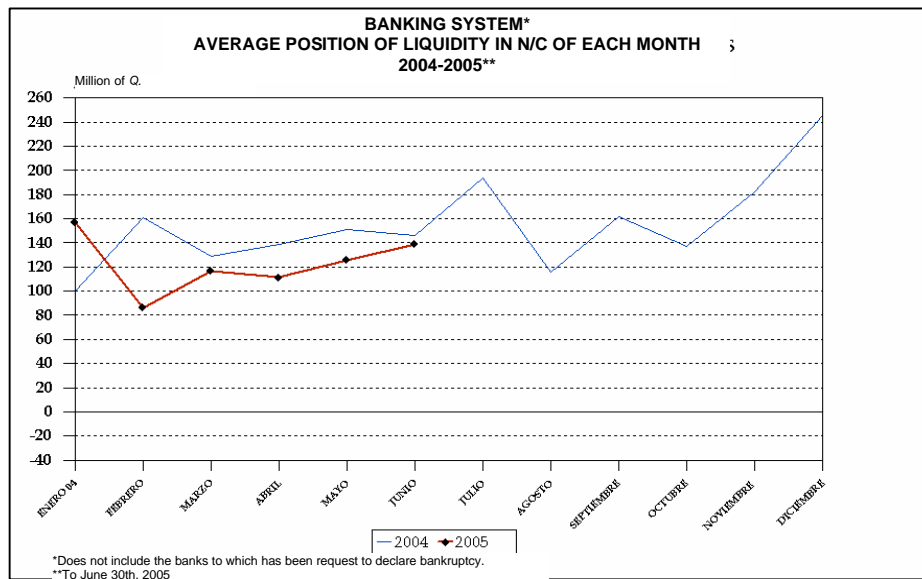
^{4/} These are annual indicators and do not include May 2005.

^{a/} Numbers to May.

Source: Superintendencia de Bancos and Instituto Nacional de Estadística -INE-.

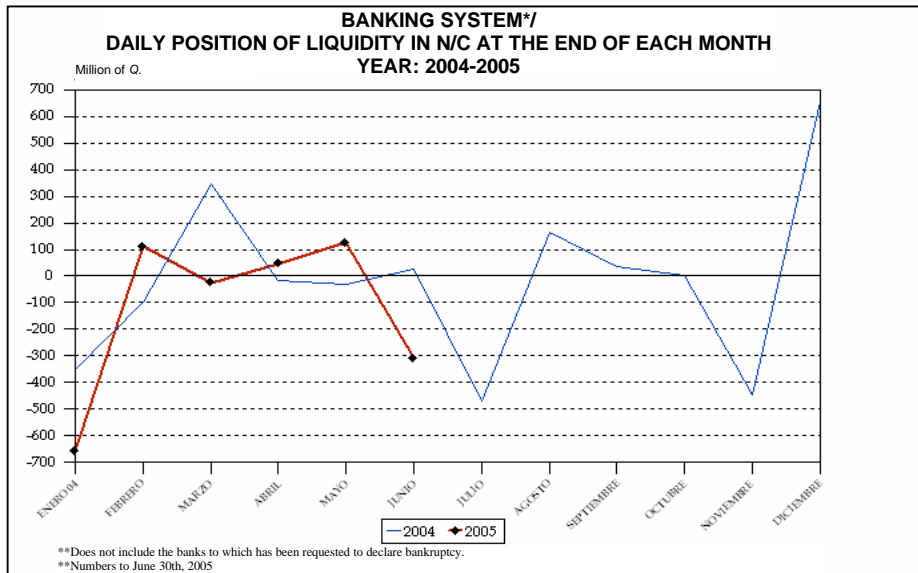
BANKING SYSTEM
AVERAGE POSITION OF LIQUIDITY IN F/C OF EACH MONTH
YEAR: 2004 - 2005
Million of quetzales

MONTH	2004	2005
JANUARY	100.5	156.8
FEBRUARY	161.1	86.2
MARCH	128.9	116.4
APRIL	138.4	111.3
MAY	151.4	125.8
JUNE	146.2	138.7
JULY	193.4	
AUGUST	115.9	
SEPTEMBER	161.5	
OCTOBER	137.2	
NOVEMBER	181.9	
DECEMBER	245.5	



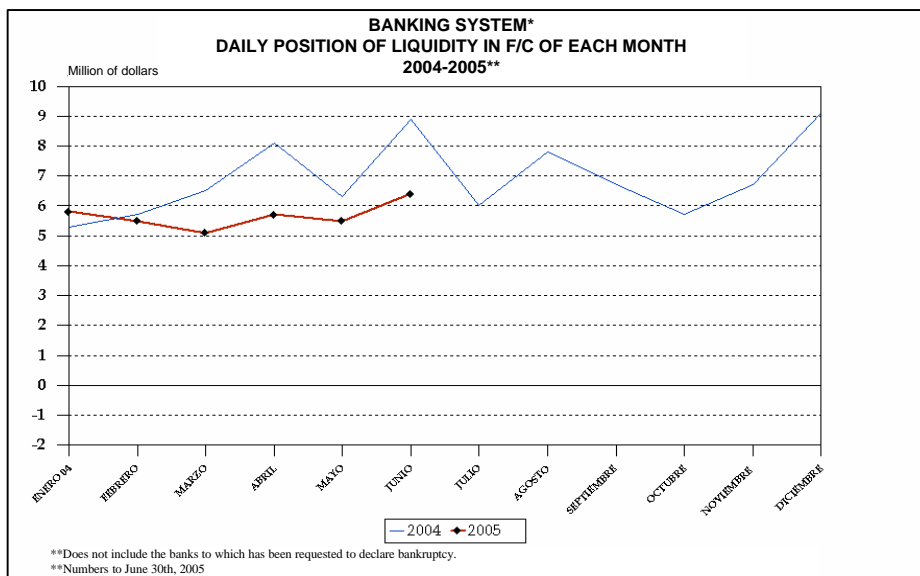
BANKING SYSTEM
DAILY POSITION OF LIQUIDITY IN N/C AT THE END OF EACH MONTH
YEAR: 2004 - 2005
Million of quetzales

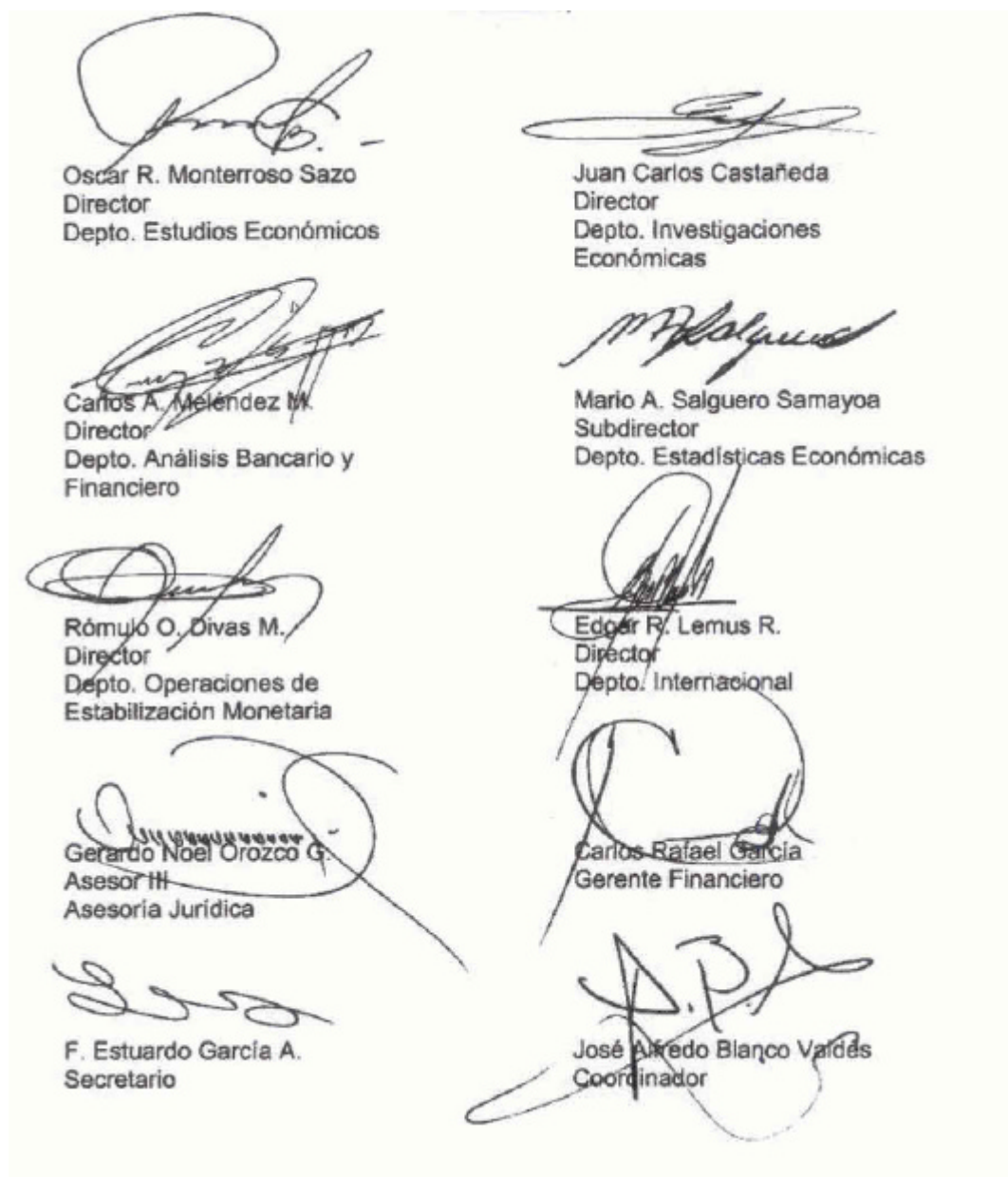
MONTH	2004	2005
JANUARY	-350.6	-656.1
FEBRUARY	-97.1	111.4
MARCH	343.5	-24.4
APRIL	-14.5	46.2
MAY	-30.4	126.6
JUNE	24.9	-308.6
JULY	-470.3	
AUGUST	163.5	
SEPTEMBER	35.6	
OCTOBER	2.0	
NOVEMBER	-445.2	
DECEMBER	656.0	



BANKING SYSTEM
AVERAGE POSITION OF LIQUIDITY IN F/C OF EACH MONTH
YEAR: 2004 - 2005
-Millions of dollars-

MONTH	2004	2005
JANUARY	5.3	5.8
FEBRUARY	5.7	5.5
MARCH	6.5	5.1
APRIL	8.1	5.7
MAY	6.3	5.5
JUNE	8.9	6.4
JULY	6.0	
AUGUST	7.8	
SEPTEMBER	6.7	
OCTOBER	5.7	
NOVEMBER	6.7	
DECEMBER	9.1	





The present decree was approved by the Technical Committee of the *Banco de Guatemala*, in the meeting dated July 22nd, 2005.

ANNEX

ECONOMIC ACTIVITY FOR 2005

1. Gross Domestic Product of the origin of the production

A positive behavior is foreseen for 2005 in all the productive sectors, with the exception of *mines and quarries exploitation and construction*, estimating that the *manufacturer industry; banking, insurance and real state; public administration and private services* sectors will register a more dynamic growth rate than the observed in the previous year.

For *agriculture, forestry, hunting and fishing* sector (with a participation of 22.9% in the GDP), according to the information provided by producers' associations, gremials and private and public entities, a growth of 3.3% is estimated for 2005, lower than the observed in 2004 (3.7%). In this sector, on the one hand a loss of dynamism in the banana and cardamom production is foreseen and, on the other hand, the production of coffee will remain the same as in the previous year (4,500.0 thousands of quintals). Lastly, it is considered an improvement in the production of basic grains, fruits and vegetables.

Regarding the production of coffee, according to the *Asociación Nacional del Café –ANACAFE*-[Association of Coffee Producers], the expected behavior is due to the improvement observed in the international price of coffee during the current year, generated by the deficit foreseen between the production and worldwide consumption for the 2005/2006 period; the producers carried out higher culture work, which would avoid the continued fall of coffee production (-3.9%).

In the case of cardamom, a 13.6% increase is expected for 2005 (27.5% in 2004). According to the *Asociación de Cardamomeros de Guatemala –CARDEGUA*-, the lower foreseen dynamism is due to the expected reduction in cardamom price. Currently, from an average export price of US\$118.84 per quintal in 2004, the average export price of cardamom is estimated in US\$89.02 per quintal in 2005.

Regarding the production of banana, it is estimated that it will increase in 4.5% for 2005 (6.5% in 2004). According to estimations of the *Compañía de Desarrollo Bananero de Guatemala, S.A. –BANDEGUA-* and of the *Compañía Bananera Guatemalteca Independiente, S.A. –COBIGUA-*, the lower expected dynamism is due to the new planting areas of the country's south, which were established due to constant labor problems in the banana producing areas of Izabal, which are reaching their maximum production level.

In the production of sugar cane, an increase of 0.2% is expected for 2005; this behavior contrasts with the growth of 10.0% observed in 2004. According to the *Asociación de Azucareros de Guatemala –ASAZGUA-*, for the sugar cane harvest season of 2004/2005 it is foreseen a production of 392.0 millions of quintals (391.2 millions of quintals in the 2003/2004 sugar cane harvest season), which might be explained by a slight increase in the expected yield of cane per sowed block. It is important to indicate that in 2004 the production of sugar cane grew as a result of an increase in the sowed area, as well as in the cane yield per block.

On the other hand, according to estimations of the *Coordinadora Nacional de Productores de Granos Básicos –CONAGRAB-* for 2005, corn and black beans production will have growths of 3.5% and 9.7%, respectively (0.5% and -1.5% in 2004). In the case of corn and black beans, the highest expected dynamism is associated with expectations of a higher production, by using improved seeds provided by CONAGRAB.

In the case of the *manufacturer industry* sector (with a participation of 12.6% in the GDP) a growth of 2.9% for 2005 is expected, percentage higher than the observed in 2004 (2.3%); this is the highest percentage registered in the last 7 years. Said behavior is associated with the recovery expected in the exportation of industrial products, mainly, to the North American and Central American markets, hoping that the dynamism of their economies continues. In addition, it is estimated that the highest investment rates, public and private, in

infrastructure projects is reflected in a major demand of industrial products and others associated to it (cement, iron and mechanic metal).

The activity of the *wholesale and retail commerce* sector (with a participation of 24.7% in the GDP) it is estimated that for 2005 a growth rate of 2.2% will be registered (3.2% in 2004), which is mainly due to the deceleration in the growth rate foreseen in the *agriculture, forestry, hunting and fishing* sector, as well as in importations.

In the *mines and quarries* sector, for 2005 a fall of 2.1% is expected (-8.3% in 2004). This behavior, according to information of the *Ministerio de Energia y Minas*, is mainly determined by a fall of 6.6% in the estimate of petroleum production (18.8% of fall in 2004), because the pumping pressure of some wells has been reduced.

Regarding the *electricity and water* sector, a growth of 5.4% was estimated (6.0% in 2004). The deceleration in the estimated growth rate is due to a lower dynamism in the demand of electric power for internal consumption, due to the rise in its price, as well as to a reduction in the exportation of electric power to El Salvador.

It is foreseen that in the *transport, storing and communications* sector, a growth of 6.4% will be registered in 2005 (9.2% in 2004), mainly associated to the lower expected dynamism in the *communications* sub-sector, which represents about 45.2% of the sector, estimating that it will register a growth of 9.0%, lower than the one of 2004 (14.7%), due to a lower activation of new phone lines.

It is expected that the *construction* sector will register a fall of 3.8% in 2005 (-19.7% in 2004), as a result of a reduction of 29.6% in the public construction (-36.0% in 2004). In contrast, an increase of 22.2% in the private construction is foreseen (.8.1% in 2004).

In public construction, the result is associated to the fact that the budget performance for the current year, with regard to construction, is limited to carrying out maintenance activities and rehabilitation of roads sections. In the case of private construction, positive behavior is associated to the expected increase of 30.1% on the surface of authorized construction of the main surveyed municipalities of the Republic³⁷ (1.4% in 2004).

Regarding the *banking, insurance and real estate* sector, it is foreseen for 2005 that it will register a growth rate of 3.0% (2.2% in 2004), associated with a higher dynamism in the financial intermediation.

For the *housing property, public administration and defense and private services* sector, it is estimated a growth rate of 2.5%, 2.4% and 3.9%, respectively (2.9%, -8.4% and 3.8%, for 2004).

2. Gross Domestic Product per expenditure

It is estimated that the variables that integrate the GDP per expenditures, in real terms, will register in 2005 positive growth rates compared with the previous year.

It is expected that the domestic demand, constituted by the consumption, investment and stock variation, will register a growth rate of 2.9%, similar to the one of 2004 (3.0%).

It is estimated that the private consumption will register a growth rate of 4.1%, higher in 0.4 percentage points than the observed in the previous year.

It is foreseen that the expenditure of government consumption, that includes remuneration and purchase of goods and services, will have a peak in its behavior, estimating a growth of 4.6% (-10.1% in 2004), which would be

³⁷ Includes the municipalities of the Metropolitan area: Guatemala, Mixco, Villa Nueva, Santa Catarina Pinula, San José Pinula, Villa Canales and San Miguel Petapa, and 33 municipalities of the countryside.

associated with the higher budget performance of expenditures by the central government for the current year.

Regarding investment, it is estimated that the geographical gross formation of capital flow will register an increase of 2.6% (1.5% in 2004), as a result of an increase of 7.7% in the private investment (8.8 of growth in 2004) and a fall of 22.8% in the public investment (24.0% of fall in 2004). The deceleration of the private investment, in real terms, is mainly due to the deceleration of the importation of capital goods, which is estimated in about 5.9% (12.3% in 2004). The expected behavior in the public investment, is due to the lower performance (-25.8%) that is expected in the construction of roads and public works (-24.3% the previous year).

The foreign demand, constituted by the exportation of goods and services, in real terms, it is estimated that it will register a positive behavior of 2.7% (6.6% of growth in 2004). In this case, it is important to mention that although the foreign demand will be impelled by the best performance foreseen in the economic activity of the United States of America and of the main commercial associates of the country, the lower dynamism expected for the current year is due to the expected fall in the exported volume of petroleum.

Regarding the offer, it is estimated that the importation of goods and services, in real terms (foreign offer), will register a growth of 1.0%, lower than the growth observed in the previous year (7.2%).