

ECONOMIC PERSPECTIVES FOR 2009-2010 AND PROPOSAL OF THE MONETARY, FOREIGN EXCHANGE RATE AND CREDIT POLICY FOR 2009

I. ECONOMIC PERSPECTIVES¹

A. FROM THE REAL SECTOR FOR 2009

The macroeconomic panorama that Latin America faces, due to the world financial crisis, will continue to be complex, due, among other aspects, to the world credit restrictions forecast, as well as a weakening of foreign demand and a drop in the prices for raw materials. Before this scenario, according to the latest estimations from the International Monetary Fund (IMF)², it is expected that Latin America will reach an economic growth rate of approximately 2.5% in 2009 (4.5% in 2008) and that the US economy will register a contraction of 0.7% in 2009 (growth of 1.4% in 2008).

For 2009, according to the estimations made by the technical departments of the *Banco de Guatemala*, the national economic activity, measured by the GDP, in real terms, will register growth between 3.0% and 3.5%, lower to the economic growth rate estimated for 2008 of 4.0%. It is important to warn that the economic growth projections for Guatemala, included in the present document consider, on the one hand, the updated estimations of the foreign, fiscal and monetary sectors, based on the latest available information, and, on the other hand, the most recent world economic perspectives formulated by the IMF, which have the added risk of being revised on the downfall. As a matter of fact, according to the most recent declarations of the General Manager of the IMF, that could occur in the short term.

The behavior forecast for national economic activity is based, externally, on the weakening of the foreign demand by the main commercial partners of Guatemala, particularly by the recession seen in the US and Euro Zone economies, as well as the deceleration forecast in the economies of the rest of the Central American countries, as well as the deceleration forecast by the economies of the rest of the Central American countries, mainly as a result of the crisis experimented by the financial sector of the advanced economies and

¹ In the statistics appendix observed information is presented, estimations for 2007 and perspectives for 2008 of the real, monetary, external, fiscal and banking sectors.

² International Monetary Fund. Perspectives of the World Economy. November 2008.



the deterioration of the trust of producers and consumers worldwide. According to the IMF, it is expected, as is indicated, that the US economy will register a contraction of 0.7% (growth of 1.4% in 2008), whereas in the Euro Zone, the contraction will be of 0.5% (growth of 1.2% in 2008). For the Latin American and Caribbean economies, it is expected that together they will show less dynamism, going from 4.5% in 2008 to 2.5% in 2009.

Added to the above, the world economic deceleration, especially in the United States of America, will rebound in less external flow associated to family remittances, tourism and direct foreign investment, which could influence in less availability of resources for banking credit to the private sector.

In the internal order, it will favorably influence maintaining the macroeconomic stability, as a result of the application of disciplined monetary and fiscal policies and to greater investment forecast in the General Income and Expenditure Budget for the 2009 Fiscal Year.

At economic activity level, it is forecast that, with the exception of *Mine and Quarries Exploitation* and *Construction*, which growth rates are projected as negative, for the rest of the productive sectors, it is estimated that the growth rates will be positive, although less dynamic that the forecast for 2008, as is commented in the following.

For the activity of Agriculture, Livestock, Hunting, Forestry and Fishing (with a participation of 13.2% of the GDP) a growth of 2.7% is estimated, higher to the forecast for 2008 (2.0%). This behavior will be influenced according to the appreciation of guilds and producer associations, the Ministry of Agriculture, Livestock and Feeding (MAGA, for its acronym in Spanish) and the National Coordinator of Basic Grains (Conagrab, for its acronym in Spanish), mainly by the greater dynamism expected in the production of non-traditional crops, particularly corn, beans, vegetables and fruit; as well as cattle farming and poultry.

For non-traditional crops (mainly coffee, sugar cane and cardamom), together, a growth of 3.1% is expected, lower to the forecast for 2008 (3.4%).



A more dynamic growth is expected for coffee production, when going from 2.0% in 2008 to 3.0% in 2009. According to the appreciation by the National Coffee Association (ANACAFE, for its acronym in Spanish), in 2009 a greater yield in the planting areas is forecast, associated to a reduction of the bi-annual effect of the crop³.

In the production of sugar cane, a growth of 3.8% is estimated (6.0% in 2008). According to the Sugar Producers Association of Guatemala (Asazgua), said growth would be associated, among other factors, to fewer yields in the planted areas, given the fact that they had not contemplated broadening said areas.

Regarding cardamom production, it would be expected that the production volume will register an increase of 0.1% (-10.0% in 2008). According to the local spice-producer's opinions, said increase would be explained by the improvements introduced in the crop, due to the incentive of better international prices for the spice.

In the case of corn and bean production, it is estimated that this will grow 2.1% and 2.0%, respectively (-2.5% and 2.3%, in that order in 2008). As to vegetables and fruit, a growth of 0.8% and 3.7% is forecast; percentages higher to those estimated in 2008 (0.1% and 2.7%). According to appreciations from MAGA and Congrab, the expected growth rhythm is mainly associated to the expectations of a favorable winter forecast for the production of said crops.

As to breeding beef cattle, a growth of 2.9% is expected (2.3% in 2008). According to the Cattle Farmers Federation of Guatemala (Fegaguat, for its acronym in Spanish) and the MAGA, the greater dynamism is due, among other reasons, to the improvement of genetic quality of the cattle and to the increase of the herds in the country.

In the Mine and Quarry Exploitation activity (with a participation of 0.6% of the GDP), a contraction of 2.9% is expected (-0.8% in 2008). This behavior is associated to the drop forecast in the extraction of crude oil and natural gas, due to the decrease forecast in the production of crude oil in the main oil wells

³ Coffee harvest cycle that indicates a season of high harvest that is usually followed by a low one due to weakening of the plant.



of the country, as well as in the reduction of the demand for pebbles, sand and clay on behalf of the construction sector.

In the case of the activity of Manufacturing Industries (with a participation of 17.9% in the GDP), would expect growth of 1.9% for 2009, percentage lower to the estimated in 2008 (2.4%). This result would be influenced by the expectations of better foreign demand of textile products, garments, particularly on behalf of the United States of America, main destination of this type of exportations, due to the economic contraction that would be facing said country.

As to the food, beverage and tobacco industry, less dynamic growth is forecast than that of 2008, associated to a deceleration forecast in domestic demand.

As to the products destined to construction, like cement, block, iron and metals, these will be influenced by the decrease forecast in the growth rhythm of the construction activity, reason for which the production is expected of said products exhibited a less dynamic behavior than the estimated for 2008.

Regarding the *Electricity Supply and Water Collection* (with a relative weight of 2.5% in the GDP), estimates a growth of 2.0% (2.2% in 2008). Said deceleration, according to the Wholesale Market Administrator (AMM), would be the result of the drop forecast in the demand of electricity, due to less growth expected in the majority of economic activities.

The Construction activity (with a participation of 3.5% in the GDP), is expected to register a drop of 4.7% (-3.6% in 2008). This behavior would be explained by the lower amount of meters authorized for construction in 2008, which conclusion would be in 2009; in residential buildings as well as non-residential, that represent a contribution of 59.9% to this activity.

The *Wholesale and Retail Commerce* (with a participation of 12.0% in the GDP), is estimated that in 2009 will register a growth rate of 3.2% (3.3% in 2008), mainly explained by the lower dynamism forecast in goods production on behalf of the manufacturing industries as well as in importations.

For the *Transportation, Storage and Communication* activity (with a relative weight of 11.6% in the GDP), a registered growth of 13.8% is forecast (18.2% in 2008). Said behavior is the result, on the one hand, of the expected



evolution in the transportation sub-activity, which would go from a growth of 4.8% in 2008 to 4.2% in 2009, mainly associated to a decrease in cargo transportation, due to less demand forecast on behalf of agricultural and farming and industrial activities and, on the other hand, of the behavior of the evolution of the mail and communications sub-activity (79.8% of participation of the activity), which would be expected to register a growth rate of 18.7% in 2009 (25.6% in 2008), basically due to less dynamism estimated for the activation of new telephone lines.

As to the activity of *Financial Intermediation, Insurance and Auxiliary Activities* (with a relative weight of 4.6% in the GDP), we forecast that it will register a rate of 11.6% (11.8% in 2008), associated to a less dynamic behavior in the banking activity, as a result of the lesser economic growth forecast for 2009.

Regarding the activity of *Home Rental* (with a participation of 9.9% in the GDP), we expect a growth rate of 3.6% (3.7% in 2008). The slight deceleration would be explained by the lower number of homes in construction registered during 2008, which would imply a deceleration in the supply of real estate destined for rental in 2009.

As to Private Services (with a participation of 15.5% in the GDP), it is expected to show a growth of 4.1% for 2009 (4.5% in 2008). Said behavior would be mainly associated to lesser dynamism expected in industrial, commercial and transportation activities, main users of said services.

Last, regarding the activity of Public and Defense Administration (with relative weight of 6.4% in the GDP), it is estimated that it will register a growth rate of 3.7% (5.4% in 2008), associated to a lower growth rate of remunerations on behalf of the Central Government.

Following is a presentation of a graph that contains the variation rates of the economic activity for 2009.



**GROSS DOMESTIC PRODUCT MEASURED BY THE ORIGIN OF THE PRODUCTION
YEARS 2008 - 2009**

Millions of constant quetzales at 2001 prices ^{a/}

ECONOMIC ACTIVITIES	2008 ^{e/}	2009 ^{py/}	Variation Rates	
			2008	2009
1. Agriculture, livestock, hunting, forestry and fishing	25,754.9	26,460.3	2.0	2.7
2. Exploitation of mines and quarries	1,286.2	1,249.5	-0.8	-2.9
3. Manufacturing industries	35,334.5	36,022.3	2.4	1.9
4. Supply of electricity and water collection	4,983.5	5,085.3	2.2	2.0
5. Construction	7,275.7	6,936.4	-3.6	-4.7
6. Commercial wholesale and retail sales	23,291.4	24,047.0	3.3	3.2
7. Transportation, storage and communications	20,550.3	23,379.5	18.2	13.8
8. Financial intermediation, insurance and auxiliary activities	8,311.0	9,275.0	11.8	11.6
9. Home rentals	19,265.3	19,963.8	3.7	3.6
10. Private Services	29,924.9	31,162.7	4.5	4.1
11. Public and Defense Administration	12,446.9	12,910.6	5.4	3.7
GROSS DOMESTIC PRODUCT	194,226.1	201,053.3	4.0	3.5

a/ The discrepancy between total and sum of the components is due to the value of Intermediation Financial Services measured Indirectly, to the net taxes of subventions to the products and the difference by non-addition of chained indexes.

e/ Estimated numbers.

py/ Projected numbers

B. OF THE REAL SECTOR FOR 2010

For 2010 it is estimated that the economic activity, measured by the GDP in real terms, register a growth rate of between 3.3% and 3.8%, higher to the estimated range for 2009 and between 3.0% and 3.5%. This behavior would be sustained, externally, by the expectations of economic recovery of the main commercial partners of the country, especially in the United States of America, in the Euro Zone and in the Central American countries.

Internally, the economic growth expected would be favored by the positive perspectives that would generate keeping macroeconomic stability, particularly based on the application of disciplined fiscal and monetary policies and the improvement of the economic agents expectations, especially if, as is



forecasted by some international experts, the economic reactivation process in the United States of America could begin in the third quarter of 2009, although it is estimated that said process would be long and gradual.

The economic activities that could be favored by a greater foreign demand caused by the recovery of the world economy, as well as by a stable domestic market, would be the following: Agriculture, livestock, hunting, forestry and fishing, manufacturing industries, Supply of electricity and water gathering or collection; wholesale and retail commerce, private services; and, construction, which, as a whole, represent a participation of 64.1% of the GDP.

Following is a chart that shows the variation rates according to the branches of economic activity for 2010.

**GROSS DOMESTIC PRODUCT MEASURED BY THE PRODUCTION ORIGIN
YEARS 2009 - 2010**
Millions of constant quetzales at a price of 2001 ^{a/}

ECONÓMIC ACTIVITIES	2009 ^{py/}	2010 ^{py/}	Variation rates	
			2009	2010
1. Agriculture, livestock, hunting, forestry and fishing	26,460.3	27,386.4	2.7	3.5
2. Exploitation of mines and quarries	1,249.5	1,243.2	-2.9	-0.5
3. Manufacturing industries	36,022.3	36,778.8	1.9	2.1
4. Supply of electricity and water collection	5,085.3	5,202.2	2.0	2.3
5. Construction	6,936.4	7,082.0	-4.7	2.1
6. Wholesale and retail commerce	24,047.0	24,864.6	3.2	3.4
7. Transportation, storage and communications	23,379.5	26,001.8	13.8	11.2
8. Financial intermediation, insurance and auxiliary activities	9,275.0	10,286.0	11.6	10.9
9. Home rentals	19,963.8	20,682.5	3.6	3.6
10. Private services	31,162.7	32,471.5	4.1	4.2
11. Public and defense Administration	12,910.6	13,243.3	3.7	2.6
GROSS DOMESTIC PRODUCT	201,053.3	208,777.6	3.5	3.8

a/ The discrepancy between total and the sum of the components must be of the Intermediation Financial administrators, measured Indirectly, to net taxes of subventions to the products and the differences from not adding changed.

py/ Projected numbers.



C. OF THE EXTERNAL SECTOR

1. On world economy

According to the estimations by the International Monetary Fund (IMF)⁴, the world economy is expected to grow 2.2% in 2009, lower to the growth forecast for 2008 (3.7%). These previsions are sustained, fundamentally, by adverse credit conditions generated by the crisis in the main financial markets and in the restrictive monetary policies implemented by the main central banks in the world, in order to abate the inflationary pressures presented during 2008. In that sense, the IMF forecast that the inflation for the advanced economies be at 1.4% in 2009 (3.6% in 2008).

It is worth indicating that the economic growth forecast for 2009, could be negatively affected if the uncertainty caused by the global financial crisis would deepen, since this would adversely affect the performance of the main world economies, especially that of the United States of America. In the same manner, the deficit in the current account of the US payments balance, although it is expected that the same experiment a reduction in 2009, will continue to be a risk for world economic stability.

According to IMF projections, the US economy will experiment a 0.7% contraction in 2009 (growth of 1.4% forecast for 2008). The recession projected for the US economy is based on adverse credit conditions generated by the fall of real as well as financial assets. The economic recession and uncertainty, caused by the financial crisis, will cause a weakening of private consumption as well as residential investment. Regarding inflation, for 2009 the IMF estimates that the same be at 1.8%, which is lower to the forecast for 2008 (4.2%). This reduction of inflationary rhythm could be influenced by the lower economic growth expected for 2009, by the reduction of the international oil price, by the lower salary increases and by an increase in productivity. Regarding the external sector, it is expected that a deficit reduction in current account in the payments balance, which will reach 3.3% of the GDP in 2009 (4.6% in 2008).

⁴ IMF. World Economic Outlook (WEO), October 2008 y WEO Update, November, 2008.



For the Euro zone, the IMF estimates a contraction of 0.5% for 2009 (growth of 1.2% forecast for 2008). The lower economic dynamism expected in this area is associated to the reduction of the foreign demand caused by lower US economic growth and to the deepening of the financial crisis, since the main banks of the region, due to their high integration with the US financial market, have been negatively affected by the crisis in said country, which forecasts that in 2009 there will be problems in the financing of the productive activity. On the other hand, it is expected that in 2009 the inflation would be around 1.9%, lower to the forecast for 2008 (3.5%).

In Japan, the economic growth projections of the IMF for this country would indicate a recession for 2009 of 0.2%, regarding the expected growth for 2008 (0.5%). This provision is based on the expected reduction in external demand, as a result of lesser global growth, especially in the United States of America, as well as of lower confidence, of consumers as well as investors, before the uncertainty generated by the global financial crisis. Regarding inflation, it is projected to be the same at 0.9% in 2009, lower to the forecast for 2008 (1.6%).

In the Asian emerging economies, the regional economic growth is projected at 7.1% for 2009, which is lower to the projected for 2008 (8.3%). Said behavior continues to be influenced by the dynamism of the economic activity by the People's Republic of China and India, which growth rates for 2009 are estimated at 8.5% and 6.3%, respectively (9.7% and 7.8% for 2008, in that order). The inflation for that region is forecast to be at 5.8% in 2009 (7.3% in 2008). In the People's Republic of China the growth for investment as well as domestic consumption is expected to promote economic growth, while in India it is forecast that economic growth is based on the private consumption strength as well as an increase in exportations. In the case of the People's Republic of China, it is expected that inflation will be at 4.3% in 2009 (6.4% for 2008). In India, the inflation forecast for 2009 is of 6.7% (7.9% for 2008).

In Emerging Market Economies and Developing Countries, a growth of 5.1% is expected for 2009 (6.6% for 2008). To consolidate said growth, these countries must continue designing economic policies destined to reducing



the vulnerability of their economies regarding the volatility of the international financial environment. The inflation estimated for this group of countries would be of 7.1% for 2009, which means a reduction regarding the estimation for 2008 (9.2%).

For the Community of Independent States a growth of 3.2% for 2009 is projected, lower to the 6.9% forecast for 2008. The deceleration in the projected growth for this region could be attributed to the reduction of external demand and to the restriction of international credit, due to the probable breakdown of foreign financial conditions. On the other hand, for 2009 an inflation of 12.6% is projected, which is lower to the forecast for 2008 (15.6%).

The IMF projections for the Middle East indicate that the economic growth for this region in 2009 will be at 5.3%, which is lower to the 6.1% estimated for 2008. The reduction forecast in the economic activity of this group of countries is sustained in the weakening of foreign demand, in the international crude oil prices drop and in the reduction of foreign capital income. On the other hand, it is worth stressing that it is forecast that inflation will decelerate in that region. In effect, for 2009 an inflation of 14.4% is expected, slightly lower to the projected for 2008 (15.8%).

As to the Western Hemisphere⁵, a decrease in economic dynamism is expected, therefore the growth projected by the IMF for the region in 2009 is of 2.5%, lower to the forecasted for 2008 (4.5%). Regional growth is considered to be affected negatively by the contraction forecast for the US economy (main commercial partner of this region), which could generate a weakening of the external demand. Added to this, the economic activity of this region could be affected by adverse foreign credit, as a result of the global financial crisis. For 2009, an inflation of 7.3% is forecast, lower to the forecasted for 2008 (7.9%).

Regarding Central America, for 2009 it is estimated that the region will grow 4.2%, forecast lower to that of 2008 (4.6%), associated to the

⁵ According to the International Monetary Fund (IMF), Western Hemisphere includes the following countries: Antigua and Barbuda, Argentina, The Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Granada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, Santa Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay and the Bolivarian Republic of Venezuela.



economic contraction of its main commercial partners, the United States of America. For 2009, Central American inflation is projected to be at 8.5%, lower to the forecasted for 2008 (10.9%).

In Africa, it is expected that in 2009 the economic growth will be at 4.7%, lower to the 5.2% forecast made in 2008. In the same manner, the forecasting of economic growth for the Sub-Saharan region indicates a reduction for 2009 (5.1%) regarding the forecasted for 2008 (5.5%). In the projections for these countries, we can highlight the weakening of foreign demand, which may not be compensated by the increase of the exchange terms of oil exporting countries of this region. On the other hand, for the non-producing countries a drop in foreign demand is forecasted, lower foreign capital increase and a breakdown of exchange terms, factors that could all together reduce the economic dynamism of these countries. On the other hand, the inflation in Africa is expected to be at 8.3% (10.2% for 2008), whereas for the Sub-Saharan region an inflation rate of 9.5% is projected (11.9% for 2008).

Among the risks for global economic growth projected for 2009, we can highlight: the uncertainty of the world financial crisis evolution, the global macroeconomic imbalances and the possibility of the central banks of developed countries to continue giving resources without restoring confidence in the markets. The case of the United States of America, as well as the Euro-Zone give particular relevance due to their commercial importance in the world, areas in which a recession for 2009 are is forecast.



**RELEVANT MACROECONOMIC VARIABLES
PER REGION AND PER SELECTED COUNTRIES
YEARS 2008 - 2009
(Percent Variation)**

	2008 ^{py/}	2009 ^{py/}
ECONOMIC GROWTH ^{1/}		
World Economy	3.7	2.2
Advanced economies	1.4	-0.3
United States of America	1.4	-0.7
Euro Zone	1.2	-0.5
Japan	0.5	-0.2
Emerging Asian economies ^{2/}	8.3	7.1
People's Republic of China	9.7	8.5
India	7.8	6.3
Emerging market economies and developing countries	6.6	5.1
Africa	5.2	4.7
Middle East	6.1	5.3
Western Hemisphere (Latin America and the Caribbean ^{3/})	4.5	2.5
Argentina	6.5	3.6
Brazil ^{1/}	5.2	3.0
Chile	4.5	3.8
Mexico ^{1/}	1.9	0.9
Peru	9.2	7.0
Colombia	4.0	3.5
Central America	4.6	4.2
Central Europe and the East	4.2	2.5
Community of Independent States	6.9	3.2
INFLATION ^{4/}		
Advanced economies ^{1/}	3.6	1.4
United States of America	4.2	1.8
Euro Zone	3.5	1.9
Japan	1.6	0.9
Emerging Asian economies ^{2/}	7.3	5.8
People's Republic of China	6.4	4.3
India	7.9	6.7
Emerging market economies and developing countries ^{1/}	9.2	7.1
Africa	10.2	8.3
Middle East	15.8	14.4
Western Hemisphere (Latin America and the Caribbean ^{3/})	7.9	7.3
Argentina	9.1	9.1
Brazil	5.7	5.1
Chile	8.9	6.5
Mexico	4.9	4.2
Peru	5.6	4.4
Colombia	7.3	5.5
Central America	10.9	8.5
Central Europe and the East	7.8	5.7
Community of Independent States	15.6	12.6

^{py/} Projected Numbers

^{1/} Data corresponding to the updated version for World Economic Outlook - WEO -, November 6, 2008.

^{2/} Includes developing Asia, recently industrialized Asian economies and Mongolia.

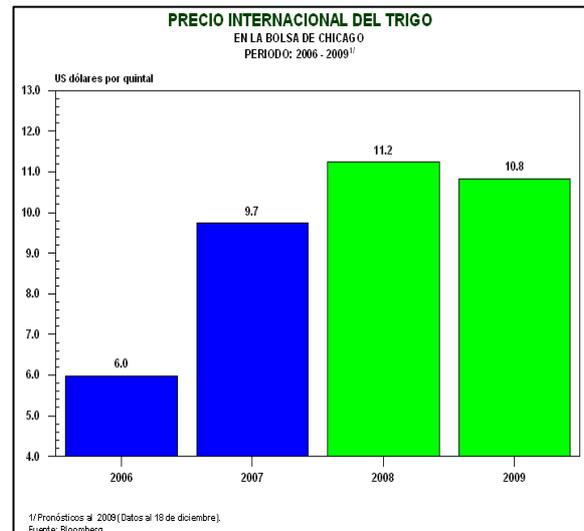
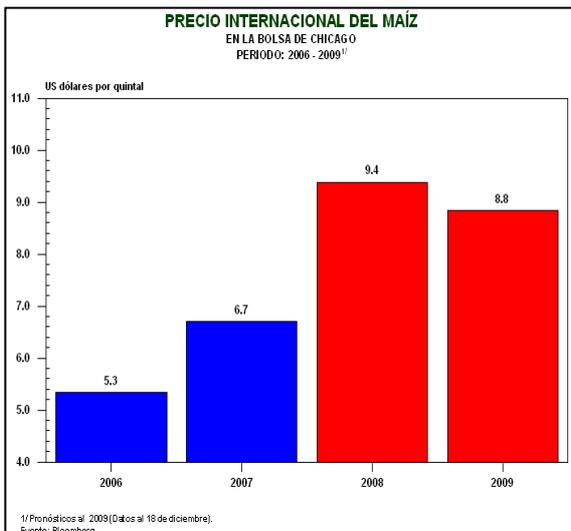
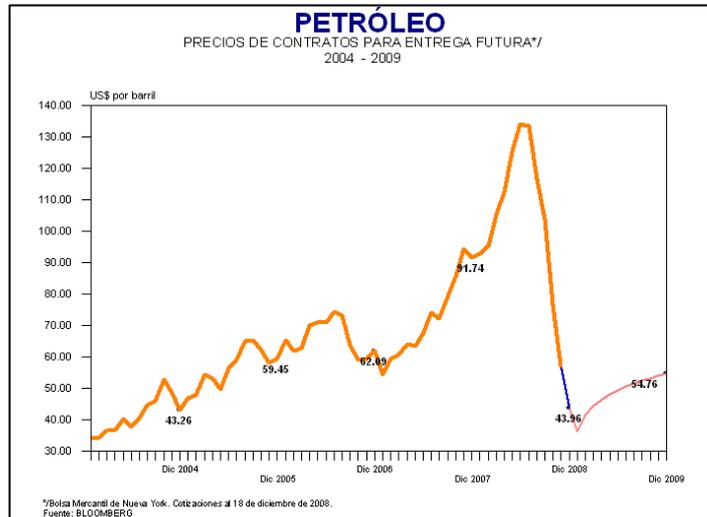
^{3/} The regional growth data is an updated version of the World Economic Outlook, November 2008; the data for each individual country and for Central America (including Panama) correspond to WEO, October 2008, as well as inflation data.

^{4/} Data from World Economic Outlook, October 2008.

SOURCE: IMF. World Economic Outlook, October 2008 and update November 6, 2008.



Last, an aspect that must be highlighted is the fact that, unlike 2008, for 2009 according to information from Bloomberg, the futures prices of oil, corn and wheat will be lower, as is seen in the following graphs.



2. Of the Payments Balance for 2009

In the context of the perspectives of the world economy commented, in the payments balance for Guatemala for 2009 is forecast that the *Reserve Assets* of the *Banco de Guatemala*⁶ could increase by approximately US\$281.3 million, as a result of a surplus balance estimated in the capital and financial

⁶For 2009, Reserve Assets do not include the estimated revaluing in gold holdings for US\$25.3 million and the estimated devaluation in holding s of the DEG for US\$1.6 million; however, the net result makes up a part of the increase of US\$305.0 million in the net international monetary reserves.



account for US\$2,450.9 million, mainly generated by the income corresponding to the net external financing of the fiscal deficit for 2009 for around US\$480.0 million, which could partially compensate the possible reduction of the external flow of private capital. The referred surplus would be enough to finance the deficit in current account projected for US\$2,169.6 million, equivalent to 5.2% of the GDP (5.3% in 2008).

Regarding the FOB value of the exportations, this would be around US\$8,750.8 million, amount higher by US\$731.7 million (9.1%) to the estimated for 2008. Said result would be determined, by the increase in the value of exportations of Other Products for US\$607.3 million (13.8%). Of this amount, the exportations to Central America would grow US\$327.1 million (14.1%), while the Rest of the World would increase US\$280.2 million (13.3%). The referred increase in the value of exportations would also be explained by the projected growth in the value of exportations of the Main Products for US\$46.5 million (2.5%).

At product level, the exportations of coffee would register a slight increase in value, when going from US\$685.0 million in 2008 to US\$688.8 million in 2009, as a result of the increase forecasted in volume, however, the median export price will register a decrease.

As to the value of the sugar exports, it is estimated that it will be at US\$383.6 million, amount higher by US\$60.1 million (18.6%), regarding 2008, due to an increase projected in the exported volume of 6,229.8 thousands of quintals (18.6%), even when a reduction is projected in the median price of exportation.

In the case of bananas, a value of exportations is located at US\$367.5 million amount higher by US\$46.4 million (14.4%) to the value estimated for 2008. This result would be explained by an increase in the volume of exportation, which would go from 33,452.0 thousand quintals in 2008 to 35,000.0 thousand quintals in 2009 and by the increase in the median price of exportation, which would go from US\$9.60 in 2008 to US\$10.50 in 2009.

Regarding the value of cardamom exportations, these would be at US\$210.0 million, amount greater by US\$41.3 million (24.4%) to the estimated



for 2008. Said result would be derived from the increase in the exported volume, when going from 450.0 thousand quintals in 2008 to 700.0 thousand quintals in 2009, as well as the decrease in the median price of exportation, when surpassing US\$375.00 in 2008 to US\$300.00 for 2009.

Regarding oil, a decrease in value is expected for exportations, when going from US\$376.0 million in 2008 to US\$271.0 million in 2009, mainly as a result of the international price of crude oil in 2009 that was lower to the registered in 2008 on average.

As to exportations of goods for transformation, these would register growth of US\$65.6 million (4.0%), while the acquired exports at the port would grow US\$12.2 million (13.5%).

The FOB value of importations for 2009 would be US\$14,963.3 million, amount higher by US\$996.9 million (7.1%) to the registered in 2008. The result forecast would be mainly associated to the deceleration forecast for 2009. In the estimation of the importations value of general commodities, the highlights were the increase in the following headings: construction material (9.5%); raw material and intermediate products (8.9%); machinery, equipment and tools (8.0%); consumer goods (7.6%); and, fuels and lubricants (5.1%). On the other hand, the importations of goods for transformation would register a growth of US\$20.6 million (2.0%), while the acquired goods importations in ports will increase by US\$0.1 million (12.0%).

As a result of the projections of commerce for 2009, the commercial balance would register a deficit of US\$6,212.5 million; amount higher by US\$265.2 million (4.5%) to the value estimated for 2008.

As to the services balance, it is forecast that this will register a deficit salary of US\$281.7 million, amount lower by US\$18.8 million (6.2%) regarding the deficit forecast for 2008, associated to the deficits of the transportation, insurance and other services headings.

The rent balance will register a deficit balance of US\$1,027.8 million, amount higher by US\$107.3 million (11.7%), regarding 2008. Said result is mainly due to the concept of the payment of dividends to foreign investments.



In current transfers we expect net income for US\$5,352.5 million, higher by US\$261.9 million (5.1%) to the estimated for 2008, mainly due to the fact that for said period there is an increase forecast of 3.5% in the net income due to family remittances.

Regarding financial and capital accounts, a balance surplus of US\$2,450.9 million is expected, higher by US\$67.2 million (2.8%) to the estimated value for 2008. As to the result of the financial account, it would highlight the increase for US\$232.2 million in the other investment heading that would go from US\$1,032.3 million in 2008 to US\$1,264.5 million in 2009⁷, whereas the direct investment would decrease by US\$48.2 million, and in 2009 would be at US\$754.6 million. It is expected that the balance surplus of portfolio investment will decrease US\$14.7 million (28.4%).

Regarding capital account, this will continue to register a balance of zero, given that, like in 2008, there is no projection for receiving capital donations.

Due to the estimated behavior of current account and capital and financial account an increase of NIMR for US\$305.0 million is expected. With a projected increase in the level of said reserves as well as in the importation of goods, the number of months of financed goods importations with international monetary reserves would be of 3.3 (3.5 in 2008), level that would continue to reflect a favorable external position. If we reduce the short term obligations of the Central Government for its equivalent in US dollars (sensitivity analysis), this would be around 2.8 months of importation goods.

⁷ Includes externally hired loan disbursements by the public sector for a total amount of US\$750.0 million, among them, the following stand out: US\$100.0 million destined to the Human Capital Program and US\$150.0 million, destined to the Fiscal Reform Program, both from IADB; US\$200.0 million for the Broad Base Development Policies Loan from the IBRD; and other loans for an amount of US\$300.0 million. Said income would counteracted by amortizations to external public debt for around US\$267.0 million.



GUATEMALA: PAYMENTS BALANCE
YEARS: 2008 - 2009
 -In millions of US Dollars-

CONCEPT	2008 ^{e/}	2009 ^{py/}	Variations	
			Absolute	Relative
CURRENT ACCOUNT	-2,077.7	-2,169.6	-91.9	4.4
A- COMMERCIAL BALANCE	-5,947.4	-6,212.5	-265.2	4.5
Exportations FOB	8,019.1	8,750.8	731.7	9.1
General Merchandise	6,288.3	6,942.1	653.8	10.4
Main products	1,874.4	1,920.9	46.5	2.5
Other Products	4,413.9	5,021.2	607.3	13.8
Goods for Transformation	1,640.1	1,705.7	65.6	4.0
Goods Acquired in Ports	90.7	103.0	12.2	13.5
Importations FOB	13,966.4	14,963.3	996.9	7.1
General merchandise	12,944.9	13,921.0	976.1	7.5
Goods for Transformation	1,020.3	1,040.9	20.6	2.0
Goods Acquired in Ports	1.2	1.4	0.1	12.0
B- SERVICES	-300.5	-281.7	18.8	-6.2
Credit	1,928.8	2,122.3	193.6	10.0
Debits	2,229.3	2,404.1	174.8	7.8
C- RENT	-920.5	-1,027.8	-107.3	11.7
Credits	577.7	543.3	-34.4	-6.0
Debits	1,498.2	1,571.1	72.9	4.9
D- CURRENT TRANSFERS	5,090.6	5,352.5	261.9	5.1
Family Remittances (Net)	4,389.0	4,542.6	153.6	3.5
CAPITAL AND FINANCIAL ACCOUNTS	2,383.7	2,450.9	67.2	2.8
A- CAPITAL ACCOUNT (NET)	0.0	0.0	0.0	0.0
B- FINANCIAL ACCOUNT	1,886.9	2,056.2	169.3	9.0
1- Direct Investment	802.8	754.6	-48.2	-6.0
Abroad	-35.0	-35.7	-0.7	2.0
In Guatemala	837.8	790.3	-47.5	-5.7
2- Portfolio Investment	51.8	37.1	-14.7	-28.4
3- Other Investments	1,032.3	1,264.5	232.2	22.5
Loans to the Public Sector	200.9	483.4	282.5	140.6
C- ERRORS AND OMISSIONS	496.8	394.7	-102.1	-20.6
BALANCE OF THE PAYMENTS BALANCE	306.0	281.3	-24.7	-8.1
RESERVE ASSETS (- increase)	-306.0	-281.3	24.7	-8.1
CURRENT ACCOUNT /GDP	-5.3	-5.2		

^{e/} Estimated numbers

^{py/} Projected numbers

^{*}/ According to the Fifth Payments Balance Manual, the transactions of Asset Reserves of the Central Bank registered in the payments balance do not include variations in the value of external assets holding, due to revaluing or devaluing the market prices. In 2009, these variations are due to the revaluing estimated in gold holdings for US\$25.3 million and in the devaluing estimated in DEG holdings for US\$1.6 million. Therefore, the amount equivalent to the increase in NIMR would be of US\$305.0 million.



3. Of the payments balance for 2010

Taking into account the world economic trends, the payments balance for 2010 present a scenario, where there is an estimated rise in *Reserve Assets* of the *Banco de Guatemala*⁸ for US\$226.1 million, as a result of the capital and financial account registering a surplus of US\$2,674.5 million, which would be enough to finance the deficit in current account projected for US\$2,448.4 million, equivalent to 5.3% of the GDP (5.2% for 2009).

Regarding the value of FOB exportations, this would be at US\$9,617.8 million, amount higher by US\$867.1 million (9.9%) to the projected for 2009⁹. Said result would be determined by the increase forecast in the value of exportations for the Main Exportation Products for US\$95.4 million (5.0%), as well as the increase in the value for Other Exportation Products for US\$619.1 million (12.3%). Of said amount, the exportations to Central America would grow US\$329.4 million (12.5%), those of Other Products destined to the rest of the world, would increase US\$289.7 million (12.2%), whereas the exportations of Transformation Goods would register a growth of US\$138.2 million (8.1%) and the exportation of acquired goods at port would grow US\$14.4 million (14.0%).

Regarding the FOB value of importations, these would be located at US\$16,342.8 million, amount higher by US\$1,379.5 million (9.2%) regarding the estimated for 2009. Said result would be mainly associated to the growth rhythm projected for the economic activity for 2010 (3.8%). In the value of importations, the increase in the following headings stands out: machinery, equipment and tools (11.5%); consumer goods (9.5%); fuel and lubricants (9.2%); and, raw material and intermediate products (9.0%). On the other hand, the goods importations for transformation would be registering growth of US\$71.2 million (6.8%), while the acquired goods importations at port will grow US\$0.1 million (10.0%).

⁸ For 2010, for the revaluation of Reserve Assets, it does not include: Gold holdings for US\$25.5 million and the estimated devaluation of DEG holdings for US\$1.6 million; however, the net result makes up part of the increase of US\$250.0 million in the net international monetary reserves.

⁹ The growth forecast in exportations for 2010 is fundamentally based on the economic recovery expected from the main commercial partners in Guatemala.



As a result of the commerce projections for 2010, the commercial balance would register a deficit of US\$6,724.9 million, higher by US\$512.4 million (8.2%) to the projected for 2009.

As to the services balance, a deficit balance of US\$222.0 million is forecast, lower by US\$59.8 million (21.2%) regarding the projected deficit for 2009, associated to the deficits in the transportation, insurance and other services headings.

Regarding the profit balance, a deficit of US\$1,124.7 million is projected, higher by US\$96.9 million regarding the forecast for 2009.

The current transfers are expected to register net income for US\$5,623.2 million, higher by US\$270.7 million (5.1%) to the projected for 2009, mainly due to the growth expected of 4.8% in the income of foreign currency due to family remittances.

As to capital and financial account, a surplus balance of US\$2,674.5 million is expected, higher by US\$223.6 million (9.1%) to the projected for 2009. As to results in the financial account, the decrease in the other investment heading stands out, that would go from US\$1,264.5 million in 2009 to US\$1,386.4 million in 2010, whereas the direct investment would increase by US\$120.9 million, and in 2010 would be at US\$875.5 million. It is expected that the surplus balance of the portfolio investment increase by US\$14.3 million (38.4%).

Regarding the capital account this will continue to register a balance of zero, equal to that in 2009, given that there is no donation of capital forecast.

As a result of the current account and of the projected surplus in the capital and financial account, it would be expected, as was indicated, to have an increase of the NIMR of US\$250.0 million. It is worth indicating that, with the projected increase, in the level of said reserves as with the importation of goods, the number of months of importations of financeable goods with reserves would be of 3.1 (3.3 for 2009).



GUATEMALA: PAYMENTS BALANCE
YEARS: 2009 - 2010
-In millions of US Dollars-

CONCEPT	2009 ^{py/}	2010 ^{py/}	Variations	
			Absolute	Relative
CURRENT ACCOUNT	-2,169.6	-2,448.4	-278.8	12.9
A- COMMERCIAL BALANCE	-6,212.5	-6,724.9	-512.4	8.2
Exportations FOB	8,750.8	9,617.8	867.1	9.9
General Merchandise	6,942.1	7,656.6	714.5	10.3
Main Products	1,920.9	2,016.3	95.4	5.0
Other Products	5,021.2	5,640.3	619.1	12.3
Transformation goods	1,705.7	1,843.9	138.2	8.1
Goods Acquired in Port	103.0	117.4	14.4	14.0
Importations FOB	14,963.3	16,342.8	1,379.5	9.2
General Merchandise	13,921.0	15,229.1	1,308.1	9.4
Transformation goods	1,040.9	1,112.1	71.2	6.8
Goods Acquired in Port	1.4	1.5	0.1	10.0
B- SERVICES	-281.7	-222.0	59.8	-21.2
Credits	2,122.3	2,407.0	284.7	13.4
Debits	2,404.1	2,629.0	224.9	9.4
C- PROFIT	-1,027.8	-1,124.7	-96.9	9.4
Credits	543.3	653.5	110.2	20.3
Debits	1,571.1	1,778.2	207.1	13.2
D- CURRENT TRANSFERS	5,352.5	5,623.2	270.7	5.1
Family Remittances (Net)	4,542.6	4,760.7	218.0	4.8
CAPITAL AND FINANCIAL ACCOUNT	2,450.9	2,674.5	223.6	9.1
A- CAPITAL ACCOUNT (NET)	0.0	0.0	0.0	0.0
B- FINANCIAL ACCOUNT	2,056.2	2,313.2	257.0	12.5
1- Direct Investment	754.6	875.5	120.9	16.0
Abroad	-35.7	-42.3	-6.6	18.5
In Guatemala	790.3	917.8	127.5	16.1
2- Portfolio Investment	37.1	51.4	14.3	38.4
3- Other investments	1,264.5	1,386.4	121.9	9.6
Loans from the Public Sector	483.4	485.6	2.2	0.5
C- ERRORS and OMISSIONS	394.7	361.3	-33.4	-8.5
BALANCE OF THE PAYMENTS BALANCE	281.3	226.1	-55.2	-19.6
RESERVE ASSETS (- increase)	-281.3	-226.1	55.2	-19.6
CUERRENT ACCOUNT /GDP	-5.2	-5.3		

^{py/} Projected numbers

^{*}/ According to the Fifth Payments Balance Manual, the transactions of Asset Reserves of the Central Bank registered in the payments balance do not include variations in the value of external assets holding, due to revaluing or devaluing the market prices. In 2009, these variations are due to the revaluing estimated in gold holdings for US\$25.3 million and in the devaluing estimated in DEG holdings for US\$1.6 million. Therefore, the amount equivalent to the increase in NIMR would be of US\$305.0 million.



D. OF THE FISCAL SECTOR

1. Estimation of the budgetary execution for 2009

The General Income and Expenditure Budget of the State for the 2009 Fiscal Year, forecasts income and donations for Q41,160.4 million (higher by Q5,987.7 million regarding the 2008 closing estimation), while as to expense, is contemplating Q47,665.8 million (amount higher by Q7,778.5 million regarding the estimated closing for 2008). As a result, the fiscal deficit will be at Q6,505.4 million (equivalent to 2.0% of the GDP) higher to the forecast for the 2008 estimated closing (Q4,714.6 million, equivalent to 1.6% of the GDP). Regarding the financing of the deficit, the net internal financing is projected at Q1,388.4 million, lower by Q266.6 million regarding the 2008 closing estimation. In the same manner, there is a forecast for the use of Q3,732.0 million of net external financing, as a result of disbursements for Q5,789.3 million and amortizations for Q2,057.3 million. Last, the use of till resources for Q1,385.0 million is estimated, which will constitute a source of internal monetization, which will have greater impact in the third and fourth quarters of 2009, as a result of greater expenses programmed in said quarters, as is seen in the following chart.

**CENTRAL GOVERNMENT
BUDGETARY EXECUTION
YEARS: 2008 - 2009
-Millions of quetzales-**

CONCEPT	2008 ^{e/}	QUARTER				2009 ^{pp/}	VARIATIONS	
		I	II	III	IV		Absolute	Relative
I. INCOME AND DONATIONS	35,172.7	9,843.3	9,549.3	10,445.9	11,321.9	41,160.4	5,987.7	14.5
A. Income (1+2)	34,841.8	9,741.0	9,416.1	10,198.2	10,931.4	40,286.7	5,444.9	13.5
1. Income to Current	34,812.3	9,738.9	9,412.8	10,188.1	10,920.1	40,259.9	5,447.6	13.5
a. Tributary	33,295.0	9,394.8	8,982.1	9,785.8	10,286.6	38,449.3	5,154.3	13.4
b. Nn Tributary	1,517.3	344.1	430.7	402.3	633.5	1,810.6	293.3	16.2
2. Income to Capital	29.5	2.1	3.3	10.1	11.3	26.8	-2.7	-10.1
B. Donactions	330.9	102.3	133.2	247.7	390.5	873.7	542.8	62.1
II. TOTAL EXPENSES	39,887.3	9,640.5	10,738.3	12,730.5	14,556.5	47,665.8	7,778.5	16.3
A. Operation	27,589.2	7,473.3	8,149.5	9,281.5	9,485.9	34,390.2	6,801.0	19.8
B. Capital	12,298.1	2,167.2	2,588.8	3,449.0	5,070.6	13,275.6	977.5	7.4
III. SURPLUS OR BUDGETARY DEFICIT	-4,714.6	202.8	-1,189.0	-2,284.6	-3,234.6	-6,505.4	-1,790.8	27.5
IV. NET FINANCING	4,714.6	-202.8	1,189.0	2,284.6	3,234.6	6,505.4	1,790.8	27.5
A. Internal	1,655.0	234.5	459.0	251.8	443.1	1,388.4	-266.6	-19.2
B. External	1,142.1	3,436.5	44.7	222.4	28.4	3,732.0	2,589.9	69.4
C. Till Variation	1,917.5	-3,873.8	685.3	1,810.4	2,763.1	1,385.0	-532.5	-38.4
(-)increase (+) decrease	11.3					12.1		
Deficit/GDP	-1.6					-2.0		

Source: Ministerio de Finanzas Públicas [Equivalent to the US Department of the Treasury.]

e/ Estimated numbers with preliminary information from the Ministerio de Finanzas Públicas. [Equivalent to the US Department of the Treasury.]

pp/ Projected numbers



2. Estimation of the budgetary execution for 2010

According to the estimations of the *Ministerio de Finanzas Públicas* [Roughly equivalent to the US Department of the Treasury.] they were looking at the Multi-annual Budget of 2009-2011, the budget execution for 2010 forecasts income and donations for Q47,172.2 million (higher by Q6,011.8 million regarding the closing of 2009), while expenses were for an amount of Q53,332.6 million (amount higher by Q5,666.8 million regarding the estimated closing of 2009). As a result, the fiscal deficit was at Q6,160.4 million (equivalent to 1.7% of the GDP). Regarding the financing of the referred deficit, this will be covered by net internal financing for Q1,467.7 million, amount higher by Q79.3 million (5.4%) to the budgeted for 2009. Regarding net external financing, this would be at Q3,792.4 million, amount higher by Q60.4 million (1.6%) to the budgeted for 2009. Last, there is a use of till Resources forecast for Q900.3 million, as is seen in the chart.

**CENTRAL GOVERNMENT
BUDGETARY EXECUTION
YEARS: 2009- 2010
-Millions of quetzales-**

CONCEPT	2009 ^{py/}	QUARTER				2010 ^{py/}	VARIATIONS	
		I	II	III	IV		Absolute	Relative
I. INCOME AND DONATIONS	41,160.4	10,931.9	11,591.5	11,636.9	13,011.9	47,172.2	6,011.8	12.7
A. Income (1+2)	40,286.7	10,713.6	11,366.6	11,331.0	12,658.5	46,069.8	5,783.1	12.6
1. Income to Current	40,259.9	10,706.3	11,360.2	11,325.0	12,651.5	46,043.0	5,783.1	12.6
a. Tributary	38,449.3	10,318.8	10,899.8	10,870.1	12,000.7	44,089.4	5,640.2	12.8
b. Non Tributary	1,810.6	387.6	460.4	454.9	650.8	1,953.5	142.9	7.3
2. Income to Capital	26.8	7.3	6.4	6.1	7.1	26.8	0.0	0.0
B. Donations	873.7	218.3	224.9	305.9	353.3	1,102.4	228.7	20.7
II. TOTAL EXPENSES	47,665.8	11,328.9	12,056.7	13,980.2	15,966.8	53,332.6	5,666.8	10.6
A. Of Operation	34,390.2	8,856.3	9,037.4	10,214.3	10,140.7	38,248.6	3,858.4	10.1
B. Capital	13,275.6	2,472.7	3,019.3	3,765.9	5,826.1	15,084.0	1,808.4	12.0
III. SURPLUS OR BUDGET DEFICIT	-6,505.4	-397.0	-465.2	-2,343.3	-2,954.9	-6,160.4	345.0	-5.6
IV. NET FINANCING	6,505.4	397.0	465.3	2,343.2	2,954.9	6,160.4	-345.0	-5.6
A. Internal	1,388.4	400.2	400.3	400.4	266.8	1,467.7	79.3	5.4
B. External	3,732.0	948.0	948.0	948.0	948.4	3,792.4	60.4	1.6
C. Till Variation	1,385.0	-951.2	-883.0	994.8	1,739.7	900.3	-484.7	-53.8
(-) increase (+) decrease								
Deficit/GDP	-2.0					-1.7		

Source: Ministerio de Finanzas Públicas [Equivalent to the US Department of the Treasury.]
py/ Projected numbers



E. OF THE MONETARY SECTOR

For 2009, a disciplined monetary policy must continue to be applied, in the framework of a scheme of explicit inflation targets and through the use of indirect instruments of monetary control, strengthen the monetary management of the *Banco de Guatemala*. In this context, the monetary policy must be centered, as consigned by law, in the consecution of stability in the general level of prices, so in the exchange flexibility framework, the inflation rate must continue to be the nominal anchor of the monetary policy.

1. Monetary Sector for 2009

The projections of the monetary sector for 2009 are consistent, on the one hand, with the proposed inflation target (5.5% +/- 1.0 percentage point) and with the growth of the real activity, which value is estimated at 3.5% and, on the other, with the estimations of the external and fiscal sectors. Based on this, the demand of the monetary issue for 2009 will register an inter-annual growth rate of around 10.0% regarding the balance estimated for 2008. In that context, the payment means (M/N + M/E) could grow in a range of between 8.0% and 10.0%, where the banking credit to the private sector (M/N + M/E) will grow between a range of 9.0% and 11.0%, in inter-annual terms.

For 2009 an expansion of external monetary origin is forecast for the equivalent to Q2,440.0 million, corresponding to an increase of the level of net international monetary reserves for US\$305.0 million. The increase of the referred reserves is mainly explained by the disbursements of foreign loans for the Central Government for around US\$750.0 million¹⁰, for interest coming from the investment of international monetary reserves for around US\$100.0 million, for income from oil exploration royalties for around US\$91.0 million and other net income for US\$17.0 million. There will be expenditure for amortization to capital and interest of the external debt for the public sector for around US\$488.0 million, as well as amortizations to capital and interest payments for bonds and Euro-bonds for around Q165.0 million.

¹⁰ Includes foreign loan disbursements hired by the public sector for the total amount of US\$750.0 million, among which the following are highlighted: US\$100.0 million for the Investment Program in Human Capital and US\$150.0 million for the Fiscal Reform Program, both from IADB; US\$200.0 million for the Broad Base Development Policies Loan from the IBRD; and other loans for an amount of US\$300.0 million.



Taking into account the behavior of the NIMR, it would be expected that the Net Internal Assets (NIA) of the *Banco de Guatemala* register an increase (monetization) of Q409.0 million. Among the expansion factors of liquidity of the NIA of the *Banco de Guatemala* we have the decrease forecast of Central Government deposits in the *Banco de Guatemala* for around Q1,385.0 million, and, on the other hand, the net deficiency of the *Banco de Guatemala* estimated at around Q428.0 million, mainly associated to the payment of the interest of Monetary Stabilization Operations (MSO) for Q1,159.0 million and to the yields from the investment of the international monetary reserves for the equivalent to Q1,117.0 million. There is also programming to receive around Q124.0 million for interest from Treasury Bonds from the Republic of Guatemala.

As to factors that have a demonetizing effect, we can highlight the increase for Q1,371.0 million in deposits in the banking system in the Central Bank, due to the expected growth of the public deposits in the banking entities and, on the other hand, the increase forecast of Term Deposit investments in the *Banco de Guatemala* on behalf of the rest of the public sector entities for Q260.0 million.

Consistent with the design and execution of the monetary program, the variable of the NIA closing would be the MSO. In that sense, and considering the behavior of the monetizing and demonetizing factors, the *Banco de Guatemala* should increase their balance of MSO by Q885.0 million.

When considering the described scenario and the quarterly analysis of contraction factors and the expansion of primary liquidity, for the January-March 2009 period would expect an increase of the net international monetary reserves for US\$350.0 million (equivalent to Q2,800.0 million) and a demonetization for Q3,481.0 million in the NIA, associated to the increase of the Central Government deposits in the *Banco de Guatemala* for Q3,874.0 million and the increase of investments in TD by the rest of the public sector in the *Banco de Guatemala* for Q506.0 million. Said demonetization would partially counteract the reduction of the balance of the legal reserve accounts for Q1,098.0 million, so they can be congruent with the demand of the



programmed monetary issue, requiring the *Banco de Guatemala* to reduce the balance of MSO for around Q158.0 million.

In the second quarter a contraction of foreign origin liquidity is expected, due to the decrease of net international monetary reserves for US\$46.0 million (equivalent to Q371.0 million). In the same manner, due to the liquidity contraction that will generate an increase of the balance of the legal banking reserve accounts for Q1,141.0 million, it is estimated that the balance of the MSO could be reduced by Q781.0 million.

In the third quarter a reduction of the level of net international monetary reserves by US\$24.0 million is estimated (equivalent to Q188.0 million) and an expansion of domestic origin liquidity for Q1,607.0 million, mainly associated to the use of deposits of the Central Government in the *Banco de Guatemala* for Q1,810.0 million, which implies that the *Banco de Guatemala* should increase the balance of the MSO by Q1,074.0 million.

In the fourth quarter an increase of foreign origin liquidity for US\$25.0 million is forecast (equivalent to Q299.0 million) and an expansion of internal origin liquidity for Q2,847.0 million, as a result of the use forecast of deposits of the Central Government in the *Banco de Guatemala* for Q2,763.0 million, which would be partially counteracted by the increase of the balance of the legal banking reserve accounts by Q681.0 million. Based on this and taking into account the seasonal increase of the demand of monetary issue, it would be necessary to increase the balance of the MSO for approximately Q750.0 million.

Following is an estimation of the Monetary and Fiscal Program for 2009.



MONETARY AND FISCAL PROGRAM FOR 2009
Millions of quetzales

Concept	I QUAR	II QUAR	III QUAR	IV QUAR	TOTAL
FISCAL ACCOUNTS					
Income	9,843	9,549	10,446	11,322	41,160
Expenditure	9,641	10,738	12,731	14,557	47,666
Current	7,473	8,150	9,282	9,486	34,390
Capital	2,167	2,589	3,449	5,071	13,276
Deficit (% of the GDP)	-203	1,189	2,285	3,235	6,505 2.0
Net external financing	3,436	45	222	28	3,732
Net internal Financing	235	459	252	443	1,388
Till Variation	-3,874	685	1,810	2,763	1,385
A. MONETIZING (+) FACTORS AND DEMONEZING (-)					
I. Net International Monetary Reserves	2,800	-371	-188	199	2,440
In US\$	350	-46	-24	25	305
II. Net Internal Assets	-3,481	-564	1,607	2,847	409
1. Central Government	-3,874	685	1,810	2,763	1,385
2. Rest of the public sector	-506	186	-94	154	-260
3. Position of the Banks	1,098	-1,141	-646	-681	-1,371
Credit to Banks	0	0	0	0	0
Banking reserves	1,098	-1,141	-646	-681	-1,371
4. Other net assets	-199	-294	536	611	655
Expenses and products	74	14	28	313	428
Other	-273	-308	509	298	227
III. CREATION OF LIQUIDITY	-681	-935	1,419	3,046	2,849
B. MONETARY ISSUE DEMAND	-523	-154	345	2,296	1,964
C. EXCESS (-) OR MISSING (+) OF LIQUITY (B-III)	158	781	-1,074	-750	-885
D. MSO NET (-) Increase	158	781	-1,074	-750	-885

2. Monetary Sector for 2010

In order to give continuity to the monetary, exchange and credit policy actions in the framework of a scheme of explicit inflation targeting, it is deemed convenient to count on projections of the monetary program for 2010. The referred program is consistent with the inflation target (5.0% +/- 1.0 percentage point) and with the growth of the real activity, which value is estimated at 3.8%. Based on that, the demand of the monetary issue for 2010 would register an inter-annual growth rate of 9.9% regarding the estimated balance of said variable for the end of 2009. In that context, it is foreseen that the total payment



means (M/N+ M/E) could grow at a range between 8% and 10%, whereas the banking credit to the private sector (M/N + M/E) would grow between 9% and 11%, both in inter-annual terms.

For 2010 it is expected that the NIMR would increase by US\$250.0 million, which would be equivalent to domestic monetary expansion of Q2,000.00 million.

Consistent with the above, the NIA would increase Q403.0 million. Among the NIA it is estimated that the Central Government would drop its deposits in the *Banco de Guatemala* by around Q900.0 million during 2010¹¹.

Regarding the result of Expenses and Products of the Banco de Guatemala for 2010 it is estimated that there is a net deficiency of around Q412.0 million. It is worth indicating that within said result, the source of expenditure will continue to be the payment of interest for the monetary stabilization operations.

Within the NIA, the main demonetizing factor would be the increase in the balance of the legal banking reserve accounts for Q850.0 million, as a result of a rise in public deposits in the banking entities.

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* could increase the level of the MSO by around Q245.0 million.

Following is an estimation of the Monetary and Fiscal Program for 2010.

¹¹ Multi-annual fiscal program, contained in the General Budgetary Income and Expenditure of the State for the 2009 Fiscal Year project.



MONETARY AND FISCAL PROGRAM 2010
Millions of quetzales

Concept	TOTAL
FISCAL ACCOUNTS	
Income	47,172
Expenditure	53,333
Current	38,249
Capital	15,084
Deficit (% of the GDP)	6,160 1.7
Net external financing	3,792
Net internal financing	1,468
Variación de Caja	900
A. MONETIZING FACTORS (+) AND DEMONETIZING (-)	
I. Net International Monetary Reserves	2,000
In US\$	250
II. Net Internal Assets	403
1. Central government	900
2. Rest of the public sector	-294
3. Position with banks	-850
Credit to Banks	0
Legal banking reserve	-850
4. Other net assets	646
Expenses and products	412
Others	235
III. CREATION OF LIQUIDITY	2,403
B. DEMAND OF MONETARY ISSUE	2,158
C. EXCESS (-) OR LACKING (+) LIQUIDITY (B-III)	-245
D. MSO NET (-) Increase	-245

F. MAIN ENVIRONMENTAL RISKS AND POLICY GUIDELINES

It is important to warn that the projections of the real, external, fiscal and monetary sectors are based on the last available estimations, among those that highlight the world economic perspectives made by the IMF, which have the added risk of being reviewed negatively given the deterioration of the world growth expectations. In effect, as has been stated recently by the General Director of said organization, this could happen in the short term. In terms of the above, it has been considered cautionary to project the economic growth



rate for 2009 and 2010 in terms of a range, given the level of uncertainty that prevails, which would give a margin if the estimations of world economic growth would be reviewed negatively, that would be enough or not depending on the magnitude of the mentioned review. In any case, in a changing environment we must be aware of a permanent way to introduce pertinent changes in the projections of the real, external, fiscal and monetary sectors that allow fine tuning the orientation of the policy.

It is worth mentioning that economic deceleration is a world phenomenon that would be difficult to reverse with internal policies. In the case of monetary policy, in a context of inflation targeting, maintaining the general level of prices must continue to be the priority, but having an active role in facing the possible effects of the international financial crisis, particularly keeping mechanisms that allow temporarily giving liquidity to the market, when necessary. In the case of fiscal policy, keeping a fiscal deficit of around 2% that allows moderately implementing an anti-cyclical fiscal policy and the proposal of financing said deficit primarily with sources that do not cause a displacement effect of private financing, are constituted in an important asset, in the face of an international financial crisis.

In addition, joint efforts between the Central Bank and the *Ministerio de Finanzas Públicas* [Roughly equivalent to the US Department of the Treasury.] have been made, oriented toward requesting access to easier ways to compensate the reduction of foreign flows from international financial organizations, cooperating in sending a message of trust to the market; and, in the case that the existing risks would come true, additional financial resources to face them would be available.



II. PROPOSAL THE MONETARY, FOREIGN EXCHANGE RATE AND CREDIT POLICY FOR 2009

A. FUNDAMENTAL OBJECTIVE

Article 3 of the Organic Law of the *Banco de Guatemala* declares the following:

“The *Banco de Guatemala* has, as its fundamental objective, to contribute to the creation and maintenance of the most favorable conditions for the orderly development of the national economy, for which it promotes the monetary, foreign exchange rate and credit conditions for stability in the general level of prices”.

B. POLICY TARGET

Taking into account that, according to the legal decree mentioned, the fundamental objective of the *Banco de Guatemala* materialize to promote conditions that lead to the stability of the general level of prices, where it is appropriate to operate said objective through the establishment of a quantitative target for the inflation rate. Added to this, the fixation of the quantitative target for the inflation rate is one of outstanding characteristics of the regimen of inflation targeting, monetary scheme adopted since 2005.

1. Purpose of the inflation target

In a regimen of inflation targeting, the inflation target established by the monetary authority has as its main purpose to build a nominal anchor for the economy and, as such, orient the actions of the monetary policy as well as the expectations of the economic agents.

In said regimen, the monetary policy does not have an objective for the nominal exchange rate, nor does it have one for the growth rate of a monetary aggregate. In such context, the actions of the monetary policy are for the consecution of the inflation target.

On the other hand, the expectations of the economic agents are important to determine price levels and economic activity. In that regard, when the inflation expectations of the economic agents do not coincide with the inflation target, the consecution of said target requires greater efforts on behalf of the monetary policy and, is usually of greater cost in terms of a lower



economic activity growth rate and of greater fiscal support to the monetary policy. Therefore, it is desirable that the inflation expectations of the economic agents coincide with the inflation target fixed by the Central Bank. This aspect requires that the inflation target be realistic and reachable in a corresponding temporary horizon, and, on the other hand, that there is the conviction that the central bank will activate the monetary policy instruments in the measure necessary to reach the inflation target (in other words, that the central bank have credibility).

2. The inflation target in 2008

According to resolution JM-211-2007 of the Monetary Board, the target for inter-annual variation of the consumer price index, for 2008, is of 5.5% +/- 1.5 percentage points. For December 2009, said resolution establishes a target for the same variable of 5.5% +/- 1 percentage point.

To November 2008, accumulated inflation registered a level of 9.82%. The inflationary rhythm to said month was of 10.85%. Based on those numbers and on the most recent forecasts of the inflationary rhythm, we can foreshadow that the inflation rate in 2008 will be over the upper limit of the established target for said year. This result would be the product of several factors; among them, the increase observed since 2007 to July 2008 in the prices of oil and its derivatives, as well as the prices of wheat and corn, even when said trend reverted in the second semester of 2008.

3. Liable forecasts

The liable forecasts of inflation point toward total inflationary rhythm projected of 10.21% for December 2008 and 7.58% for December 2009¹². The main suppositions that sustain the previous forecasts refer to the expected behavior of the oil prices and its derivatives, as well as corn, wheat and, on the other hand, to the inertial behavior of the inflation rate of the diverse expense headings that make up the consumer price index.

¹² Projection with data observed to November 2008.



It is worth indicating that according to the referred liable inflation forecasts, the inflation targets established for 2008 and 2009 will not be complied with.

4. Asset Forecasts

The asset inflation forecasts forecast for the Semi-structural Macroeconomic Model (MMS) of the *Banco de Guatemala* take into account the assets of the central bank that tend to consecution of the inflation target, as well as the effects that such actions had on the rest of the macroeconomic variables. According to the results of the fourth running of the MMS in 2008, an inter-annual inflation rate of 11.70% is forecast for December 2008 and of 7.01% for December 2009.

The asset forecasts generated by the MMS allow seeing the possibility of reaching the inflation target (5.5% +/- 1 percentage point) for December 2009, given that it is not far, as long as the monetary measures adopted are pertinent.

5. Proposal of inflation targets

In a scheme of inflation targeting, it is particularly important to make prospective scenarios of inflation targets that allow orienting the inflation expectations of the economic agents in the short and medium terms, consistent with keeping the stability in the general level of prices. Establishing short and medium terms makes it easier for the referred expectations are anchored in the same, so a medium term target is proposed, to be established at 4% +/- 1.0 percentage point and converge in a 5 year horizon, as is illustrated in the following chart.

<u>YEARS</u>	<u>PUNCTUAL TARGETS</u> (inter-annual variation of the CPI)	<u>TOLERANCE MARGIN</u>
2009	5.5%	+ / - 1.0 percentage point
2010	5.0%	+ / - 1.0 percentage point
2011	5.0%	+ / - 1.0 percentage point
2012	4.5%	+ / - 1.0 percentage point
2013	4.0%	+ / - 1.0 percentage point



Following we present the main characteristics of the proposed multi-annual inflation targets.

6. Characteristics of inflation target proposals and of the gradual inflation reduction strategy

a) Punctual Target and Tolerance Margin

In the presence of a punctual target, any deviation of the relevant inflation forecast regarding the target obligates considering corrective adjustments. Of course, such adjustments would be small in magnitude in the cases in which the deviations of the relevant forecast regarding the target were not very significant. Therefore, the operative consequence of use of a punctual target is a more gradual and opportune use of monetary policy instruments.

The function of the margin of the tolerance margin, as an integral part of the target, is to allow deviations no greater than that limit, of the inflation observed regarding the target, in recognition that the central bank, through the monetary policy, exercises an imperfect influence in the observed inflation rate.

b) Central Value of the inflation target

When comparing the multi-annual inflation target proposed with the inflation target of 5.5% +/- 1.5 percentage points and of 5.5% +/- 1.0 percentage point, determined by the Monetary Board for 2008 and 2009, respectively, through resolution JM-211-2007, we can see that the proposal made implies leaving the central value of the inflation target constant for 2009 (5.5%), decreasing it by 0.5 percentage points in 2010, keeping it in 2011 and reducing it 0.5 percentage points in each one of the following years, in other words in 2012 and 2013.

It is considered advisable to keep the central level of the inflation target for 2009 by 5.5% annually taking into account that the forecasts of liable as well as asset inflation indicate that there is a process of reduction in the inflationary levels for 2009, aspect that has made reaching a target with an unaltered central value feasible regarding the current target for said year.



On the other hand, it is worth taking into account, that inevitably, the modification of inflation targets upward would have a negative effect on the credibility of the monetary policy. Particularly, an increase in the central value of the target that could be interpreted as a relaxation of the monetary policy, since reaching a target with a higher central value would require less monetary efforts.

Regarding the central value of the target for the years 2010-2013, considering the current international context, in the economic as well as financial environments, is too uncertain and, therefore, would subtract credibility from a monetary policy target that would expect to lead inflation levels to lower values to those proposed, reason for which it is considered reasonable to anchor the inflation expectations to a gradual inflation reduction process.

c) Breadth of the target range

The proposal presented involves confirming the range of the inflation target for 2009, of +/- 1.0 percentage point, around the central 5.5% value. In this way, the inflation target was established in resolution JM-211-2007 for said year would remain current. In that regard, it is worth pointing out that this practice in countries with regimens of inflation targeting not modifying the already established targets, to avoid damaging the credibility of the central bank, every time that a modification could be interpreted as a relaxation of the position of the monetary policy. Therefore, the central banks make an effort to reach the established targets and, when this is not possible, provide the pertinent reasons to explain the deviations occurred; but avoid, as much as possible, modifying the already announced inflation targets.

On the other hand, due to the uncertainty regarding the international context, the tolerance margin of the inflation target for the 2010-2013 period would remain at +/- 1.0 percentage point around the central value.

d) Temporary horizon of the target



Regarding the temporary horizon of the monetary policy target, there is a significant difference between the two year period of the target that is current at the moment and the five year period of the target presented in this proposal.

In that regard, it is worth indicating that, for the inflationary expectations of the economic agents to be anchored effectively in the levels of the inflation target established by the monetary authority, a temporary horizon is required for said targets to be sufficiently extended, so that the decision of consumption, savings and investment are based on the notion that the medium and long term inflation targets perform the function of nominal anchor of the monetary policy. In that sense, it is important to take into account the effects of the monetary policy actions in the economy that are delayed, so that the monetary policy target would be more useful if it can be linked to the actions of said policy through the temporary horizon required for such actions to take effect. Due to this, there is the need for a temporary horizon of the inflationary target to be sufficiently broad.

In particular, the temporary horizon for two years for the monetary policy target is reduced, for practical effects, in little less than a year, it will be the end of the first calendar. In contrast, a broader horizon will facilitate the evaluation and the monetary policy decisions, due to the mentioned delays in the effects of its actions, therefore, the temporary horizon for the inflation target presented in this proposal makes the decision making of the monetary policy possible through a clear nominal anchor, provided by the target in the horizon extended to five years.

Also, from the point of view of account rendering, counting on an inflation target with an extended temporary horizon makes it possible for the monetary authority to explain their actions to the public more appropriately, since it allows explaining the implications expected from said actions in a better manner, with the consecution of the inflationary target in the medium and long terms.

C. INDICATIVE VARIABLES OF THE MONETARY POLICY

Given the importance that the follow up of the indicative variables has within the scheme of inflation targeting, since it allows evaluating in the



measure that they are achieving the inflation target and, therefore allows orienting the actions of the monetary policy, considering it convenient that the conduction of the monetary policy continues advancing in the consolidation process of the scheme of inflation targeting, in the sense that, in the decision making process they would consider that the following indicative variables that are forward looking like the inflation forecasts, the inflation expectations and the parameter interest rate¹³ be included. Notwithstanding, it is considered important to follow up on the variables that provide information on the behavior of the monetary aggregates, given their relation to inflation.

1. Indicative Variables

In the described context, for 2009 they propose that the following be considered indicative variables:

- a) Projected total inflationary rhythm
- b) Projected subjacent inflationary rhythm
- c) Parameter interest rate
- d) Inflation expectations from the panel of private analysts
- e) Implied inflation expectations
- f) Inflation forecasts in the medium term of the Semi-structural Macroeconomic Model (MMS)

Following are the characteristics of the indicative variables proposed.

a) Projected total inflationary rhythm

Follow up will be given to the total projected inflationary rhythm for December 2009 and 2010, comparing it to the established inflation targets for those same years. It is worth indicating that two econometric models will continue to be used for the inflationary rhythm projections for the end of the two years mentioned.

¹³ The full implementation of the inflation targeting scheme implies the follow up of variables related to the inflation forecasts and expectations in order to evaluate the fulfillment of the targets to be established. In the transition phase of monetary targets to explicit inflation targets, it is convenient to use those indicative variables that are related to monetary aggregates, but their use in the measure that the inflation targeting advances must be reduced and be constituted into only follow up variables, given their link to inflation.



b) Projected subjacent inflationary rhythm

The subjacent inflation shows the variations in the level of prices that has more relation with monetary variables, its calculation is made based on the Consumer Price Index (CPI), excluding the prices of goods and services that have high variability (generally seasonal or situational) that, in normal circumstances, cannot be neutralized by monetary policy actions.

Follow up will be given to the subjacent inflationary rhythm projected for December 2009 and 2010, comparing it to the inflation targets established for those same years. It is worth mentioning that two econometric models will continue to be used for the projections of subjacent inflationary rhythm for the end of the two mentioned years.

c) Parameter interest rate

The Taylor rule is an indicator used by many central Banks that operate under inflation targeting to orient the participation decision in the monetary market, since the same reflect the adjustments in the interest rate due to inflation and due to an excess of aggregate demand that makes it compatible with the fundamental objective of the monetary policy. In the case of Guatemala, it has been considered convenient to add an adjustment by exchange movements, reason for which it has been called the parameter interest rate, according to the following specification.

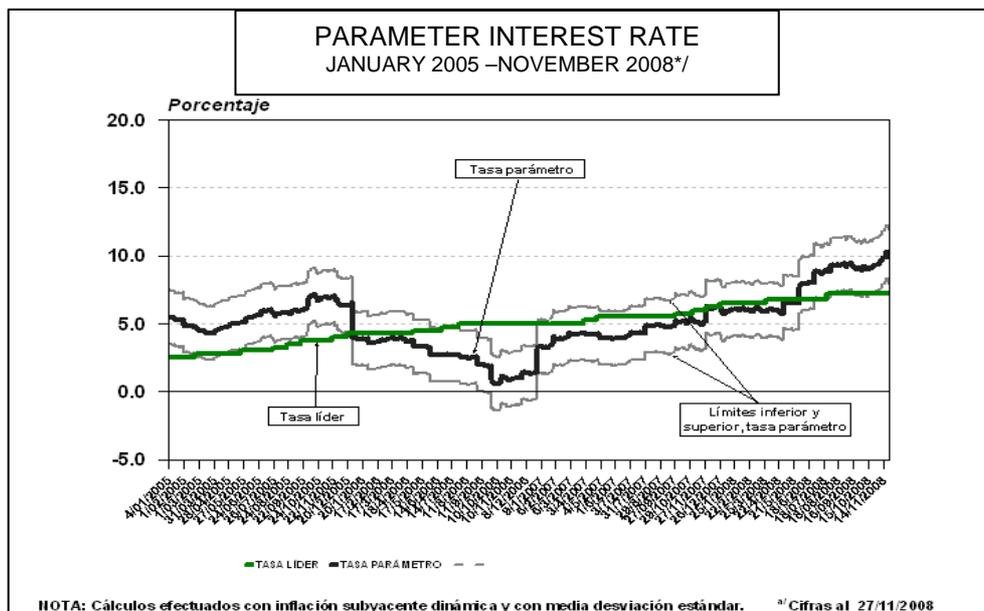
$$TP = [i_p + (\pi - \pi^e)] + \{ 1/2 (\pi - \pi^e) + 1/4 (IMAE - Y^e) + 1/4 [VTC - (\pi^e - \pi^{*e})] \}$$

Where:

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

Taking into account that the parameter rate serves the purpose of indicating the level of the interest rate that must prevail in the market, in congruence with the stability objective of the general level of prices, it is proposed that the level of the leading interest rate of the monetary policy should be compared to the tolerance margin of the parameter interest rate, understood as \pm standard median deviation (calculated by the January 1998 to December 2007 period) around the punctual value of the parameter interest rate.

Using the described specification, in the following graph is an illustration of the behavior of the parameter interest rate in the January 2005 to November 2008 period.



d) Inflation expectations from the panel of private analysts

The inflation expectations are defined as the perception of the economic agents on the future behavior of the prices in the economy. The inflation expectations that, for a certain period make up the economic agents, can substantially influence in the determination of the inflation rates that are finally registered in said period, which might even occur independently from the economic foundations. In that sense, it may be that for a given monetary offer, the inflation expectations are high, which could cause a decrease in the real



demand of money; such a reduction, would generate an increase in inflation; contrary to what would happen if the inflation expectations were low.

In that context, for 2009 they propose to continue using the forecasts coming from the Inflation Expectations Survey to the Panel of Private Analysts (EEI, for its acronym in Spanish), in order to obtain a measurement of the inflationary expectations from the private sector.

e) Implied inflation expectations

One of the indirect ways of knowing the inflation expectations is what in economic literature is known as implied inflation expectations. Said expectations are obtained applying the Fisher equation, which can be illustrated as follows:

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

From said expression we can infer that greater inflation expectations will require a greater premium for inflation and, therefore, a greater rate of nominal interest. However, a reduction of inflation expectations will cause a reduction in the inflation premium required by the investors; therefore the nominal interest rate would be dropping.

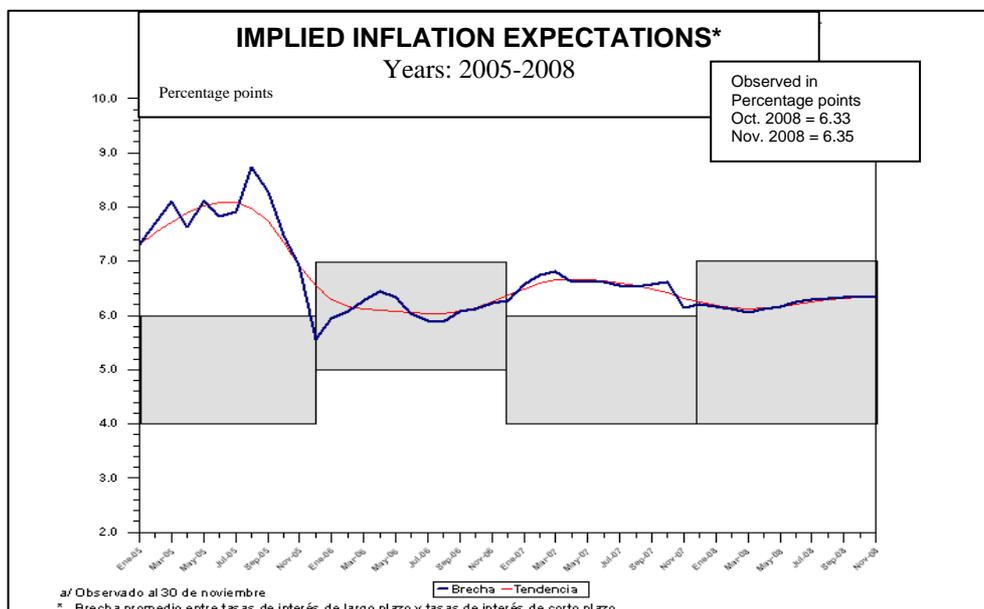
In the described context, it is an indirect or implied way of knowing the inflation premium through the calculation of the gap between the nominal interest rate in the long and short terms. Said gap constitutes an approximation of the expectations of the economic agents on the inflation behavior. The idea that underlies in the previous affirmation is based on the fact that, on the one hand the gap between the real short and long interest rates is more stable in time than the long term inflation expectations and, on the other hand, the inflation expectations in the short term have very little significance (except in very high or hyper-inflation processes). Therefore, changes in the gaps of the nominal interest rates in the long and short term would basically reflect changes in the long term inflation expectations.



In general the nominal interest rates in the long term are higher than those in the short term, due in measure to the fact that the longer an investment term, there is the risk that the future yields will decrease to cause higher inflation; in other words, if the inflation expectations of the economic agents are high, the premium for inflation will require that the nominal yield rates be high also. The empiric evidence in other countries shows that, in general, nominal interest rates in the long term move in the same direction as those in the short term. An exception to said find is when a central bank, with the purpose of abating inflation, increases the monetary policy interest rate and as a result of it produces a reduction in the long term interest rate, reflecting high credibility in the economic agents that the measure adopted will reduce the expected inflation.

The methodology proposed to measure the implied inflation expectations, is based on the calculation of different gaps between the long and short term nominal interest rates. For the case of long term interest rates, the weighted average interest rate of the banking system will be used (total asset and new loans) and, for the short term, the weighted average repurchase agreement term rate between 1 and 7 days will be used, and the financial average cost of the MSO of the *Banco de Guatemala* with a due date of up to 91 days. The average of the gaps obtained will constitute the approximate indicator for measuring the implied inflation expectations.

In the following graph, the average between the long and short term interest rates is illustrated, for January 2005 to November 2008.





Taking into account the above, for 2009 it is proposed, in addition to the survey on inflation expectations to 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 will complement the measuring of the inflation expectations of the economic agents, which is based on the inflation targeting scheme.

f) Inflation Forecasts in the medium term of the Semi-structural Macroeconomic Model (MMS)

The MMS is a system of equations that allows quantifying the direction and magnitude of the reactions between the main macroeconomic variables. In that context, the inflation forecasts in the medium term, due to said model, are conditional to the future evolution of all variables that make up the MMS, which provides macroeconomic consistency with the forecasts and, at the same time, allows reflecting the implementation of monetary policy actions to combat inflationary pressures.

It is worth pointing out that as of June 2006 they began using the result of the medium term inflation forecasts obtained quarterly through the running of the MMS. Said result offers coherent and reasonable Information about the future evolution of inflation, reason for which it is proposed that for 2009, the forecasts from the four runnings for said year be used. The above is based on the premise that the monetary policy execution in an inflation targeting scheme requires adequate information for opportune decision making in matters of determining the leading interest rate of the monetary policy.

For 2009, taking into account the feedback received¹⁴, the MMS will continue to be fine-tuned, including the following tasks, for that effect:

- a) Including explicit fiscal impulses of aggregate demand, with the purpose of taking into account the effects on the fiscal execution on the product gap and, through these, on inflation.
- b) Modification of the specification of the yield curve, in order to reflect in the best way possible, on the relation that exists between the weighted

¹⁴ Suggestions and recommendations coming from: Monetary Board, Execution Committee, International Monetary Fund and Professor Sebastian Edwards.



average banking asset interest rate and the leading interest rate of the monetary policy.

- c) Modification of the specification of the equation that determines the inflation level in the model (Phillips equation), with the purpose of explicitly incorporating the effect of external inflation and the effect of transferring the nominal exchange rate.
- d) Modification of the specification of the parity relation discovered from the interest rate, with the purpose of better reflecting the way the behavior of the variation rate of the nominal exchange rate.
- e) Updating of the model calibration, in order to take into account the recent evolution of the quantitative relations that determine the monetary transmission mechanism in the Guatemalan economy.

2. Follow up Variables

We propose, given the inflation relation, to use the following follow up variables.

- a) Parity liable interest rate
- b) Primary liquidity
 - i) Monetary issue
 - ii) Broad monetary base
- c) Payment means
- d) Banking credit to the private sector

Following we present the following characteristics of the follow up variables.

a) Parity liable interest rate

It is an indicator that compares the competitiveness of the internal parity liable interest rate regarding the parity interest rate, in such a way that can be evaluated if the level of the internal interest rate causes a way out (income) of capital that could generate variability in the nominal exchange rate.



The calculation of the parity liable interest rate is made up of three elements: a) a comparable international interest rate; b) a premium for exchange risk; and, c) a premium for country risk. As to the first element, like the comparable international interest rate currently uses the interest rate for the deposits to six months terms in the US financial market. They propose estimating the premium for the exchange risk through an approximation of the variation expectations of the nominal exchange rate on behalf of the economic agents. It is worth pointing out that the referred approximation results in the estimation of the gap in 2008 between the inflation in Guatemala and that of its main commercial partners. In that sense, based on the seasonality of the nominal exchange rate, they would build a weekly series of the expected nominal exchange rate and for each analysis date would compare with the current reference exchange rate. In the case of exchange risk premium, it is proposed that it be estimated using the methodology.

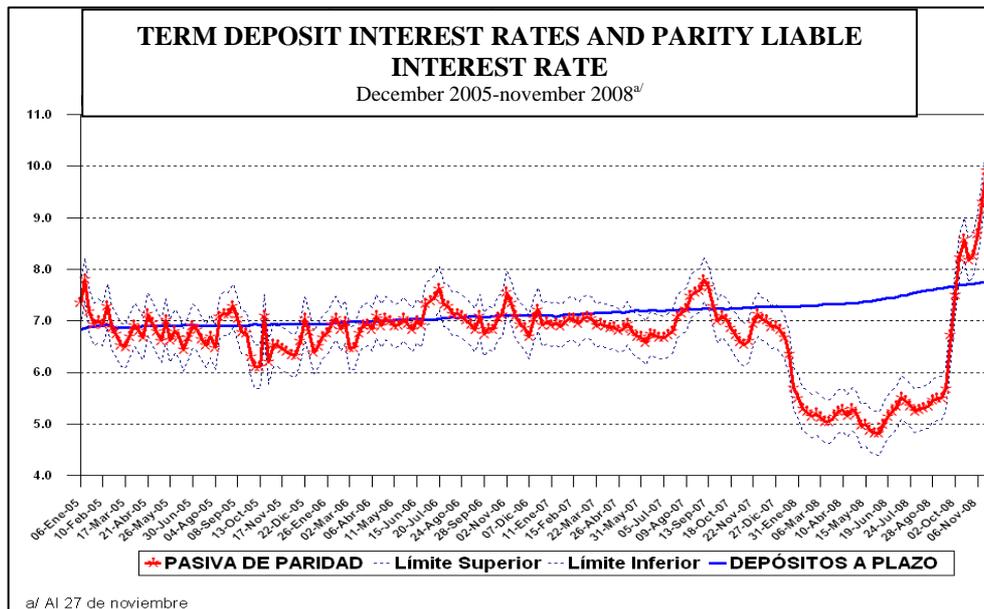
Regarding the premium per country risk, this is calculated by the difference between the yield rate of the Treasury Bonds of the Republic of Guatemala in the international financial market for a 10 year term (weighted average yield rate of the issue of said bonds) and the yield rate of the Treasury Bonds of the United States of America for 10 year terms. It is considered that the methodology used for the calculation of this premium constitutes the best approximation possible, so they propose that it continue to be used in 2009.

For external interest rate cases, it is estimated that the interest rates for six month term deposits in the US market, adequately reflects the opportunity cost of the national investors, as long as the financial market in that country influence the internal financial flows, due to their proximity and importance. The tolerance margin of the parity liable interest rate is established in the standard deviation median (equivalent to 0.42 percentage points)¹⁵, since 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 established during an extended period.

¹⁵ For the calculation of the standard deviation, the observed parity interest rate numbers were used in the period between January 2003 and December 2007.



The following graph illustrates the application of the methodology described.



b) Primary Liquidity

The primary liquidity is made up of the monetary issue and the broad monetary base. The first is important since its seasonality and trend allow predicting it reasonably well, which facilitates estimating its behavior through a corridor that encloses changes that could be registered in the same, and, the second, is an indicator that, besides including the numerary in circulation, it also incorporates the legal banking reserve behavior and the monetary stabilization operations that influence in the short term liquidity.

Following are the programmed runners, for monetary issue as well as for the broad monetary base.

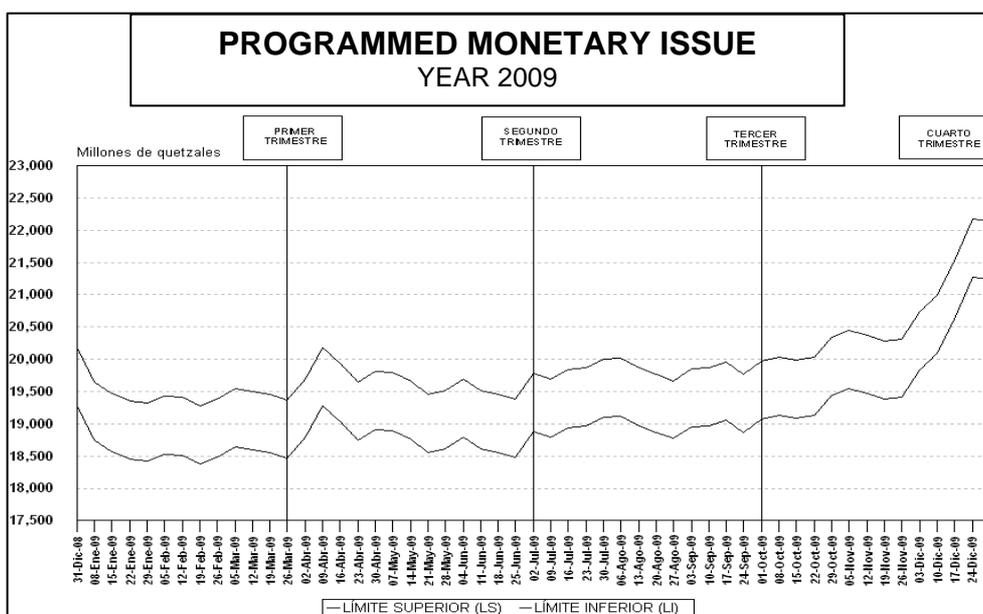
i) Monetary Issue

The monetary issue constitutes an indicator of the levels of primary liquidity existing in the economy, which follow up and projection are useful to anticipate possible pressures on the general level of prices.

In that sense, we currently hold a punctual estimation and estimation by range of the monetary issue, congruent with the inflation target and with the growth forecast of the economic activity. However, given that the inflation target



has a tolerance margin, it is reasonable to consider as normal that the monetary issue levels fluctuate within a corridor that is consistent with the inflation target proposed, the upper and lower limits of the of the mentioned runner is estimated using a standard deviation¹⁶.



The projection of the monetary program for 2009 is consistent with the proposed inflation target (5.5% +/- 1.0 percentage point) and with the forecast value of economic growth (3.5%). Based on this, the demand of monetary issue forecast for 2009 will register a relative inter-annual variation of 10.0% regarding the variable estimation at closing for 2008¹⁷, which represents an increase of Q1,964.3 million.

ii) Broad monetary base

The broad monetary base is calculated through the sum of the circulating numerary, the legal banking reserve and the balance of the short term MSO with the banking sector (maturity of up to 91 days).

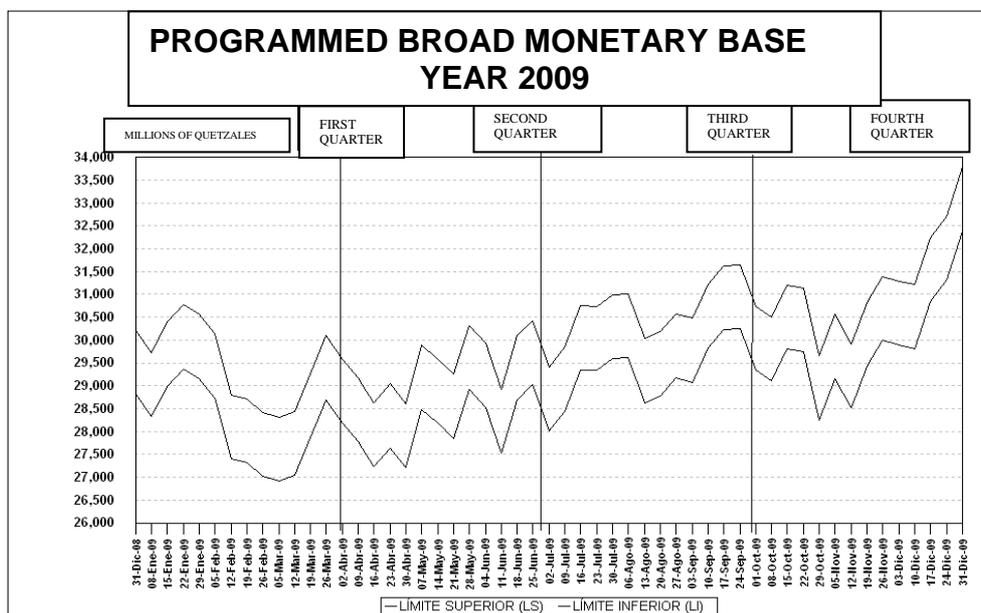
¹⁶ For the calculation of the standard deviation monetary issue data for the 2009 period will be used.

¹⁷ For the end of 2008, it is forecast that the monetary issue will be within the programmed runner, but very close to the lower limit.

The follow up of the broad monetary base, given that the inflation target has a tolerance margin, can be done through a runner that is consistent with said range and that it incorporates possible transitory liquidity fluctuations. The tolerance margin was established at half a standard deviation¹⁸.

It is estimated that for 2009, the broad monetary base will grow by 12.1% regarding the closing of 2008, which represents an increase of Q3,572.3 million.

Following is the programmed runner for the broad monetary base for 2009.



c) Payment Means

The payment means (M2) measure the money supply in the broad sense and constitute an indicator of the behavior of the secondary creation of money. The inter-annual growth of said variable is estimated in such a way that it is consistent with the growth of the economic activity, with the inflation target and the speed of money circulation. Due to the above, it is forecast that for the end of 2009 the total payment means (payment means in national currency plus payment means in foreign currency) will grow in a range of between 8.0% and 10.0% in inter-annual terms, consistent with an estimated runner for the whole year.

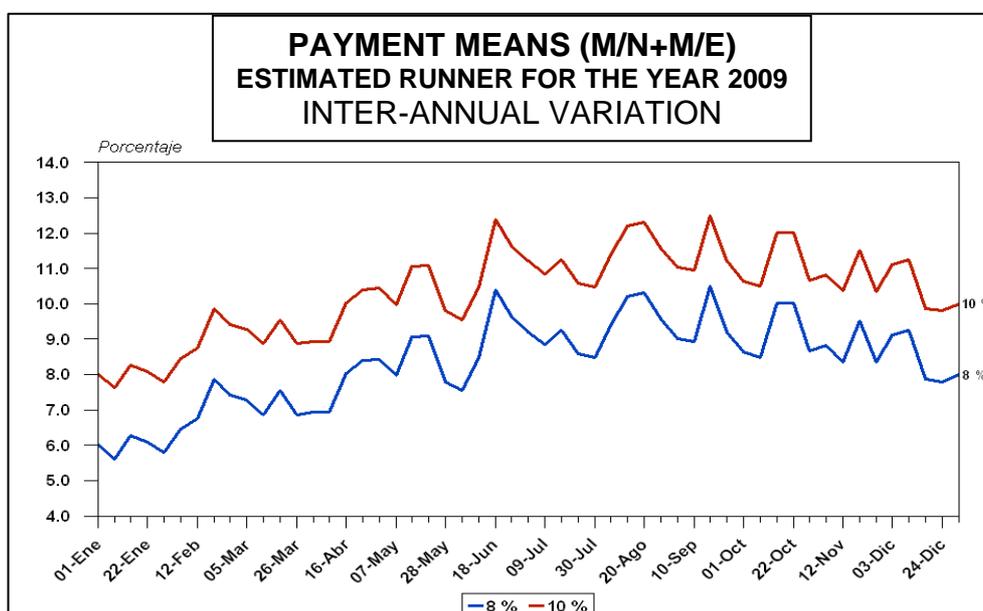
¹⁸ For the calculation of the standard deviation monetary issue data for the 2009 period will be used.



Besides considering the projected runner, in the interpretation of said variable an econometric estimation is taken into account for the inter-annual growth rate for December 2009, which calculation incorporates the seasonal behavior as well as the payment means and the information that is observed periodically.

For the follow up of the payment means, a weighting of 50% will be applied to the deviation regarding the estimated runner (in other words, the difference between the relative inter-annual variation observed on the analysis date and the estimated value by the referred runner on that same date). In the same way, a 50% weighting will apply to the econometric estimation deviation, which is calculated as the difference between the inter-annual variation of the payment means for 2009, estimated econometrically, and the range forecast for December 2009 (8.0%-10.0%).

Following is the presentation of the estimated runner of the payment means for 2009.

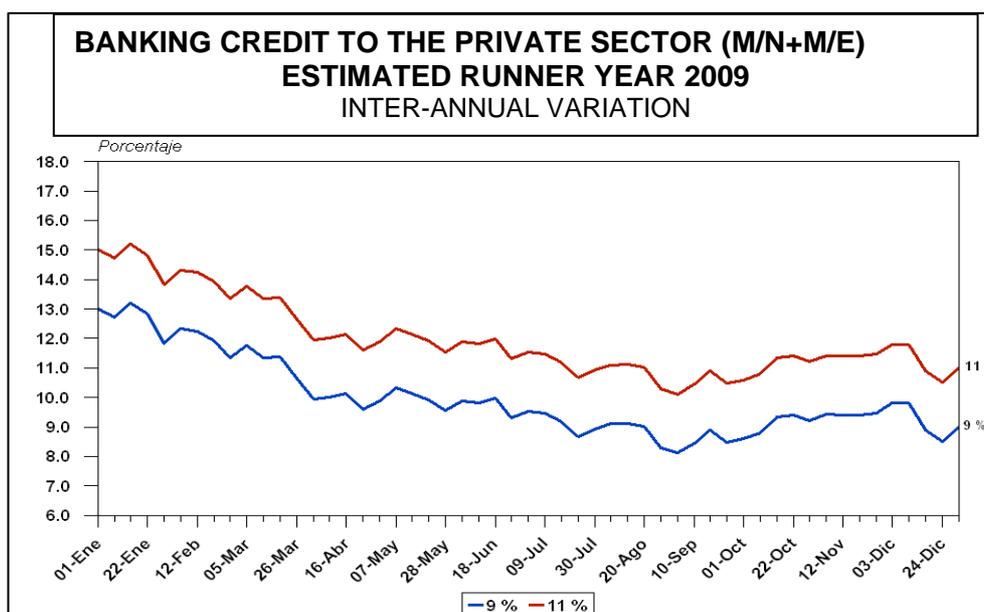


d) Banking Credit to the private sector

The banking credit to the private sector as a follow up variable is important, since it measures the amount of financial intermediation resources of the banking system that the economy uses to finance real activity.



The inter-annual growth of the banking credit to the private sector (in national and foreign currency), is estimated so that it is congruent with the inflation target established by the monetary authority and with the forecast growth in the economic activity. In that sense, for December 2009 an inter-annual growth of the banking credit to the private sector is projected within a range of between 9.0% and 11.0%, congruent with the estimated runner for the entire year.



In order to give adequate follow up to the behavior of the banking credit to the private sector, besides considering the estimated runner, it is proposed that an econometric estimation of the inter-annual growth rate for December 2009 be taken into account, which calculation incorporates the seasonal behavior of the banking credit to the private sector as well as the periodically observed information.

The follow up behavior indicator of the banking credit to the private sector will be obtained from the weighting of the estimated runner as well as the econometric estimation, considering a 50% deviation of each one of the estimations for the effect. Added to the follow up of the behavior of the inter-annual growth rate of the banking credit to the private sector, it is important to monitor the branches of economic activity toward which it is directed, in order to



be able to establish if they show behavior that could influence the inflationary pressures of the economy.

D. SYNTHETIC INDEX OF INDICATIVE VARIABLES

As of June 2006, a new index was used, that allows jointly evaluating the orientation of the indicative variables, taking into account the relative importance that each one could have in the decision making process of the monetary policy. The relative weights of the synthetic index were obtained from a survey, in which each member of the Monetary Board expressed their opinion as to the relative weight of each indicative variable.

The advantage represented in the fine-tuning of the synthetic index, was in the fact that before the same weighting was assigned to each one of the indicative variables. The new methodology allowed incorporating only one indicator for each orientation category¹⁹, 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 to other dates.

In that context, international experts and member so the technical team from the International Monetary Fund, have supported the criteria that the relative weights are obtained through quantitative methods. In that sense, taking into account the mentioned recommendations and the analysis of the technical departments of the Banco de Guatemala, it was deemed convenient to incorporate some improvements to the methodology used to calculate the synthetic index, using econometric criteria to evaluate the weighting of each one of the variables. In that regard, it was proposed they use coefficients resulting from the regression analysis of each one of the indicative variables with inflation, given that the referred coefficients measure the degree of lineal relation between two variables and allow knowing the direction of the referred relation.

¹⁹ In this methodology, five indexes are calculated, one for each orientation (relaxed, moderately relaxed, invariable, moderately restrictive and restrictive), which sum is 100%. It is worth indicating that the moderately relaxed orientation is referred to the location below the punctual value of the inflation target, but is within the tolerance margin of +/- 1.0 percentage points. Analogously, the moderately restrictive orientation is referred to the location over the punctual value of the inflation target, but is within the tolerance margin of +/- 1.0 percentage points.



For the effect, regression coefficients were estimated between the variation rates of each one to the indicative variables and of the variation rate of the Consumer Price Index (CPI). Based on the values of the coefficients estimated for each indicative variable, an index was calculated that reflects the global orientation of the monetary policy suggested for the set of variables. The relative weight for a particular indicative variable is calculated as the reason between the estimated regression coefficient of said variable and the sum of regression coefficients of all indicative variables.

Based on the obtained results, following is a proposal of Synthetic Index and its components.

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

Indicative Variable	Regression Coefficient	Relative weight of the variable
1. Projected Subjacent Inflationary Rhythm	0.75248	25.69
2. Total Projected Inflationary Rhythm	0.65762	22.45
3. Medium Term Inflation Forecasts of the MMS	0.63876	21.81
4. Inflation Expectations of the Panel of Private Analysts	0.50618	17.28
5. Implied Inflation Expectations	0.20387	6.96
6. Parameter Interest Rate	0.16983	5.80
Total		100.00

E. PRINCIPLES FOR MARKET PARTICIPATION

In order to reach the fundamental objective of the monetary, foreign exchange rate and credit policy for 2009, it is considered convenient to make the principles that could orient the Central Bank's participation explicit, in the monetary as well as exchange markets.

1. Focus on the Fundamental Objective

The participation of the *Banco de Guatemala* in the monetary and exchange markets will be made giving priority to the consecution of its fundamental objective, congruent with the scheme of explicit inflation targets.



2. The use of monetary stabilization operations in a scheme of inflation targeting

In the scheme of inflation targeting, the main instrument for moderating the primary liquidity of the economy is constituted on holding Monetary Stabilization Operations (MSO), that in Guatemala's case include, receiving term deposits, as well as holding open market operations in the secondary market, in market conditions, by the Central Bank with the financial, public and non-financial private sector, in order to counteract or expand primary liquidity in order that, there is influence on the evolution of the interest rates and in that way influence the behavior of the aggregate demand of the economy, with the purpose of contributing to the achievement of the fundamental objective of the monetary policy.

3. Exchange Flexibility

In an exchange flexibility scheme, like that currently used in Guatemala, the absence of commitments with any level or trajectory of the nominal exchange rate, forecast monetary autonomy and credibility to the Central Bank to ensure the fundamental objective in order to achieve low and stable inflation, in that way avoiding distortions in the rest of macroeconomic variables. In that regard, it is worth indicating that said exchange scheme is based on one fundamental element of support for the improvement of the inflation targeting scheme of Guatemala.

Notwithstanding the above, if in an exchange flexibility scheme the nominal exchange rate is determined by the interaction of supply and demand of foreign currency in the market, there are reasons that justify the eventual participation of the Central Bank in the Institutional Foreign Currency Market, as long as said participation has the purpose of moderating the volatility of the nominal exchange rate without affecting its trend. For this effect, said participation should be based on a regulation with objective and transparent criteria that generate certainty for the participants in the exchange market. In the same way, if it were strictly necessary, the *Banco de Guatemala* could



acquire foreign currency that would be required by the bank itself, the central government or other public sector entities.

F. INSTRUMENTS FOR KEEPING MACRO-FINANCIAL STABILITY

1. Monetary Market

a) Monetary Stabilization Operations

The moderation that has been achieved with the main macro-financial variables (inflation, interest rates and nominal exchange rate), is explained by the application of a monetary policy that, with the choice of a nominal anchor (inflation target) and within the context of a regimen of the flexible exchange rate, has been supported in the MSO held as well as in the fiscal policy discipline.

In that sense, and using indirect monetary regulation instruments in an environment of market conditions, for 2009 the monetary stabilization operations will continue being the central instrument to moderate the primary liquidity, since it is the one that distorts the operation of the financial market the least, helping fulfill, as was indicated, with the fundamental objective of promoting the stability in the general level of prices.

In that context, for 2009 the proposal is to continue participating in the market through the mechanisms that are currently used by the Banco de Guatemala for the reception of term deposits, these are:

i) Mechanisms for placements

- **Electronic Money Banking Table (MEBD)**

Through this mechanism there will be direct negotiations with banks and financial stock companies, for 7 day terms, at the leading interest rate of the monetary policy.



- **Values System of the *Bolsa de Valores Nacional, S. A.* (National Stock Exchange)**

In this mechanism, negotiations through the stock exchanges will be held, in 7 day terms, at a leading interest rate of the monetary policy.

- **Biddings**

Through this mechanism, negotiations through the stock exchanges that operate in the country directly will be held, for which biddings they be will called per due date, with pre-established quotas, which maturities are up to one year.

- **Window**

Through this mechanism negotiations with public entities and non-financial public sector entities will be held.

b) Measures for 2009

i) Legal Banking Reserve

The legal banking reserve constitutes a mechanism that allows lessening the expansion rhythm of the aggregate liquidity and of the banking credit, reason for which, according to the best international practices, currently the liquidity safeguard is used. In that sense, given that the banking entities keep the excess of the legal banking reserve reasonable, it is proposed that the legal banking reserve rate remain at 14.6%, in national as well as foreign currency.

ii) Last instance lender

The financial support of the Central Bank to the banks of the system are only oriented toward solving temporary liquidity deficits, so it looks to avoiding banking institutions falling into insolvency that, on the one hand, threaten the normal operation of the payment systems and, on the other hand, can unnecessarily pressure the short term interest rates; in other words, that said support be only a “security valve” that responds to unexpected liquidity movements that eventually forbid a fluid distribution of the reserves through the inter-banking market.



In order to promote the adequate use of the operation of the last instance lender, the Organic Law of the *Banco de Guatemala* establishes limits to said operation, in order to give priority to the consecution of its fundamental objective, which is to promote stability in the general level of prices.

In that regard, the decided by the Monetary Board in resolution JM-50-2005, in which the guidelines for the credit granting to the national private banks were approved, according to the established in article 48 of the Organic Law of the *Banco de Guatemala*, oriented, among others, to determine the general and uniform proceeding must be observed for the granting of such credits, with the purpose of assisting the necessary petitions quickly and on the other hand, that the banking institutions know the requirements that must be fulfilled to obtain said financing.

iii) Reception of Term Deposits, which due dates are greater than a year

When examining the due dates of the monetary stabilization operations and the needs of primary liquidity of the economy, it is evident that the monetary issue supply generated by the maturities has been consistently greater than demand, which has caused the Central Bank to constantly neutralize these excesses of natural structure. This situation makes the need of the Central Bank evident, when the monetary spaces allow, making monetary stabilization operations necessary, which due dates are greater than one year, so that they gradually allow the *Banco de Guatemala* to have a less indebted position before the monetary market and, on the other hand, improve the liable management.

It is worth stating that improving the position of the Central Bank before the money market has the advantage of helping to strengthen the process of the inflation targeting scheme and, with that, increase the credibility of the monetary policy, aspect that allows moderating the inflationary expectations.

iv) Liquidity-giving bids through the MEBD

The *Banco de Guatemala* will continue placing liquidity giving bids in the MEBD and at the asset leading interest rate of the monetary policy, which will



be adjusted depending to the liquidity conditions in the market and of the level of the liable leading interest rate.

v) Open market operations

The *Banco de Guatemala* could hold open market operations in the secondary values market, through the negotiation of Treasury Bonds of the Republic of Guatemala, according to the established for that effect in article 46 of the Organic Law of the *Banco de Guatemala*.

2. Exchange market

a) Participation rules

The Monetary Board in resolution JM-60-2008 dated June 11, 2008, resolved modifying the Participation Regulation of the *Banco de Guatemala* in the Institutional Foreign Currency Market, eliminating the thresholds and establishing that the rule will be activated for purchase, when the nominal exchange rate in the market is equal or less than the fluctuation margin of 0.5% of the mobile average of the reference exchange rate of the last five working days, whereas, it will activate for sale when the nominal exchange rate of the market is equal to or higher than the referred margin, with which the participation regulation is completely symmetric. On this account, it simplifies the operation of said participation regulation, which makes it more comprehensible to economic agents.

In that regard, it is worth indicating that to November 30, 2008, given the volatility shown by the nominal exchange rate, the Central Bank has participated in the Institutional Foreign Currency Market buying US\$237.4 million and selling US\$46.5 million.

Taking into account that in a scheme of inflation targeting, greater exchange flexibility is desirable, to moderate the volatility of the exchange rate, proposing flexibility of the exchange participation regulation, keeping the principle that the participation of the Central Bank in the exchange market is



limited to moderating the volatility of the nominal exchange rate, without affecting its trend.

In that context, the proposed modification is limited to increasing the fluctuation margin of the mobile average from 0.5% to 0.75%, keeping the other parameter rules invariable. In effect, when the reference exchange rate surpasses said fluctuation margins, would activate the auction mechanism that would allow the Central Bank to participate, buying or selling foreign currency, whichever the case. It is worth highlighting that the application of this rule does not intend to influence the exchange market with the purpose of reaching or keeping the objective of the predetermined exchange rate, but on the contrary, allows greater flexibility, fundamental principle within the scheme of inflation targeting.

The criteria of participation of the Central Bank contained in said regulation would be the following:

- **Criteria for purchase**

The purchase rule would be permanently active. In case the reference exchange rate will be equal to or lower to the mobile average of the last five working days of the reference exchange rate minus the fluctuation margin of 0.75%, the Central Bank would convene the entities that make up the Institutional Foreign Currency Market to a dollar purchase auction, for a maximum amount of US\$8.0 million. If the auctioned amount were awarded, the Banco de Guatemala would convene additional auctions, 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 foreign currency purchase auctions per day.

- **Criteria for sale**

The sale rule will be permanently active. In case the reference exchange rate will be equal to or higher to the mobile average of the last five working days of the reference exchange rate plus the fluctuation margin of 0.75%, the Central Bank would convene the entities that make up the



Institutional Foreign Currency Market to a dollar sale auction, for a maximum amount of US\$8.0 million. If the auctioned amount were awarded, the *Banco de Guatemala* would convene additional auctions, 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 foreign currency purchase auctions per day.

The foreign currency purchase-sale auctions are held through the Electronic Foreign Currency Negotiations System, as of the time scheduled to begin the operations of said system.

The settlement operations for foreign currency purchase-sale, held according to the mentioned criteria, are held immediately after the awarding of each one of the auction events through the Gross Settlement System in Real Time.

b) Fund Raising of term deposits in US dollars

It is deemed important that the Central Bank in 2009 continue having the option of an available instrument that allows picking up funds in foreign currency through fund-raising in term deposits in US dollars, with the objective of, if the circumstances should merit, soften the behavior of the exchange rate without affecting its trend, extracting US dollars from the market at the moment in which the seasonally it is excessive, to return them at the moment in which seasonally they are scarce, according to the established in resolution JM-99-2004 dated September 24, 2004.

G. MEASURES TO CONTRIBUTE TO THE EFFECTIVENESS OF THE MONETARY POLICY

1. Adjustment of the operative procedures of the monetary policy

a) General aspects of the current operative procedures of the monetary policy

The *Banco de Guatemala* mainly implements the monetary policy through the fixation of the so called “leading interest rate of the monetary policy”. This is the interest rate that the deposits of certificate receive for 7-day



terms, constituted in the Central Bank. It accepts the 7-day deposits for unlimited amounts. The determination of the leading interest rate of the Monetary Board is the responsibility of the Monetary Board and its level is established and modified in order to reach the established inflation target in the temporary relevant horizon. On the other hand, the Central Bank is permanently willing to give liquidity through repurchase agreement operations (with public title guarantees), at a higher interest rate than that of the leading interest rate of the monetary policy.

Additionally, the *Banco de Guatemala* receives deposits (represented by certificates) in terms of more than 7-days. In these cases, the Central Bank periodically calls bids in which different term certificates are placed. The interest rate for each placement is determined in the corresponding bidding. There are amounts of previously defined certificates to be placed for each term; however, it is possible that lower amounts be placed, when the demand of the investors is not enough to cover the amount bid or when the central bank is required to pay interest rates that are too high, in their opinion, to place the complete amount.

Currently, the Central Bank has a daily debtor position before the financial sector, which obligates it to place net term certificate deposits very frequently. So the fixing of the leading interest rate of the monetary policy fixes the opportunity cost that the majority of participants in the money market (especially, commercial banks) face when using its liquidity and not the interest rate to which the majority of banks must finance themselves marginally day to day.

b) Convenience of introducing adjustments to the operative procedures of the monetary policy

There are some characteristics of the current operative procedures of the monetary policy that are susceptible to fine-tuning with the purpose of strengthening the operation of the transmission mechanism of the monetary



policy.²⁰ In effect, the way which the central bank implements its operations of monetary stabilization, when placing the deposit of certificates of terms greater than 7-days, on occasions it can make the exchange transmission of the leading interest rate toward changes in rates for longer terms.²¹

A possible consequence of the way in which the exchange transmission of the leading interest rate of the monetary policy operates on the interest rates of deposits constituted in the *Banco de Guatemala* in greater terms, is that the increases in the level of the referred leading rate, in response to inflationary pressures, cause concentration, in the 7-day term, of the balances of term deposits constituted in the *Banco de Guatemala*.

The mentioned concentration inhibits the negotiations in the secondary market of term deposits of the *Banco de Guatemala* to terms of more than 7-days; and must be aware that said negotiations are necessary for forming the yield curve for the financial instruments and in order to strengthen the transmission mechanism of the monetary policy. As a matter of fact, the existence of a yield curve is extremely useful in the context of a regimen of inflation targeting, since it makes it possible to better measure the implied inflation expectations in the different relevant interest rates. Additionally, the incipient development of the secondary market of the referred financial instruments in terms greater than 7-days makes the transmission of the monetary policy assets to market interest rates difficult, which are more relevant in influencing consumer decisions, savings and investment of economic agents, which do not favor transmission of the monetary policy effects on aggregate demand and particularly on the trajectory of the inflation rate.

On the other hand, the fact that an important part of the deposit balance in the *Banco de Guatemala* for 7-day terms matures daily and, therefore, the position of the central bank before the banking system is the debtor regarding daily flows, making some banks slow down the transfer of their credit and deposit operations, the changes observed in the leading interest rate of the

²⁰ The main characteristics of the operative procedures of the monetary policy in Guatemala are analyzed in the following document "GUATEMALA - DEVELOPING SECONDARY PUBLIC DEBT MARKETS AND ENHANCING MONETARY OPERATIONS", International Monetary Fund, Monetary and Capital Markets Department, October 2008.

²¹ See Edwards, Sebastián (2006). Política Monetaria en Guatemala 2004-2006: Evaluación y Perspectivas Futuras. Noviembre 4 (Monetary Policy in Guatemala 2004-2006: Evaluation and Future Perspectives. November 4).



monetary policy, and in this way this contributes to making operations of the transmission mechanism of the monetary policy less fluid.

Taking into account the need to accelerate the process of strengthening the transmission mechanism of the monetary policy, for increasing the effectiveness of this and facilitate the fulfillment of its objectives, it is considered convenient that, in the first semester of 2009, they present an operative procedures adjustments proposal for the implementation of the monetary policy to the Monetary Board.

2. Improve the political framework of the Monetary Policy

a) Identification and quantification of the different mechanisms of monetary policy transmission

The transmission mechanism of the monetary policy toward the inflation trajectory of an economy is very complex and changing. They are usually identified by four channels for which the mechanism is materialized: the interest rate channel, the exchange rate channel, the other assets price channel and the credit channel. Typically, they also recognize the operation of an expectations channel. The relative importance of such channels varies from one country to another and over time. In particular, different degrees of development in the economic structures and different institutional contexts affect the operation and the relative magnitudes of the different transmission channels. Particularly, the existence of different monetary and exchange regimens determine great differences of the transmission channels of the monetary policy between countries and between historic periods. However, it is convenient to have a notion of the quantitative importance of the different transmission channels of the monetary policy, since this allows better knowing the possible costs in real production terms, of the anti-inflationary policy, as well as its possible exchange effects.

On the other hand, there is a certain observational equivalence among the effects of the different transmission channels. On the other hand, it is difficult to quantitatively distinguish its relative importance at a given time. Even so, the knowledge of the specific characteristics of a determined economy can



be useful to orient the quantitative investigation as to the transmission channels of the monetary policy.

For the identification effect of the quantitative importance of the different transmission channels of the monetary policy in Guatemala, in 2008, basically, the statistical methodologies of dynamic correlations and structural autoregressive vectors were used. In 2009 there will be an estimation of the econometric estimation of the main equations of the Semi-structural Macroeconomic Model, with the purpose that the updated calibration of it reflects the quantitative importance of each one of the main transmission channels of the monetary policy in Guatemala. As a matter of fact, this estimation and calibration process was already begun and is expected to have a fine-tuned version of the new calibration in the course of the second quarter of 2009.

b) Macroeconomic Structural Model (MME)

In 2008 the development of a structural macroeconomic model (MME) for the inflation forecasts was begun.

The interest of implementing a structural model in the *Banco de Guatemala* has its justification in the advantages that a structural model has on the econometric models or reduced models. As a matter of fact, the main advantage of the structural models consists of allowing modeling its preferred characteristics, technology and the institutions, of the real and financial sectors of an economy, which are invariable before the changes in the public policies; therefore, provide predictions that take into account the fact that the economic agents can react differently before the same impulse when the rules that regulate the public policy in question vary.

Therefore, it will be expected that the structural model of optimization processes²² that each representative agent fulfills in the artificial economy is known in detail and will facilitate the comprehension of the results of the model. There is also the interest that the design of the model will include the transmission mechanisms of the monetary policy that operate in the

²² Maximization restricted of the utility of consumers and of the profits of firms.



Guatemalan economy, according to monetary authorities and of the technicians of the *Banco de Guatemala*, and it is expected that its design be flexible and in blocks, to experiment with different specification and calibrations that allow evaluating the operation of transmission channels (or of different conceptions on such channels).

In 2008 two dynamic general balance models were built, for a small and open economy, calibrated for the Guatemalan economy. In both cases only the real part of the economy was modeled, making abstractions of the monetary variables. In 2009 the following are forecasted to make progress; (i) build a model that incorporates fiscal variables, (ii) develop a monetary model of closed economy and (iii) design a small and open monetary economy, with fiscal variables. This last model will build a first version of the structural macroeconomic model of the *Banco de Guatemala*.

3. Continue with the consolidation of the Information of the inter-banking operations in the secondary values market

Taking into account that the information on the values prices of the values that are negotiated in the secondary market constitute an important element in the development and depth of the same, it is proposed that the *Banco de Guatemala* continue consolidating and publishing information on the operations held with Term Deposits constituted in the *Banco de Guatemala* and with the Treasury Bonds of the Republic of Guatemala or with representative certificates of such bonds, in the stock market and over the counter markets.

In that sense, it has been proposed to the Monetary Board that just as in 2008, they instruct the Banks of the system and financial stock companies to report the financial characteristics of the operations held with Term Deposits constituted in the *Banco de Guatemala* and Representative Certificates with Treasury Bonds of the Republic of Guatemala in the stock market and over the counter markets, in the manner and with the periodicity that is established by the Central Bank.



Once the information is consolidated, the *Banco de Guatemala* will continue to make available the term Information for the participants, yield rates and negotiated amounts, in global terms, on its Internet site.

4. Contracts to future foreign currency

In Guatemala, since 1994 there is a futures market in foreign currency that operates in the *Bolsa de Valores Nacional, S. A.*, (BVNSA), which is regulated by the Futures Regulation, approved by the Administration Council of said stock market.

On that account, it is possible to negotiate contracts on future foreign currency (quetzal versus the US dollar), in which the BVNSA assumes the role of the Banking Clearing House. When a futures contract is negotiated the BVNSA requests the parties that began the contract, the purchaser as well as the seller, that deposit an express amount in quetzales, that represent a percentage of the value of each contract. This amount is called “margin” and it is an amount of money that during a current term should remain in deposit and is returned or accredited when the contract is over. The function of the margin is to guarantee the fulfillment of the contracts and avoid the accumulation of losses, achieving the protection of both parties in this manner. The BVNSA calculates the “Price of closing” that is regulated that day in the Futures Market daily and based on this calculation and adjusts the value of each contract. Due to the daily adjustment, one of the parties that began the contract wins, while the other loses, since the amount lost is debited from the “margin account” of the party that lost, to accredit it to the “margin account” of the winning party. These amounts that are delivered or received daily are known as “adjustments”. When closing a futures contract it is enough for the parties to deposit the initial margin, which implies that it is not necessary to disburse 100% of the negotiable amount, to be able to participate in the futures market. When counting on a high degree of leverage, a small change in the foreign currency quote can represent big losses or big gains, so whoever is negotiating must take into account the risk level that it is willing to run.



The financial characteristics of these operations are the following: the negotiated asset is US dollars; the amount of each contract is of US\$1,000.00; the maturity dates are established for the third Wednesday of March, June, September and December of each year; the margin per contract is determined by the participants in said market; and, the settlement is held through the delivery of the negotiated asset.

In the following graph is the Information of the future foreign currency contracts during the 2002 to 2008 period.

OPERATIONS HELD IN THE FUTURE FOREIGN CURRENCY MARKET IN
THE BOLSA DE VALORES NACIONAL S.A. NATIONAL STOCK EXCHANGE

2002-2008 PERIOD
(Numbers in US dollars and percentages)

YEAR	NUMBER OF OPERATIONS	TOTAL AMOUNT	WEIGHTED AVERAGE EXCHANGE RATE
2002	48	4,850,000.00	7.95
2003	85	10,690,000.00	8.00
2004	35	12,134,000.00	8.03
2005	22	5,200,000.00	7.68
2006	3	17,500,000.00	7.60
2007	-	-	-
2008	-	-	-

Source: Bolsa de Valores Nacional S.A.

According to information from the BVNSA, since December 15, 2006 there are no closed operations registered in the futures foreign currency markets. Said situation can be associated to the relative stability of the nominal exchange rate of the quetzal regarding the US dollar and the absence of reference information in the secondary values market (interest rate), which is used to determine the future exchange rates.

a) Forward Foreign Currency Contracts

In Guatemala some banking entities hold operations in the term foreign currency markets, through the negotiation of forward contracts; however, not all participants of the foreign currency market have the relative information of said operations, as long as it is not published. In effect, said operations are especially held with corporate clients.



b) Strengthening of the term foreign currency market

In the measure that the primary market of values titles is strengthened and the secondary market of said titles is developed and deepened, reference information will be generated (interest rates) that will contribute to determining the prices of term foreign currency contracts.

It is estimated that the flexibilization of the Participation Regulation of the *Banco de Guatemala* in the Institutional Foreign Currency Market proposed for 2009 could help in holding operation in the term foreign currency market, through the negotiation of future contracts or through forward contracts.

Additionally, it is deemed important to make the operations that are held in the term foreign currency market transparent, in order that the economic agents count on the reference prices for the operations held in said market. It is worth mentioning that the publication of the information of the future foreign currency negotiations contracts corresponding to the *Bolsa de Valores Nacional, S. A.* (National Stock Exchange).

In the case of forward operations, it is proposed that the institutions that make up the Institutional Foreign Currency Market report the financial characteristics of the operations with this type of contracts established by the Central Bank daily to the *Banco de Guatemala*. Once said information is consolidated, the *Banco de Guatemala* will make it available to the participants on its website.

5. Coordination with the fiscal policy

An efficient and effective coordination of the monetary and fiscal policies is necessary to avoid the weight of stability to fall exclusively in one of the mentioned policies and, therefore, generate distortions, like unnecessary pressures on the nominal exchange rate, the interest rates, the public debt and the settlement of the national financial system, which could shrink economic growth.

During 2008, the coordination between fiscal and monetary policies was held through the Coordination Committee as always, that, according to the agreed between the *Ministerio de Finanzas Públicas* [roughly equivalent to the



Department of the Treasury.] and the *Banco de Guatemala*, have periodical meetings, on the one hand, to give follow up to the operations held by said entities and on the other hand, to evaluate the actions taken regarding said coordination, overseeing that they agree with a consistent and coherent monetary and fiscal program, in the framework of the economic program of the country.

In the described context, it is considered that an adequate coordination of the fiscal and monetary policies constitute an asset that strengthens the institutionalism of the macroeconomic policy.

6. Transparency and account rendering of the *Banco de Guatemala*

For the strengthening of account rendering of the Central Bank operations it is necessary that, added to complying with the writing of different reports and publications, it must let the public know, according to the established in the organic law of the *Banco de Guatemala*, about the determined by the monetary policy and also of the action 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. In order to generate certainty in the economic agents for decision making, the *Banco de Guatemala*, in a scheme of explicit inflation targeting publicly announces the annual meeting calendar in which the Monetary Authority will make decisions regarding the leading interest rate of the monetary policy. Following is the proposed calendar that the *Banco de Guatemala* could publish for 2009. Said calendar was made taking into account two different aspects: the available relevant Information for decision making regarding the leading interest rate and a reasonable period of time between each decision, which will allow a more complete analysis of the domestic as well as foreign environments, in which the monetary policy performs.



**CALENDAR FOR THE SESSIONS IN WHICH
THE MONETARY BOARD WILL MAKE DECISIONS
REGARDING THE LEADING INTEREST RATE**

DATE
JANUARY 28, 2009
FEBRUARY 25, 2009
MARCH 25, 2009
APRIL 22, 2009
JUNE 17, 2009
JULY 29, 2009
SEPTEMBER 16, 2009
OCTOBER 28, 2009
NOVEMBER 25, 2009

7. Improvement of the statistical system in 2009

a) Monetary and Financial Statistics

In 2009 we will continue to make progress in the implementation process on the Monetary and Financial Statistics Manual (MEMF, for its acronym in Spanish), 2000 edition, from the International Monetary Fund, which methodology framework incorporates the best international practices in matter of compilation and publishing of monetary and financial statistics.

It is worth indicating that during 2008 the coverage of statistics for financial stock companies was completed. Due to this, in 2009 we forecast continued work for improving the sectoring in which institutions regarding those for which there is no extra-accountable Information, particularly regarding detailed information of portfolio balances of Financial Stock Companies, Offshore Entities and Specialized Companies in Financial Services.

It is worth mentioning that the improvements to be incorporated in 2009 will allow concluding the implementation of the MEMF methodology implementations at the end of said year.

b) Quarterly National Accounts

In 2009 we will continue to write up the Quarterly National Accounts within the conceptual framework of the National Accounts System of 1993 (SCN93), with the objective of contributing to the follow up of the behavior of the



economic activity in the short term and have trustworthy and opportune information from the real sector available.

In that sense, at the end of the first quarter of 2009 the final quarterly estimation of the Gross Domestic Product should be finished, measured by the focus on production and by the focus on expense.

**c) New Monthly Index of Economic Activity (IMAE)
Reviewed Base 2001**

In 2009 the Monthly Index of Economic Activity is programmed to conclude, which will incorporate the improvements to adequate it to the new productive structures provided by the National Accounts System 1993.

The revised IMAE will consider the following methodological changes:

- Re-weighting of its components, according to the productive structure provided by the SCN93.
- Broadening of its coverage to better explain the behavior of the GDP in the short term (9 of 11 activities).

d) Input-Output Model (MIP, acronym in Spanish)

It is a coefficient quadrant that contains a disaggregation of the production account in a matrix system (rows and columns) in which the origin and destination of the production transactions are registered.

For the end of the first quarter of 2009, the Input Output Model for 2006 is programmed to be finished, using the definitive information coming from the National Accounts System 1993 as the main source.

III. RECOMMENDATION

Based on the expressed, the Technical Council of the *Banco de Guatemala* recommends the Monetary Board determine the Monetary, Foreign Exchange Rate and Credit Policy for 2009, as well as the complementary measures for the same, in the terms presented in the present decree.



Sincerely,

Johny R. Gramajo Marroquín
Director
Dept. of Economic Studies

Juan Carlos Castañeda F.
Director
Dept. Economic Research

Pablo A. Marroquín F.
Subdirector
Dept. of Banking and Financial
Analysis

Otto René López F.
Director
Dept. of Economic Statistics

Rómulo Oswaldo Divas Muñoz
Director
Dept. of Monetary Stabilization
Operations

Edgar R. Lemus Ramírez
Director
International Dept.

Gerardo Noel Orozco Godínez
Advisor III
Legal Advisory

Sergio F. Recinos Rivera
Financial Manager

F. Estuardo García Alburez
Secretary

Oscar Roberto Monterroso Sazo
Economic Manager
Coordinator

The present decree was approved by the Technical Council of the Banco de Guatemala, in the session held on December 15, 2008.



STATISTICAL APPENDIX



A. REAL SECTOR



PRODUCTO INTERNO BRUTO POR EL ENFOQUE DE LA PRODUCCIÓN
AÑOS 2006 - 2009
Millones de quetzales constantes a precios de 2001^w

ACTIVIDADES ECONÓMICAS	2006	2007 ^y	2008 ^{e/}	2009 ^{p/}	Variación porcentual (%)			Contribución en variación porcentual del PIB			Participación en variación porcentual del PIB					
					2006	2007	2008	2009	2006	2007	2008	2009	2006	2007	2008	2009
PRODUCTO INTERNO BRUTO	175,691.3	186,704.9	194,226.1	201,053.3	5.4	6.3	4.0	3.5	5.4	6.3	4.0	3.5	100.0	100.0	100.0	100.0
1. Agricultura, ganadería, caza, silvicultura y pesca	23,842.4	25,244.1	25,754.9	26,460.3	1.3	5.9	2.0	2.7	0.2	0.8	0.3	0.4	3.3	12.7	6.8	10.4
2. Explotación de minas y canteras	1,138.1	1,296.4	1,286.2	1,249.5	17.6	13.9	-0.8	-2.9	0.1	0.1	0.0	0.0	1.9	1.4	-0.1	-0.5
3. Industrias manufactureras	33,472.4	34,491.7	35,334.5	36,022.3	3.8	3.0	2.4	1.9	0.7	0.6	0.5	0.4	13.5	9.3	11.2	10.1
4. Suministro de electricidad y captación de agua	4,586.5	4,874.0	4,983.5	5,085.3	3.0	6.3	2.2	2.0	0.1	0.2	0.1	0.1	1.5	2.6	1.5	1.5
5. Construcción	6,936.9	7,548.3	7,275.7	6,936.4	13.1	8.8	-3.6	-4.7	0.5	0.3	-0.1	-0.2	9.0	5.6	-3.6	-5.0
6. Comercio al por mayor y al por menor	21,681.7	22,538.3	23,291.4	24,047.0	3.9	4.0	3.3	3.2	0.5	0.5	0.4	0.4	9.2	7.8	10.0	11.1
7. Transporte, almacenamiento y comunicaciones	14,146.1	17,381.0	20,550.3	23,379.5	18.6	22.9	18.2	13.8	1.3	1.8	1.7	1.5	24.7	29.4	42.1	41.7
8. Intermediación financiera, seguros y actividades auxiliares	6,763.7	7,432.2	8,311.0	9,275.0	16.1	9.9	11.8	11.6	0.6	0.4	0.5	0.5	10.5	6.1	11.7	14.2
9. Alquiler de vivienda	17,875.6	18,571.1	19,265.3	19,963.8	2.7	3.9	3.7	3.6	0.3	0.4	0.4	0.4	5.2	6.3	9.2	10.3
10. Servicios privados	26,868.5	28,623.2	29,924.9	31,162.7	5.5	6.5	4.5	4.1	0.8	1.0	0.7	0.6	15.5	15.9	17.3	18.2
11. Administración pública y defensa	11,294.0	11,813.7	12,446.9	12,910.6	5.3	4.6	5.4	3.7	0.3	0.3	0.3	0.2	6.3	4.7	8.4	6.8
(-) Servicios de Intermediación Financiera Medidos Indirectamente (SIFMI)	5,917.8	6,702.6	7,613.5	8,533.0	16.7	13.3	13.6	12.1	0.5	0.4	0.5	0.5	9.5	7.1	12.1	13.5
(+) Impuestos netos de subvenciones a los productos	13,571.7	14,458.9	15,086.0	15,723.1	5.7	6.5	4.3	4.2	0.4	0.5	0.3	0.3	8.2	8.1	8.3	9.4
ESTRUCTURA PORCENTUAL																
PRODUCTO INTERNO BRUTO	100.0	100.0	100.0	100.0												
1. Agricultura, ganadería, caza, silvicultura y pesca	13.6	13.5	13.3	13.2												
2. Explotación de minas y canteras	0.6	0.7	0.7	0.6												
3. Industrias manufactureras	19.1	18.5	18.2	17.9												
4. Suministro de electricidad y captación de agua	2.6	2.6	2.6	2.5												
5. Construcción	3.9	4.0	3.7	3.5												
6. Comercio al por mayor y al por menor	12.3	12.1	12.0	12.0												
7. Transporte, almacenamiento y comunicaciones	8.1	9.3	10.6	11.6												
8. Intermediación financiera, seguros y actividades auxiliares	3.8	4.0	4.3	4.6												
9. Alquiler de vivienda	10.2	9.9	9.9	9.9												
10. Servicios privados	15.3	15.3	15.4	15.5												
11. Administración pública y defensa	6.4	6.3	6.4	6.4												
(-) Servicios de Intermediación Financiera Medidos Indirectamente (SIFMI)	3.4	3.6	3.9	4.2												
(+) Impuestos netos de subvenciones a los productos	7.7	7.7	7.8	7.8												

a/ La discrepancia entre el total y la suma de los componentes se debe a la diferencia por no actividad de índices encadenados.

p/ Cifras preliminares

e/ Cifras estimadas

pv/ Cifras proyectadas



B. MONETARY SECTOR



MONETARY SECTOR
YEARS 2006 - 2009
Millions of quetzales

CONCEPT	2006	2007	2008 ^{e/}	2009 ^{py/}
Net International Monetary Reserves (millions of US\$)	4,061.1	4,320.3	4,620.4	4,925.4
Net International Monetary Reserves in MN	32,488.8	34,562.4	36,962.9	39,402.9
Monetary Issue	15,772.0	20,010.8	19,734.5	21,698.8
Total Banking Credit to the private sector ^{f/}	61,490.7	78,283.7	91,011.9	100,508.1
Total bank fund-raising ^{1/}	72,237.9	79,681.7	87,009.4	94,625.1
M2 Payment Means in MN	77,314.7	84,693.7	91,309.2	98,922.0
M2 Payment Means in M/E ^{1/}	9,667.2	12,170.5	14,478.9	16,353.8
Total Payment Means M2 (MN + ME) ^{1/}	86,982.0	96,864.2	105,788.1	115,275.8
MSO Balance	15,188.9	11,669.4	13,583.2	14,728.0
M3 total	92,085.1	101,412.8	110,755.7	120,689.0

MONETARY INDICATORS
YEARS 2006 - 2009
In percentages

CONCEPT	2006	2007	2008 ^{e/}	2009 ^{py/}
RMIN in MN / Monetary Issue	206.0	172.7	187.3	181.6
RMIN in MN / MSOs	213.9	296.2	272.1	267.5
RMIN in MN / M2 total	37.4	35.7	34.9	34.2
MSO / Monetary Issue	96.3	58.3	68.8	67.9
Total banking credit to the private sector / nominal GDP	26.8	30.0	30.9	30.9
M2 total / nominal GDP	37.8	37.1	35.9	35.4
M2 in ME / M2 total	11.1	12.6	13.7	14.2
MSO / M2 total	17.5	12.0	12.8	12.8
MSO / nominal GDP	6.6	4.5	4.6	4.5

^{1/} Does not include Offshore entities

^{e/} Estimated numbers

^{py/} Projected numbers

Source: Banco de Guatemala and Bank Superintendence



C. FISCAL SECTOR



PUBLIC FINANCE
YEARS 2006-2009
Millions of quetzales and percentages

Concept	2006	2007	2008 ^{e/}	2009 ^{py/}
Tax burden	11.9	12.1	11.3	12.1
Tax elasticity	1.6	1.2	0.4	1.9
Total income (% of the GDP)	12.7	12.9	11.9	12.9
Indirect taxes / tax income	71.9	72.5	71.1	73.6
Total expenses (% of the GDP)	14.7	14.3	13.5	15.0
Capital expenses / Total expense	35.9	33.7	30.8	27.9
Social expense / Total expense	43.3	41.3	46.5	48.7
Fiscal deficit (% of the GDP)	-1.9	-1.4	-1.6	-2.0
Surplus / Primary deficit (% of the GDP)	-0.6	0.0	-0.2	-0.6
Savings in current account	7,222.9	8,383.5	7,223.1	5,869.7
Total public debt service / tax income	33.5	24.4	23.8	22.2
External public debt service / Exportations of goods and services	7.1	6.5	4.9	5.0
Internal public debt balance / Total public debt	40.2	42.7	43.8	42.1
External public debt balance / Total public debt	59.8	57.3	56.2	57.9
Total public debt balance (% of the GDP)	21.9	21.7	20.3	20.6
Internal public debt balance (% of the GDP)	8.8	9.3	8.9	8.7
External public debt balance (% of the GDP)	13.1	12.4	11.4	12.0
External public debt balance / Exportations of goods and services	49.3	45.6	42.2	43.2

e/ Estimation

py/ Projected numbers

Source: Ministerio de Finanzas Públicas [Roughly equivalent to the US Department of the Treasury and the Banco de Guatemala]



D. EXTERNAL SECTOR



Economic Perspectives for 2009-2010 and Proposal for the Monetary, Foreign Exchange Rate and Credit Policy for 2009



PAYMENTS BALANCE ^{1/} AND
MAIN FOREIGN COMMERCE INDICATORS
Years 2006 - 2009
- In millions of US Dollars -

CONCEPT	2006	2007 ^{P/}	2008 ^{E/}	2009 ^{PP/}
Current Balance Account	-1,524.1	-1,769.0	-2,077.7	-2,169.6
FOB Exportations	6,082.1	6,983.4	8,019.1	8,750.8
General merchandise	4,418.3	5,339.2	6,288.3	6,942.1
Main products	1,294.3	1,620.6	1,874.4	1,920.9
Other products	3,124.0	3,718.6	4,413.9	5,021.2
Goods for transformation	1,603.5	1,568.6	1,640.1	1,705.7
Goods acquired in ports	60.3	75.6	90.7	103.0
FOB Importations	10,934.4	12,470.0	13,966.4	14,963.3
Services	-259.6	-293.4	-300.5	-281.7
Profit	-680.4	-842.9	-920.5	-1,027.8
Current Transfers (Net)	4,268.2	4,853.9	5,090.6	5,352.5
Family Remittances (Net)	3,645.3	4,200.0	4,389.0	4,542.6
Capital and Financial Balance Account	1,776.4	1,985.3	2,383.7	2,450.9
Capital Account	142.2	0.0	0.0	0.0
Financial Account	1,634.2	1,985.3	2,383.7	2,450.9
Direct investment	551.6	719.2	802.8	754.6
Portfolio investment	-83.4	-184.8	51.8	37.1
Other investments (includes errors and omissions)	1,166.0	1,450.9	1,529.1	1,659.2
Reserve Assets [(-) Increase (+) Decrease] ^{2/}	-252.3	-216.3	-306.0	-281.3
Net International Reserve Amount (RMIN)	4,061.1	4,320.3	4,620.3	5,125.3
RELATION REGARDING THE GDP				
Current Account Balance	-5.0	-5.2	-5.3	-5.2
FOB Exportations	20.1	20.5	20.6	20.8
Main products	4.3	4.8	4.8	4.6
Other products	10.3	10.9	11.3	11.9
FOB Importations	36.2	36.6	35.9	35.5
Services	-0.9	-0.9	-0.8	-0.7
Profit	-2.3	-2.5	-2.4	-2.4
Current Transfer (Net)	14.1	14.3	13.1	12.7
Family Remittances (Net)	12.1	12.3	11.3	10.8
Capital and Financial Balance Account	5.9	5.8	6.1	5.8
Capital Account	0.5	0.0	0.0	0.0
Financial	5.4	5.8	6.1	5.8
Direct investment	1.8	2.1	2.1	1.8
Portfolio investment	-0.3	-0.5	0.1	0.1
Other investment (include errors and omissions)	3.9	4.3	3.9	3.9
Months of Goods importations (FOB) Financeable with RMIN	3.9	3.7	3.7	3.8
Months of Goods importations (FOB) and financeable services with RMIN	3.4	3.2	3.2	3.2
FOREIGN COMMERCE				
EXPORTATIONS – MAIN PRODUCTS				
Coffee	463.6	577.3	685.0	688.8
Volume (Thousands of qq)	4,379.4	5,013.2	5,150.0	6,319.0
Median price (US\$ per quintal)	105.86	115.16	133.00	109.00
Sugar	298.6	358.1	323.5	383.6
Volume (Thousands of qq)	28,959.6	28,154.1	25,215.2	31,445.0
Median price (US\$ per quintal)	10.31	12.72	12.83	12.20
Banana	215.5	298.8	321.1	367.5
Volume (Thousands of qq)	21,112.8	28,920.9	33,452.0	35,000.0
Median price (US\$ per quintal)	10.21	10.33	9.60	10.50
Cardamom	83.4	137.3	168.8	210.0
Volume (Thousands of qq)	677.5	607.6	450.0	700.0
Median price (US\$ per quintal)	123.10	225.97	375.00	300.00
Petroleum	233.2	249.1	376.0	271.0
Volume (Thousands of barrels)	5,357.5	5,276.6	4,700.0	6,775.0
Median price (US\$ per barrel)	43.53	47.21	80.00	40.00
FOB IMPORTATIONS (CUODE Economic Group)	10,934.4	12,470.0	13,966.4	14,963.3
General Merchandise	9,863.3	11,474.4	12,944.9	13,921.0
Consumer Goods	2,837.3	3,177.5	3,316.7	3,567.3
Raw material and intermediate products	3,119.2	3,468.1	4,062.4	4,424.0
Fuel and lubricants	1,797.6	2,279.9	2,933.9	3,082.7
Construction Material	229.9	285.7	345.7	378.5
Capital Goods	1,878.0	2,262.5	2,285.5	2,467.8
Miscellaneous	1.3	0.7	0.7	0.7
Goods for transformation	1,068.8	994.5	1,020.3	1,040.9
Goods acquired in ports	2.3	1.1	1.2	1.4

^{1/} Methodology of the Fifth Payments Balance Manual (MBP5) of the International Monetary Fund (IMF).)

^{2/} Las transacciones de Assets de Reserva del Banco Central registradas en la balanza de pagos no incluyen variaciones en el valor de la tenencia de activos externos debido a revalorizaciones o desvalorizaciones de precios de mercado.

^{P/} Preliminary numbers

^{E/} Estimated numbers

^{PP/} Projected numbers

Source: Banco de Guatemala



E. BANKING SECTOR



BANKING SECTOR
YEARS: 2006 - 2008
- Millions of quetzales -

CONCEPT	2006	2007	2008 ^{a/}
Total Assets	104,515.2	118,392.5	129,428.6
Total Credit portfolio (gross)	51,742.3	70,155.5	75,669.0
In national currency	36,146.4	47,229.9	50,174.5
In foreign currency	15,595.9	22,925.6	25,494.5
Default and past due portfol ^{1/} io	2,782.1	2,746.5	2,029.3
Non-productive assets ^{2/}	5,874.5	6,144.3	5,721.5
Assets subject to weighting by risk	58,259.8	75,319.3	82,591.8
Investments in national values ^{3/}	30,131.9	23,672.5	26,838.3
Total liability	95,950.9	107,907.0	115,373.2
Total deposits	77,817.3	86,904.0	94,987.5
In national currency	68,619.3	74,946.8	81,046.2
In foreign currency	9,198.0	11,957.2	13,941.3
External credit	10,395.6	13,851.8	13,937.9
Countable equity	7,818.2	9,889.4	12,610.8
Net profit	1,292.5	1,834.3	2,301.6
Paid + Net capital	5,472.6	6,569.3	7,186.8

POPULATION AND NUMBER OF BANK BRANCHES
YEARS: 2005 - 2008

CONCEPT	2006	2007	2008 ^{a/}
Population	13,018,759	13,344,770	13,677,815
Number of bank branches	1,377	2,243	2,546

1/ With the Implementation of the new instructions manual for accounting current as of 2008, the past due portfolio disappears, so for said year only the default portfolio is taken into account.

2/ Refers to those that do not generate financial income (fixed assets, extraordinary assets, past due portfolio and default portfolio), for 2008, the assets that are not productive are integrated to fixed assets, past due portfolio and quick assets.

3/ To December 2007, include temporary investments and long term for 2008, the investments are made up of the Values Titles for Sale, Values Titles for their due date and permanent investments.

a/ Preliminary number to November

Source: Superintendencia of Banks and the National Statistics Institute (INE)



BANK INDICATORS
YEARS: 2005 - 2008
- Percentages and numbers-

CONCEPT	2006	2007	2008 ^{a/}
Credit portfolio / total asset	49.5	59.3	58.5
Structure of the credit portfolio according to currency			
National currency portfolio/ total portfolio	69.9	67.3	66.3
Foreign currency portfolio /total portfolio	30.1	32.7	33.7
Past due and default portfolio / total portfolio	5.4	3.9	2.7
Non-productive assets / total assets	5.6	5.2	4.4
Investment in national values / total asset	28.8	20.0	20.7
Deposits / total liability	81.1	80.5	82.3
Deposits in national currency / total deposits	88.2	86.2	85.3
Deposits in foreign currency / total deposits	11.8	13.8	14.7
External credit / total liability	10.8	12.8	12.1
External credit / total portfolio	20.1	19.7	18.4
Sound equity			
Countable equity / assets weighted by risk	13.4	13.1	15.3
Profitability (gains/ paid capital + reserves)	23.6	27.9	27.5
Bancarization (population/ number of bank branches)	9,454	5,950	5,372

a/ Preliminary numbers to November

Source: Superintendence of Banks and National Statistics Institute (INE)