

# **ECONOMIC PERSPECTIVES FOR 2007 AND 2008 AND PROPOSAL OF THE MONETARY, FOREIGN EXCHANGE RATE, AND CREDIT POLICY FOR 2007**

## **I. ECONOMIC PERSPECTIVES<sup>1</sup>**

### **A. OF THE REAL SECTOR FOR 2007<sup>2</sup>**

The sustainable economic growth requires not only macroeconomic stability, but also the efficient institutional and structural policies that promote the increase of productivity, based on the best use of factors that intervene in the productive process.

In the context described, the strength of an economy before economic and extra economic<sup>3</sup> shocks, requires a disciplined monetary policy (with a defined nominal anchor and a flexible exchange rate), a balanced fiscal policy, an adequate institutional and structural base, that constitute the platform of a sustainable base.

For 2007 it is estimated that the national economic activity, measured by the GDP, in real terms, registers a growth of 5.1%, rate higher than the expected in 2006 (4.6%).

The behavior foreseen in the national economic activity is founded, in the external order, in a favorable environment, derived from the evolution that would experiment the economy of the main commercial partners of Guatemala, as well as the consolidation of the benefits of the DR-CAFTA (from here on known as treaty).

Regarding the effects of the treaty on economic growth of the country, the International Monetary Fund, IMF-<sup>4</sup> conclude that besides generating an impulse for growth, the treaty could represent an inflection point in the integration of the region with world economy and indicate that this could benefit the growth in diverse manners in Central American countries, as occurred with the countries that signed the North American Free Trade Agreement (NAFTA). In that sense, Hilaire and Yang (2003), used a General Competitive Balance

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<sup>1</sup> In the statistical appendix the observed information is presented, estimations for 2006 and perspectives for 2007 of the real, monetary, external, fiscal and banking policies.

<sup>2</sup> Estimations made using the methodology contained in the 2 Revision of the National Account Manual of the United Nations 1953 -SCN53-, base year 1958.

<sup>3</sup> Qualitative factors that generate uncertainty in the economic activity, for example, the policy risk factors that internationally recognized businesses that qualify risk take into account when analyzing the country risk, among these, the socio-economic conditions, the tradition of law and the order and degree of harmony between government and other sectors of society; as well as the occurrence of natural disasters,

<sup>4</sup> International Monetary Fund. Central America: World Integration and Regional Cooperation. 2005.



(EGC, for its acronym in Spanish), to examine the benefits regarding the growth that could generate the treaty, conclude the GDP of Central American countries could initially increase by 0.7 additional percentage points annually to those it would grow in a scenario without a treaty, until reaching, in the long term, a maximum 1.5 additional annual percentage points.

The World Bank<sup>5</sup> estimates that it is possible that the treaty have positive effects in the economic growth of Central America when they increase the national and foreign investments, as well as increasing the exportations and importations, that at the same time could help accelerate the transfer of technology from abroad. In that sense, said organism made two studies. In the first, the econometric estimations suggest that the economies of the countries that signed the free trade agreements, during the first five years after its implementation, tend to increase their annual growth rates by approximately 0.6 additional percentage points to those that would be registered in a scenario without a treaty. In the second study, the WB, through a model used by Berthelon (2003)<sup>6</sup>, conclude that the regional effect of free trade treaties produce a positive and significant impact in growth. According to the last model, the treaty would add around 0.8 percentage points to the annual growth, if all the other variables remained constant. The WB adds that this growth would depend on structural and institutional changes that would be made within each of the countries that signed the treaty.

Regarding the indicated, the technical departments of the *Banco de Guatemala*, based on an econometric analysis, estimate that the impact of the referred treaty on the growth rate of the real GDP of the country could be between 0.71 and 1.07 additional percentage points per year (See annex 1).

On the other hand, in the internal order, the expected growth is based on maintenance of macroeconomic stability, as a result of the application of disciplined monetary and fiscal policies; in the improvement of the expectations of the economic agents, derived on the execution of the programmed mega

<sup>5</sup> World Bank. CAFTA-DR: Challenges and Opportunities for Central America, August 2005. Page 186.

<sup>6</sup> Model that calculates the effects on the regional free trade agreement in growth, using a fictitious variable for the period in which the country enters into said agreement, weighting the size of the percentage of the world GDP represented by the commercial partners of the treaty and creating a variable that takes the relation of size in percentage of each country in the world GDP.



projects<sup>7</sup>; and, in the impulse that will promote greater public and private investment levels, derived from the infrastructure projects that the general government has foreseen for the last year of its administrative management and, due to the demands of the resulting competition from the consolidation of benefits of the referred treaty.

At the level of the productive sectors, it is foreseen that these register positive and more dynamic behavior than in 2006, with the exception of mine and quarry exploitation; construction and, transportation, storage and communications sectors.

For the agriculture, forestry, hunting and fishing sector (with a 22.0% participation in the GDP) estimates a 4.4% growth, greater to the foreseen for 2006 (1.8%). This more dynamic behavior would be mainly influenced by the greater expected growth in the production of banana and sugar cane; due to the dynamism foreseen in the production for internal consumption; and, due to the recovery that is estimated in the production of industrial consumer goods. It is worth mentioning that according to the appreciation of the associations and workers unions, as well as the *Ministerio de Agricultura, Ganadería y Alimentación -MAGA-* (Ministry of Agriculture, Cattle and Feeding) and of the *Coordinadora Nacional de Productores de Granos Básicos -CONAGRAB-*, (National Coordinator of Basic Grains Producers), expecting a normalization in the coffee, banana, corn, vegetables, sugar cane, sesame seeds and rubber production. In the case of the production of sesame seeds it is estimated that it will recover completely, after a fall in production in 2006, due to damages caused by tropical storm *Stan*.

In the case of coffee production, according to *Asociación Nacional del Café -ANACAFÉ-*, (National Coffee Association) it is estimated that next year this activity will continue to be affected by the excessive world supply and by the uncertainty in the tendency of prices for the grain in the international market; however, a growth is foreseen in the production of 2.0%, similar to the foreseen

<sup>7</sup> Decree numbers 88-2005 and 89-2005 approved on November 16, 2005 by the Congress of the Republic, contemplates the execution of the viable projects from the "Northern Transversal Fringe" and of the Metropolitan Peripheral Ring". Said projects were approved on November 30 by the Executive Branch, and, published in the official daily newspaper on December 1, 2005. Additionally, the, *Ministerio de Comunicaciones, Infraestructura y Vivienda* (Ministry of Communications, Infrastructure and Housing) began work on remodeling the International Airport of *La Aurora*.



for 2006 (2.1%). It is worth adding that even when it is expected that in 2007 the median price of coffee exportation would be around US\$103.50 per quintal, lower to that from 2006 (US\$105.78 per quintal), this will continue to be higher to the prevailing in the international market in the 1995-2001 period (around US\$100.00 per quintal).

As to the production of cardamom, it is expected that for 2007 a deceleration in the growth rate will be established, when going from 2.5% in 2006 to 1.3% in 2007. According to the *Asociación de Cardamomeros de Guatemala -CARDEGUA-* (Cardamom Association of Guatemala), the behavior foreseen is explained by the slight increase foreseen in the world demand and by the increase of inventories associated to world over-supply, which has induced a decreasing tendency in the international price of this spice.

As to the banana production, it is estimated it will grow by 14.8% (3.6% fall in 2006). According to appreciations of the *Compañía de Desarrollo Bananero de Guatemala, S.A. -BANDEGUA* (Banana Development Company of Guatemala, S.A.) and of the *Compañía Bananera Guatemalteca Independiente, S.A. -COBIGUA-* (Independent Guatemalan Banana Company), the growth rhythm expected is associated, among other factors, to a new broadening of 100 hectares in the area planted on behalf of BANDEGUA in the region of the Motagua River (municipium of Los Amates, Izabal); and, to the perspectives that could be generated in international commerce as a result of the actions begun by the fruit producing countries, oriented to decreasing the tariff barriers adopted by the European Union.

In sugar cane production a growth of 7.0% is expected, behavior that contrasts with the fall of 7.9% expected for 2006. According to the *Asociación de Azucareros de Guatemala -ASAZGUA-* (Guatemalan Sugar Cane Growers Association), for the harvest foresees a production of 386.2 million quintals, greater by 25.3 million quintals to the 2005/2006 harvest, behavior associated to the increase foreseen in the area of sugar cane plantations, which would be motivated by the increase that is expected in the world demand and due to the effect of a greater quota of exportation, already contemplated by the treaty.



On the other hand, according to estimations by CONAGRAAB, the production of corn and beans will grow 5.0% and 3.0%, respectively (10.0% and 5.0% in the same order, for 2006). The behavior expected, although less dynamic than that of 2006, is associated to the normalization of harvests in the areas affected after tropical storm *Stan*.

In the case of the manufacturing industry sector (with a participation of 12.3% in the GDP), a growth of 3.8% is expected, percentage higher to the expected for 2006 (3.6%). Said behavior is linked to an expected increase of industrial products exportations, mainly to US and Central American markets, before the expectations that the dynamism of its economies continue, as well as the consolidation of the benefits of the treaty and to the negotiation of new commercial treaties. It is also estimated that the greater levels of public investment (especially mega-projects) as well as private are reflected in greater demand to industrial projects (cement, block, iron, among others).

The activity of the wholesale and retail sale commerce sector (with a participation of 24.1% in the GDP), is estimated that in 2007 will register a growth rate of 4.2% (3.1% in 2006), mainly explained by the greater dynamism foreseen in the agriculture, forestry, hunting and fishing sectors and the manufacturing industry; as well as with the especially positive behavior of goods importations.

In the mines and quarries sector a growth of 2.6% is expected (9.5% in 2006). The behavior of this sector would be associated to the gradual normalization of the production of oil fields in the country that were in maintenance and a deceleration that is foreseen in the demand of gravel and sand on behalf of private as well as public construction.

In the electricity and water sector, it is estimated that a growth of 6.6% (2.4% in 2006), which is mainly associated to a greater demand of electric energy, derived to the greater growth expected in the wholesale and retail commercial sectors, manufacturing industry and private services. According to the information of the Wholesale Market Administrator (AMM for its acronym in Spanish) for 2007 an increase is foreseen in the generation of electric energy (of geometric origin), when operating new plants, one from the Central



Generating Group, S.A. – GECSA (for its acronym in Spanish) located in Chimaltenango, with a capacity of 15 MWH and another from Ortitlán, Ltda. Located in Amatitlán, with a capacity of 20 MWH. The Magdalena and Pantaleón sugar processing plants estimate broadening the capacity of their vapor turbines to generate electricity, by 35 MWH and 50 MWH, respectively.

The transportation, storage and communications sectors are foreseen to register a growth of 10.1% (12.9% in 2006). Said behavior would result from the expected evolution in the transportation sub-sector, which would present lesser dynamism, when surpassing growth 9.1% in 2006 to 8.8% for 2006, mainly associated to a decrease foreseen in urban taxi transportation. The communications sub-sector, that represents 47.2% of the sector, would be expected to register a growth of 11.6% in 2007 (17.6% in 2006), derived from an increase foreseen in the investment of telecommunications businesses, for the broadening of telephone and internet<sup>8</sup> services. .

The construction sector is expected to register a growth rate of 7.2% (29.6% in 2006), as a result of an increase of 4.3% in public construction (7.6% en 2006) and a growth of 8.9% in private construction (47.1% in 2006). In the case of public construction, the result is mainly associated to lesser assignment of resources given that the General Budget Project for Income and Expenditure for the 2007 Fiscal Year was not approved. As to private construction, the result is explained by the lesser dynamism expected in the number of licenses authorized for the construction of apartment buildings, malls, industrial installations and hotel industry, due to the uncertainty that is generally observed in an election year, among other factors.

As to the banking, insurance and real estate sector we foresee that in 2007 registers a growth rate of 6.5% (5.6% in 2006), associated to more dynamic behavior in financial intermediation, as a consequence of greater growth foreseen in the economic activity.

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<sup>8</sup> According to the Superintendence of Telecommunications -SIT-, the *Digicel Group* Caribbean group, operators of mobile telephones, will begin operations at the beginning of 2007.



For the housing sectors; public and defense administration; and, private services expect growth rates of 2.2%, 3.8% and 4.5%, respectively, similar to the registered the previous year (2.0%, 3.6% and 3.8%, in the same order).

<b>ORIGIN PER BRANCHES OF THE ACTIVITY OF THE GROSS DOMESTIC PRODUCT AT MARKET PRICES AÑOS 2006 - 2007 (millions of quetzales from 1958)</b>				
C O N C E P T	2006 e/	2007 py/	Variation rates ón	
			2006	2007
<b>GROSS DOMESTIC PRODUCT</b>	<b>6,009.8</b>	<b>6,318.7</b>	<b>4.6</b>	<b>5.1</b>
Agriculture, forestry , hunting and fishing	1,331.3	1,390.5	1.8	4.4
Explotación de minas y canteras	30.2	30.9	9.5	2.6
Manufacturing Industry	748.9	777.1	3.6	3.8
Construcción	111.4	119.5	29.6	7.2
Electricity and water	257.3	274.3	2.4	6.6
Transportation, storage and communications	782.1	861.1	12.9	10.1
Wholesale and retail sale commerce	1,461.5	1,523.5	3.1	4.2
Bank, insurance and real estate	299.6	319.1	5.6	6.5
Housing property	271.8	277.6	2.0	2.2
Public and Defense Administration	356.9	370.4	3.6	3.8
Private Services	358.8	374.7	3.8	4.5
e/ Estimated numbers; py/ and projected numbers				

## B. FROM THE REAL SECTOR FOR 2008

For 2008 it is estimated that the economic activity, produced by the GDP, in real terms, will register growth of 5.2%, slightly over the estimated for 2007 (5.1%). This behavior would be sustained, in the external order, in a favorable environment associated to the positive evolution expected in the economy of commercial partners of the country, especially the United States of America and



of the Central American countries, to which we can add new commercial treaties signed with the European Union, Colombia and Panama.

In the internal order, the expected growth is favored by the positive perspectives that would generate the maintenance of the macroeconomic stability, particularly based in the application of disciplined fiscal and monetary policy. However, it is worth emphasizing that the growth foreseen for 2008 could be affected by the uncertainty generated by the extra-economic order of occurrences.

The productive sectors that could benefit from greater external demand induced by the commercial opening, as well as the more ample, stable market, generated by the acceleration of the economic growth, would be: mine and quarry exploitation; manufacturing industry; construction; electricity and water; banks, insurance and real estate; and, housing property.

<b>ORIGIN PER BRAND OF ACTIVITY OF THE GROSS DOMESTIC PRODUCT AT MARKET PRICES YEARS 2007 - 2008 (millions of quetzales from 1958)</b>				
C O N C E P T	2007 py/	2008 py/	Variation Rates	
			2007	2008
<b>GROSS DOMESTIC PRODUCT</b>	<b>6,318.7</b>	<b>6,650.0</b>	<b>5.1</b>	<b>5.2</b>
Agriculture, forestry, hunting and fishing	1,390.5	1,444.7	4.4	3.9
Exploitation of mines and quarries	30.9	33.6	2.6	8.5
Manufacturing Industry	777.1	811.3	3.8	4.4
Construction	119.5	130.6	7.2	9.3
Electricity and water	274.3	295.7	6.6	7.8
Transportation, storage and communications	861.1	939.4	10.1	9.1
Wholesale and retail comerse	1,523.5	1,586.8	4.2	4.2
Bank, insurance and real estate	319.1	346.8	6.5	8.7
Housing pro perty	277.6	285.1	2.2	2.7
Public and Defense Administration	370.4	386.3	3.8	4.3
Private Services	374.7	389.7	4.5	4.0
py/ Projected numbers				





## **C. FROM THE EXTERNAL SECTOR**

### **1. On world economy**

According to the estimations from the MF<sup>9</sup>, it is expected that the global economy will grow 4.9% in 2007. This growth is slightly below the foreseen for 2006 (5.1%) fundamentally due to the reduction foreseen in the economic growth of the United States of America and of the restrictive monetary policies implemented by the main central banks of the world with the end of abating the inflationary pressures that were presented in 2006. In that sense, the IMF foresees that the inflation for the advanced economies be at 2.6% in 2007 (2.3% in 2006), expecting the mentioned monetary restrictions are maintained.

It is foreseen that the economic growth for 2007 could be affected by the increase mentioned of the inflationary pressures in the main economies of the world, as well as the growth in the volatility of the international price of oil and due to the reduction in economic growth of the United States of America, fundamentally induced by a greater cooling of the real estate market. Also, the deficit in current account from the US payments balance will continue to be a risk for world economic stability.

According to the projections of the IMF for 2007, the US economy will grow 2.9%, percentage less than 3.4% foreseen for 2007. The lesser economic dynamism expected of the US economy is sustained by the weakening of the internal aggregate demand, especially of the private consumption and of the investment in the residential market. Regarding inflation, for 2007 the IMF estimates that the same will continue to be at 3.6%, which is slightly over the foreseen for 2006 (3.4%). This increase of inflation could be induced by the reduction in the productive capacity in the market of goods as well as in the labor market, as well as due to the increase in the energy markets, which would influence in the price of other goods and services, especially in those of transportation. On the other hand, an increase in the deficit of current account

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<sup>9</sup> International Monetary Fund. World Economic Outlook. September, 2006.



of the payment balance, which, in 2007, would increase 6.9% in relation of the GDP (6.6% in 2006).

In the area of the Euro, for 2007 there is an estimation of 2.0% economic growth, percentage slightly below the estimated for 2006 (2.4%). The economic growth in this region would be sustained in the corporate gains that, at the same time, would cooperate in increasing investments, and therefore, employment. The slight reduction of economic growth expected in that area is basically due to the lesser economic dynamism foreseen for Germany, due to the increase of programmed taxes for 2007. On the other hand, the inflation is expected to be 2.4% in 2007, slightly over the foreseen for 2006 (2.3%).

In Japan, the economic growth projections indicate a reduction of economic dynamism for 2007 (2.1%) regarding 2006 (2.7%). This prevision is based on the expected moderation of internal consumption, since it is considered that the investment will continue to be relatively dynamic. Regarding inflation, the same is projected to be at 0.7% in 2007, which implies a slight increase regarding the foreseen for 2006 (0.3%). On the other hand, in order to consolidate macroeconomic stability, the IMF considers that the authorities of that country should strengthen fiscal discipline through an increase of the consumer tax and the widening of the tributary base of the income tax.

In the emerging economies of Asia, the regional economic growth is projected to be around 8.2% for 2007, percentage lesser to the projected for 2006 (8.3%). Said behavior will continue to be influenced by the dynamism of the production of the People's Republic of China and India, whose growth rates for 2007 are estimated at 10.0% and 7.3% (10.0% and 8.3% for 2006), respectively. The inflation for this region is foreseen to be at 3.5% in 2007 (3.6% in 2006). In the People's Republic of China, as well as for that foreseen for 2006, a growth of investment as well as net exportations will continue promoting economic growth; while the deceleration of growth estimated for India, could be attributed to the restrictive monetary management implemented for the Reserve Bank of said country. On the other hand, for this region an inflation of 3.5% in 2007 is projected, percentage lower to the 3.6% foreseen for



2006. In the case of the People's Republic of China inflation is expected to be at 2.2% in 2007 (1.5% for 2006). In India, the inflation foreseen for 2007 is of around 5.3% (5.6% for 2006). In both countries, the monetary policy has been restrictive and it is expected that for 2007 it will continue with the same orientation, with the end of abating the inflationary pressures generated by the strength of the aggregate demand as well as by the high price of oil and its derivatives.

In emerging economies and developing countries a growth rate of 7.2% is expected for 2007 (7.3% for 2006). This economic dynamism would be sustained in substantial increases of productivity, especially work productivity. To consolidate this growth, the countries must continue to design economic policies destined to reducing the vulnerability of its economies destined toward reducing the vulnerability of its economies regarding the international environment. The estimated inflation for this group of countries would be 5.0% for 2007, percentage slightly below that of 2006 (5.2%). It is worth indicating that the price stability in this group of countries has been generated by the greater macroeconomic discipline, especially in the monetary field.

For the Independent States Community a growth of 6.5% is projected for 2007, percentage lower to 7.0% foreseen for 2006. The slight deceleration in the projected growth for this region could be attributed to the probable deterioration of the exchange of terms of some countries that integrate this region, since it foresees a reduction in the price of steel and an increase in the price of gas, which would particularly affect Ukraine. On the other hand, for 2007 an inflation of 9.3% is foreseen, lower to the foreseen for 2006 (9.6%).

The perspectives for the Middle East continue to be favorable. In effect, for 2007 a 5.4% growth is foreseen, slightly lower to the 5.8% projected for 2006. The strength of expected economic growth in this region would be sustained by the expectations on the evolution foreseen of the oil market. Although the increase in the general level of prices has controlled this region, for 2007 it is expecting an inflation of 7.9%, percentage higher to the 7.1% projected for 2006. It is worth indicating that the increase of inflation in this group of countries are influenced by the increase of prices foreseen in the



Islamic Republic of Iran, whose prognosis for 2007 is of 15.0% (14.0% for 2006).

As to the Western Hemisphere<sup>10</sup>, it is expected that the economic growth will continue, therefore the projected growth by the IMF for the region in 2007 will be of 4.2%, percentage slightly lower to the foreseen for 2006 (4.8%). It is considered that the regional growth will be sustained by the strength of the internal and external demands. It is important to point out that the inflation is controlled through disciplined macroeconomic policies; especially the monetary policy that has been successful in anchoring the expectations of economic agents. For 2007 an inflation prognosis of 5.2%, is lower than the foreseen for 2006 (5.6%). In the particular case of Central America, a growth rate of 4.4% for 2007 is estimated, prognosis lower to the present year (4.8%). This reflects the fact that a reduction in the economic growth of the United States of America is expected, which is the main commercial partner of the region. On the other hand, the consolidation of benefits from DR-CAFTA is expected to positively influence in the economic agents expectations and impulse private investment. For 2007 an inflation of 6.3% in Central America is projected, lower to the foreseen for 2006 (7.4%).

In Africa an economic growth for 2007 is expected to be at 5.9%, which will surpass the previsions of 5.4% made for 2006. This economic dynamism will allow that for 2007 will continue with optimistic perspectives of growth for the Sub-Sahara area, in the order of 6.3% (5.2% en 2006). In the projections for these countries, the contribution of the oil exporting countries is highlighted, as well as the recovery of the oil production in Nigeria and the opening of new oil fields in Angola and Equatorial New Guinea. Also, although in lesser degree, also for the non-oil producing countries of this region is expecting a positive evolution of economic growth basically due to the rise in prices of some of the primary exportation products, especially coffee. On the other hand, for 2007 the

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<sup>10</sup> According to the IMF, within the concept of "Western Hemisphere" includes the following countries: Antigua and Barbados, Argentina, The Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Dutch Antilles, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Surinam, Trinidad and Tobago, Uruguay and Venezuela.



inflation in the region is expected to be 10.6% (9.9% for 2006), whereas for the Sub-Sahara region an inflation of 12.6% is projected (11.7% for 2006).

Among the risks to consolidate the projected global growth for 2007, the possibility of an intensification of inflationary pressures in the main economies of the world are highlighted, which could include the central banks and implement restrictive monetary policies that will influence in world economic growth. The case of the United States of America reviews particular importance, due to the fact that this is the main economy of the world and the same has had a decrease in the housing market, therefore a raise in the interest rate to contain inflation could lessen growth in said economy, which would negatively affect world growth. Another of the risks the world economic dynamism is exposed to is the volatility of the international oil price. Although an observed rise in said price has been generated by the growing world demand of crude oil, not discarding an increase in the international price, generated by the intensification of political problems in the Middle East and the ethnic tension in Nigeria.

Regarding world commerce of goods and services, the foreseen for 2007 indicates a global commercial flow, when going from 8.9% in 2006 to 7.6% in 2007. This deceleration of world commerce will be associated to lesser world economic growth and, particularly, to the reduction of the dynamism of the United States of America's economy, which is the main economy in the world.



**ECONOMIC GROWTH AND INFLATION  
PER SELECTED REGION AND COUNTRY  
EXPECTATIONS FOR 2006 AND 2007  
(Percentual Variation)**

<b>ECONOMIC GROWTH</b>	<b>2006</b>	<b>2007</b>
World economy	5.1	4.9
Advanced economies	3.1	2.7
United States of America	3.4	2.9
Euro area	2.4	2.0
Japan	2.7	2.1
Emerging economies of Asia*	8.3	8.2
People's Republic of China	10.0	10.0
India	8.3	7.3
Emerging economies and developing countries	7.3	7.2
Western Hemisphere (Latin America and the Caribbean)	4.8	4.2
Argentina	8.0	6.0
Chile	5.2	5.5
Mexico	4.0	3.5
Brazil	3.6	4.0
Central America	4.8	4.4
Middle East	5.8	5.4
Community of Independent States	6.8	6.5
Russia	6.5	6.5
Central Europe and the East	5.3	5.0
Africa	5.4	5.9
Sub-Sahara	5.2	6.3
Volume of Commerce	8.9	7.6
<b>INFLATION</b>		
Advanced economies	2.6	2.3
United States of America	3.6	2.9
Area of the Euro	2.3	2.4
Japan	0.3	0.7
Emerging economies of Asia*	3.6	3.5
People's Republic of China	1.5	2.2
India	5.6	5.3
Emerging economies and developing countries	5.2	5.0
Western Hemisphere (Latin America and the Caribbean)	5.6	5.2
Argentina	12.3	11.4
Chile	3.5	3.1
Mexico	3.5	3.3
Brazil	4.5	4.1
Central America	7.4	6.3
Middle East	7.1	7.9
Community of Independent States	9.6	9.3
Russia	9.7	8.5
Central Europe and the East te	5.3	4.6
Africa	9.9	10.6
Sub-Sahara	11.7	12.6

\* Includes Asia in development, the recently industrialized economies of Asia and Mongolia.

Source: IMF. World Economic Outlook, September 2006.



## **2. Of the payment balance for 2007**

In the context of perspectives of commented world economy, the payment balance of Guatemala for 2007 foresees an increase in the net international monetary reserves for US\$100.0 million, since the surplus balance of capital and financial account, of US\$1,751.6 million, would be enough to finance the deficit in projected current account for the mentioned year, which would be of around US\$1,651.6 million, equivalent to 4.3% of the gross domestic product (4.4% for 2006).

Regarding the FOB value of exportations, this last would be at US\$4,115.3 million, greater by US\$404.4 million (10.9%) to the estimated for 2006. Said result would be determined by the increase in the value of exportations of other exportation products (to Central America and the rest of the world) for US\$377.6 million (15.7%). Of said amount, the exportations of Central America would grow by US\$222.4 million (13.8%) and those that are destined to the rest of the world would increase to US\$155.2 million to (19.4%).

The referred increase in the value of exportations also explains the dynamism in the value of exportations of the main exportation products for US\$26.8 million (2.1%). Said increase would be partly explained by a rise in the value of coffee exportations, when going from US\$443.1 million in 2006 to US\$491.6 million in 2007, mainly as a consequence of the exported volume would be of 4,750.0 thousand quintals, higher by 561.0 thousand quintals (13.4%) regarding the estimated in 2006. As to the exported value of sugar, it is estimated that it be located at US\$267.3 million, less by US\$17.1 million (6.0%) regarding 2006, as a result of the decrease in the median price of exportation.

In the case of banana, the exported value would be expected to be at US\$271.4 million, higher by US\$31.1 million (12.9%) to the estimated value for 2006. This result would be basically explained by an increase in the exportation, which would go from 22,816.4 thousand quintals in 2006 to 25,250.0 thousand quintals in 2007. Last, regarding oil, a decrease is expecting a decrease in the exportation value, when going from US\$254.6 million in 2006 to US\$208.3 million in 2007, mainly as a result of the behavior foreseen of the international price of crude oil.



On the other hand, the CIF value of importations would be at US\$11,160.8 million, greater by US\$1,249.7 million (12.6%) to the estimated value for 2006. Said result would be mainly associated to the projected growth rhythm of the economic activity for 2007 (5.1%). In the value of importations the increase in the following would be highlighted: raw material and intermediate products (23.3%); machinery, equipment and tools (14.1%); consumer goods (10.8%); and construction material (7.2%).

As a result of the commerce projections for Guatemala for 2007, the commercial balance will register a deficit of US\$7,045.5 million, greater by US\$845.3 million (13.6%) to the estimated value for 2006.

As to the services balance, a surplus balance is foreseen of US\$621.7 million, greater by US\$58.0 million (10.3%) regarding the surplus foreseen for 2006, mainly due to the increase in the non-factorial services income, associated to the increase in the foreseen surplus in the tourism and travel headings (9.5%) and in the miscellaneous services, that include transformation goods –multures- (10.8%).

The current transfers, on the other hand, are expected to register net income for US\$4,772.2 million, greater by US\$669.1 million (16.3%) to the estimated for 2006, due to the fact that important income is foreseen due to family remittances.

Regarding capital and financial accounts, would expect a surplus balance of US\$1,751.6 million, lower by US\$81.8 million (4.5%) to the estimated value for 2006. In said result the reduction in the official and banking capital for US\$151.7 million was highlighted, due to lesser disbursements due to external indebteding contracts. It would be expected that the surplus balance of the private capital account to increase in US\$222.1 million (16.3%), mainly due to the expected increase in direct foreign investment, associated in good measure to the impulse of the DR-CAFTA.

Regarding the capital transfers, these would decrease by US\$152.2 million (55.9%), US\$120.0 million, mainly due to the normalization of the flow of said transfers, derived from the fact that in 2006 these increased, due to the negotiated agreement that allowed the cancellation of the debt that *Corporación*





*Financiera Nacional -CORFINA-* had with *Banco Bilbao Vizcaya Argentaria - BBVA-* and with *Compañía Española de Seguros de Crédito a la Exportación, S.A. Compañía de Seguros y Reaseguros -CESCE-* from Spain due to credit granted in 1980 for the financing of the purchase of a manufacturing plant for paper and cellulose paste and a sawmill for *Celulosas de Guatemala, S.A. - CELGUSA-*.

Derived from the behavior of current account and capital and financial accounts it would be expected, as was indicated, and of net international monetary reserves for US\$100.0 million. With the projected increase in the level of said reserves as well as in the importation of goods, the number of months of goods importations that can be financed with international monetary reserves would be of 4.0 (4.4 in 2006), level that would continue to reflect a solid external position. Even if we deduce the obligations in short term of the central government in US dollars (proof of sensibility), it would still be over the limit by international financial organisms, since these would be around 3.3 months of goods importations.

The level of net international monetary reserves, to December 31, 2007, would be at US\$4,182.4 million, equivalent to 7.7 times the amount of the service of the external public debt for a year, indicator that would also denote the solidity of the external position of the country. If the other monetary variables are related, it would be estimated that they would represent 1.3 times the monetary base, whereas the net international monetary reserves as a percentage of the monetary supply in the ample sense (M2) would represent 33.6% to December 31, 2007, which would suggest that the country count on a reasonable margin to cover the monetary obligation converted to foreign currency. Another indicator of the external position of the country would be given due to the relation of the level of the net international monetary reserves regarding the sum of the deficit in current account of the payment balance and of the external public debt to a year, which result would indicate that the level of net international monetary reserves estimated for the end of 2007 could cover up to 2.2 of the referred obligations.



## PAYMENTS BALANCE

YEARS 2006 - 2007

-In millions of US dollars-

CONCEPT	2006 <sup>ae/</sup>	2007 <sup>py/</sup>	Variations	
			Absolutes	Relatives
<b>I. CURRENT ACCOUNT (A+B+C) <sup>1/</sup></b>	<b>-1,533.4</b>	<b>-1,651.6</b>	<b>-118.2</b>	<b>7.7</b>
A. COMMERCIAL BALANCE	<b>-6,200.2</b>	<b>-7,045.5</b>	<b>-845.3</b>	<b>13.6</b>
1. FOB Exportations	3,710.9	4,115.3	404.4	10.9
Principal Products	1,299.0	1,325.8	26.8	2.1
Other Products	2,411.9	2,789.5	377.6	15.7
2. Importations CIF	9,911.1	11,160.8	1,249.7	12.6
B. SERVICES	<b>563.7</b>	<b>621.7</b>	<b>58.0</b>	<b>10.3</b>
1. Factorials, Net	-371.2	-404.0	-32.8	8.8
2. Non Factorials, Net <sup>2/</sup>	934.9	1,025.7	90.8	9.7
C. CURRENT TRANSFERS (Net)	4,103.1	4,772.2	669.1	16.3
<b>II. CAPITAL AND FINANCIAL ACCOUNT (A+B+C)</b>	<b>1,833.4</b>	<b>1,751.6</b>	<b>-81.8</b>	<b>-4.5</b>
A. CAPITAL TRANSFERS	272.2	120.0	-152.2	-55.9
B. OFFICIAL AND BANKING CAPITAL ACCOUNT	197.6	45.9	-151.7	-76.8
C. PRIVATE CAPITAL ACCOUNT <sup>3/</sup>	1,363.6	1,585.7	222.1	16.3
<b>III. PAYMENT BALANCE ACCOUNT</b>	<b>300.0</b>	<b>100.0</b>		
Net International Monetary Reserves (- increase)	<b>-300.0</b>	<b>-100.0</b>		

<sup>1/</sup> Current Balance account/ GDP = -4.4% for 2006 and -4.3% for 2007

<sup>2/</sup> Includes amounts for US\$335.0 millions for 2006 and US\$368.5 millions for 2007

<sup>3/</sup> Include errors and omissions

<sup>ae/</sup> Numbers estimates

<sup>py/</sup> Projected numbers

### 3. Of the payment balance for 2008

Taking into account the tendency of world economy, in the payment balance of Guatemala for 2008 presents a scenario in which an increase of net international monetary reserves is estimated for US\$225.0 million, since the balance surplus of the capital and financial accounts, of US\$1,984.6 million, would be enough to finance the deficit in current account projected for the



mentioned year, which would be at US\$1,759.6 million, equivalent to 4.2% of the GDP (4.3% for 2007).

Regarding the FOB value of exportations, this last was at US\$4,578.2 million, greater by US\$462.9 million (11.2%) to the projected for 2007. Said result would be determined by the increase in the value of exportations of other products of exportations (to Central America and the rest of the world) for US\$445.4 million (16.0%). Of said amount, the exportations of Central America would grow by US\$264.3 million (14.4%) and of the other products that are destined to the rest of the world, would be increasing by US\$181.1 million (19.0%). Also, the mentioned amount in the value of exportations of FOB would also be explained by the increase foreseen in the value of exportations of the main exportation products for US\$17.5 million (1.3%).

Regarding the CIF value of importations, this would be located at US\$12,500.1 million, greater by US\$1,339.3 million (12.0%) regarding 2007. Said result would be mainly associated to the growth rhythm projected of economic activity for 2008 (5.2%). In the value of the importations would highlight the increase in the following headings: raw material and intermediate products (17.5%); machinery, equipment and tools (14.9%); construction material (12.2%); and, consumer goods (10.4%).

As a result of the projections of Guatemalan commerce for 2008, the commercial balance would register a deficit of US\$7,921.9 million, amount greater by US\$876.4 million (12.4%) to the projected for 2007.

As to the services balance, a surplus balance is foreseen of US\$638.6 million, amount greater by US\$16.9 million (2.7%) regarding the projected surplus for 2007, mainly due to the amount in the non-factorial services income, associated to the increase in the surplus foreseen in the headings of tourism and travel (12.3%) and in the miscellaneous services, that include transformation goods -culture- (9.4%).

The current transfers, on the other hand, would expect to register net income for US\$5,523.7 million, greater by US\$751.5 million (15.7%) to the projected for 2007, mainly due to the prognosis of continued dynamism of foreign currency income due to family remittances.



Regarding the capital and financial account would expect a surplus balance of US\$1,984.6 million, greater by US\$233.0 million (13.3%) to the projected for 2007. In said result the increase in private capital account for US\$334.2 million (21.1%) was highlighted, due to the fact that the continued dynamism is foreseen in the heading of direct foreign investment. On the other hand, a decrease in the surplus balance in official and banking capital account for US\$198.7 million are highlighted, as a result of greater amortizations regarding the disbursements foreseen, therefore said balance would be in a deficit position of US\$45.3 million.

Regarding the capital transfers, these will decrease by US\$10.0 million (8.3%) when located at US\$110.0 million.

Parting from the result of current capital and financial account, an increase of net international monetary reserves of US\$225.0 million would be expected, as was indicated. It is worth indicating that with the projected increase in the goods importations, the number of months of goods that can be financed for importations would be of 3.8 (4.0 for 2007), which would be over the level of 3.0 months of goods importations suggested by international financial organisms.



## PAYMENTS BALANCE

YEARS 2007 - 2008

-In millions of US dollars-

CONCEPT	2007 <sup>py/</sup>	2008 <sup>py/</sup>	Variations	
			Absolutes	Relatives
<b>I. CURRENT ACCOUNT (A+B+C) <sup>1/</sup></b>	<b>-1,651.6</b>	<b>-1,759.6</b>	<b>-108.0</b>	<b>6.5</b>
A. COMMERCIAL BALANCE	-7,045.5	-7,921.9	-876.4	12.4
1. FOB Exportations	4,115.3	4,578.2	462.9	11.2
Principal Products	1,325.8	1,343.3	17.5	1.3
Other Products	2,789.5	3,234.9	445.4	16.0
2. Importations CIF	11,160.8	12,500.1	1,339.3	12.0
B. SERVICES	621.7	638.6	16.9	2.7
1. Factorials, Net	-404.0	-492.7	-88.7	22.0
2. Non Factorial, Net <sup>2/</sup>	1,025.7	1,131.3	105.6	10.3
C. CURRENT TRANSFERS (Net)	4,772.2	5,523.7	751.5	15.7
<b>II. CAPITAL AND FINANCIAL ACCOUNT (A+B+C)</b>	<b>1,751.6</b>	<b>1,984.6</b>	<b>233.0</b>	<b>13.3</b>
A. CAPITAL TRANSFERS	120.0	110.0	-10.0	-8.3
B. OFFICIAL AND BANKING CAPITAL ACCOUNT	45.9	-45.3	-91.2	-198.7
C. PRIVATE CAPITAL ACCOUNT <sup>3/</sup>	1,585.7	1,919.9	334.2	21.1
<b>III. PAYMENTS BALANCE</b>	<b>100.0</b>	<b>225.0</b>		
Net International Monetary Reserves (- increase)	-100.0	-225.0		

<sup>1/</sup> Current Balance Account/ GDP = -4.3% for 2007 and -4.2% for 2008

<sup>2/</sup> Includes multires for US\$368.5 million for 2007 and US\$405.4 million for 2008

<sup>3/</sup> Includes errors and omissions

<sup>py/</sup> Projected numbers

## D. OF THE FISCAL SECTOR

### 1. Estimation of the budgetary execution for 2007

Derived due to the fact that the Congress of the Republic did not approve the General Budget of Income and Expenditure of the State for the 2007 Fiscal Year, the budget that will cover 2007 is the current budget, so that the fiscal perspectives will have to adjust to the same. Based on this and with the



purpose of having an ample panorama of the possible performance of public finance for 2007, following are two scenarios that contain projections of income, expense and financing sources for the following years.

**a) Scenario 1**

This scenario is based on the information provided by the *Ministerio de Finanzas Públicas* [Roughly equivalent to the Department of the Treasury of the USA] on the new estimation of the financial situation of the Central Government for 2007. Regarding the current income and donations, an equal amount is expected when considering the income budget project has not been approved; also, in matter of expense, said ministry considers a lower level than the contemplated in the budget project for 2007. Regarding financing for the budget, it is expected no internal financing will be used through a negotiation of the Treasury bonds, therefore, only the programmed maturity for 2007 will be paid; in the same manner, a lesser use of external resources is expected regarding the contemplated in the budget project for 2007; therefore, the greater component for financing the government deficit will come from the use of deposited resources in the Central Bank.

According to estimations of the *Ministerio de Finanzas Públicas* [Roughly equivalent to the Department of the Treasury of the USA], the budgetary execution will register a growth in total income of Q3,296.5 million (11.6%), regarding the estimation of the 2006 closing, while the expense will increase by Q2,145.1 million (6.6%) regarding the estimation of closing of 2006, highlighting the greater expense of operation, which will grow by 10.2% regarding the closing estimated for 2006. As a result, the fiscal deficit will be at Q2,762.8 million (equivalent to 0.9% of the GDP). As to deficit financing, the net internal financing will be negative by Q1,899.6 million, less by Q4,503.1 million regarding the closing estimation of 2006; also, the use of net external financing for Q859.6 million is foreseen, as a result of disbursements of Q3,509.7 million and amortizations for Q2,650.1 million. Last, the use of bill resources for Q3,802.8 million is estimated, which would constitute a source of monetization



of internal origin, which would have its greatest impact in the third and fourth quarters of 2007, as a result of a greater programmed expense of said quarters.

**GOBIERNO CENTRAL  
EJECUCIÓN PRESUPUESTARIA  
AÑO: 2006 - 2007  
- Millones de quetzales -**

CONCEPTO	2006 <sup>e/</sup>	TRIMESTRE				2007 <sup>py/</sup>	VARIACIONES	
		I	II	III	IV		Absoluta	Relativa
<b>I. INGRESOS Y DONACIONES</b>	<b>28,453.2</b>	<b>7,571.1</b>	<b>7,698.2</b>	<b>8,209.5</b>	<b>8,270.9</b>	<b>31,749.7</b>	<b>3,296.5</b>	<b>11.6</b>
<b>A. Ingresos (1+2)</b>	<b>28,209.7</b>	<b>7,526.1</b>	<b>7,486.8</b>	<b>7,813.2</b>	<b>7,918.8</b>	<b>30,744.9</b>	<b>2,535.2</b>	<b>9.0</b>
1. Ingresos Corrientes	28,173.2	7,521.0	7,478.4	7,808.5	7,910.3	30,718.2	2,545.0	9.0
a. Tributarios	26,819.9	7,209.6	7,078.9	7,457.0	7,455.2	29,200.7	2,380.8	8.9
b. No Tributarios	1,353.3	311.4	399.5	351.5	455.1	1,517.5	164.2	12.1
2. Ingresos de Capital	36.5	5.1	8.4	4.7	8.5	26.7	-9.8	-26.8
<b>B. Donaciones</b>	<b>243.5</b>	<b>45.0</b>	<b>211.4</b>	<b>396.3</b>	<b>352.1</b>	<b>1,004.8</b>	<b>761.3</b>	<b>312.6</b>
<b>II. TOTAL DE GASTOS</b>	<b>32,367.4</b>	<b>7,051.8</b>	<b>7,265.9</b>	<b>9,403.7</b>	<b>10,791.1</b>	<b>34,512.5</b>	<b>2,145.1</b>	<b>6.6</b>
<b>A. De Funcionamiento</b>	<b>21,205.9</b>	<b>5,388.7</b>	<b>5,244.8</b>	<b>6,567.4</b>	<b>6,162.6</b>	<b>23,363.5</b>	<b>2,157.6</b>	<b>10.2</b>
<b>B. De Capital</b>	<b>11,161.5</b>	<b>1,663.1</b>	<b>2,021.1</b>	<b>2,836.3</b>	<b>4,628.5</b>	<b>11,149.0</b>	<b>-12.5</b>	<b>-0.1</b>
<b>III. SUPERÁVIT O DÉFICIT PRESUPUESTAL</b>	<b>-3,914.2</b>	<b>519.3</b>	<b>432.3</b>	<b>-1,194.2</b>	<b>-2,520.2</b>	<b>-2,762.8</b>	<b>1,151.4</b>	<b>-29.4</b>
<b>IV. FINANCIAMIENTO NETO</b>	<b>3,914.2</b>	<b>-519.3</b>	<b>-432.3</b>	<b>1,194.2</b>	<b>2,520.2</b>	<b>2,762.8</b>	<b>-1,151.4</b>	<b>-29.4</b>
A. Interno	2,603.5	-806.3	-287.9	-750.9	-54.5	-1,899.6	-4,503.1	-173.0
B. Externo	2,946.9	235.3	1,655.1	-951.6	-79.2	859.6	-2,087.3	-70.8
C. Variación de Caja (-) aumento (+) disminución	-1,636.2	51.7	-1,799.5	2,896.7	2,653.9	3,802.8	5,439.0	-332.4

Fuente: Ministerio de Finanzas Públicas

e/ Cifras estimadas

py/ Cifras proyectadas

Carga tributaria

Déficit/PIB

10.4  
-1.5

9.9  
-0.9

## b) Scenario 2

In that scenario the *Ministerio de Finanzas Públicas* [Roughly equivalent to the Department of the Treasury of the USA] is supposed to make a roll-over in *quetzales* in the internal market for the equivalent to the maturity of the internal bonus debt. In that sense, the income as well as the total expense, are equal to those of scenario 1, therefore the fiscal indicators do not have variation. However, the composition of the deficit financing sources does. In effect, it is foreseen that a net internal financing equal to zero, since the total of maturity and amortizations programmed would be negotiated; for said reason, the negotiations of the Treasury Bonds would be for Q1,899.6 million (Q1,305.8 million due to maturity and Q593.8 million of amortizations, this last amount is referred to the issue of Treasury Bonds to cover the net deficiency of the Central Bank corresponding to the 2004 accounting year). As to external financing, the same would be equal to the foreseen in scenario 1.



Derived from the above, a use of deposited resources in the *Banco de Guatemala* for Q1,903.2 million is estimated, less than that of scenario 1 (Q3,802.8 million), which would constitute a source of monetization of internal origin, which would have its greater impact in the third and fourth quarters of 2007, as a result of greater programmed expense in said trimesters. It is worth pointing out that in said scenarios a fiscal deficit of 0.9% of the GDP and a tributary charge of 9.9% is foreseen.

GOBIERNO CENTRAL  
EJECUCIÓN PRESUPUESTARIA  
AÑO: 2006 - 2007  
- Millones de quetzales -

CONCEPTO	2006 <sup>e/</sup>	TRIMESTRE				2007 <sup>py/</sup>	VARIACIONES	
		I	II	III	IV		Absoluta	Relativa
I. INGRESOS Y DONACIONES	28,453.2	7,571.1	7,698.2	8,209.5	8,270.9	31,749.7	3,296.5	11.6
A. Ingresos (1+2)	28,209.7	7,526.1	7,486.8	7,813.2	7,918.8	30,744.9	2,535.2	9.0
1. Ingresos Corrientes	28,173.2	7,521.0	7,478.4	7,808.5	7,910.3	30,718.2	2,545.0	9.0
a. Tributarios	26,819.9	7,209.6	7,078.9	7,457.0	7,455.2	29,200.7	2,380.8	8.9
b. No Tributarios	1,353.3	311.4	399.5	351.5	455.1	1,517.5	164.2	12.1
2. Ingresos de Capital	36.5	5.1	8.4	4.7	8.5	26.7	-9.8	-26.8
B. Donaciones	243.5	45.0	211.4	396.3	352.1	1,004.8	761.3	312.6
II. TOTAL DE GASTOS	32,367.4	7,051.8	7,265.9	9,403.7	10,791.1	34,512.5	2,145.1	6.6
A. De Funcionamiento	21,205.9	5,388.7	5,244.8	6,567.4	6,162.6	23,363.5	2,157.6	10.2
B. De Capital	11,161.5	1,663.1	2,021.1	2,836.3	4,628.5	11,149.0	-12.5	-0.1
III. SUPERÁVIT O DÉFICIT PRESUPUESTAL	-3,914.2	519.3	432.3	-1,194.2	-2,520.2	-2,762.8	1,151.4	-29.4
IV. FINANCIAMIENTO NETO	3,914.2	-519.3	-432.3	1,194.2	2,520.2	2,762.8	-1,151.4	-29.4
A. Interno	2,603.5	0.0	0.0	0.0	0.0	0.0	-2,603.5	-100.0
B. Externo	2,946.9	235.3	1,655.1	-951.6	-79.2	859.6	-2,087.3	-70.8
C. Variación de Caja (-) aumento (+) disminución	-1,636.2	-754.6	-2,087.4	2,145.8	2,599.4	1,903.2	3,539.4	-216.3

Fuente: Ministerio de Finanzas Públicas

e/ Cifras estimadas

py/ Cifras proyectadas

Carga tributaria

Déficit/PIB

10.4

-1.5

9.9

-0.9

## 2. Estimation of the budgetary execution for 2008

To make estimations for the budget execution for 2008, the 2007-2009 multi-annual budget was taken into account, contained in the General Budget of Income and Expenditure of the State for the 2007 Fiscal Year, in that order, according to the *Ministerio de Finanzas Públicas* [Roughly equivalent to the Department of the Treasury of the USA], the multi-annual budget was formulated taking into account the guidelines contained in the Peace Agreements, the Fiscal Pact and the Social and Economic Reactivation Program. For said reason, the assignments directed toward social expense, are highlighted, also highlighting the budget destined for civil and social security; to education and health services; a network of highway structures and





housing programs. Also, it is estimated that an improvement of income collection will be based on the effects derived from the law of “Legal Dispositions for the Strengthening of the Tributary Administration”, which purpose is to avoid tributary evasion and avoidance, establishing clear norms that allow the generality, equity and certainty of an imposing juristic frame. In that sense, the budgetary execution for 2008 will register an increase in the total income of Q2,162.8 million (6.8%) regarding the estimated income for 2007; while the total expense will observe a growth of Q5,160.4 million (15.0%) regarding 2007. In that order of ideas, the fiscal deficit will be at Q5,760.4 million (equivalent to 1.8% of the GDP). Regarding the financing deficit, this will be covered by net internal financing for an amount of Q5,707.6 million, greater by Q7,607.2 million to that of 2007 (scenario 1). Regarding the net external financing, this would be negative by Q52.6 million, less by Q912.2 million to that of 2007. Last, the use of till resources for Q105.4 million is foreseen.

**GOBIERNO CENTRAL**  
**EJECUCIÓN PRESUPUESTARIA**  
**AÑO: 2007 - 2008**  
**- Millones de quetzales -**

CONCEPTO	2007 py/	TRIMESTRE				2008 py/	VARIACIONES	
		I	II	III	IV		Absoluta	Relativa
<b>I. INGRESOS Y DONACIONES</b>	<b>31,749.7</b>	<b>7,554.2</b>	<b>8,710.8</b>	<b>8,197.3</b>	<b>9,450.2</b>	<b>33,912.5</b>	<b>2,162.8</b>	<b>6.8</b>
<b>A. Ingresos (1+2)</b>	30,744.9	7,406.4	8,593.6	8,092.3	9,268.9	33,361.2	2,616.3	8.5
<b>1. Ingresos Corrientes</b>	30,718.2	7,398.8	8,588.6	8,086.9	9,258.9	33,333.2	2,615.0	8.5
<b>a. Tributarios</b>	29,200.7	7,168.6	8,278.3	7,848.4	8,594.8	31,890.1	2,689.4	9.2
<b>b. No Tributarios</b>	1,517.5	230.2	310.3	238.5	664.1	1,443.1	-74.4	-4.9
<b>2. Ingresos de Capital</b>	26.7	7.6	5.0	5.4	10.0	28.0	1.3	4.9
<b>B. Donaciones</b>	1,004.8	147.8	117.2	105.0	181.3	551.3	-453.5	-45.1
<b>II. TOTAL DE GASTOS</b>	<b>34,512.5</b>	<b>8,411.1</b>	<b>8,580.9</b>	<b>10,117.9</b>	<b>12,563.0</b>	<b>39,672.9</b>	<b>5,160.4</b>	<b>15.0</b>
<b>A. De Funcionamiento</b>	23,363.5	6,327.3	6,365.7	7,036.6	7,732.3	27,461.9	4,098.4	17.5
<b>B. De Capital</b>	11,149.0	2,083.8	2,215.2	3,081.3	4,830.7	12,211.0	1,062.0	9.5
<b>III. SUPERÁVIT O DÉFICIT PRESUPUESTAL</b>	<b>-2,762.8</b>	<b>-856.9</b>	<b>129.9</b>	<b>-1,920.6</b>	<b>-3,112.8</b>	<b>-5,760.4</b>	<b>-2,997.6</b>	<b>108.5</b>
<b>IV. FINANCIAMIENTO NETO</b>	<b>2,762.8</b>	<b>856.9</b>	<b>-129.9</b>	<b>1,920.7</b>	<b>3,112.7</b>	<b>5,760.4</b>	<b>2,997.6</b>	<b>108.5</b>
<b>A. Interno</b>	-1,899.6	1,578.5	1,840.6	887.4	1,401.1	5,707.6	7,607.2	-400.5
<b>B. Externo</b>	859.6	-13.2	-13.2	-13.2	-13.0	-52.6	-912.2	-106.1
<b>C. Variación de Caja</b>	3,802.8	-708.4	-1,957.3	1,046.5	1,724.6	105.4	-3,697.4	-97.2
(-) aumento (+) disminución								

Fuente: Ministerio de Finanzas Públicas

py/ Cifras proyectadas

Carga tributaria

Déficit/PIB

9.9

-0.9

9.9

-1.8



## **E. OF THE MONETARY SECTOR**

For 2007, a disciplined monetary policy must continue to be applied that in the framework of explicit inflation goals scheme and through the preferred use of indirect instruments of monetary control, strengthens the efficiency of the monetary management of the *Banco de Guatemala*. Said monetary policy should be centered in the consecution of the stability in the general level of prices, therefore, in a framework of exchange flexibility, the inflation rate should continue to be the nominal anchor of the monetary policy.

### **1. Monetary sector for 2007**

The projections of the monetary sector for 2007 are consistent, on the one hand, with the inflation goal foreseen (5% +/- 1 percentage point) and with the growth of real activity, that is estimated in 5.1% and, on the other hand, with the estimations of the external and fiscal sectors (adjusted according to the General Budget of Income and expense of the Central Government approved for 2006). Based on this, the demand of monetary issue for 2007 would register an inter-annual growth rate of around 11.2% regarding the balance estimated of said variable at the closing of 2006. In that context, the total payment means (payment means in national currency plus payment means in foreign currency) could grow between 15% and 17%, whereas the banking credit in the private sector would grow between 21% and 23%, both in inter-annual terms. Based on this, and taking into account that two fiscal scenarios were presented, therefore two monetary scenarios were presented, which are detailed as follows:

#### **a) Scenario 1**

In this scenario, the fiscal component corresponds to scenario 1 of the estimation of the budgetary execution for 2007, described. When considering the perspectives of the external sector and of the behavior of the Net Internal Assets –AIN– (for its acronym in Spanish) of the *Banco de Guatemala*, compatible with the estimated demand of monetary issue and with the inflation



goal, would expect that for 2007 a monetary expansion would be generated from an external origin for the equivalent of Q800.0 million, corresponding to an increase of the level of net international monetary reserves for US\$100.0 million. It is worth indicating that the increase of the referred reserves would be mainly explained by disbursements that would be perceived by the Central Government by external loans contracted for around US\$427.0 million<sup>11</sup>, for the estimation of interest, product of the investment of international monetary reserves for US\$182.0 million, supposing that the Central Government would make roll-overs with the Treasury Bonds expressed in foreign currency for US\$180.0 million and by income derived from royalties for oil exploration for US\$87.0 million. On the other hand, expenditures for the amortization of capital and interest would be registered in concept of foreign debt of the public sector for around US\$419.0 million and for the payment of capital and interest for bonus public debt for around US\$352.0 million (includes the amortization of the Treasury bonds placed in 1997 in the international market for US\$150.0 million.)

Taking into account the behavior indicated by the net international monetary reserves, would expect that the Net Internal Assets of the *Banco de Guatemala* show an increase for Q5,889.0 million. Within the AIN of the *Banco de Guatemala* it is estimated that the heading for expenses and products a monetization factor would be constituted for Q392.0 million. It is worth indicating that within this factor the main expenditure is made up of the payment of interest for the monetary stabilization operations. It has also been programmed that due to interest from Treasury Bonds<sup>12</sup>, a sum of around Q83.0 million will be received from interest that the *Ministerio de Finanzas Públicas* [Roughly equivalent to the US Department of the Treasury] was transferred to the *Banco de Guatemala* to cover the net deficiencies of the institution registered in 2003 and in 2004.

On the other hand, for 2007 the deposits of the Central Government in the *Banco de Guatemala* would constitute the main source of internal monetization, which is estimated could reach around Q3,803.0 million this year.

<sup>11</sup> Includes the disbursement programmed for June 2007 for US\$200.0 million of the loan of the Central American Economic Integration Bank –BCIE (for its acronym in Spanish) to finance the “Multi-Sector Program of Investment Strengthening.”

<sup>12</sup> Issued for the long term and market interest rates.



Among the factors of contraction of liquidity of the AIN of the *Banco de Guatemala* would, on the one hand, increase investments in LTDs in the *Banco de Guatemala* on behalf of the rest of the public entities for Q484.0 million and, on the other hand, the increase of the deposits of the system banks in the Central Bank, due to the effect of the expected growth of public deposits in the system banks, which at the same time, would generate that these increase the level of banking legal reserve for Q1,730.0 million.

Consistent with the design and execution of the monetary program, the closing factor of the AIN would be the OEMs. In that sense, and considering the behavior of the monetizing and demonetizing factors, the *Banco de Guatemala* should increase its balance of OEMs by Q1,242.0 million.

When considering the described scenario and the quarterly analysis of the contraction and expansion factors of primary liquidity, for the January to March 2007 period, would expect an increase of the net international monetary reserves for US\$13.0 million (equivalent to Q102.0 million) and a monetization of Q1,334.0 million in the AIN, associated to the programmed maturities of OEMs for Q1,883.0 million and a demonetization for the increase of investments in LTDs for the rest of the public sector in the *Banco de Guatemala* for Q564.0 million, so, in order to maintain the congruency with the demand of the monetary issue programmed, it requires the *Banco de Guatemala* to reduce the OEMs balance for around Q312.0 million.

In the second trimester an expansion of liquidity of external origin would be expected, derived of the increase of net international monetary reserves for US\$167.0 million (equivalent to Q1,335.0 million). Also due to the contraction of liquidity that would generate the increase of deposits of the central government and the banks of the system in the *Banco de Guatemala*, estimating a reduction of the level of OEMs by Q1,098.0 million.

In the third trimester a decrease in the level of net international monetary reserves for US\$34.0 million (equivalent to Q272.0 million) would be expected, and an expansion of liquidity of internal origin for Q3,260.0 million, mainly associated to the use of deposits by the Central Government for Q2,897.0



million, which would imply that the *Banco de Guatemala* increase the balance of OEMs by Q2,361.0 million.

In the fourth trimester a contraction of liquidity of external origin for US\$46.0 million (equivalent to Q365.0 million) is foreseen and an expansion of liquidity of internal origin for Q2,739.0 million, associated to the use of deposits by the central government. On that account and taking into consideration the seasonal increase of the demand of monetary issue, would make an increase in the balance of OEMs for approximately Q292.0 million necessary.

It is worth pointing out that due to the fact that OEMs constitute the adjustment factor of the AIN of the *Banco de Guatemala*, these should correct any deviation that would be presented by the rest of the monetizing factors estimated in the quarterly program for 2007.



**PROGRAMA MONETARIO Y FISCAL 2007**  
Millones de quetzales

Concepto	ESCENARIO 1				TOTAL
	I TRIM	II TRIM	III TRIM	IV TRIM	
<b>CUENTAS FISCALES</b>					
Ingresos	7571	7698	8210	8271	31750
Egresos	7052	7266	9404	10791	34513
Corrientes	5389	5245	6567	6163	23364
Capital	1663	2021	2836	4629	11149
Déficit (% del PIB)	-519	-432	1194	2520	2763 0.9
Financiamiento externo neto	235	1655	-952	-79	860
Financiamiento interno neto	-806	-288	-751	-55	-1899
Variación de Caja	52	-1800	2897	2654	3803
<b>A. FACTORES MONETIZANTES (+) Y DESMONETIZANTES (-)</b>					
<b>I. Reservas Monetarias Internacionales Netas</b>	<b>102</b>	<b>1335</b>	<b>-272</b>	<b>-365</b>	<b>800</b>
En US\$	13	167	-34	-46	100
<b>II. Activos Internos Netos</b>	<b>1334</b>	<b>-789</b>	<b>3260</b>	<b>2739</b>	<b>5889</b>
1. Gobierno central	52	-1800	2897	2654	3803
2. Resto del sector público	-564	-96	-108	284	-484
3. Posición con bancos	-302	-298	-287	-843	-1730
Crédito a bancos	0	0	0	0	0
Reserva bancaria	-302	-298	-287	-843	-1730
4. Otros Activos Netos	266	19	75	279	638
Gastos y productos	144	107	46	95	392
Otros	122	-89	29	184	246
5. Vencimientos de OEMs	1883	1386	683	365	3662
<b>III. CREACIÓN DE LIQUIDEZ</b>	<b>1436</b>	<b>546</b>	<b>2988</b>	<b>2374</b>	<b>6689</b>
<b>B. DEMANDA DE EMISIÓN MONETARIA</b>	<b>-134</b>	<b>257</b>	<b>-56</b>	<b>1717</b>	<b>1785</b>
<b>C. EXCEDENTE ( - ) Ó FALTANTE (+) DE LIQUIDEZ (B-III)</b>	<b>-1570</b>	<b>-288</b>	<b>-3044</b>	<b>-657</b>	<b>-4904</b>
<b>D. COLOCACIÓN DE OEMs</b>	<b>1570</b>	<b>288</b>	<b>3044</b>	<b>657</b>	<b>4904</b>
<b>E. COLOCACIONES NETAS DE OEMs (-) aumento (+) disminución</b>	<b>312</b>	<b>1098</b>	<b>-2361</b>	<b>-292</b>	<b>-1242</b>

**b) Scenario 2**

In this scenario, the fiscal component corresponds to scenario 2 of the estimation of the budgetary execution for 2007 described. In that sense, when considering the perspectives of the external sector and the behavior of the AIN of the *Banco de Guatemala*, compatible with the demand estimated for monetary issue and with the inflation goal, for 2007 would expect, just as in scenario 1, to generate a monetary expansion of external origin for the



equivalent to Q800.0 million, corresponding to an increase in the level of the net international monetary reserves for US\$100.0 million.

Taking into account the behavior indicated of the net international monetary reserves, would expect the AIN of the *Banco de Guatemala* show an increase for Q3,876.0 million. Within the AIN it is estimated that the expenses and products heading would constitute a monetization factor for Q278.0 million.

On the other hand, the deposits of the Central Government in the *Banco de Guatemala* would constitute a source of internal origin monetization, which is estimated to reach around Q1,903.0 million per year.

Among the liquidity contracting factors of the AIN would be, the increase of investments in LTDs in the *Banco de Guatemala* on behalf of the rest of the public sector for Q484.0 million and, on the other hand, the increase of deposits of the system banks in the Central Bank, due to the effect of expected growth of public deposits in the system banks, which at the same time would generate an increase in the level of banking legal reserve for Q1,730.0 million.

Consistent with the design and execution of the monetary program, the closing factor of the AIN would be the OEMs. In that sense, and considering the behavior of the monetizing and demonetizing factors, the *Banco de Guatemala* should reduce the balance of OEMs by Q771.0 million.

When considering the described scenario and the quarterly analysis for the contraction and expansion of primary liquidity factors, for the first trimester would expect an increase of the net international monetary reserves of US\$13.0 million (equivalent to Q102.0 million) and a monetization of Q510 million of the AIN, associated to the combination of programmed maturities of OEMs for Q1,883.0 million; and to the increase of central government deposits in the *Banco de Guatemala* for Q755.0 million, therefore, in order to maintain the congruency with the demand of programmed monetary issue, requires that the *Banco de Guatemala* reduce the balance of OEMs by around Q1,136.0 million.

In the second trimester an expansion of external origin liquidity would be expected, derived of the increase of net international monetary reserves for US\$167.0 million (equivalent to Q1,335.0 million). Also due to the liquidity contraction that would generate the increase of deposits of the central



government and the system banks in the *Banco de Guatemala*, is estimated to reduce the level of OEMs by Q1,412.0 million.

In the third trimester a decrease in the level of the net international monetary reserves for US\$34.0 million (equivalent to Q272.0 million) would be expected and an expansion of internal origin liquidity for Q2,477.0 million, mainly, as a result of the use of central government deposits for Q2,146.0 million, which would imply that the *Banco de Guatemala* increase the balance of OEMs by Q1,578.0 million.

In the fourth trimester a contraction of external origin liquidity is foreseen for US\$46.0 million (equivalent to Q365.0 million) and a liquidity expansion of internal origin for Q2,646.0 million, due to the use of deposits of the Central Government. On this account and considering the seasonal increase of the monetary issue demand, would make an increase necessary in the increase of the balance of OEMs for approximately Q199.0 million.





**PROGRAMA MONETARIO Y FISCAL 2007**  
Millones de quetzales

Concepto	ESCENARIO 2				TOTAL
	I TRIM	II TRIM	III TRIM	IV TRIM	
<b>CUENTAS FISCALES</b>					
Ingresos	7571	7698	8210	8271	31750
Egresos	7052	7266	9404	10791	34513
Corrientes	5389	5245	6567	6163	23364
Capital	1663	2021	2836	4629	11149
Déficit (% del PIB)	-519	-432	1194	2520	2763 0.9
Financiamiento externo neto	235	1655	-952	-79	860
Financiamiento interno neto	0	0	0	0	0
Variación de Caja	-755	-2088	2146	2599	1903
<b>A. FACTORES MONETIZANTES (+) Y DESMONETIZANTES (-)</b>					
<b>I. Reservas Monetarias Internacionales Netas</b>	<b>102</b>	<b>1335</b>	<b>-272</b>	<b>-365</b>	<b>800</b>
En US\$	13	167	-34	-46	100
<b>II. Activos Internos Netos</b>	<b>510</b>	<b>-1103</b>	<b>2477</b>	<b>2646</b>	<b>3876</b>
1. Gobierno central	-755	-2088	2146	2599	1903
2. Resto del sector público	-564	-96	-108	284	-484
3. Posición con bancos	-302	-298	-287	-843	-1730
Crédito a bancos	0	0	0	0	0
Reserva bancaria	-302	-298	-287	-843	-1730
4. Otros Activos Netos	248	-8	43	241	525
Gastos y productos	126	81	14	57	278
Otros	122	-89	29	184	246
5. Vencimientos de OEMs	1883	1386	683	365	3662
<b>III. CREACION DE LIQUIDEZ</b>	<b>612</b>	<b>231</b>	<b>2205</b>	<b>2281</b>	<b>4676</b>
<b>B. DEMANDA DE EMISIÓN MONETARIA</b>	<b>-134</b>	<b>257</b>	<b>-56</b>	<b>1717</b>	<b>1785</b>
<b>C. EXCEDENTE ( - ) Ó FALTANTE (+) DE LIQUIDEZ (B-III)</b>	<b>-746</b>	<b>26</b>	<b>-2261</b>	<b>-564</b>	<b>-2891</b>
<b>D. COLOCACIÓN DE OEMs</b>	<b>746</b>	<b>-26</b>	<b>2261</b>	<b>564</b>	<b>2891</b>
<b>E. COLOCACIONES NETAS DE OEMs (-) aumento (+) disminución</b>	<b>1136</b>	<b>1412</b>	<b>-1578</b>	<b>-199</b>	<b>771</b>

## 2. Monetary Sector for 2008

In order to give continuity to the monetary, foreign exchange rate and credit policy in the framework of the explicit inflation goals, it is estimated convenient to count on the projections of the monetary program for 2008. For the effect, the closing estimation for 2007 for the monetary program contained in scenario 1 was taken into consideration. Said projections are consistent with the inflation goal (4.5% +/- 1 percentage point) and with the growth of the real activity, it is estimated at 5.2%. Based on this, the demand of monetary issue for 2008 will register an inter-annual growth rate of around 10.8% regarding the estimated balance of said variable for 2007. In that context, the total payment means



(payment means in national currency added to the payment means in foreign currency) could grow between 14% and 16%, whereas the banking credit to the private sector would grow between 19% and 21%, both in inter-annual terms.

As it was indicated, it would be expected that for 2008 the net international monetary reserves would increase by US\$225.0 million, which would be equivalent to an external origin monetary expansion for Q1,800.0 million.

Consistent with the above, the AIN should increase around Q2,162.0 million. It is worth indicating that within the AIN it is estimated that the central government decrease its deposits in the *Banco de Guatemala* by around Q105.0 million during the year<sup>13</sup>.

Although there also is a tendency toward the reduction for 2008, the estimated cost of the monetary policy would constitute a monetization source (around Q257.0 million.) It is worth indicating that within this factor the main expenditure would continue to be the payment of interest of the monetary stabilization operations, which is compensated by the income coming from the investment of the international monetary reserves.

On the other hand, the main contraction factor of liquidity of the AIN would be the deposits of the system banks in the Central Bank, due to the expected growth effect of financial intermediation that would allow an increase in the public deposits in the system banks, which at the same time would generate that these increase the banking legal reserve level by Q1,688.0 million.

Consistent with the design and execution of the monetary program, the adjustment factor of the AIN would be the OEMs. In that context and considering the behavior of the monetizing and demonetizing factors, as well as the demand of the monetary issue, the *Banco de Guatemala* should reduce the level of OEMs for around Q1,614.0 million.

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<sup>13</sup> Estimation according to the multi-annual fiscal program contained in the project of the General Budget of income and Expenditure of the State for the 2007 Fiscal Year.



**PROGRAMA MONETARIO Y FISCAL 2008**  
**Millones de quetzales**

Concepto	TOTAL
<b>CUENTAS FISCALES</b>	
Ingresos	33913
Egresos	39673
Corrientes	27462
Capital	12211
Déficit	5760
(% del PIB)	1.8
Financiamiento externo neto	-53
Financiamiento interno neto	5708
Variación de Caja	105
<b>A. FACTORES MONETIZANTES (+) Y DESMONETIZANTES (-)</b>	
<b>I. Reservas Monetarias Internacionales Netas</b>	<b>1800</b>
En US\$	225
<b>II. Activos Internos Netos</b>	<b>2162</b>
1. Gobierno central	105
2. Resto del sector público	-400
3. Posición con bancos	-1688
Crédito a bancos	0
Reserva bancaria	-1688
4. Otros Activos Netos	482
Gastos y productos	257
Otros	225
5. Vencimientos de OEMs	3662
<b>III. CREACIÓN DE LIQUIDEZ</b>	<b>3962</b>
<b>B. DEMANDA DE EMISIÓN MONETARIA</b>	<b>1914</b>
<b>C. EXCEDENTE ( - ) Ó FALTANTE (+) DE LIQUIDEZ (B-III)</b>	<b>-2048</b>
<b>D. COLOCACIÓN DE OEMs</b>	<b>2048</b>
<b>E. COLOCACIONES NETAS DE OEMs (-) aumento (+) disminución</b>	<b>1614</b>



It is worth indicating that the mid-term expectations described are coherent with the fiscal discipline that would be expected through maintaining the balance of the government deposits in the central bank, which would be consolidating the favorable conditions for the macroeconomic stability in the mid and long terms.

## **II. PROPOSAL FOR THE MONETARY, FOREIGN EXCHANGE RATE AND CREDIT POLICY FOR 2007.**

### **A. FUNDAMENTAL OBJECTIVE**

Article 3 of the Organic Law of the *Banco de Guatemala* literally establishes::

**“The *Banco de Guatemala* has as its fundamental objective, to contribute to the creation and maintenance of the most favorable conditions to the orderly development of the national economy, therefore, it will propitiate the monetary, exchange and credit conditions that promote the stability in the general level of prices.”**

### **B. POLICY GOAL**

Taking into account that, according to the legal mandate above-mentioned, the fundamental objective of the *Banco de Guatemala* is materialized as the propitiation of the conditions that promote the stability in the general level of prices, making it appropriate to operate said objective through the establishment of a quantitative inflation goal, whose fixation is one of the most outstanding characteristics of the regimen of explicit inflation goals, monetary scheme that the Monetary Board has decided to implement in Guatemala<sup>14</sup>.

#### **1. Purpose of the inflation goal**

In a scheme of explicit inflation goals, the goal that the monetary authority establishes has the main purpose of constituting the nominal anchor of the monetary policy and, as such, orients the actions of said policy as well as the expectations of the economic agents.

<sup>14</sup> Resolutions JM-160-2004 and JM-185-2005 of the Monetary Board.



In effect, in said scheme, the monetary policy does not have as its objective the exchange rate for national currency regarding one or more foreign currencies, nor does it have one for the growth rate of one or more monetary aggregates. In that context, the actions of the monetary policy are oriented to the consecution of the inflation goal.

On the other hand, the expectations of the economic agents are important to determine the level of prices of real economic activity. When the inflation expectation of economic agents does not coincide with the inflation goal, the consecution of said goal requires greater efforts on behalf of the monetary policy and, usually, greater costs in terms of a lesser growth rate of economic activity and fiscal support to the monetary policy. Therefore, it is desirable that the inflation expectations of economic agents coincide with the inflation goal. This coincidence requires that the inflation goal be realistic in a temporary horizon and, on the other hand, that the conviction that the central bank will activate the monetary policy instruments in the necessary measure to reach the inflation goal (in other words, that the central bank count on enough credibility.)

## **2. The inflation goal in 2006**

According to resolution JM-185-2005, the goal for the inter-annual variation of the consumer price index, for December 2006, is of 6% +/- 1 percentage point. Also, for December 2007, said resolution establishes a goal for the same variable of 5% +/- 1 percentage point.

## **3. Liable prognosis**

The liable inflation prognosis points toward an inter-annual variation of the Consumer Price Index of 5.03% for December 2007 and of 4.4% for December 2008. The main suppositions that sustain the previous prognosis refer, on the one hand, to the expected behavior of the international price of oil and its derivatives and, on the other hand, to the behavior of the inflation of diverse headings of expenses that make up the CPI.



Regarding the first point, according to *Global Insight*,<sup>15</sup> the price per oil barrel (*West Texas Intermediate -WTI-*), that in January 2006 was of US\$62.52 and in July came to a maximum of US\$74.39; it is foreseen that in December 2006 will be of US\$61.00; while for December 2007 and 2008 will be of US\$66.50 and of US\$65.00, in its order. As can be appreciated, it is foreseen that there is certain stability in the international price of oil in the next two years.

It is worth indicating that according to the referred liable prognosis, the consecution of the inflation goal is viable, established for December 2007 in resolution JM-185-2005 and, at the same time, reducing the inflation for December 2008 by half a percentage point regarding 2007.

#### **4. Asset Prognosis**

The asset prognosis, for the Semi-structural Macroeconomic Model of the *Banco de Guatemala*, take into account the actions of the central bank that tend to the consecution of the inflation goal, as well as the effects that said actions have in the rest of the macroeconomic variables. According to the results of the fourth running of the MMS in 2006, an inter-annual inflation rate of 4.83% is foreseen for December 2007 and of 3.85% for December 2008. It is worth pointing out that the prognosis for 2008, contain a degree of great uncertainty than that of 2007, reason for which said value could experiment changes in the following runnings of the MMS.

Just as in the case of liable prognosis, asset prognosis generated by the MMS confirm, as was indicated, the viability of reaching the inflation goal for December 2007 and, at the same time, reducing the inflation goal for December 2008.

#### **5. Proposal of inflation goals**

Based on the previous considerations, and with the prognosis that in the mid term the internal inflation converge toward the observed levels in developing countries that operate under the scheme of explicit inflation goals, the following inflation goals for 2007 and for 2008 are proposed:

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<sup>15</sup> Global Petroleum Monthly, November 2006.



<b><u>YEAR</u></b>	<b><u>GOAL</u></b> (inter-annual variation of CPI)	<b><u>MARGIN</u></b>
2007	5.0%	+ / - 1 percentage point
2008	4.5%	+ / - 1 percentage point

The previous inflation goals would be consistent with the strategy of gradual deflation<sup>16</sup> presented in the Proposal of the Monetary, Foreign Exchange Rate and Credit Policy for 2006 and propose to maintain in 2007.

<b><u>YEAR</u></b>	<b><u>Inter-annual variation of the CPI</u></b>	<b><u>MARGIN</u></b>
2007	5.0%	+ / - 1 percentage point
2008	4.5%	+ / - 1 percentage point
2009	4.0%	+ / - 1 percentage point
2010	3.5%	+ / - 1 percentage point
2011	3.0%	+ / - 1 percentage point

## **6. Characteristics of the proposed inflation goals and of the strategy of gradual deflation**

### **a) Credibility**

When comparing the inflation goals proposed with the inflation goal of 5% +/- 1 percentage point, determined by the Monetary Board for 2007, the level of proposed inflation observed coincides with the current goal for 2007 and implies a slight reduction for 2008.

It is worth indicating that the fact that the proposed goal involves inflation rates that are viable from the point of view of liable and asset prognosis, makes monetary policy oriented toward its consecution being credible for the markets and economic agents and can benefit from the inherent advantages of said credibility.

<sup>16</sup> It is worth pointing out that the referred strategy is designed with a horizon until 2011, in Annex 2 the main suppositions are described in the same.



**b) Firmness and gradualness in the execution of the monetary policy**

It is advisable that the Central Bank continue applying a monetary policy that firmly controls the inflationary phenomenon, but gradually. However, the gradualness must be recognized in the application of the monetary policy necessarily implies that the inflation reduction will be a process that will take time. In said sense, the presented proposal implies the consecution of inflation rates, for 2007 and 2008, gradually decreasing and tendencies toward converting toward inflation rate levels of developing countries with the explicit inflation goals schemes.

**c) Consecution of inflation levels in developing countries**

In the presented proposal, the inflation goals for two years are included, in a temporary horizon of five years. The congruent proposal with which, in the mid term, gradually converge toward a long term inflation rate of 3% annually. This last inflation rate level is equal or close to the observed levels in emerging economies that have applied it successfully, on the one hand, the scheme of explicit inflation goals and, on the other hand, structural reforms. Therefore, the approval of the presented proposal would be consistent with the determination that the country converge toward inflation levels in a defined temporary horizon (five years.)

It is considered that the foreseen term for the approved convergente, since for the reduction of inflation to be sustainable it is convenient to maintain a gradual focus in the deflation effort, to avoid incurring in excessive costs, in terms of active economic growth rates as an effort on behalf of public finance.

**d) Anchorage of inflationary expectations**

The credibility that would characterize the inflation goals proponed here, in case they were approved by the monetary authority, would make possible that the same work as an anchor for the inflationary expectations of economic agents. Of course, for the anchorage of the referred expectations to have





continuity in time, it is precise that the Central Bank continues applying a firm and disciplined monetary policy, oriented toward a consecution of the inflation goal, in an effective frame of transmission mechanisms in the same. In said supposition, the presented goals would fulfill the purpose of anchoring the inflationary expectations and, therefore, facilitate its own consecution, in order to reduce the real and fiscal inherent costs. In that sense, consider that the presentation of a realistic, credible and mid term inflation goal, is a fundamental element of the monetary policy in the explicit inflation goals scheme.

#### **e) Sustainability of the gradual deflation strategy**

The proposed goals would imply reducing the inflation rate by 1 percentage point from 2006 to 2007, from 6% to 5% (+/- 1 percentage point, in each case). Later, the inflation would be reduced by 0.5 percentage points, when going from 4.5% in 2008. After, in the framework of the gradual deflation strategy from 2009 to 2011 would continue to reduce by 0.5 annual percentage points until reaching a level of 3%. In that regard, it is worth indicating that the sustainability of the inflation reduction is more difficult when it has already reached relatively low levels. For said reason, the convenience of preserving the credibility and gradualness of the monetary policy advises recognizing this restriction and visualizing the levels of inflation that imply reductions of 0.5 annual percentage points in the corresponding rates, as of 2008, in order to slowly reduce the inflation and reaching observed levels in developing countries with schemes of explicit inflation goals.

#### **f) Punctual goal and tolerance margin**

In the presence of a punctual goal, any deviation of the inflation prognosis regarding that of the goal obligates considering corrective adjustments. Of course, said adjustments would be of a small magnitude in the case in which the deviations of the relevant prognosis regarding the goal were insignificant. Therefore, the operative consequence of the use of the punctual goal is a more gradual and opportune use of the monetary policy instruments.



The function of the tolerance margin of  $\pm 1$  percentage point, as an integral part of the goal, is to allow deviations no greater than that limit, of the observed inflation regarding the goal, in recognition that the central bank, through the monetary policy, just exercises an imperfect influence in the observed inflation rate.

#### **g) Support of the fiscal policy**

The solidity of public finance is fundamental to serve as permanent support in the management of the monetary policy and make possible the consecution of the inflation goal in the mid-term and the sustainable stability in the general level of price in the long term. For this, it is precise that measures be taken to allow reaching the sustainability of public finance in the mid term.

### **C. INDICATIVE VARIABLES OF THE MONETARY POLICY**

The follow up of indicative variables is to evaluate in what measure the inflation goal is being achieved. In said sense these variables orient the actions of the monetary policy. Derived of the importance of these variables within the scheme of the monetary policy based on explicit inflation goals, makes it convenient to periodically review the information offered as to the orientation of the monetary management, with the purpose that the execution of the same incorporate the best information possible.

In the described context and taking into consideration the performance of the indicative variables during 2006, in the following the indicative variables that are proposed for follow up in 2007 are presented.

#### **1. Total projected inflationary rhythm**

Follow up will be given to the total projected inflationary rhythm for December 2007 and for December 2008, comparing them with the fixed inflation goals for these same months. It is worth indicating that just as in 2006; two econometric models will continue to be used for the inflationary rhythm projections for the end of the mentioned years.

#### **2. Subjacent projected inflationary rhythm**



The subjacent inflation shows the variations of the level of prices that have more relation with the monetary variables, the calculation is made based on the Consumer Price Index, excluding the price components that have an elevated variability (especially seasonal or jointly) that, in normal circumstances, can not be neutralized by the actions of the monetary policy.

For 2007, follow up to the projected subjacent inflationary rhythm (for December 2007 as well as for December 2008), for which effect, just as in 2006, will use two econometric models.

### 3. Parameter interest rate

The Taylor Rule is an indicator used by many central banks to orient the participation in the monetary market, in virtue of the fact that the same reflects the adjustments in the interest rates due to inflation and excess of demand that are compatible with the fundamental objective of the monetary policy. In Guatemala's case, it has been considered convenient to add an adjustment for exchange movements, reason for which it has been called "parameter rate."

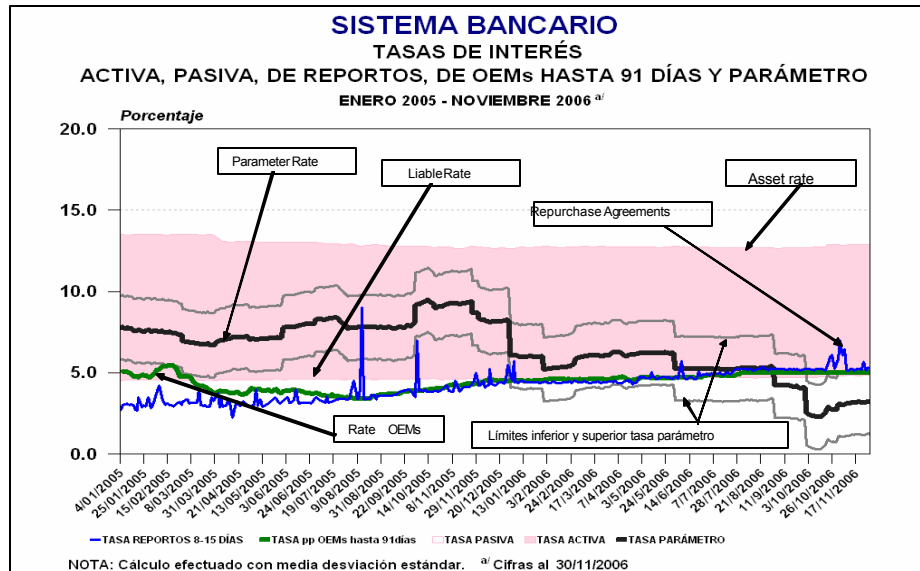
In the following we present the parameter interest rate, to be given follow up in 2007. It is worth indicating that the same include a change in the corresponding weightings so that these reflect the greater preference of the Central Bank to lessen the deviations between the observed inflation and the goal.

$$TP = [ p + (i_p - p^e) ] + \{ 1/4 [ VTC - (p^e - p^{*e}) ] + [ 1/4 (IMAE - Y^e) ] + [ 1/2 (p - p^e) ] \}$$

Where:

- $\pi$  = inflationary rhythm;
- $i_p$  = average weighted liable interest rate of the banking system;
- $\pi^e$  = expected inflation, according to the policy goal;
- VTC = inter-annual variation of the nominal exchange rate;
- $\pi^{*e}$  = inflation of the main commercial business partners;
- IMAE = growth rhythm of the economic activity; and,
- $Y^e$  = expected growth of the GDP

Using the specification described, in the following graph the behavior of the parameter interest rate is observed.



It is worth pointing out the change in the weightings, the gap between observed inflation and the inflation goal would have a weight of 1.5 percentage points<sup>17</sup> (1.33 percentage points in the prior specification), which is consistent with the monetary policy rules used for other central banks that have adopted the scheme of explicit inflation goals. It is worth indicating that according to the recommendation of Dr. Sebastian Edwards, the weightings must be estimated with simulation exercises with structural macroeconomic models calibrated per country considered for the dynamic interaction between the most relevant macroeconomic variables. However, said models are in the make up process, reason for which it was considered convenient to take advantage of international experience in said matter.

<sup>17</sup> This result is the sum of the weightings of the neutral interest rate  $[\pi + (i_p - \pi^e)]$  that is equal to the unit and the inflation gap  $(\pi - \pi^e)$  that is equal to a median percentage point. It is worth remembering that the neutral interest rate is that which prevails in a situation in which the inflation rate is in the defined goal by the monetary authority and economic activity is found performing according to its potential level. In that context, according to the observations by Dr. Edwards, the neutral interest rate, given its importance as a reference point in the level of the leading interest rate, should be estimated through long term macroeconomic models with supply, demand and economic growth equations, with a specification that considers the own characteristics of the countries economy.



#### **4. Parity liable interest rate**

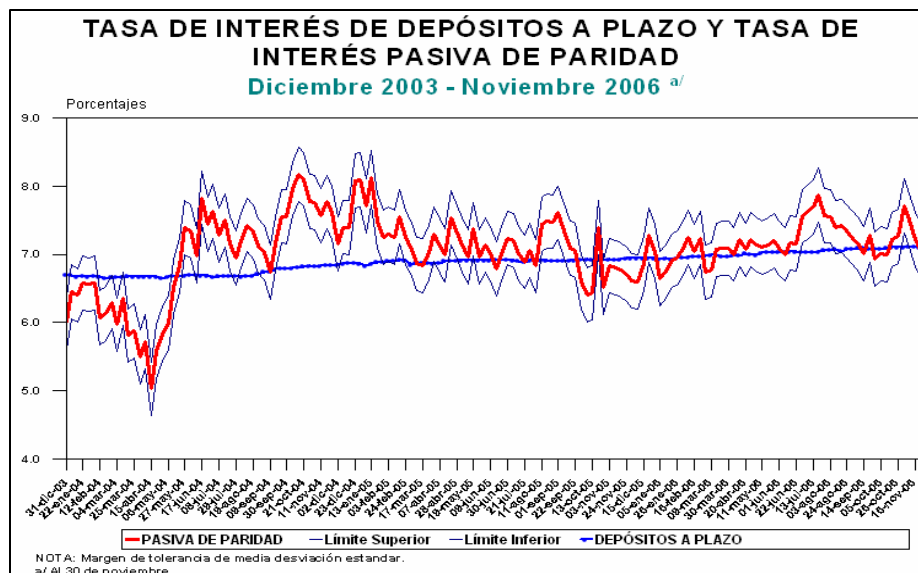
Added to the parameter interest rate it is worth counting on another reference indicator on what could be the behavior of the interest rate that is compatible with the monetary policy goal, for which an indicator can be obtained that compares the competitiveness of the domestic liable interest rate regarding the parity interest rate, so the evaluation of the level of the domestic interest rate can be evaluated inducing an expenditure or an income of foreign capital that could generate variability in the nominal exchange rate or in the monetary offer. In said sense, it is convenient to give follow up to the evolution of the parity liable interest rate.

The calculation of the parity interest rate is made up of three elements: a) a comparable international interest rate; b) an exchange risk premium and, c) a country risk premium. As to the first element, for the comparable international interest rate is currently used for the interest rate for the six month term deposits in the US market. The exchange risk premium is estimated through an approximation of the depreciation expectations of depreciation or appreciation in the Guatemalan futures market; in other words, the percentual variation within the nominal exchange rate quoted in the futures market for a year and the observed weighted exchange rate in the Institutional Foreign Currency Market on the date of analysis. Regarding the country risk premium, this is estimated to be calculated as the difference between the yield rate of Guatemalan bonds placed in international financial markets for a ten year term (weighted average of issues for 1997, 2001 and 2003) and the yield rate of the Treasury Bonds of the United States for a 10 year term.

It is considered that the methodologies used for the calculation of country risk premium and the exchange risk are the best approximations available, therefore they continue to be valid in general terms. In the case of external rates, it is estimated that the interest rate of the six month deposits in the US market, adequately reflect the opportunity cost of the national investors, as long as it is the financial market that influences in the financial flow, due to its proximity and importance.

Taking into account a recommendation of the IMF mission that visited the country in October 2006, would reduce the tolerance margin of the parity liable interest rate at half a standard deviation (equivalent to 0.40 percentage points), due to the fact that the behavior of the interest rate with which it is compared to obtain the referred orientation (weighted average interest rate of term deposits), has been stable during the prolonged period, with which the signs of the monetary policy could be improved that offer the parity liable interest rate. The graph that is presented in the following illustrates the behavior of the parity liable interest rate with the proposed change.

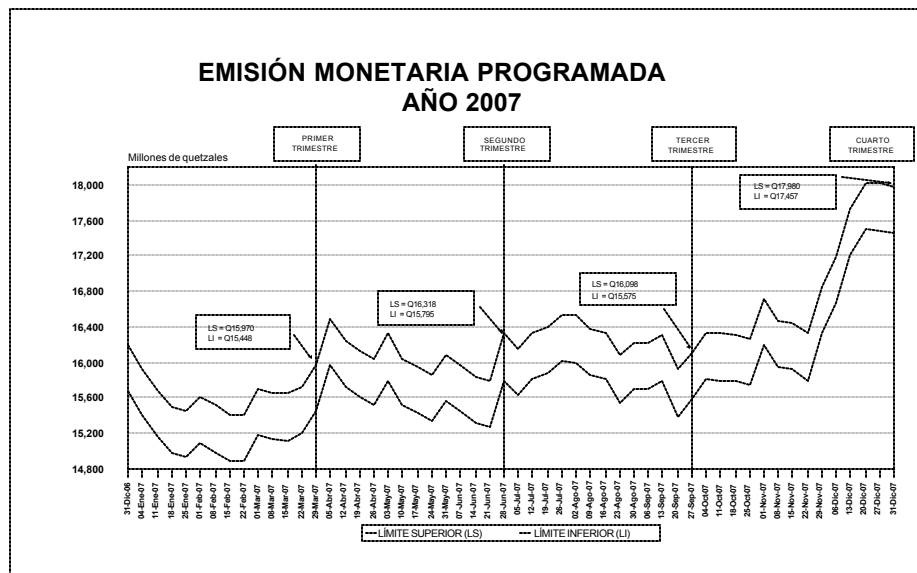
#### TERM DEPOSIT INTEREST RATES AND PARITY LIABLE INTEREST RATES



### 5. Monetary Issue

The monetary issue constitutes an indicator of the primary liquidity levels that exist in the economy, whose follow-up and projection are useful for anticipating possible pressures on the general level of prices.

In that sense, currently a punctual estimation is estimated and an estimation on the range of monetary issue, congruent with the inflation goal and with the foreseen goal of economic activity. However, given that the inflation goal has a tolerance margin, it is reasonable to consider as normal that the levels of monetary issue fluctuate within the runner that is consistent with the proposed inflation goal.



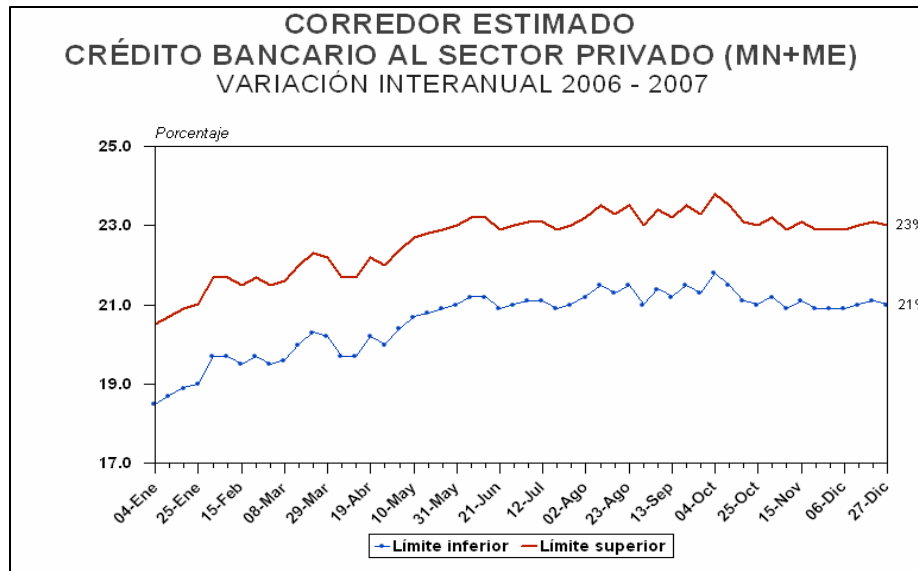
The projection of the monetary program for 2007 is consistent with the proposed inflation goal (5% +/- 1 percentage point) and with the foreseen growth of the gross domestic product (5.1%). Based on this, the demand of the monetary issue foreseen for 2007 will register a variation of inter-annual variation of around 11.2% regarding the programmed balance of said variable for 2006.

## 6. Banking Credit to the Private Sector

The banking credit to the private sector as a follow-up variable is important, due to the fact that it measures the amount of financial resources that the economy uses to finance the real activity. On this account, it follows up allows having a perception of the pressures that could be generated on the prices of goods and services, the interest rates and the balance of current account of the payment balance.

The inter-annual growth of the banking credit to the private sector (includes national and foreign currency), it is estimated so that it holds congruency with the inflation goal established for the monetary authority and with the growth foreseen for the economic activity. In that sense, for December

2007 an inter-annual growth rate of banking credit to the private sector between 21% and 23%, reflect an estimated runner for the whole year.



In order to be able to establish an adequate orientation of the monetary policy regarding the behavior of the banking credit to the private sector, besides considering the estimated runner, propose, as well as in 2006, take into account an econometric estimation for the inter-annual growth rate for December 2007, whose calculation incorporates the seasonal behavior of the banking credit to the private sector for the 1998-2006 period, with the information that is periodically observed.

The orientation of the monetary policy comes from the behavior of the banking credit to the private sector, it will be obtained through the weighting of the deviation of the estimated runner as well as the econometric estimation, considering for the effect the 50% deviation of each one of the mentioned estimations. In that sense, a deviation over the upper limit of each one of the estimations could suggest possible inflationary pressures, which would advise a restrictive monetary policy; on the other hand, a deviation below the lower limit would reflect deflationary pressures, aspect which would advise a relaxed monetary policy, while a value within the estimated runner would indicate an invariable monetary policy. Added to the follow up of the behavior of the inter-





annual growth rate of the banking credit to the private sector, it is considered important to monitor the branches of economic activity toward which the same is directed, in order to establish if inflationary or deflationary pressures exist derived of some economic activity in particular.

## **7. Inflation Expectations**

The inflation expectations are defined as the perception of the economic agents on the evolution of the prices within the economy. The inflationary expectations that, for a certain period form economic agents can, in some circumstances, substantially influence (and independently from the behavior of the economic fundamentals) in the determination of the inflation rate that is finally observed in the period dealt with. In effect, what can happen is, for a monetary offer level given the inflation expectations are high, which could cause a decrease of the real Money demand; said reduction would generate an increase in the inflation; the contrary would occur if the inflation expectations were low.

In this context, for 2007 proposes, just as in 2006, to continue the follow-up of the prognosis coming from the Private Analysis Panel Inflation Expectations Survey –EEI [For its acronym in Spanish.], in order to obtain a measure of the inflationary expectations of the private sector.

## **8. Implied inflation expectations**

The EEI constitutes a direct form of obtaining the perception of a representative group regarding the inflation expectations of economic agents. Notwithstanding, there are also indirect forms of knowing the mentioned expectations, one of them is that which in economic literature is known as the implied inflation expectations. Said expectations are obtained through the Fisher equation, which could be illustrated through the following expression:

$$\text{Nominal interest rate} = \text{Real interest rate} + \text{expected inflation}$$

Of said expression inference can be made that the greater inflation expectations would register greater inflation premium and, therefore, a greater



nominal interest rate. In that same sense, a reduction of the inflation expectations would induce a reduction in the inflation premium required by the investors; therefore, the nominal interest rate would be decreasing.

In the described context, an indirect or implied form of knowing the inflation Premium is through the calculation of the gap between the long term interest rate and the short term interest rate. Said gap constitutes an approximation of the economic agent expectations on inflation behavior. The idea underlies in the previous affirmation based on the fact that, in general, the long term interest rates are higher than the short term ones, due to the fact that the greater is the term of an investment, there is a risk that the future yields decrease a cause that inflation increases; in other words, if the inflation expectations of economic agents are high, the inflation premium that would be required in the nominal yield rates would also be. The empiric evidence in other countries shows that, in general, the long term interest rates move in the same direction that the short term ones. One exception to said finding is when in the central bank, with the purpose of abating inflation, increases the short term interest rates, and as a result of this there is a reduction in the long term interest rate, reflecting a high credibility in that the adopted measure would reduce the expected inflation.

The methodology proposed to make the measurement of the implied inflation expectations, as in 2006, is based on the calculation of different gaps between the long term interest rates and the short term interest rates. For the case of long term interest rates; the weighted average interest rates of the banking system will be used (total asset and new loans) and for the case of the short term rates, the use of weighted average repurchase agreements from 1 to 7 days is suggested, and a weighted average of the interest rates of the LTDs of the *Banco de Guatemala* for the terms understood between 7 and 182 days. The average of the gaps obtained would be constituted in an adequate indicator to measure the implied inflation expectations.

In the following chart the gap between the average of long term interest rates and short term interest rates between January 2001 and October 2006 are shown.



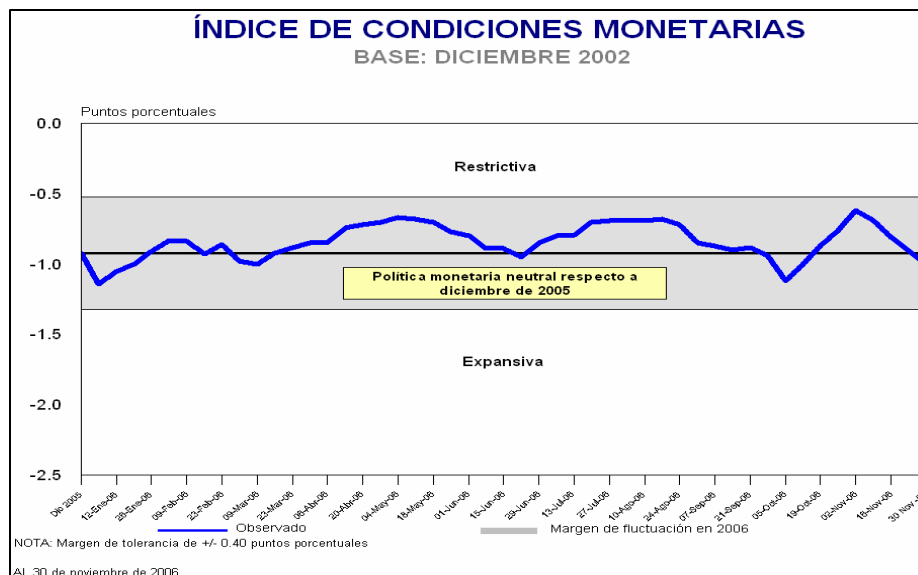
Taking into account the above, for 2007 we propose, added to the survey of inflation expectations by the panel of private analysts, to continue using the calculation of the implied inflation expectations as an indicative variable. It is worth indicating that the follow up of said variable would complement the measurement of the inflation expectations of the economic agents, which is fundamental in a scheme of explicit inflation goals.

## 9. Monetary Conditions Index –ICM (For its acronym in Spanish)-

The Monetary Conditions Index (ICM) measures, interrelated, the changes in the interest rate and in the nominal exchange rate regarding the predetermined base year, allowing to point out the direction that the monetary policy could take; in other words, if it should be more or less restrictive derived of the observed in the interest rate as well as the nominal exchange rate.

In said sense, a nominal depreciation (appreciation) of the quetzal implies an increase (reduction) of the net exportations, therefore, if this is not compensated with an increase (reduction) equivalent to the interest rates, is converted in an excess (lack) of aggregate demand, which is reflected in a fall (rise) of the ICM, indicating a relaxation (restriction) of the monetary policy.

Taking into consideration that in the case of Guatemala of the ICM fundamentally changes due to fluctuations in the nominal exchange rate, variations that in some occasions respond to the seasonal behavior, it is necessary to find a method to soften the variations of the ICM of the nominal exchange rate, so that the orientation of the monetary policy provided by said variable be the expected by the monetary authority. The above can be achieved estimating a fluctuation margin for the ICM. With said purpose, for 2006 established that the referred margin would be equivalent to  $\pm 0.8$  percentage points, in which the ICM could fluctuate maintaining a neutral monetary policy. However, for 2007 the reduction of the tolerance margin of the ICM to  $\pm 0.4$  percentage points is proposed, given that just as other indicative variables (like the parameter interest rate and the parity liable interest rates (above-mentioned) has been established during a prolonged period of time.



## 10. Prognosis of mid-term inflation rate of the Semi-structural Macroeconomic Model –MMS (For its acronym in Spanish)-

The MMS is a system of equations that allows quantifying the direction and magnitude of the relations between the main macroeconomic variables. In that context, the inflation prognosis in the mid-term derived of said model serve



the same purposes than those of the indicative variables of the monetary policy, since the same are conditional to the future evolution of all variables that integrate the MMS, which provides macroeconomic consistency to the prognosis and, at the same time, allow reflecting the implementation of monetary policy actions for combating inflationary pressures.

It is worth point out that as of June 2006, the results of the inflation prognosis were started to be used in the mid-term used quarterly through the running of the MMS. Said result offers coherent and reasonable information on the future evolution of inflation, reason for which for 2007 proposes the use of prognosis derived of the four foreseen runnings. The above, based on the premise that the execution of the monetary policy in an explicit inflation goal scheme requires adequate information for the timely making of decisions in the leading interest rate matters.

It is worth indicating that the MMS is in the process of fine-tuning, which includes the following tasks:

- i) Review the calibration model;
- ii) Generate consensus on the model properties; and,
- iii) Elaborate a report on the model properties.

As to the review of the calibration of the model, this will be made during the first trimester of 2007. On the other hand, the report on the properties of the MMS will be completed in the first trimester of said year; so much so that the divulging of the document will lead to a consensus on the model properties.

On the other hand, in the second semester of 2007 it is foreseen that the suggestions of Dr. Edwards will be evaluated, which are summarized within the following aspects:

- i) Incorporate a direct mechanism of pass-through of the nominal exchange rate;
- ii) Incorporate the most explicit manner of external prices and the exchange terms;
- iii) Develop a more flexible version of the yield curves;



- iv) Increase the level of the neutral exchange rate of the seasonal monetary policy;
- v) Fine-tune the relation between the leading interest rate and the nominal exchange rate; and,
- vi) Review the methodology to determine the tendency-directed components of some key model variables.

#### **D. SYNTHETIC INDICATIVE VARIABLES INDEX**

As of June 2006, the follow up was begun of the indicative variables through an index that allows jointly evaluating, the orientation of the referred variables taking into account the importance of each one of the indicative variables has on the referred process of decision-making of monetary policy. For the effect, in June a survey was designed in which each member of the Monetary Board declared their opinion.

The advantage the fine-tuning represented in the synthetic index radiates in the fact that previously the same weighting was assigned to each one of the indicative variables, notwithstanding that, as was proven in the referred survey, the appreciation for each one of those surveyed was that not all indicative variables should have the same relative weight to define the orientation of the monetary policy. In that sense, the new methodology allows incorporating in one indicator for each orientation category<sup>18</sup>, the different weightings assigned to each variable, which facilitates making comparisons between the results from one week to another, since the referred index provides a percentage for each orientation category that is easily comparable with other dates.

It is important to mention that in 2006, in the elaboration of the synthetic index eleven indicative variables were included, among them primary liquidity (monetary issue and ample base monetary issue) and the payment means. However, taking into account the recommendations of the International

<sup>18</sup> In this methodology five indexes were calculated, one for each orientation (relaxed, moderately relaxed, invariable, moderately restrictive and restrictive), whose sum is of 100%. It is worth indicating that the moderately relaxed orientation is referred to a location below the punctual value of the inflation goal, but is found within the tolerance margin of +/- 1 percentage point. Analogously, the moderately restrictive orientation is referred to a location over the punctual value of the inflation, but is found within the tolerance margin of +/- 1 percentage point.



Monetary Fund as well as Dr. Sebastian Edwards<sup>19</sup>, it was thought opportune to eliminate the follow up of the synthetic index of the ample monetary base and of the total payment means, given that the monetary issue represents approximately 57% of the ample monetary base, while the dynamism of the payment means, in general, reflects in the behavior of the banking credit to the private sector.

It is also considered that an additional improvement to the calculation methodology of the synthetic index requires the use of quantitative criteria for evaluating the weighting of each one of the variables. In that regard, the use of coefficients resulting from the analysis of regression of each one of the indicative variables with inflation was proposed, given that the referred coefficients measure the degree of lineal dependence between two variables and allow knowing the direction of the referred dependence.

For the effect, the regression coefficients between the variation rates of each one of the indicative variables and the variation of the Consumer Price Index were estimated, using a monthly series understood between January 2000<sup>20</sup> and November 2006. Based on the values of the estimated coefficients for each indicative variable, an index was calculated that reflects the global orientation of the monetary policy suggested by a set of variables. The relative weight of each indicative variable is considered the equivalent to the absolute value of the rate between the estimated regression coefficients of said variable regarding the total.

The following presents the results obtained.

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<sup>19</sup> Dr. Edwards suggested, added to the follow up of the real sector variables. It is convenient to comment that within the follow up of the parameter rate, the behavior of the Economic Activity Monthly Index should be incorporated; while in the Semi-structural Macroeconomic Model includes the product gap.

<sup>20</sup> In the case of implied inflation expectations, parity liable rate, inflation expectations of the panel of private analysts and of total and subagent expected inflation, only information as of January 2001, January 2002, January 2004 and January 2005 was had.



**SYNTHETIC INDEX OF THE INDICATIVE VARIABLES  
RELATIVE WEIGHT ACCORDING TO THE REGRESSION COEFFICIENT**

Indicative Variable	Coefficient of Regression	Relative weight Of the variable
1. Projected Subjacent Inflationary Rhythm */	0.71946	16.74
2. Projected Total Inflationary Rhythm	0.65771	15.30
3. Monetary Issue	0.60990	14.19
4. Banking Credit to the Private Sector	0.60566	14.09
5. Inflation Expectations of Private Analysts	0.53662	12.48
6. Prognosis of mid-term inflation (MMS)	0.52608	12.24
7. Parity Liable interest rate	0.21693	5.05
8. Parameter interest rate	0.19423	4.52
9. Implied inflation expectations	0.19054	4.43
10. Monetary Conditions Index t	-0.04179	0.96
<b>Total</b>		<b>100.00</b>

\*/ Regression estimated with the subjacent inflation

The results reflect the relative importance that must be assigned to each one of the indicative variables within the synthetic index; however, it is necessary to measure the intensity of the orientation that is suggested by each one of the indicative variables, in order to capture the information that provides a minimum or maximum deviation (that are not necessarily the same), since in some opportunities it has been observed that the same reach levels far superior to the limits of the estimated runners. In that sense, it is proposed that the relative weight of the deviation of each indicative variable be measured, regarding the level that it should register on a determined date (in this case the upper limit or the lower limit of the established tolerance margin was proposed, as it corresponds). The above will allow differentiating deviations of different magnitudes; for example, if determined variables are found deviated regarding the upper limit in 10% of the value that it should observe on a specific date, the





weighting of it within the synthetic index should, with greater intensity than the monetary policy, be restrictive. In that order of ideas, the original weightings of the synthetic index would be increased proportionally in the magnitudes where the deviations of the respective estimated runners are found.

In summary, the synthetic index would be composed of the same variables that had been used in the current year (except the ample monetary base and the payment means), which would allow eliminating a possible over-specification of the mentioned index.

## **E. PRINCIPLES FOR PARTICIPATING IN THE MARKET**

With the purpose of reaching the fundamental objective of the monetary, foreign exchange rate and credit policy for 2007, it is considered convenient to make the principles that would regulate the participation of the Central Bank more explicit, in the monetary market as well as in the exchange market.

### **1. Focus on the fundamental objective**

Taking into account that within the scheme of explicit inflation goals, the objectives of the Central Bank are circumscribed to reaching the stability of the general level of prices, this should unite its efforts of monetary policy in the more favorable creation and maintenance of monetary, foreign exchange rate and credit conditions than the orderly development of the national economy.

### **2. The use of the monetary stabilization operations in a scheme of explicit inflation goals**

In the scheme of explicit inflation goals the main instrument for the control of liquidity of the economy is constituted by the realization of OEMs, that is understood, among others, as the reception of term deposits, as well as the open market operations made in the secondary market, in market conditions, on behalf of the Central Bank with the financial, non-financial public and private sectors, with the end of contracting or expanding the monetary base in order that, on the one hand, the aggregate demand of the economy moderate its



behavior, and on the other hand, influence on the evolution of the interest rates as well as contributing to the achievement of the fundamental objective of the monetary policy, such as the stability in the general level of prices.

### **3. Exchange flexibility**

In a flexible exchange regimen, such as the current one in Guatemala, the exchange rate is determined by the interaction between supply and demand of foreign currency in the market. In that regard, it is worth remembering that, in the presence of free mobility of capital, it is impossible to count simultaneously on the objective of the nominal exchange rate and independence of the monetary policy, which implies that a monetary stabilization policy can not rest on the establishment of two nominal anchors (inflation goal and objective of the nominal exchange rate) therefore it is evident that the actions of the *Banco de Guatemala* must be centered on keeping inflation low and stable, so that it does not generate distortions in the rest of the macroeconomic variables.

Notwithstanding the above, there are reasons that justify the eventual participation of the Central Bank in the exchange market. In the first place, in an open economy the nominal exchange rate affects the relative price between internal and external goods, which, at the same time, influences the internal and external demand of locally produced goods and, therefore, influences in the behavior of aggregate demand and of inflation. In second place, there is also a direct channel for which the nominal exchange rate affects the price of imported goods in local currency, therefore high exchange volatility can distort the messages that the relative internal prices send to the market. In third place, the Central Bank would participate in the exchange market with the purpose of acquiring the foreign currencies required, on the one hand, the bank itself and, on the other hand, the central government and other entities of the public sector.



## **F. INSTRUMENTS FOR MAINTAINING THE MACRO-FINANCIAL STABILITY**

### **1. Monetary market**

#### **a) Monetary Stabilization Operations**

In good measure, the stabilization achieved in the main macro-financial variables (inflation, interest rates and nominal exchange rate), is explained by the application of a monetary policy that, choosing a nominal anchor (inflation goal) and within the context of a regimen of a flexible exchange rate, has been supported in the operations of OEMs, as well as in the discipline of the fiscal policy.

In that sense, and taking advantage of the use of indirect regulation instruments of monetary offer in an environment of market conditions, for 2007, the monetary stabilization operations continue to be the main instrument for the control of the money supply, since that is the instrument that least distorts the operation of the financial market, cooperating in the fulfillment, as was indicated, in the fundamental objective of promoting the stability in the general level of prices.

In that context, for 2007 it is proposed to continue participating in the market through the mechanisms that are currently used by the *Banco de Guatemala* for the reception of Term Deposits –DP [for its acronym in Spanish], these are:

#### **i) Placement Mechanisms**

- **Money Banking Electronic Table –MEBD** [For its acronym in Spanish]-

Through this mechanism the negotiations with banks and financial stock companies are made daily, in 7 day terms, at the leading interest rate of the monetary policy.

- **Values System of the National Stock Exchange, S. A.**



In this mechanism, negotiations with the financial sector are made daily, through the stock exchanges, for a 7 day term, at the leading interest rate of the monetary policy.

**Biddings**

Through this mechanism, through the stock exchanges that operate in the country, the convening for biddings in those terms will be made by predetermined quotas for the terms of up to one year.

**Window**

In this mechanism the *Banco de Guatemala* will receive direct, non-financial and public sector term deposits from the private sector on a daily basis.

**ii) Measures for 2007**

**Placement of Term Deposits LTDs- for maturity dates, in order to promote the development of a secondary market**

Currently the LTDs are expedited with the purpose of constituting term deposits through different mechanisms authorized by the Monetary Board for the execution of the monetary policy, with different amounts, terms and interest rates, which in the financial market provokes a great amount of LTDs with different characteristics, that make comparison and exchange difficult and, therefore, limit the profoundness and secondary market development.

With the purpose of solving the mentioned limitations, it is proposed that the LTDs have characteristics such as equal expiration date, equal nominal value and in its case, equal interest payments, with which the Central Bank would be contributing to the development and deepening of the secondary market. In that sense, the *Banco de Guatemala* could place LTDs creating reference points that propitiate the formation of an interest rate curve; in other



words, concentrated on maturity dates that allow constituting a critical mass<sup>21</sup>, in such a way that the market identifies them as liquid instruments and that contribute to the establishment of an issue benchmark<sup>22</sup>.

The implementation of the measured proposal offers advantages for depositors and for the Central Bank. Regarding depositors, it facilitates the LTD transactions in the secondary market, contributes to the efficient management of the portfolio; provides information on market prices; represents a set of future issue references; and, constitutes the base for the valuation of private issues. On the other hand, the *Banco de Guatemala* would obtain information on market prices for the determination of the yield curves for the LTDs.

It is important to mention that the Monetary Board in resolution in JM-185-2005, within the monetary, foreign exchange rate and credit policy measures, approved the relative to the expediting of the LTDs by maturity date. In that regard, it is worth indicating that the Monetary Board in session number 15-2006 celebrated on April 5, 2006, to see the advances in the operation scheme for monetary stabilization operations, regarding the proposed by the Regulation for the Term Deposit Reception in quetzales to be constituted in the *Banco de Guatemala*, which contemplates the dispositions that allow the implementation of this measure, the *Banco de Guatemala* gave the instructions to make the consultations with the stock exchange, prior to its approval. Due to the fact that the process of consultation requires was concluded and taking in to account that the *Banco de Guatemala* made important advances as to the corresponding complementary norms and to the modification of the information systems, proposed placing LTD by maturity date, as of the second semester of 2007. For the effect, the Execution Committee will continue to give follow-up and supervising the implementation process.

<sup>21</sup> Volume that guarantees the liquidity of the placements with a determined maturity date. (See Regional Standards Programs for Public Debt. Executive Secretary of the Central American Monetary Council. 2003).

<sup>22</sup> Issue of values that are sufficiently big and actively transacted so its price can serve as a reference point for other issues of similar maturity. (See Developing Government Bond Markets -A Handbook-. By The World Bank and International Monetary Fund. July 2001).



### **Improvement in the transmission mechanism of the leading interest rate**

For the improvement of the effectiveness of the OEMs, in the sense that the movements of the leading interest rate be reflected in the interest rates of the fund raising terms subject to quotas (currently 182 and 364 day terms), in the heart of the Execution Committee are being evaluated the criteria that allow improving said transmission mechanism, including the relative to the determination of the quotas, as well as the estimation manner of the reference interest rate to make the corresponding awarding. Said statement is congruent with the recommendations made by Dr. Edwards, in his most recent visit to Guatemala.

### **Transfer of titles of the LTDs in custody of the *Banco de Guatemala***

Currently, the issue of LTDs is made at the request of the depositors, in one or various physical certificates, or registries in custody are made. In the case of physical LTDs, notwithstanding its security characteristics, when negotiated in the repurchase agreement and secondary markets, due to their mobilization and the transfer of the reported to the reporter and the vendor to the buyer, are exposed to risk of loss, theft, alteration, falsification or destruction.

In that sense, with the purpose of contributing development of an agile and secure secondary market, in which some of the mentioned risks are mentioned and the costs of associated transaction are reduced, as well as the liquidation cycle, at the proposal of the technical bodies of the *Banco de Guatemala*, the Monetary Board in resolution JM-185-2005, within the measures of the monetary, foreign exchange rate and credit policy, approved: a) That the LTDs can be registered in the *Banco de Guatemala*; b) That the exchange of title of LTDs registered or that are registered in the future in the *Banco de Guatemala*; and, c) That the LTDs issued physically, are found in circulation, can be registered in the *Banco de Guatemala*. With that purpose, it



was instructed that in the first trimester of 2006 the necessary actions be taken tending toward the implementation of said measures.

It is worth indicating that the Monetary Board, as in the case of LTD placements by maturity dates, instructed the *Banco de Guatemala* to make consultations with the stock exchange, prior to the approval of the proposal of regulation. It results important to indicate that the consultation process to the stock exchange and the advances made in the implementation processes mentioned in the previous clause, also are applicable for the title transfer of the LTDs in custody in the *Banco de Guatemala* and that, added to that, gave information to the participants in the money market, therefore proposes that said measure be implemented as of the first trimester of 2007. For the effect, the Execution Committee will continue to give follow up and supervision of the implementation process.

The implementation of the proposed measure offers advantages for the depositors and for the Central Bank, in the sense that it ensures the agility of the transactions when electronic means are available for registries in custody; offers protection against destruction, loss, theft, alteration or falsification, eliminating the fraud problem; and, reducing the liquidation cycle.

### **Placement of Deposit Certificates in long term**

When analyzing the maturities of the operations of monetary stabilization and the needs of primary liquidity of the economy, make it evident that the primary offer generated by said maturities has been consistently greater to the money demand, which has propitiated that the Central Bank be constantly neutralizing those excesses, of structural nature. This situation evidences that the Central Bank, when the monetary spaces allow it, can make monetary stabilization operations at greater than one year terms (as was done in the second semester of 2005 and as it has been done since the second half of November of this year), so that gradually, on the one hand, the *Banco de Guatemala* come closer to having a less indebted position or neutral front



toward the money market and, on the other hand, improve the management of liable.

It is worth highlighting that improving the position of the Central Bank before the money market has the advantage that it cooperates with the adoption process of the scheme of explicit inflation goals and, with that, strengthens the credibility of the monetary policy, aspect that allows moderating the inflationary expectations.

In that order of ideas, this type of operation contributes toward improving the effectiveness of the monetary policy, since, when the central bank has a less indebted position or neutral front toward the money market, it eases the execution of the referred policy, since the Central Bank influences more effectively on the short term interest rate.

On the other hand, it is important to point out that the experience of some Latin American countries (Chile, Mexico and Brazil) that have adopted a scheme of explicit inflation goals, confirm that a better position of the central bank before the money market, allows increasing the effectiveness of the monetary policy and strengthening the positive aspects of the referred scheme.

#### **Injection of liquidity through the MEBD**

The *Banco de Guatemala* will continue placing the bids of liquidity injection in the MEBD, in a 7 day term and at the leading asset interest rate of the monetary policy, which will adjust in the same magnitude in which the liable leading interest rate will adjust; in other words, kept the differential registered to December 31, 2006. Said presentation is congruent with the recommendations made by Dr. Edwards in his most recent visit to Guatemala.

#### **Strategy for the development and deepening of the secondary market**

A secondary market has developed and deepened providing the economic agents with facilitation in financing their productive activities, as well as information on the prices of the values negotiated in the same, with adequate security measures, in a legal framework and supervision that protects





the investor. The Central Bank, particularly, as was indicated, is interested in a determination of the interest rate, which serve as a good for the construction of the yield curve and, also, the relative information of the banking system operations, for follow up effects on the management of banking liquidity.

In the described context, it is estimated proceeding that the Central Bank, in the environment of its competence, adopt measures geared toward achieving the development and deepening of the secondary market. In that sense, the measures of the relative policies to the implementation of “Placement of Term Deposit Certificates -CDPs- according to maturity date” and to the “Transfer of Titleholder of the CDPs in custody in the *Banco de Guatemala*”, proposed to the Monetary Board, constitute an important contribution to the monetary authority. Added to this, the Central Bank would be hiring external consultation in order to design a strategy in the mid-term that allows developing and deepening the secondary market values.

#### **b) Legal Banking Reserve**

Although the legal banking reserve constitutes a mechanism that allows lessening the expansion rhythm of aggregate liquidity and the banking credit, in the last years this has not been used for said end, but for liquidity safekeeping effects, according to the best international practices. In that sense, given that, on the one hand, it is necessary that they continue strengthening the trust in the financial system and, on the other hand, that the banking entities keep reasonable excess of legal reserve, it is recommended to continue the reserve rate of 14.6%, in national as well as foreign currency.

#### **c) Last Instance Loans**

The credit assistance of the Central Bank to the system banks are only oriented toward solving temporary deficiencies of liquidity, with which we pursue that the same derive in lack of solvency of the banking institutions and, on the other hand, attempt against the normal operations of the payment system, and on the other hand, can unnecessarily pressure the short term interest rates; in other words, that said assistance must only be a “security valve” that responds to unexpected movements of liquidity that eventually impede a fluid distribution of the reserves through the inter-banking market.



With the objective of propitiating the adequate use of the credit operation of last instance loans, the Organic Law of the *Banco de Guatemala* establishes limits to said operation, in order to privilege the consecution of its fundamental objective, which is to promote the stability in the general level of prices.

In that regard, the declared by the Monetary Board is observed in Resolution JM-50-2005, where the guidelines of credit granting to national private banks is established, according to Article 48 of the Organic Law of the *Banco de Guatemala*, oriented, among others, to determine the general and uniform procedure that must be observed for the granting of said credits, with the purpose, on the one hand, that they take care of the petitions with the necessary celerity that they are presented and, on the other hand, that the banking institutions know the requirements that should be fulfilled to obtain said financing.

## **2. Exchange Market**

### **a) Participation Rule**

With the purpose that the participation of the *Banco de Guatemala* sustain objective criteria to be made known in the market, proposes a rule for their participation in the exchange market, in order to moderate the volatility of the nominal exchange rate, without affecting its tendency. Said rule is based on reference exchange rate mobile averages and on exchange rate fluctuation margins, whose limits when equaled or surpassed by the reference exchange rate, will activate an auction mechanism that will allow the Central Bank to participate purchasing and selling foreign currency, according to each case, avoiding unnecessary purchase and sale and prices outside the market, every time that the participation of the Central Bank, through auctions, would be at prices prevailing on the market.

The proposal presents that the bids in purchase as well as sale of foreign currency on behalf of the *Banco de Guatemala* are based on the historic behavior (mobile average of the last five working days) of the reference exchange rate.



The liquidation of purchase and sale operations of foreign currency, made according to this rule, is made immediately after the awarding of each auction event, through the Real Time Gross Settlement System.

The characteristics of the proposed rule are the following:

**i) For purchase:**

The rule for purchase will be permanently active.

The *Banco de Guatemala* will call up the entities that constitute the Institutional Foreign Currency Market to a dollar purchase auction, for up to an amount of US\$8.0 million, when the reference exchange rate is equal or less to the mobile average of the last five working days of the reference exchange rate, minus a fluctuation margin of 0.5%, allowing a 15 minute period to enter the bids. The maximum awarding price of this auction will be equal to the mobile average of the last five working days of the reference exchange rate, minus a fluctuation margin of 0.5%.

In case the entire auctioned amount is awarded, the *Banco de Guatemala* will convene an additional auction, for an amount and a period of time to enter bids, equal to those of the first auction, but without exceeding a maximum of three auctions of foreign currency purchases per day. The maximum price of awarding will be equal to the average weighted exchange rate of the awarded bids in the auction immediately prior. It is estimated that the maximum price of awarding for the second and third purchase auctions is the appropriate for the participation of the *Banco de Guatemala* and discards the use of a lower price received in the awarded bids, since it is not proceeding that the price requested by some particular institution, be the one that determine the participation of the *Banco de Guatemala* in the exchange market, since this would induce the Central Bank to operate with out-of-market prices and, consequently send the wrong signals to the economic agents, with which the volatility of the exchange rate could be exacerbated.

When the reference exchange rate is equal or less than Q7.60000 x US\$1.00, the fluctuation margin will be of 0.1%, keeping the rest of dispositions invariable for the purchase of foreign currency.



**ii) For Sale :**

The sale rule will be activated when the reference exchange rate will be equal to or greater than  $Q7.81500 \times US\$1.00$ .

The *Banco de Guatemala* will convene the entities that make up the Foreign Currency Institutional Market at a dollar auction sale, for up to an amount of US\$8.0 million, when the reference exchange rate is equal to or greater than the mobile average of the last five working days of the reference exchange rate, plus a fluctuation margin of 1.0%, allowing a 15-minute period to enter bids. The minimum awarding price of said auction will be equal to the mobile average of the last five working days of the reference exchange rate, plus a fluctuation margin of 1.0%.

In case the entire auctioned amount is awarded, the *Banco de Guatemala* will convene an additional auction, for an amount and a period of time to enter bids, equal to those of the first auction, but without exceeding a maximum of three auctions of foreign currency sale per day. The minimum price of awarding will be equal to the average weighted exchange rate of the awarded bids in the auction immediately prior. It is estimated that the minimum price of awarding for the second and third sale auctions is the appropriate for the participation of the *Banco de Guatemala* and discards the use of a higher price received in the awarded bids, since it is not proceeding that the price requested by some particular institution, be the one that determine the participation of the *Banco de Guatemala* in the exchange market, since this would induce the Central Bank to operate with out-of-market prices and, consequently send the wrong signals to the economic agents, with which the volatility of the exchange rate could be exacerbated.

When the reference exchange rate is equal or less than  $Q8.05000 \times US\$1.00$ , the fluctuation margin will be of 0.5%, keeping the rest of dispositions invariable for the sale. As of said value the participation rule for sale of foreign currency is symmetric with the established for foreign currency purchase.

Additionally, the Execution Committee could decide additional amounts to auction, for the purchase as well as for the sale of foreign currency, informing the Monetary Board, in its next session, on the adopted decision.



The proposed rule will increase the efficiency of the Central Bank's participation in the exchange market, every time it surpasses the limitations presented in the current exchange rule. In effect, the proposed rule establishes dispositions for the participation of the *Banco de Guatemala* in environments of appreciation as well as depreciation of the exchange rate; also, fixes the amount for daily participation of up to US\$24.0 million, for purchase as well as for sale of foreign currency, divided in three daily auctions, which pursues fixing the participation potential of the Central Bank in the exchange market, taking the amount equivalent to one and a half times the daily average of inter-institutional operations as the reference amount observed between January 1 and December 1, 2006. In that regard, it is estimated that said amount is adequate to satisfy the demand of the market, especially in periods in which atypical behavior is observed, with high volatility of the nominal exchange rate.

In addition, the *Banco de Guatemala* will place bids in the Foreign Currency Electronic Negotiations System -SINEDI- only when the reference exchange rate reaches or surpasses the fluctuation limits established, which would avoid, on the one hand, keeping bids permanently in said system and, on the other hand, make unnecessary negotiations at out-of-market prices.

#### **b) Fund-raising of term deposits in US dollars**

Although it is true that central banks have an independent monetary policy, oriented to the established in the general level of prices in the context of a flexible exchange rate regime, face the restriction of the presented of the impossible trinity of open macro economy, also includes the short term implementation of transitory measures of the monetary policy oriented to discouraging accelerated appreciations and depreciations of the nominal exchange rate, that set the macroeconomic stability at risk.

In this context, it is estimated prudent that the Central Bank in 2007 will continue with the availability of the instrument that will allow picking up liquidity in foreign currency through fund-raising of term deposits in US dollars, with the objective of, if the circumstances merit it, soften the behavior of the exchange rate without affecting its tendency, extracting US dollars from the market at the



moment in which (seasonally) are excessive, for re-injecting at the moment they are (seasonably) scarce, according to the established in resolution JM-99-2004 dated September 24, 2004.

## **G. MEASURES FOR CONTRIBUTING TO THE EFFECTIVENESS OF THE MONETARY POLICY**

### **1. Coordination with the fiscal policy**

The efficient and effective coordination of the monetary and fiscal management is necessary to avoid that the weight of stabilization fall exclusively on one of the mentioned policies and, therefore, generate distortions such as unnecessary pressures on the nominal exchange rate, high interest rates, unsustainable of public debt and liquidity of the national financial system, which could slow down the economic growth.

During 2006, the coordination between the fiscal and monetary policy was continued through a Coordination Committee that, according to the agreed between the *Ministerio de Finanzas Públicas* [Roughly equivalent to the Department of the Treasury of the United States.] and the *Banco de Guatemala*, meet periodically to give follow up to the operations made by said institutions, ensuring the same are according to a consistent and coherent monetary program in the economic program framework of the country.

In the described context, the continuation for 2007 of an adequate coordination of the fiscal and monetary policies constitutes a type of “asset” that strengthens the institutionalism of the macroeconomic policy.

### **2. Transparency and account rendering of the *Banco de Guatemala***

For the strengthening of the account rendering of the actions taken by the Central Bank it is necessary that, besides fulfilling the elaboration of the different reports and publications that must be made according to the declared in the organic law, the *Banco de Guatemala* let the public know, on the one hand, the design and orientation of the monetary policy and, on the other hand,



the actions taken for the execution of said policy for the achievement of the fundamental objective of the Central Bank, which is the stability in the general level of prices. Also, the effect of generating certainty in the economic agents for the decision making sessions, the *Banco de Guatemala*, in a scheme of explicit inflation goals, publicly announced the annual calendar of the meetings in which the Monetary Authority will make decisions regarding the leading interest rate of the monetary policy. Following is the calendar when the *Banco de Guatemala* could announce for 2007.

**CALENDAR OF THE SESSIONS WHERE THE MONETARY BOARD WILL MAKE  
DECISIONS REGARDING THE LEADING INTEREST RATE OF THE MONETARY  
POLICY FOR 2007**

<b>MONTH</b>	<b>DATE</b>
January	31
February	28
March	28
April	25
May	30
June	27
July	25
August	29
September	26
Octubre	31
November	28
December	26

**III. RECOMMENDATION**

Based on the presented, the Technical Council of the *Banco de Guatemala* allows recommending the Monetary Board approve the Monetary, Foreign Exchange Rate and Credit Policy for 2007, as well as the complementary measures of the same, in the terms presented in the present declaration.






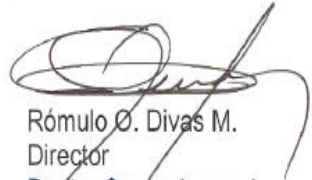
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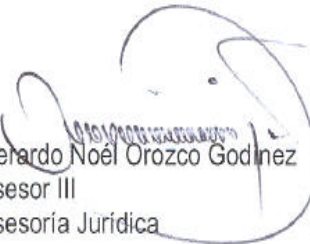
Johny R. Gramajo Marroquín  
Director  
Depto. Estudios Económicos



Sergio R. González R.  
Subdirector  
Depto. Análisis Bancario y  
Financiero



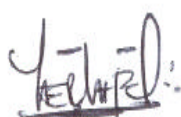
Rómulo O. Divas M.  
Director  
Depto. Operaciones de  
Estabilización Monetaria



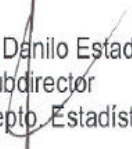
Gerardo Noel Orozco Godínez  
Asesor III  
Asesoría Jurídica




F. Estuardo García Alburez  
Secretario



Sergio Javier López Toledo  
Subdirector  
Depto. Investigaciones  
Económicas



F. Danilo Estada P.  
Subdirector  
Depto. Estadísticas Económicas



Jorge A. del Cid Aguilar  
Subdirector  
Depto. Internacional



Sergio F. Recinos Rivera  
Gerente Financiero



Oscar Roberto Monterroso Sazo  
Gerente Económico  
Coordinador

El presente dictamen fue aprobado por el Consejo Técnico del Banco de Guatemala en sesión celebrada el 13 de diciembre de 2006.





## **A. REAL SECTOR**



SECTOR REAL  
ORIGEN POR RAMAS DE ACTIVIDAD DEL PRODUCTO INTERNO BRUTO  
A PRECIOS DE MERCADO  
AÑOS: 2004 - 2007  
(Millones de quetzales de 1958)

CONCEPTO	2004	2005 p/	2006 e/	2007 py/	Tasas de Variación Porcentual			Contribución en Variación Porcentual del PIB			Participación en Variación Porcentual del PIB		
					2004	2005	2006	2004	2005	2006	2004	2005	2006
<b>PRODUCTO INTERNO BRUTO</b>	<b>5,571.0</b>	<b>5,747.0</b>	<b>6,009.8</b>	<b>6,318.7</b>	<b>2.7</b>	<b>3.2</b>	<b>4.6</b>	<b>2.7</b>	<b>3.2</b>	<b>4.6</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
1. Agricultura, silvicultura, caza y pesca	1,279.3	1,308.0	1,331.3	1,390.5	4.0	2.2	1.8	0.90	0.52	0.41	32.85	16.31	8.87
2. Explotación de minas y canteras	28.1	27.5	30.2	30.9	-7.6	-2.1	9.5	-0.04	-0.01	0.05	-1.55	-0.33	1.00
3. Industria manufacturera	704.1	722.8	748.9	777.1	2.3	2.7	3.6	0.30	0.34	0.45	10.80	10.61	9.93
4. Construcción	74.1	86.0	111.4	119.5	-18.2	16.0	29.6	-0.30	0.21	0.44	-11.03	6.73	9.68
5. Electricidad y agua	247.0	251.3	257.3	274.3	6.0	1.7	2.4	0.26	0.08	0.10	9.36	2.43	2.29
6. Transporte, almacenamiento y comunicaciones	633.7	692.9	782.1	861.1	9.5	9.3	12.9	1.01	1.06	1.55	36.90	33.64	33.93
7. Comercio al por mayor y al por menor	1,385.1	1,418.2	1,461.5	1,523.5	3.1	2.4	3.1	0.76	0.59	0.75	27.77	18.81	16.48
8. Banca, seguros y bienes inmuebles	275.1	283.7	299.6	319.1	2.2	3.1	5.6	0.11	0.15	0.28	3.91	4.90	6.05
9. Propiedad de vivienda	259.8	266.3	271.8	277.7	2.9	2.5	2.0	0.13	0.12	0.09	4.89	3.72	2.07
10. Administración pública y defensa	350.7	344.4	356.9	370.4	-8.4	-1.8	3.6	-0.60	-0.11	0.22	-21.68	-3.56	4.75
11. Servicios privados	333.9	345.7	358.8	374.7	3.6	3.6	3.8	0.21	0.21	0.23	7.78	6.75	4.96
<b>ESTRUCTURA PORCENTUAL</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>									
<b>PRODUCTO INTERNO BRUTO</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>									
1. Agricultura, silvicultura, caza y pesca	23.0	22.8	22.2	22.0									
2. Explotación de minas y canteras	0.5	0.5	0.5	0.5									
3. Industria manufacturera	12.6	12.6	12.5	12.3									
4. Construcción	1.3	1.5	1.9	1.9									
5. Electricidad y agua	4.4	4.4	4.3	4.3									
6. Transporte, almacenamiento y comunicaciones	11.4	12.1	13.0	13.6									
7. Comercio al por mayor y al por menor	24.9	24.7	24.3	24.1									
8. Banca, seguros y bienes inmuebles	4.9	4.9	5.0	5.0									
9. Propiedad de vivienda	4.7	4.6	4.5	4.4									
10. Administración pública y defensa	6.3	6.0	5.9	5.9									
11. Servicios privados	6.0	6.0	6.0	5.9									

p/ Cífras preliminares

e/ Cífras estimadas

py/ Cífras proyectadas

Fuente: Banco de Guatemala



## **B. MONETARY SECTOR**



**SECTOR MONETARIO**  
**AÑOS 2004 - 2007**  
Millones de quetzales

CONCEPTO	2004	2005	2006 <sup>el</sup>	2007 <sup>pyl</sup>	
				Escenario I	Escenario II
Reservas monetarias internacionales netas (millones de US\$)	3,528.0	3,782.4	4,082.0	4,182.0	4,182.0
Reservas monetarias internacionales netas en MN <sup>1/</sup>	28,223.6	30,259.1	32,659.0	33,459.0	33,459.0
Emisión monetaria	12,626.4	14,261.9	15,934.0	17,718.0	17,718.0
Crédito bancario al sector privado total <sup>2/</sup>	39,772.3	48,277.3	60,556.6	73,880.7	73,880.7
Captaciones bancarias totales <sup>2/</sup>	53,474.8	61,666.4	72,131.9	84,082.6	84,082.6
Medios de pago M2 en MN	57,635.4	66,043.6	75,711.8	86,603.4	86,603.4
Medios de pago M2 en M/E <sup>2/</sup>	7,032.1	8,138.9	10,324.3	12,940.7	12,940.7
Medio de pago totales M2 (MN + ME) <sup>2/</sup>	64,667.5	74,182.5	86,036.2	99,544.2	99,544.2
Costo de la política monetaria	1,186.4	674.4	345.0	392.0	278.0
Saldo de OEMs	15,905.8	16,987.8	16,963.0	17,679.0	15,666.0
M3 total	68,039.0	77,848.2	90,303.9	104,481.6	104,481.6

**INDICADORES MONETARIOS**  
**AÑOS 2004 - 2007**  
En porcentajes

CONCEPTO	2004	2005	2006 <sup>el</sup>	2007 <sup>pyl</sup>	
				Escenario I	Escenario II
RMIN en MN / Emisión monetaria	223.5	212.2	205.0	188.8	188.8
RMIN en MN / OEMs	177.4	178.1	192.5	189.3	213.6
RMIN en MN / M2 total	43.6	40.8	38.0	33.6	33.6
OEMs / Emisión monetaria	126.0	119.1	106.5	99.8	88.4
Crédito bancario al sector privado total / PIB nominal	18.3	20.0	22.5	24.6	24.6
M2 total / PIB nominal	29.8	30.7	32.0	33.2	33.2
M2 en ME / M2 total	10.9	11.0	12.0	13.0	13.0
OEMs / M2 total	24.6	22.9	19.7	17.8	15.7
OEMs / PIB nominal	7.3	7.0	6.3	5.9	5.2
Costo de la política monetaria / PIB nominal	0.5	0.3	0.1	0.1	0.1

1/ Tipo de Cambio: Q8.00 X US\$1.00

2/ No incluye Entidades Fuera de Plaza

<sup>el</sup> Cifras estimadas

<sup>pyl</sup> Cifras proyectadas

Fuente: Banco de Guatemala y Superintendencia de Bancos



## **C. FISCAL SECTOR**



**FINANZAS PÚBLICAS**  
**AÑOS 2004 - 2007**  
**Millones de quetzales y porcentajes**

Concepto	2004	2005	2006 <sup>ef</sup>	2007 <sup>py/</sup>	
				Escenario 1	Escenario 2
Carga tributaria	10.1	9.6	10.4	<b>9.9</b>	<b>9.9</b>
Elasticidad tributaria	0.9	0.5	1.3	<b>0.8</b>	<b>0.8</b>
Ingresos totales (% del PIB)	10.8	10.3	11.0	<b>10.7</b>	<b>10.7</b>
Impuestos indirectos / Ingresos tributarios	75.5	74.0	n.d.	n.d.	n.d.
Gastos totales (% del PIB)	11.8	11.8	12.5	<b>11.6</b>	<b>11.6</b>
Gastos de capital / Gasto total	31.5	33.6	34.5	<b>32.3</b>	<b>32.3</b>
Gasto social / Gasto total	41.7	44.7	40.5	n.d.	n.d.
Déficit fiscal (% del PIB)	1.0	1.5	1.5	<b>0.9</b>	<b>0.9</b>
Superávit/Déficit primario (% del PIB)	0.2	-0.3	n.d.	n.d.	n.d.
Ahorro en cuenta corriente	5,650.7	5,596.9	6,967.3	<b>7,354.7</b>	<b>7,354.7</b>
Servicio deuda pública total / Ingresos tributarios	26.6	30.1	n.d.	n.d.	n.d.
Servicio deuda pública externa/ Exportaciones de bienes y servicios	9.6	7.5	8.8	n.d.	n.d.
Saldo deuda pública interna / Deuda pública total	29.6	36.6	40.1	<b>37.2</b>	<b>38.8</b>
Saldo deuda pública externa / Deuda pública total	70.4	63.4	59.9	<b>62.8</b>	<b>61.2</b>
Saldo deuda pública total (% del PIB)	19.5	18.0	18.7	<b>16.9</b>	<b>17.3</b>
Saldo deuda pública interna (% del PIB)	5.9	6.8	7.5	<b>6.3</b>	<b>6.7</b>
Saldo deuda pública externa (% del PIB)	14.1	11.8	11.2	<b>10.6</b>	<b>10.6</b>
Saldo deuda pública externa/ Exportaciones de bienes y servicios	80.6	71.8	68.6	<b>65.2</b>	<b>65.2</b>

ef/ Estimación.

py/ Cifras proyectadas

n.d. = no disponible.

Fuente: Ministerio de Finanzas Públicas y Banco de Guatemala.



## **D. EXTERNAL SECTOR**



**BALANZA DE PAGOS Y PRINCIPALES INDICADORES DE COMERCIO EXTERIOR**

**Años 2004 - 2007**

**- En millones de US Dólares -**

CONCEPTO	2004	2005 <sup>p/</sup>	2006 <sup>e/</sup>	2007 <sup>py/</sup>
<b>Saldo Cuenta Corriente</b>	<b>-1,210.7</b>	<b>-1,387.3</b>	<b>-1,533.4</b>	<b>-1,651.6</b>
Exportaciones FOB	2,928.4	3,378.5	3,710.9	4,115.3
Principales productos	996.6	1,232.2	1,299.0	1,325.8
Otros productos	1,931.8	2,146.3	2,411.9	2,789.5
Importaciones CIF	7,811.6	8,812.3	9,911.1	11,160.8
Servicios	627.9	489.0	563.7	621.7
Transferencias Corrientes (Neto)	3,044.6	3,557.5	4,103.1	4,772.2
Remesas Familiares (Neto)	2,518.1	2,959.5	3,581.0	4,297.2
<b>Saldo Cuenta Capital y Financiera</b>	<b>1,819.4</b>	<b>1,641.7</b>	<b>1,833.4</b>	<b>1,751.6</b>
Transferencias de Capital (Neto)	135.3	125.3	272.2	120.0
Capital Oficial y Bancario	249.3	-83.9	197.6	45.9
Capital Privado	1,434.8	1,600.3	1,363.6	1,585.7
<b>Variación de RMIN</b> {(-) Aumento, (+) Disminución}	<b>-608.7</b>	<b>-254.4</b>	<b>-300.0</b>	<b>-100.0</b>
<b>Monto de Reservas Monetarias Internacionales Netas</b>	<b>3,528.0</b>	<b>3,782.4</b>	<b>4,082.4</b>	<b>4,182.4</b>
<b>RELACIÓN RESPECTO AL PIB</b>				
<b>Saldo Cuenta Corriente</b>	<b>-4.4</b>	<b>-4.4</b>	<b>-4.4</b>	<b>-4.3</b>
Exportaciones FOB	10.7	10.7	10.5	10.6
Principales productos	3.7	3.9	3.7	3.4
Otros productos	7.1	6.8	6.8	7.2
Importaciones CIF	28.6	27.9	28.1	28.9
Servicios	2.3	1.5	1.6	1.6
Transferencias Corrientes (Neto)	11.2	11.2	11.6	12.3
Remesas Familiares (Neto)	9.2	9.4	10.2	11.1
<b>Saldo Cuenta Capital y Financiera</b>	<b>6.7</b>	<b>5.2</b>	<b>5.2</b>	<b>4.6</b>
Transferencias de Capital (Neto)	0.5	0.4	0.8	0.3
Capital Oficial y Bancario	0.9	-0.3	0.6	0.1
Capital Privado	5.3	5.1	3.9	4.1
<b>Meses de Importación de Bienes Financiables con RMIN</b>	<b>4.8</b>	<b>4.6</b>	<b>4.4</b>	<b>4.0</b>
<b>Meses de Importación de Bienes y Servicios No Factoriales Financiables con RMIN</b>	<b>4.4</b>	<b>4.2</b>	<b>4.1</b>	<b>3.7</b>
<b>COMERCIO EXTERIOR</b>				
<b>EXPORTACION - PRINCIPALES PRODUCTOS</b>				
<b>Café</b>	<b>327.9</b>	<b>464.0</b>	<b>443.1</b>	<b>491.6</b>
Volumen (Miles de qq)	4 520.1	4 384.2	4 189.0	4 750.5
Precio Medio (US\$ por quintal)	72.54	105.83	105.78	103.48
<b>Azúcar</b>	<b>188.0</b>	<b>236.6</b>	<b>284.4</b>	<b>267.3</b>
Volumen (Miles de qq)	25 099.8	27 977.0	29 512.4	31 450.0
Precio Medio (US\$ por quintal)	7.49	8.46	9.64	8.50
<b>Banano</b>	<b>228.2</b>	<b>236.2</b>	<b>240.3</b>	<b>271.4</b>
Volumen (Miles de qq)	22 038.8	22 723.1	22 816.4	25 250.0
Precio Medio (US\$ por quintal)	10.35	10.39	10.53	10.75
<b>Cardamomo</b>	<b>73.8</b>	<b>70.3</b>	<b>76.6</b>	<b>87.2</b>
Volumen (Miles de qq)	621.0	687.8	705.8	855.0
Precio Medio (US\$ por quintal)	118.84	102.21	108.53	101.99
<b>Petróleo</b>	<b>178.7</b>	<b>225.1</b>	<b>254.6</b>	<b>208.3</b>
Volumen (Miles de barriles)	6 807.0	6 707.5	5 625.5	5 950.0
Precio Medio (US\$ por barril)	26.25	36.26	45.26	35.01
<b>IMPORTACIONES - Grupo Económico CUODE</b>				
Bienes de Consumo	2,477.4	2,656.7	2,920.0	3,235.0
Materias Primas y Productos Intermedios	2,528.0	2,640.2	2,818.2	3,475.0
Combustibles y Lubricantes	1,088.7	1,584.0	1,883.6	1,855.3
Materiales de Construcción	166.9	201.4	228.5	245.0
Bienes de Capital	1 550.0	1 729.6	2 060.4	2 350.0

<sup>p/</sup> Cifras preliminares

<sup>e/</sup> Cifras estimadas

<sup>py/</sup> Cifras proyectadas

Fuente: Banco de Guatemala





**VARIABLES MACROECONÓMICAS RELEVANTES  
POR REGIONES Y PAÍSES SELECCIONADOS  
AÑOS 2004 - 2005 Y EXPECTATIVAS PARA 2006 Y 2007  
(Variación porcentual)**

	2004	2005	2006	2007
<b>CRECIMIENTO ECONÓMICO</b>				
Economía Mundial	5.3	4.9	5.1	4.9
Economías avanzadas	3.2	2.6	3.1	2.7
Estados Unidos de América	3.9	3.2	3.4	2.9
Área del euro	2.1	1.3	2.4	2.0
Japón	2.3	2.6	2.7	2.1
Economías emergentes de Asia <sup>1/</sup>	8.8	9.0	8.7	8.6
República Popular China	10.1	10.2	10.0	10.0
Mercados emergentes y países en desarrollo	7.7	7.4	7.3	7.2
África	5.5	5.4	5.4	5.9
Oriente Medio	5.5	5.7	5.8	5.4
Hemisferio Occidental (América Latina y el Caribe)	5.7	4.3	4.8	4.2
Argentina	9.0	9.2	8.0	6.0
Brasil	4.9	2.3	3.6	4.0
Uruguay	11.8	6.6	4.6	4.2
Chile	6.2	6.3	5.2	5.5
México	4.2	3.0	4.0	3.5
Venezuela	17.9	9.3	7.5	3.7
Perú	5.2	6.4	6.0	5.0
Colombia	4.8	5.1	4.8	4.0
Costa Rica	4.1	5.9	6.5	4.5
El Salvador	1.8	2.8	3.5	3.5
Guatemala <sup>2/</sup>	2.7	3.2	4.6	5.1
Honduras	4.6	4.2	4.5	4.5
Nicaragua	5.1	4.0	3.7	4.3
Europa Central y del Este	6.5	5.4	5.3	5.0
Comunidad de Estados Independientes	8.4	6.5	6.8	6.5
<b>INFLACIÓN</b>				
Economías avanzadas	2.0	2.3	2.6	2.3
Estados Unidos de América	2.7	3.4	3.6	2.9
Área del euro	2.1	2.2	2.3	2.4
Japón	0.0	-0.6	0.3	0.7
Economías emergentes de Asia <sup>1/</sup>	4.1	3.5	3.8	3.6
República Popular China	3.9	1.8	1.5	2.2
Mercados emergentes y países en desarrollo	5.6	5.3	5.2	5.0
África	8.0	8.5	9.9	10.6
Oriente Medio	7.6	7.7	7.1	7.9
Hemisferio Occidental (América Latina y el Caribe)	6.5	6.3	5.6	5.2
Argentina	4.4	9.6	12.3	11.4
Brasil	6.6	6.9	4.5	4.1
Uruguay	9.2	4.7	5.9	4.3
Chile	1.1	3.1	3.5	3.1
México	4.7	4.0	3.5	3.3
Venezuela	21.7	15.9	12.1	15.4
Perú	3.7	1.6	2.4	2.5
Colombia	5.9	5.0	4.7	4.2
Costa Rica	11.7	13.6	13.0	10.9
El Salvador	4.5	3.7	4.1	3.5
Guatemala <sup>2/</sup>	9.2	8.6	6.0% + / - 1 punto porcentual	5.0% + / - 1 punto porcentual
Honduras	8.1	8.1	5.8	4.4
Nicaragua	9.3	9.6	8.6	6.8
Europa Central y del Este	6.1	4.8	5.3	4.6
Comunidad de Estados Independientes	10.3	12.3	9.6	9.2

<sup>1/</sup> Comprende Asia en desarrollo y las economías de Asia recientemente industrializadas.

<sup>2/</sup> Datos del Banco de Guatemala.

FUENTE: Perspectivas de la Economía Mundial, Fondo Monetario Internacional, a septiembre de 2006.



## **E. BANKING SECTOR**



**BANKING SYSTEM**  
**AVERAGE LIQUIDITY POSITION IN M/N**  
**YEARS: 2005 - 2006**  
**- Millions of quetzales -**

<b>MONTH</b>	<b>2005</b>	<b>2006</b>
January	156.8	179.4
February	86.2	121.2
March	116.4	121.3
April	111.3	114.1
May	125.8	102.4
June	138.7	129.2
July	142.6	114.1
August	96.8	148.6
September	86.2	150.5
October	119.6	459.9
November	149.7	237.4 a/
December	233.0	

a/ To November 30

**SISTEMA BANCARIO**  
**POSICIÓN PROMEDIO DE LIQUIDEZ EN M/E**  
**AÑOS: 2005 - 2006**  
**-Millones de US dólares-**

<b>MES</b>	<b>2005</b>	<b>2006</b>
ENERO	5.8	7.7
FEBRERO	5.5	5.3
MARZO	5.1	5.7
ABRIL	5.7	6.4
MAYO	5.5	5.0
JUNIO	6.4	5.3
JULIO	4.8	5.2
AGOSTO	4.8	6.2
SEPTIEMBRE	3.1	7.6
OCTUBRE	6.2	11.4
NOVIEMBRE	3.7	8.7 a/
DICIEMBRE	5.9	

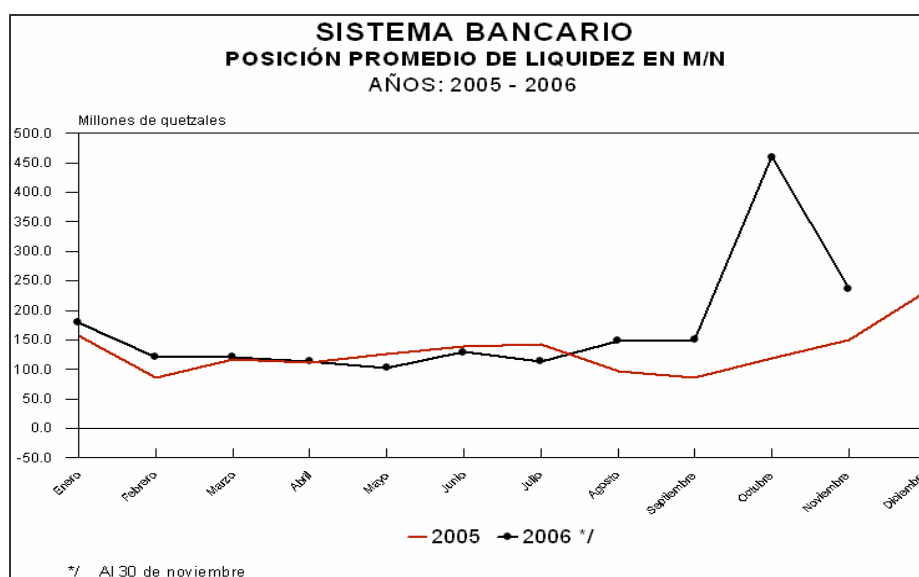
a/ Al 30 de noviembre

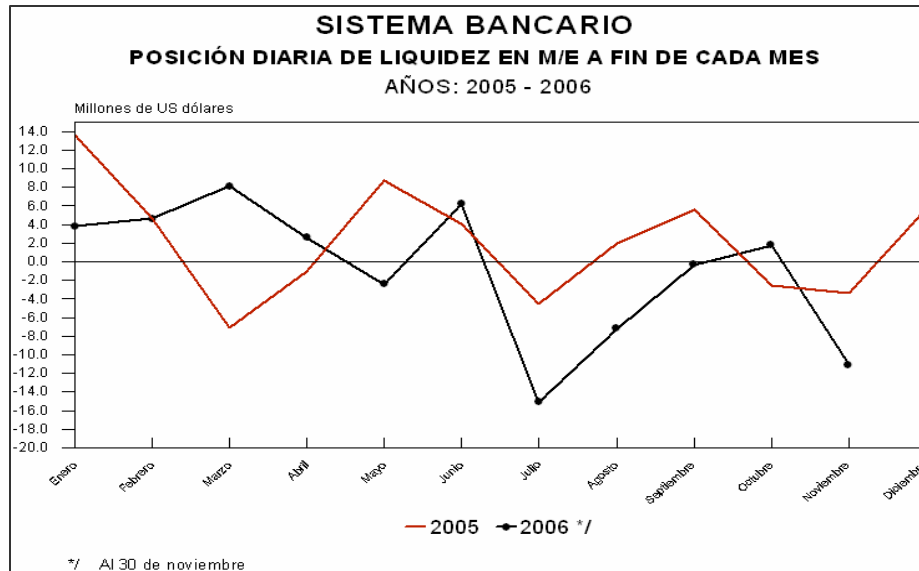
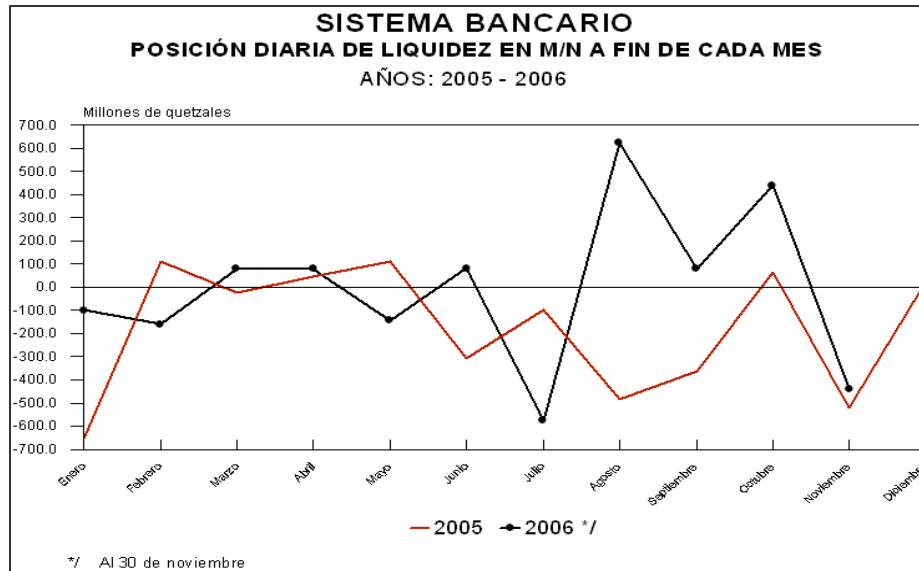


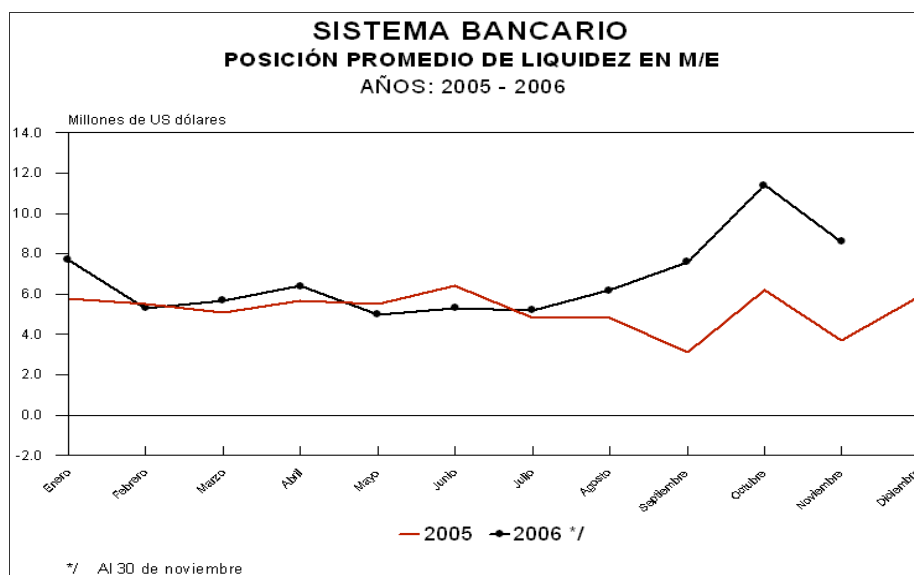
**SISTEMA BANCARIO**  
**POSICIÓN DIARIA DE LIQUIDEZ EN M/E A FIN DE CADA MES**  
**AÑOS: 2005 - 2006**  
**-Millones de US dólares-**

MES	2005	2006
ENERO	13.6	3.8
FEBRERO	4.7	4.6
MARZO	-7.1	8.1
ABRIL	-1.0	2.6
MAYO	8.7	-2.4
JUNIO	4.1	6.2
JULIO	-4.5	-15.1
AGOSTO	2.0	-7.2
SEPTIEMBRE	5.6	-0.3
OCTUBRE	-2.6	1.8
NOVIEMBRE	-3.4	-9.5 a/
DICIEMBRE	5.7	

a/ Al 30 de noviembre









# ANNEXES



## ANNEX 1

### ESTIMATION OF THE IMPACT OF THE “FREE TRADE AGREEMENT OF THE DOMINICAN REPUBLIC, CENTRAL AMERICA, UNITED STATES OF AMERICA”<sup>23</sup> ON THE ECONOMIC ACTIVITY OF THE COUNTRY

#### I. Antecedents<sup>24</sup>

In May 2004 the Central American countries and the United States of America, signed the Free Trade Agreement of Central America-United States of America (from now on known as the Treaty), which added the Dominican Republic in August 2004. The Treaty was enforced on July 1, 2006.

The main objective of the Treaty, in the opinion of the IMF, is to eliminate all tariffs and substantially the non-tariff barriers between member countries, added to stimulating commerce flow between their economies.

According to the IMF, between Central American countries and the Dominican Republic, would obtain, among others, a better access to the main exportation markets, a greater foreign direct market and great institutional strengthening in diverse areas related to commerce and investment.

The IMF adds, that if the Central American countries keep solid relations of commerce and investment with the United States of America and enjoy preferential access due to the Caribbean Basin Initiative (ICC for its acronym in Spanish), the Treaty is much wider and changes the manner of commercial relations that go from the unilateral preferential agreement defined by the ICC to a unilateral agreement of permanent character.

The application of the Treaty implies making modifications of structural and institutional character that allow consolidating commercial relations with greater certainty among member countries, which would help promote economic growth.

#### II. Effects of the Treaty<sup>25</sup>

<sup>23</sup> Decree Number 31-2005 of the Congress of the Republic of Guatemala, published in the official newspaper dated March 16, 2005.

<sup>24</sup> Based on the document: Central America: World Integration and regional cooperation, IMF, Washington, 2005.

<sup>25</sup> Op. cit.





The effects of the Treaty will be more evident in the environments of the direct foreign investment and exterior commerce and, therefore, in the economic growth of the country.

According to an IMF study<sup>26</sup>, using a static model of general computable balance from several countries concludes that the exportations of Central America to the United States could increase by 28% after enforcing the Treaty<sup>27</sup>. In that sense, also concludes that the exportations of the region of the United States of America would mainly due to the observed in the textiles, clothing and processed harvests headings. On the other hand, the United States International Trade Commission<sup>28</sup> -USITC-, using for the effect a computable general balance model, sustains that said increase would be of 12.44% during the first year of enforcing of the Treaty.

According the IMF, notwithstanding that Central America already has agreements with the United States, through the ICC and the generalized system of Preferences –SGP-, the Treaty would impulse new commerce, to the direct foreign investment and economic growth in the region. It is also expected that the Treaty contribute to improving the macroeconomic performance of the region, in the measure in which their economies are integrated even more with the United States; however, to materialize the benefits of the same, as to the growth and the stability, the Treaty should be backed by reforms that strengthen the regulating entities of commerce, the key institutions, the resolution of conflicts, the property rights and the flexibility of the work market.

On the other hand, the IMF points out that empiric studies showed that the commercial opening has a direct and positive effect on the economic growth. Also, other studies made in said organism sustain that the positive effect of greater commercial bonds on the productivity and growth of the investment, are the sustained growth pillars. Before this scheme of possibilities, the Treaty constitutes an advancement opportunity in the integration process of

<sup>26</sup> Study made by: Hilaire, Alvin D. y Yongzheng Yang; The United States and the New Regionalism/Bilateralism. IMF Working Paper 03/206. Washington, 2003.

<sup>27</sup> For example, according to the IMF the experience of Mexico regarding the TLCAN is that the value of its exportations of the United States increased by more than 50% in less than two years later of enforcing of this treaty.

<sup>28</sup> U.S.-Central America-Dominican Republic Free Trade Agreement: Potencial Economywide and Selected Sectoral +Effects. USITC Publication 3717, August 2004.

the region with the world economy and the analysis of its impact must be made through the intervention of the variables that participate in said dynamic.

#### A. PROBABLE EFFECT OF THE TREATY IN THE ECONOMIC GROWTH RATE OF GUATEMALA

With the purpose of having an appreciation of what could be the effect for 2007 of the Treaty in the economic activity, made an econometric estimation through the Ordinary Minimum Squared Method (MCO) with annual observations for the period understood between 1990 and 2005 and estimation for 2006 and 2007. The econometric model considers the gross domestic product as a dependent variable in real terms and as independent variables or expletives the inertia of the gross domestic product in real terms (in other words, the delayed dependent variable for a period), the exportations of goods, the importations of goods and the direct foreign investment.

The referred model can be expressed in the following manner:

$$\Delta PIB_t = f(\Delta PIB_{t-1}, \Delta X_t, \Delta M_t, \Delta IED_t)$$

Obtaining:

$\Delta PIB_t = a_1 + a_2 \Delta PIB_{t-1} + a_3 \Delta X_t + a_4 \Delta M_t + a_5 \Delta IED_t + e_t$	<b>(1)</b>
--	------------

Where:

$\Delta PIB_t$	=	Variation rate of the real GDP in the year $t$
$\Delta PIB_{t-1}$	=	Variation rate of the real GDP in the year $t - 1$
$\Delta X_t$	=	Variation rate of the exportation of goods in the year $t$
$\Delta M_t$	=	Variation rate of the importation of goods in the year $t$
$\Delta IED_t$	=	Variation rate of the direct foreign investment in the year $t$
$a_i$	=	Parameters to estimate ( $i = 1, 2, \dots, 5$ )
$e_t$	=	Term of the error in the year $t$

It is worth indicating that the model was estimated based on annual data for the 1990-2005 period and for 2006 and 2007, as was indicated.

The results of the application of the referred model are presented as follows.

Variable	Coefficients	Statistic t	Probability
$\Delta PIB(-1)$	0.762232	5.895808	0.0001
$\Delta X$	0.039105	2.567709	0.0262
$\Delta M$	0.058104	4.66628	0.0007
$\Delta IED$	0.0086	1.686723	0.1198
$R^2$	0.861244	F statistic	17.06896
$R^2$ adjusted	0.810787	Probability	0.00011

Note: The statistic proof corresponds to a level of significance of 10%.

Since it deals with a first difference model, to fine tune the calculation for the effects of the DR-CAFTA in the economic growth, was transformed into equation (1) in the following manner:

$\Delta PIB_t = a_2 \Delta PIB_{t-1} + w_t$	(2)
---	-----

Where  $w_t = a_1 + a_3 \Delta X_t + a_4 \Delta M_t + a_5 \Delta IED_t + e_t$ . So, for  $t + 1$ , the equation (2) becomes:

$$\Delta PIB_{t+1} = a_2 \Delta PIB_t + w_{t+1} = a_2 (a_2 \Delta PIB_{t-1} + w_t) + w_{t+1}$$

That is equivalent to:

$$\Delta PIB_{t+1} = a_2^2 \Delta PIB_{t-1} + a_2 w_t + w_{t+1}$$

From the previous equation we can estimate the effect in  $\Delta PIB_{t+1}$ , due to a change in  $w_t$ , assuming that  $w_{t+1}$  remains constant. This effect was given by:

$$\frac{\partial \Delta PIB_{t+1}}{\partial w_t} = a_2 \quad (3)$$

With the above equation it is possible to calculate the effect of a unit increase in the exportations, in the importations and in the direct foreign investment on economic growth. The above can be calculated through the chain rule:

$$\frac{\partial \Delta PIB_{t+1}}{\partial \Delta X_t} = \frac{\partial \Delta PIB_{t+1}}{\partial w_t} \cdot \frac{\partial w_t}{\partial \Delta X_t} = a_2 a_3 \quad (4)$$

$$\frac{\partial \Delta PIB_{t+1}}{\partial \Delta M_t} = \frac{\partial \Delta PIB_{t+1}}{\partial w_t} \cdot \frac{\partial w_t}{\partial \Delta M_t} = a_2 a_4 \quad (5)$$

$$\frac{\partial \Delta PIB_{t+1}}{\partial \Delta IED_t} = \frac{\partial \Delta PIB_{t+1}}{\partial w_t} \cdot \frac{\partial w_t}{\partial \Delta IED_t} = a_2 a_5 \quad (6)$$

In this manner, to measure the effect that would be had on economic growth would obtain an increase of one percent in the exportations, importations and in the direct foreign investment, would be in the following manner:

$$\frac{\partial \Delta PIB_{t+1}}{\partial \Delta X_t} = (0.762232)(0.039105) = 0.02980708 \ 2 \quad (7)$$

$$\frac{\partial \Delta PIB_{t+1}}{\partial \Delta M_t} = (0.762232)(0.058104) = 0.04428872 \ 8 \quad (8)$$

$$\frac{\partial \Delta PIB_{t+1}}{\partial \Delta IED_t} = (0.762232)(0.008600) = 0.00655519 \ 0 \quad (9)$$



## **1. Effect of the exportations of goods**

With the purpose of measuring the effect of the increase of exportations in the growth rate of the real GDP, the estimations for USITC<sup>29</sup> and the IMF<sup>30</sup> were considered.

The USITC estimates that the Treaty could generate an additional increase in the exportations of the Central American region to the United States of America of 12.44 percentage points in the short term. For the case of Guatemala, the relative weight of exportations of the country regarding the region (which is of 27.8%) was considered. Based on this proportion, it is considered that the additional increase could register the exportations of the country would be of 3.46 percentage points for 2006. In that context, the impact of the referred growth of exportations in the real GDP for 2007 would be 0.10 percentage points ( $0.029807082 \times 3.46$ ).

On behalf of the IMF it was estimated that the Treaty could generate an additional increase in the exportations of the Central American region to the United States at 28 percentage points in the short term. For the case of Guatemala, as in the previous exercise, the relative weight of exportations of the country regarding the region is of 27.8%. Taking into account this proportion, an additional increase is considered, which could register the exportations of the country at 7.78 percentage points for 2007. In that context, the impact of the referred growth of exportations in the real GDP for 2007 would be of 0.23 percentage points ( $0.029807082 \times 7.78$ ).

## **2. Effect of the importation of goods**

Even when the USITC and the IMF do not calculate the effect of the Treaty in the growth of goods importations of the Central American Region, the international evidence in matter of agreements of free commerce suggest that the fact that there is greater production for exporting means greater demand of importations, given that each unit produced requires imported components.

<sup>29</sup> United States International Trade Commission "US-Central America-Dominican Republic Free Trade Agreement: Potential Economy wide and Selected Sectoral Effects", 2004.

<sup>30</sup> International Monetary Fund, Occasional Paper 243 "Central America: World Integration and Regional Cooperation", 2005.



Based on this, it is considered that in order to obtain an approximation of said evidence, to calculate the marginal effect the Treaty in importations, it is feasible to use the additional growth estimated for exportations, which come from studies from the mentioned entities (12.44 percentage points according to the USITC and 28 percentage points according to the IMF.) It is worth indicating that said percentages refer to the additional increase in the total growth of exportations for the region, not the same on the marginal effect that would be observed in each one of the signing countries of the Treaty. In that sense, the reference of relative weight of Guatemalan importations was taken as a reference for the region, which is located at 32.8%. Taking into account the estimations of the USITC, the impact of the additional growth estimated for the importations in the real GDP for 2007 would be of 0.18 percentage points ( $0.044288728 \times 4.09$ ).

On the other hand, the estimations of the IMF were taken into account; the impact of the additional growth in the importations in the real GDP of the country for 2007 would be of 0.41 percentage points ( $0.044288728 \times 9.2$ ).

### **3. Effect of direct foreign investment -IED-**

With the purpose of estimating the additional impact in the growth of the real GDP of the country for 2007 comes from IED, were taken into account as reference of the Mexican experience with the enforcing of the North American Free Trade Agreement (NAFTA), in which, according to the IMF<sup>31</sup>, the flow of direct foreign investment would significantly increase (approximately 123.0 percentage points). With this parameter, it was considered that for the case of Guatemala the direct foreign investment could increase additionally by around 65.34 percentage points (around half of the experimented by Mexico<sup>32</sup>). In that sense, the additional impact in the real GDP of the country for 2007 would be of 0.43 percentage points ( $0.006555195 \times 65.34$ ). Given that for this case, there is

<sup>31</sup> Ibid, Ocasional Paper 243, page 17.

<sup>32</sup> This is a Proxy that is based in the observation of the dynamic of direct foreign investment in Mexico before the enforcing of the treaty versus that of Guatemala. In effect, according to official numbers, México registered growth rates for the referred variable greater than the observed in Guatemala. For example, so much so that in México in the previous three years of enforcing the treaty the IED grows at an annual rate of 23%, in Guatemala said rate was of 15%. With that we could therefore say that the increase of the IED in the first year of enforcing of the TLCAUSA, that is positive, but could be seen and the moment it was observed in said country.



only estimation that is the same for both scenarios that were presented for the other two explicative variables.

#### **4. Total Effect**

According to the obtained calculations, and taking into account the estimations of its effect on goods exportations, in the goods importations and in the IED, would obtain the following results:

- a) In the first scenario, with an additional increase of 3.46 percentage points in the exportations, of 4.09 percentage points in the importations and of 65.34 percentage points in the IED flows, the total additional impact in the real GDP for 2007 would be of 0.71 percentage points.
- b) In the second scenario, with additional growth of 7.78 percentage points in exportations, of 9.20 percentage points in importations and of 65.34 percentage points in the IED flow, the total additional impact in the real GDP for 2007 would be of 1.07 percentage points.

In the described context and according to the results obtained, the additional effect in the growth of the real GDP of the country for 2007, derived from the Treaty, is estimated that it could be located in a range between 0.71 percentage points and 1.07 percentage points.

Last, it is worth reiterating that this is only an exercise that will generate an appreciation, although imperfect due to the limitations of information and available statistic quality, of the effects of the Treaty on the growth rate of the country; however, it is illustrative to indicate that the obtained results in some manner coincide with what the international experts have recently been pointing out on this subject. According to some experts, since the second half of the nineties, the economies of the region have been increasing their external opening, in this manner expecting a marginal impact in the short term and especially the positive impacts for 2007 of the Treaty would be solidified as an increase of the investment, especially of the direct foreign one, as a consequence of associated favorable expectations to improving a climate of business in the region. It can be seen that at the beginning the



positive impact is derived from the increase of investment in the region, whereas gradually, in the measure in which the productive structure of the region becomes more efficient, foreign commerce would take on more importance. All of the above, would impact each country in the region according to the celerity with which to adopt institutional reforms necessary to receiving such benefits.



## ANNEX 2

### MAIN SUPPOSITIONS OF THE GRADUAL DEFLATION STRATEGY

In the following is a scenario that is compatible with the inflation reduction process. Said scenario illustrates the probable trajectory of some key macroeconomic variables in the mid-term for the main sectors of the economy of the country.

MAIN SUPPOSITIONS OF A COMPATIBLE SCENARIO WITH THE PROCESS OF INFLATION REDUCTION						
YEAR	FISCAL SECTOR	REAL SECTOR	MONETARY SECTOR	EXTERNAL SECTOR		
	% of the GDP	%	Consolidation Of the scheme of Explicit inflation Goals	RMIN as the Months of Goods importations	% del PIB	%
	Fiscal deficit <sup>1/2/</sup>	Growth GDP			Deficit in Current account	Growth of the GDP USA.
2006	-1.5	4.6		4.4	4.4	3.4
2007	-0.9	5.1		4.0	4.3	2.9
2008	-1.8	5.2		3.8	4.2	3.3
2009	-1.7	5.3		3.6	4.1	3.1
2010	-1.2	5.1		3.4	3.9	3.1
2011	-1.0	5.0		3.2	3.8	3.1

1/ (-) Means fiscal deficit

2/ The data of the 2008-2009 period correspond to the Multi-annual Income and Expenditure budget of the State.

#### I. IN THE MONETARY SECTOR

- ✓ Consolidation of a scheme of explicit inflation goals.

#### II. IN THE FISCAL SECTOR

- ✓ Fulfillment of the Fiscal Agreement.

#### A. PRINCIPLE OF BALANCE BETWEEN INCOME AND EXPENDITURE OF THE STATE

- ☞ Commitment: that the fiscal deficit is around 1% annually regarding the GDP.
- ☞ The balance between income and expenditure is one of the fundamental factors for ensuring the stability and economic growth. The fiscal balance must be



the result of an adequate management between the tributary income and public expense within a mid and long term vision.

## **B. PRINCIPLE OF STABILITY AND CERTAINTY**

- ☞ Commitment: elevate the tributary load at 12% of the GDP.
- ☞ The stability of the juristic-tributary frame reduces the risks of unforeseen or arbitrary changes, allowing that the contributors can foresee the amount of future obligations and that the State can foresee the flow of taxes to be paid, increasing the efficiency and effectiveness of the collection measures.

All the above will allow raising the social expense, so as to gradually fulfilling the commitments of the Peace Agreements, keeping macroeconomic stability at the same time.

## **III. IN THE REAL SECTOR**

- ✓ Keeping macroeconomic discipline;
- ✓ Gradual taking advantage of the DR-CAFTA benefits; and,
- ✓ Stability in the external demand.

## **IV. IN THE EXTERNAL SECTOR**

- ✓ Deficit in current account gradual reduction, consistent with the increase of exportations due to the DR-CAFTA, of a stable external environment and keeping macroeconomic discipline.
- ✓ Capital and financing account stability for an increase of the direct foreign investment, associated to a better business climate and to the consolidation of structural reforms; and,
- ✓ Level of net international monetary reserves: keeping solidity in the external position of the country.