

# Inflation Report

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April – June 2008



**BANCO DE MEXICO**

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JULY 2008



*BOARD OF GOVERNORS*

**Governor**

GUILLERMO ORTIZ MARTÍNEZ

**Deputy Governors**

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*Unless otherwise stated, this document has been prepared using data available as of July 29, 2008. Figures are preliminary and subject to change.*



# CONTENTS

## Inflation Report April - June 2008

<b>1. Introduction .....</b>	<b>1</b>
<b>2. Recent Developments in Inflation .....</b>	<b>3</b>
2.1. Inflation .....	3
2.2. Producer Price Index .....	8
<b>3. Main Determinants of Inflation.....</b>	<b>10</b>
3.1. External Conditions.....	10
3.1.1. World Economic Activity.....	10
3.1.2. Inflation Trends .....	11
3.1.3. Financial Markets .....	14
3.1.4. Outlook.....	18
3.2. Aggregate Demand and Supply in Mexico.....	18
3.2.1. Production by Sector.....	19
3.2.2. Aggregate Demand .....	21
3.2.3. Employment .....	26
3.2.4. External Sector.....	28
3.3. Costs and Prices .....	34
3.3.1. Wages .....	34
3.3.2. Output per Worker.....	36
3.3.3. Administered and Regulated Prices of Goods and Services .....	37
3.3.4. Food Commodities .....	38
3.3.5. Energy Commodities.....	46
3.3.6. Metal Commodities .....	51
3.4. Monetary and Credit Aggregates .....	52
3.4.1. Monetary Base, Net Domestic Credit, and International Assets .....	52
3.4.2. Monetary Aggregates and Financing .....	53
<b>4. Monetary Policy.....</b>	<b>62</b>
<b>5. Prospects for Inflation and Balance of Risks.....</b>	<b>74</b>

### Boxes

1. Recent Monetary Policy Actions Taken by Other Central Banks .....	13
2. International Grain Prices (Developments and Outlook) .....	44
3. Oil, Gasoline and Natural Gas Markets (Developments and Outlook) .....	48
4. Inflation Expectations in the Monetary Policy Transmission Mechanism	72





## 1. Introduction

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The problems the world economy was confronting continued during the second quarter of 2008, and still do not show signs of correction. Most recent information suggests that world economic activity weakened further during the quarter. Inflationary pressures increased and a new period of uncertainty in financial markets arose as well. Although U.S. GDP growth apparently strengthened, this positive development is expected to be temporary as the U.S. economy expands at a slower rate for the rest of the year, mainly as a result of a contraction in residential investment. Economic activity in the Euro Zone, Japan, and other advanced economies -as well as in several emerging market economies- seem to have decelerated during the April-June period.

Price increases in foods, energy, and other commodities continued to affect world inflation negatively and have raised concerns in practically all central banks about the deterioration of inflation expectations, despite the price reduction of certain commodities observed in July 2008. In the main advanced economies, headline inflation increased and risks of higher inflation escalated. Under these conditions, the monetary authorities of some of these countries have tightened their monetary policy stances or have interrupted processes previously started to reduce their reference interest rates. Inflationary pressures rose even more in emerging market economies, due to both their cyclical position and the greater share of foodstuffs in their consumer baskets. During the analyzed period, inflation was above the targets determined by the monetary authorities of many advanced and developing countries.

The turmoil in international financial markets, which had eased somewhat since the end of the first quarter of 2008, resumed by mid-year. The latter was influenced by expectations of additional losses in various financial institutions in the U.S. (particularly, government-backed mortgage agencies), and by fears about these institutions' need to increase their capital, in times when it has become more difficult to do so. This situation prompted a new increase in risk perception that affected many markets and countries. Risk spreads for bond markets rose and stock markets fell. Sovereign risk spreads for emerging market economies also increased considerably.

So far, economic activity in Mexico has not been affected significantly by the weakening of the U.S. economy, although it has continued to exhibit the slowdown pattern observed during the first quarter of the year. This slowdown is seen both aggregate demand and production. Although non-oil exports (of both the automotive sector and the rest of manufactures) to non-U.S. markets grew, other components of aggregate demand lost momentum in the latest months. Among these, private consumption and investment slowed down. During the second quarter, although economic activity indicators were affected positively by the effect of the Easter holiday, seasonally adjusted data for GDP is expected to have grown in annual terms below figures observed during the January-March period. The near future is still subject to considerable downward risks.

Annual headline inflation has followed an increasing trend during the second quarter of 2008. Among these risks is the increase in international commodity prices (food, energy and some metals), which has affected firms' cost

structure. Firms that have accumulated a higher tax burden might have also passed part of these costs to their prices. Weather problems have also affected the supply of fruits and vegetables. Thus, Inflation experienced a considerable increase during the second quarter of 2008. All of the abovementioned are the materialization of several upward inflationary risks that Banco de México had repeatedly forewarned. All of these shocks have affected inflation from the aggregate supply side. On another front, on the basis of evidence provided by this Report, no pressures from aggregate expenditure have arisen.

The recent developments in inflation have led to an upward revision in economic agents' short-term inflationary prospects in the last months. However, medium and long-term expectations remain, in general terms, well anchored.

In the following months, several factors could contribute to mitigate inflationary pressures worldwide. In particular, the prices of some of the mentioned commodities, such as energy-related and some grains, have decreased. One of the main factors determining this downward adjustment might be the weakening of global economic activity.

As for inflation in Mexico, during the second quarter, the international prices of many commodities reached levels above those forecasted in the previous Inflation Report. Despite the recent reduction in the prices of some of these commodities, their prices are still high, and their effects have not been transmitted completely to consumer prices. Finally, the speed of correction of subsidies of domestic energy prices has increased. All of these factors have made inflation expectations remain at high levels for a longer period than initially expected. As a result, in this Report, Banco de México modified its prospects for inflation upwards, forecasting that inflation will converge to its inflation target a year later than initially forecasted, that is, in 2010.

Despite the aforementioned, the outlook for inflation in Mexico shows some positive signs. This perception is based on the following considerations: 1) the recent reduction in the prices of many commodities that point, in general terms, to a foreseeable reduction of the upward pressures that have prevailed in the economic scene during the last two years; 2) the weakening of domestic economic activity, which will create difficult conditions for firms to pass cost increases on to consumer prices; and, 3) the tight monetary policy stance adopted by Banco de México, which will help to keep inflation expectations beyond the short term properly "anchored".

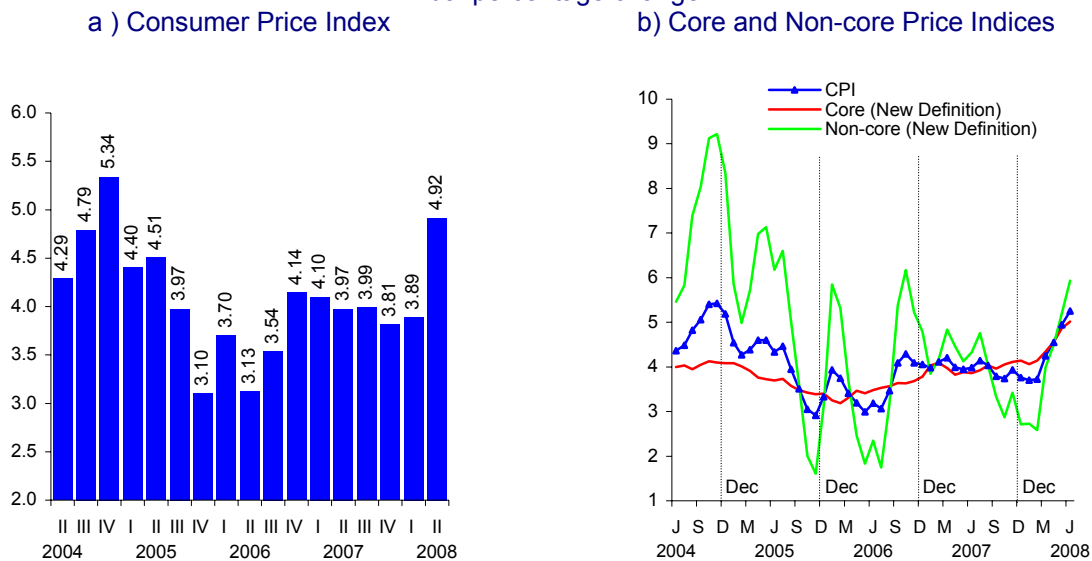
An environment of price stability is thus needed for sustained growth. In order to attain it, medium and long-term inflation expectations must remain well "anchored". Monetary policy plays a key role in this process. Banco de México will continue to monitor closely the balance of risks for inflation in order to strengthen its "anchoring" and foster the proper conditions to achieve the 3 percent target.

## 2. Recent Developments in Inflation

### 2.1. Inflation

Average annual headline inflation was 4.92 percent during the second quarter of 2008, 1.03 percentage points above the 3.89 percent registered during the previous quarter (Graph 1 and Table 1).

**Graph 1**  
**Consumer Price Index**  
Annual percentage change



Annual headline inflation followed an upward trajectory during April, May, and June 2008, reaching 4.55, 4.95, and 5.26 percent, respectively. Price increases during the second quarter responded to:

- i) The pressure exerted by the prices of food commodities on firms' production costs. Particularly, during the first half of 2008, spot prices of corn, soy, and rice rose 62.9, 31.2, and 74.6 percent, respectively. However, during July, the prices of these grains (wheat included) declined due to the favorable outlook announced by the United States Agriculture Department for the 2007/2008 production cycle (except for soy).
- ii) The increase in fuel prices, due both to the larger rates of change for gasoline and LP gas prices and to increases in domestic fuel prices, which mirror, to a certain degree, foreign market prices.
- iii) Steel prices have risen and therefore affected construction industry's costs. These increases are directly related to the price fluctuations of raw materials used for steel production, such as scrap metal, mineral ore, and fuels.
- iv) Prices of regulated goods and services recorded increasing inflation due to the higher fares of urban transportation in some cities of the country.

- v) Restrictions in the supply of certain vegetables due to weather problems and foreign trade operations.
- vi) The higher fiscal burden faced by firms in the current year has likely led them to revise their consumer prices.

During the second quarter of 2008, the pressure exerted by commodity prices, the sliding policy in those fuel prices subject to a rate of change regime, and supply problems of some vegetables, affected the trajectory of the CPI's core and non-core indices, which recorded higher average inflation rates during the second quarter as compared to the first (Table 1).

**Table 1**  
**Consumer Price Index and Components**

	Annual				Annual Average	
	Mar-2008	Percentage Change			Percentage Change	
		Apr-2008	May-2008	Jun-2008	Q-1 2008	Q-2 2008
<b>CPI</b>	<b>4.25</b>	<b>4.55</b>	<b>4.95</b>	<b>5.26</b>	<b>3.89</b>	<b>4.92</b>
<b>Core (new definition)</b>	<b>4.34</b>	<b>4.56</b>	<b>4.86</b>	<b>5.02</b>	<b>4.18</b>	<b>4.81</b>
<b>Merchandise</b>	<b>4.71</b>	<b>5.06</b>	<b>5.50</b>	<b>5.72</b>	<b>4.47</b>	<b>5.42</b>
<b>Foods</b>	<b>7.66</b>	<b>8.52</b>	<b>9.40</b>	<b>9.59</b>	<b>7.21</b>	<b>9.17</b>
Soy products <sup>1/</sup>	26.66	34.02	39.60	40.96	22.01	38.22
Rice	12.04	19.17	37.66	52.92	9.47	36.69
Wheat products <sup>2/</sup>	10.33	12.74	14.80	15.52	10.47	14.35
Corn products <sup>3/</sup>	2.01	2.80	3.91	4.18	1.50	3.63
<b>Rest of merchandise</b>	<b>2.46</b>	<b>2.42</b>	<b>2.52</b>	<b>2.74</b>	<b>2.38</b>	<b>2.56</b>
<b>Services (new definition)</b>	<b>4.01</b>	<b>4.11</b>	<b>4.28</b>	<b>4.38</b>	<b>3.92</b>	<b>4.25</b>
<b>Housing</b>	<b>3.34</b>	<b>3.45</b>	<b>3.66</b>	<b>3.80</b>	<b>3.25</b>	<b>3.64</b>
Own housing	3.13	3.33	3.62	3.76	2.98	3.57
<b>Education</b>	<b>5.70</b>	<b>5.71</b>	<b>5.71</b>	<b>5.63</b>	<b>5.75</b>	<b>5.68</b>
<b>Rest of services</b>	<b>4.09</b>	<b>4.21</b>	<b>4.42</b>	<b>4.53</b>	<b>3.95</b>	<b>4.39</b>
Air transportation	9.50	12.30	16.06	16.49	7.48	14.97
Travel package services	2.38	2.06	3.08	3.20	2.33	2.78
Food-related services <sup>4/</sup>	4.56	4.79	4.87	4.98	4.30	4.88
<b>Non-core (new definition)</b>	<b>3.99</b>	<b>4.51</b>	<b>5.19</b>	<b>5.94</b>	<b>3.10</b>	<b>5.21</b>
<b>Agriculture</b>	<b>4.36</b>	<b>5.67</b>	<b>7.44</b>	<b>8.88</b>	<b>3.22</b>	<b>7.31</b>
<b>Fruits, vegetables and legumes</b>	<b>1.07</b>	<b>3.71</b>	<b>8.89</b>	<b>12.78</b>	<b>-0.44</b>	<b>8.25</b>
Onions	-70.62	-62.02	-10.72	9.32	-65.16	-37.02
Zucchini	22.11	49.62	34.05	12.37	-12.89	32.54
Tomatos	79.37	54.84	9.22	26.75	24.12	29.08
Beans	4.46	8.04	14.17	21.08	3.66	14.42
<b>Farm-related</b>	<b>6.62</b>	<b>7.01</b>	<b>6.54</b>	<b>6.58</b>	<b>5.75</b>	<b>6.71</b>
Eggs	23.49	23.98	20.33	21.84	19.98	22.06
Poultry	10.17	11.33	10.46	8.02	7.87	9.90
<b>Administered and regulated</b>	<b>3.80</b>	<b>3.93</b>	<b>4.09</b>	<b>4.52</b>	<b>3.04</b>	<b>4.18</b>
<b>Administered</b>	<b>4.90</b>	<b>5.00</b>	<b>5.33</b>	<b>5.84</b>	<b>4.07</b>	<b>5.38</b>
Low-octane gasoline	3.74	3.25	3.24	3.52	4.54	3.34
High-octane gasoline	5.62	5.34	5.45	5.74	5.95	5.51
Electricity	6.26	7.82	9.25	9.90	5.25	8.92
Residential gas	4.61	4.12	4.42	5.14	1.75	4.56
<b>Regulated</b>	<b>2.65</b>	<b>2.84</b>	<b>2.88</b>	<b>3.21</b>	<b>1.96</b>	<b>2.98</b>
<b>Core (previous definition)</b>	<b>4.22</b>	<b>4.46</b>	<b>4.79</b>	<b>4.96</b>	<b>4.04</b>	<b>4.74</b>
<b>Services (previous definition)</b>	<b>3.69</b>	<b>3.80</b>	<b>4.01</b>	<b>4.14</b>	<b>3.57</b>	<b>3.98</b>
<b>Non-core (previous definition)</b>	<b>4.31</b>	<b>4.73</b>	<b>5.29</b>	<b>5.88</b>	<b>3.59</b>	<b>5.30</b>

1/ CPI soy products are: Vegetable oils and fats for human consumption; Potato chips and similar products, and, Mayonnaise and mustard.

2/ CPI wheat products are: Sweet rolls, White bread, Tin loaf, Pastries and cakes, Soup pasta, Popular cookies, Whole-wheat tortillas, Other cookies, Wheat flour, and Cereal flakes.

3/ CPI corn products are: Corn tortillas; Corn dough and flour; and, Corn.

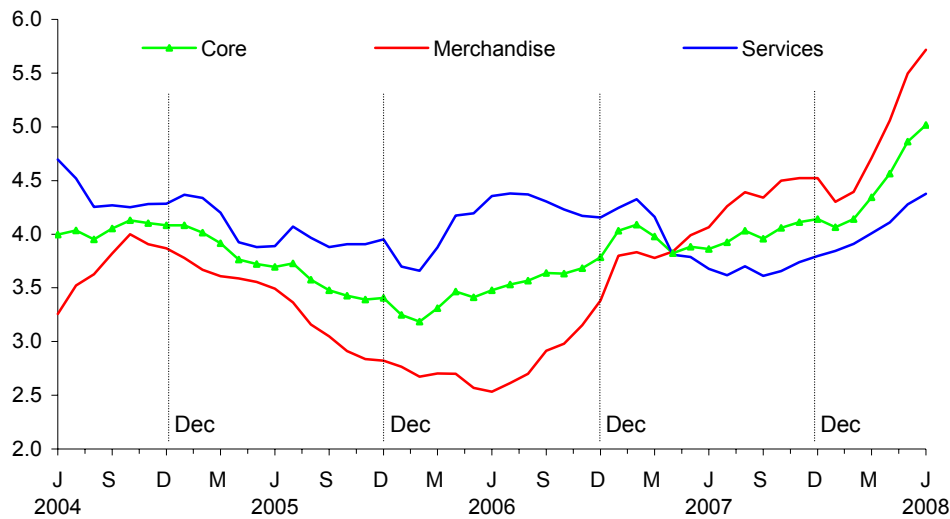
4/ CPI food services are: Diners/Snack bars; Restaurants, Bars; and, Coffee shops.

Core inflation continued to follow an upward trajectory during the April-June 2008 period. The average annual variation for this indicator jumped from

4.18 to 4.81 percent from the first to the second quarter. These results were reflected in its two subindices, with inflation rates moving upward each month of the analyzed quarter (Graph 2).

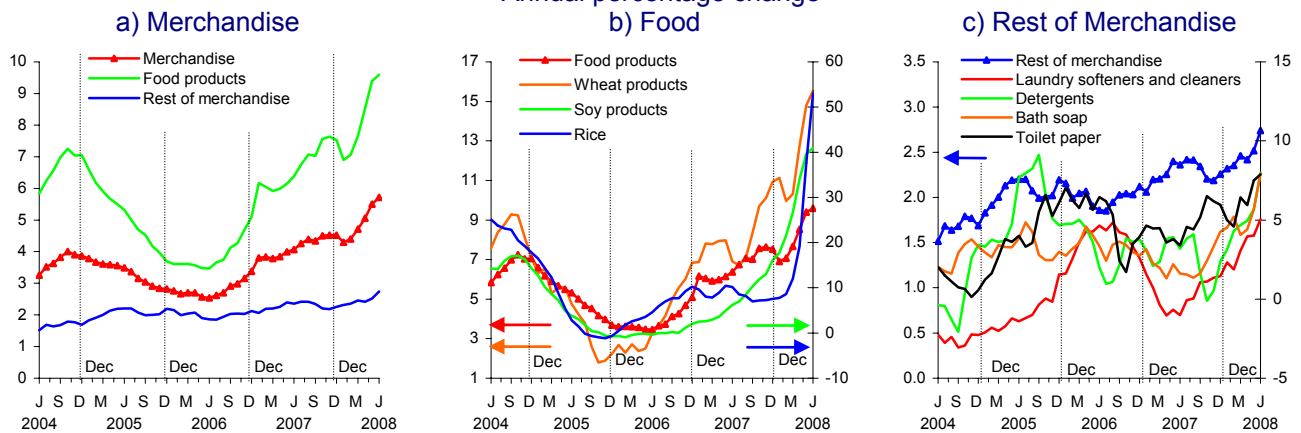
As for the core merchandise price subindex, its average annual variation for the second quarter of 2008 was 5.42 percent (during the first quarter, the corresponding figure was of 4.47 percent) (Graph 3). By breakdown, processed foodstuffs reached an average annual growth rate of 9.17 percent (as compared to 7.21 percent of the previous quarter), while the remaining merchandises, 2.56 percent (as compared with 2.38 percent of the previous quarter).

**Graph 2**  
**Core Price Subindex (New Definition)<sup>1/</sup>**  
Annual percentage change



<sup>1/</sup> Banco de México adopted a new definition for core inflation in January 2008. See Inflation Report July-September 2007, Appendix 1, pp. 53-58.

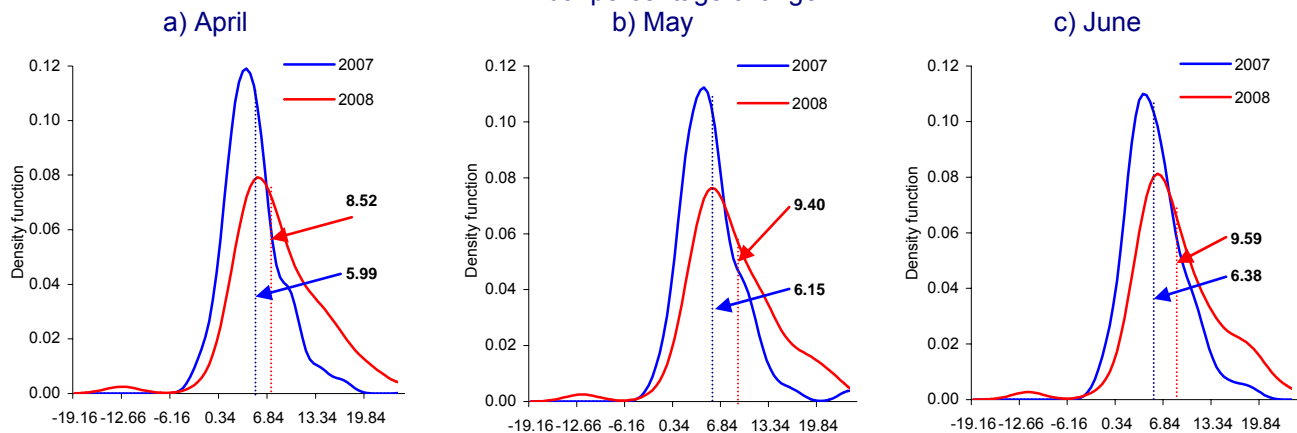
**Graph 3**  
**Core Merchandise Price Subindex**  
Annual percentage change



The processed foods inflation rate continued the upward trajectory observed since the beginning of the year. The density functions of this group's annual price variations changed to higher levels each month of the analyzed

period (Graph 4). This phenomenon is directly related to the higher international prices of food commodities (the pass-through to consumer prices presumably is not over yet). In particular, the contribution of products that include in their production processes soy, rice and wheat as their main raw materials deserves mention (Table 2).

**Graph 4**  
**Annual Inflation Density<sup>1/</sup>**  
**of Core Food Price Subindex**  
 Annual percentage change



1/ Graphs represent density functions calculated to adjust data of annual inflation of products that make up the core food price subindex. Density functions are estimated using the non-parametric Kernel smoothing method. To construct a density function under this method, the following procedure is done: i) data of annual inflation of products from the core food price subindex are used to generate a data interval so that the highest and lowest inflation are within the upper and lower limits of such interval; ii) the referred interval is divided into a number of points (to allow for a continuous figure of the density function), which are associated with a probability; and, iii) the probability associated with each point of the interval is calculated by evaluating a Kernel function around each normal nucleus (each observation from the sample represents a nucleus). Finally, the density function is the accumulated sum of each Kernel associated with the inflation of the considered products. The density functions presented in the rest of this report were estimated using the described method.

**Table 2**  
**Price Subindex of Processed Foods**

	Weight	Annual						Annual Average	
		Percentage Change						Percentage	
		Jan-2008	Feb-2008	Mar-2008	Apr-2008	May-2008	Jun-2008	Q-I 2008	Q-II 2008
<b>CPI</b>	<b>100.00</b>	<b>3.70</b>	<b>3.72</b>	<b>4.25</b>	<b>4.55</b>	<b>4.95</b>	<b>5.26</b>	<b>3.89</b>	<b>4.92</b>
<b>Core (new definition)</b>	<b>74.77</b>	<b>4.06</b>	<b>4.14</b>	<b>4.34</b>	<b>4.56</b>	<b>4.86</b>	<b>5.02</b>	<b>4.18</b>	<b>4.81</b>
<b>Merchandise</b>	<b>37.03</b>	<b>4.30</b>	<b>4.39</b>	<b>4.71</b>	<b>5.06</b>	<b>5.50</b>	<b>5.72</b>	<b>4.47</b>	<b>5.42</b>
<b>Processed foods</b>	<b>14.67</b>	<b>6.90</b>	<b>7.06</b>	<b>7.66</b>	<b>8.52</b>	<b>9.40</b>	<b>9.59</b>	<b>7.21</b>	<b>9.17</b>
Soy products <sup>2/</sup>	0.51	17.76	21.57	26.66	34.02	39.60	40.96	22.01	38.22
Wheat products <sup>2/</sup>	1.61	11.13	9.97	10.33	12.74	14.80	15.52	10.47	14.35
Rice	0.15	7.79	8.59	12.04	19.17	37.66	52.92	9.47	36.69
Corn products <sup>2/</sup>	1.29	0.58	1.92	2.01	2.80	3.91	4.18	1.50	3.63
Other grocery products	1.65	3.15	3.10	4.09	4.38	5.39	6.66	3.44	5.48
Beverages and tobacco	3.15	6.54	6.57	7.21	7.57	7.48	7.63	6.78	7.56
Prepared foods	1.36	5.26	5.20	5.89	6.13	6.45	6.79	5.45	6.46
Sugar products	1.96	1.56	2.04	2.25	2.41	2.29	2.10	1.95	2.26
Dairy products	3.00	12.34	12.06	11.98	11.94	11.83	10.21	12.13	11.32

1/ Groups of items are ordered by the difference in incidences to average headline inflation of the reported quarters.

2/ Items of each group are mentioned in Table 1.

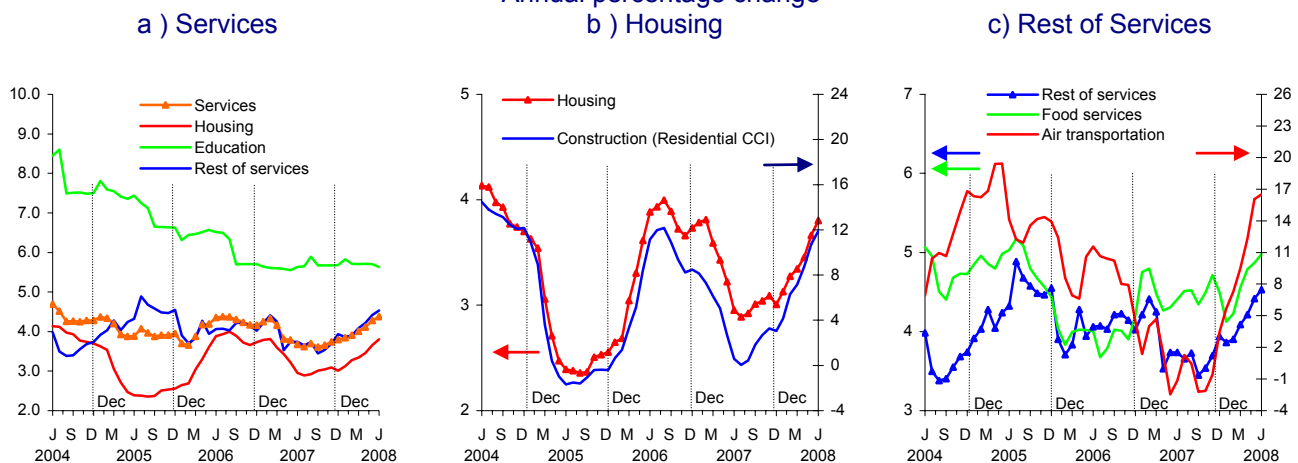
The price subindex for the remaining merchandises (i.e., non-foods) followed an upward trajectory from April to June, influenced by the price increases registered by some personal hygiene and home cleaning products, such as detergents, softeners and cleaners, beauty soaps as well as cellulose by-products, such as toilet paper (Graph 3c). In both cases, these results were

influenced, to a large extent, by the development of commodity prices in international markets, particularly, by the prices of oil and its by-products, which are inputs for the manufacturing of the abovementioned products.

The average annual price variation of the core services subindex rose from 3.92 to 4.25 percent from the first to the second quarter of 2008 (Graph 5a). For each of the months of the analyzed period, the prices of housing and remaining services grew at higher annual rates. Hence, housing prices grew from 3.25 to 3.64 percent during the mentioned dates (Graph 5b). This is due, to a large degree, to an average increase in the Residential Construction Cost Index (*Índice del Costo de la Construcción Residencial*), from 5.79 to 10.51 percent during the second quarter of 2008. The construction materials with the highest price increases were those related to steel, such as wire and metallic products. Their average annual price inflation jumped from 13.14 to 47.04 percent, for the former, and from 7.97 to 21.59 percent for the latter, during the aforementioned quarters.

As for the core subindex of the remaining services, their average annual inflation for the second quarter of 2008 reached 4.39 percent, 0.44 percentage points more than in the previous quarter (Graph 5c). Price increases in the subindex of all the other services were basically determined by airline fares and food services, mainly in fast-food establishments and restaurants. Air fares continued to have higher operation costs, as the annual price variation for jet-fuel has remained considerably high during the first six months of the year (81.98 percent in June 2008). Indeed, some low-cost airlines are starting to modify the frequencies and destinations of their flights, closing the less profitable routes. Finally, food services, which have a high weight in the CPI, have seen their operation costs affected by the price increases of the inputs they use.<sup>1</sup> Their average annual inflation rates moved from 4.68 to 5.34 percent in the case of fast-food establishments, and from 3.85 to 4.20 percent in the case of restaurants.

**Graph 5**  
**Core Services Price Subindex (New Definition)<sup>1/</sup>**  
 Annual percentage change



<sup>1/</sup> Banco de México adopted a new definition for core inflation in January 2008. See Inflation Report July-September 2007, Appendix 1, pp. 53-58.

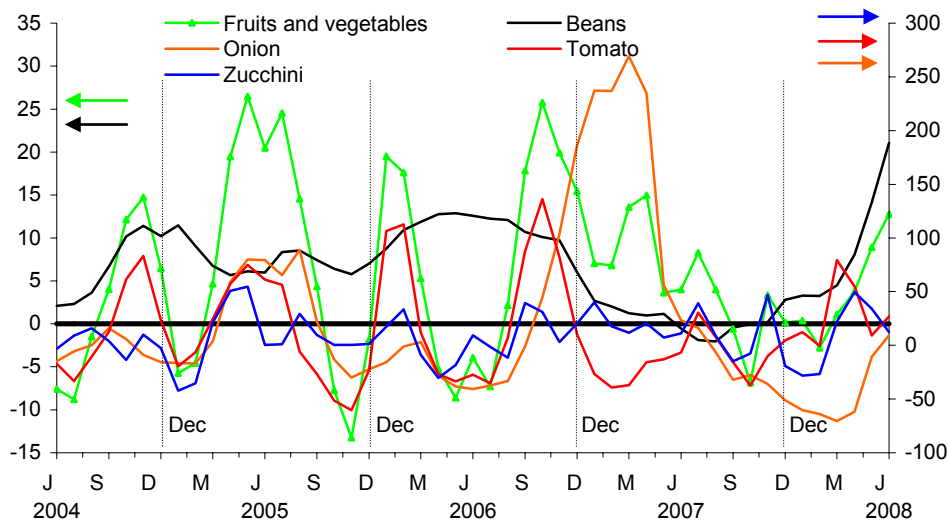
<sup>1</sup> The weights for fast-food establishments and restaurants in the CPI are 3.58 and 2.33 percent, respectively.



The annual average variation of the non-core price index was 5.21 percent during the second quarter of 2008, as compared to 3.10 percent during the previous quarter (Table 1). The non-core inflation increase was determined by the development of its two subindices, since the annual average price variation of agricultural products jumped from 3.22 to 7.31 percent from the first to the second quarter of 2008, while in the case of goods and services with administered and regulated prices, from 3.04 to 4.18 percent (Section 3.3.2 details the development of this last subindex).

The highest average price inflation recorded by agricultural products was due mainly to its fruits and vegetables component: its average price variation jumped from -0.44 to 8.25 percent from the first to the second quarter of 2008. The main products that account for this increase were onions, zucchinis, tomatoes, and beans (Graph 6). As for livestock products, the rebound in their average quarterly inflation rate (from 5.75 to 6.71 percent from the first to the second quarter 2008) can be attributed to the raise in chicken and egg prices, which relate, among other factors, to the ongoing price increase of balanced animal feeds for poultry, which recorded an annual price variation of 18.19 percent for June.

**Graph 6**  
**Fruits and Vegetables Price Subindex**  
 Annual percentage change



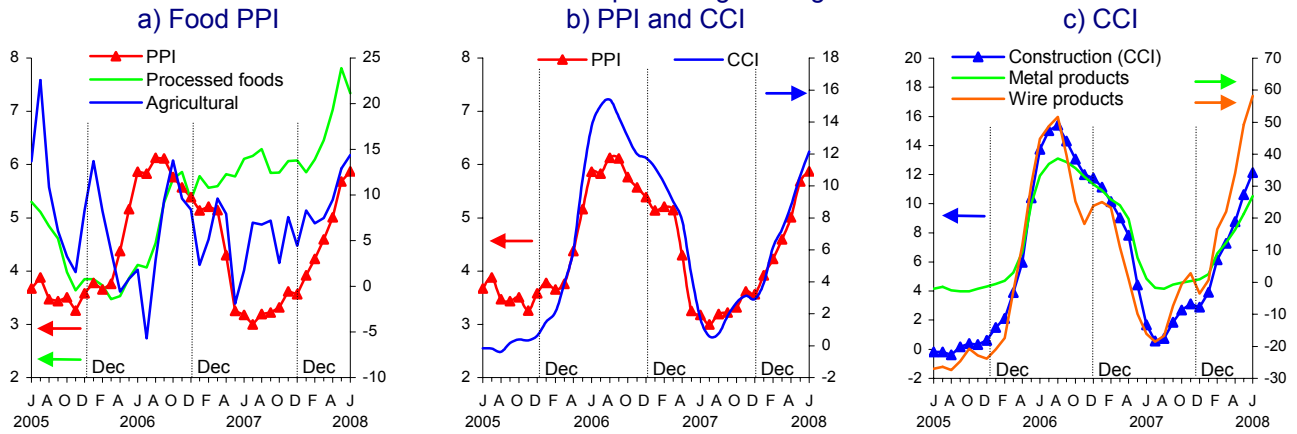
## 2.2. Producer Price Index

As in the case of the CPI, the Producer Price Index excluding crude oil (PPI) was affected by the price developments of commodities in international markets. In fact, the PPI is the indicator that, on a first instance, shows the general increases that might materialize in the CPI (except for the fact that some firms might absorb part of the price increase in production or commercialization margins). The PPI registered an annual average variation of 5.52 percent during the second quarter of 2008, as compared to 4.25 percent during the previous quarter. The result of PPI inflation was significantly influenced by the construction sector, where activity was affected by the price increase in wire and metallic products. The foods sector, including both the agricultural products group and the



processed products group, also contributed significantly to the higher results in PPI inflation.

**Graph 7**  
**Producer Price Index Excluding Oil and Selected Components**  
 Annual percentage change



## 3. Main Determinants of Inflation

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### 3.1. External Conditions

During the second quarter of 2008, the world economy was considerably influenced by the increase in oil and food prices. Besides increasing inflation, this situation affected households' income and, consequently, their consumption, with adverse effects on economic growth. The weakening of global economic activity deepened and inflationary pressures increased significantly. In the United States, GDP growth apparently strengthened, though temporarily, while available information points to a considerable slowdown of economic activity in the Euro zone and Japan. Although emerging economies continued to grow with dynamism, several showed signs of deceleration. Inflation rebounded in both developed and emerging countries due to the increase in oil and food prices. International financial markets underwent a new era of uncertainty during this period.

#### 3.1.1. World Economic Activity

U.S. GDP recorded modest growth during the first quarter of 2008 (1 percent at an annualized quarterly rate) as a result of the stagnation of total domestic demand. In particular, residential investment continued to be a drag for economic activity by contracting for the ninth quarter in a row and subtracting 1.1 percentage points to GDP growth. Also, non-residential investment showed a generalized weakening and private consumption grew only 1.1 percent at an annualized quarterly rate, its lowest increase since the second quarter of 2001. As in previous quarters, the external sector was one of the main driving forces for the economy: net exports contributed with 0.8 percentage points to GDP growth. GDP growth stood at 2.5 percent in annual terms, a figure similar to that observed during the previous quarter.

During the April-June period, the U.S. economy continued to be affected by the contraction of investment in the residential sector. Most recent housing data on sales starts, inventories and prices reveal a continuing weakening in this sector. Furthermore, there are no signs yet suggesting that the contraction of residential investment is coming to an end. In the context of a situation characterized by a lower growth of corporate profits, more credit restrictions, and, in general, ongoing uncertainty, non-residential fixed investment is estimated to have grown moderately. For the April-June period, personal consumer spending performed better than expected, due mainly to the effect of tax rebates. The latter, combined with the growth in net exports, apparently allowed economic activity to exhibit a more dynamic performance than that expected at the beginning of the quarter and to that observed during the January-March period. However, once the effects of the tax stimulus plan fade away, consumption growth is expected to slow down again, a situation that is mainly the result of the labor market weakness, the adverse effect of inflation on personal income, families' low saving rates, and the persistence of tighter conditions in credit markets, among other factors.

At present, although the probability of the U.S. economy entering a deep recession is quite low, no signs of growth close to the potential rate are in sight for

the near future. In fact, regardless of the short-term cyclical fluctuations, GDP is anticipated to grow moderately in the medium-term due to the need for consumption growth to allow a strengthening of domestic savings and a reduction of the current account deficit to sustainable levels. Analysts' forecasts for GDP growth are 1.6 percent in 2008 and 1.7 percent in 2009.

During the first quarter, annualized quarterly GDP in the Euro Zone grew above expectations: 2.9 percent (2.1 percent with respect to the same period of the previous year). This result reflects mainly the strong performance of the German economy, which registered its highest quarterly growth in the last twelve years. However, various timely indicators including retail sales, consumer and firms' confidence indices and purchase managers' indices for manufacturing and services, suggest a marked slowdown of economic activity during the second quarter. In Japan, GDP for the January-March period grew higher than expected, with an annualized quarterly growth of 4.0 percent (1.3 percent in annual terms), mainly due to the increase in private consumption and exports. The economy seems to have weakened significantly during the second quarter, mainly because of the adverse effects of the high prices of oil and other commodities.

During the second quarter, economic activity remained strong in emerging economies, although some showed signs of slower growth. In China, GDP grew at an annual rate of 10.1 percent during the April-June period, the lowest since the last quarter of 2005. For four years in a row, GDP has grown at slower rates in annual terms since the 12.6 percent figure observed during the third quarter of 2007. In India, GDP grew 8.8 percent in annual terms during the first quarter; economic activity slowed down during the second quarter influenced by the recent monetary tightening, the global turmoil in markets, the weakness of the world economy, and the high prices of commodities, among other factors. In Latin America, higher domestic demand and commodity exports have supported economic growth, though timely indicators suggest that economic growth exhibited less dynamism in various countries during the April-June period as compared to the first quarter.

### 3.1.2. Inflation Trends

International oil prices showed significant upward pressures during the second quarter of 2008. The price of the West Texas Intermediate (WTI) rose almost continuously, jumping from 102 US dollars per barrel by the end of March to 140 US dollars at the closing of the second quarter, and then to above 145 US dollars per barrel at the beginning of July, and again by the middle of that month. This rising trend reverted since mid-July: from July 14 to July 29, the price of the WTI decreased 23 US dollars. The annual rate of growth of non-oil commodity products increased during the second quarter, reflecting the faster rate of growth of food prices.<sup>2</sup>

In light of the fast increase in food and energy prices, inflationary pressures in the world economy escalated during the second quarter. In emerging economies, these pressures worsened due to the expansion of domestic demand and the high share of food products in their consumption baskets. In this context, inflation in practically all developed and emerging countries remained above the targets set by the authorities (Box 1). Keeping at bay inflationary pressures in

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<sup>2</sup> For a more detailed description of the international prices of primary products, see Sections 3.3.4 and 3.3.5.

circumstances where economic growth is subject to continuous downward risks has become the main challenge for monetary policy in almost all countries.

In the United States, consumer headline inflation rose from 4.0 percent in annual terms in March to 5.0 percent in June. Core inflation was 2.4 percent in June. Core inflation has fluctuated around that level throughout the year, thus reflecting the moderate impact of headline inflation on core inflation and the absence of pressures from labor costs. CPI headline inflation is anticipated to decrease by the end of this year and during 2009. However, the inflationary outlook is quite uncertain: on one hand, inflation expectations for both the current and the following year have been adjusted upwards. On the other, although the most reliable indicators for long-term inflation expectations do suggest that these are anchored at a level of around 2.5 percent, others, particularly those based on consumer surveys, show higher figures.

In the Euro Zone, consumer headline inflation continued increasing during the April-June period, reaching 4.0 percent in annual terms by the end of the quarter (3.6 percent in March). This figure is above the 2.0 percent target set by the European Central Bank (ECB). The monetary authorities are expecting inflation to exceed this target by a considerable margin for a long period. In Japan, June became the ninth month with a positive inflation rate. The consumer price index rose 2.0 percent in that month in annual terms and the authorities are expecting positive inflation figures to continue due to the impact of higher prices of fuels and food.

Significantly higher Inflationary pressures were observed in emerging economies than in developed countries during the second quarter. It is worth pointing out that, in several of those countries, monetary policy remained loose, which resulted in low and even negative real interest rates despite the presence of high inflation rates, increasing in turn the pressures generated by oil and foodstuffs prices. This was a particular characteristic, though not exclusive, of some Asian economies where keeping undervalued exchange rates implied the implementation of loose monetary policies. As a result, inflationary pressures have increased and a smooth adjustment of the global current account imbalances has been impeded. In China, although consumer annual inflation was 7.1 percent in June, below the 8 percent registered during the three previous months, it is mainly due to seasonal factors and inflation could increase again later in the year. In India, producers' prices grew at an annual rate of 11.9 percent during the fourth week of June, the highest increase in more than thirteen years. That same month, significant increases in administered oil prices were announced, a measure that will affect next month's inflation. In Russia, consumer headline inflation turned out to be 15.1 percent in June. In Latin America, consumer prices grew at a faster rate during the April-June period, even in countries that have followed prudent long-term macroeconomic policies. The balance of risks for inflation shifted upwards in most Latin American countries.

**Box 1**
**Recent Monetary Policy Actions Taken by Other Central Banks**

In an environment where commodity and food prices have increased significantly, both inflation and inflation expectations have deteriorated in many countries over the last months. In this context, most central banks have tightened their monetary policy stances or else stopped cutting their reference interest rates, despite the significant downward risks for growth that the world economy continues to face. Nevertheless, in several emerging economies, short-term real interest rates are at low, and, in some cases, negative levels.

Table 1 includes information on the inflation target, observed inflation, inflation expectations, the reference (or monetary policy) interest rate, and the real interest rate of advanced and emerging economies. In most cases, the central banks of these economies implement their monetary policies under an inflating-targeting framework and use the short-term nominal interest rate as the main instrument to change their policy stances.

The increase in the international prices of some commodities in 2007 contributed to the jump in annual headline inflation at the end of that year to levels above the inflation target (or above the upper limit set around the target) in more than half of the economies considered in Table 1. Except for Canada, annual headline inflation rose (in some cases, significantly) in 2008. Inflation in Mexico has grown more moderately than in other economies in 2008.

Information regarding inflation expectations from the surveys conducted among analysts in March of this year indicated that, in most cases, inflation would end above target in 2008. Nevertheless, due to the nature of the shocks, it was expected that they would affect inflation only temporarily and that inflation would resume a path consistent with the inflation target for 2009. In most cases, inflation expectations for 2009 were consistent with the inflation target.

In the last four months, inflationary pressures have escalated in practically all economies due to the continuous increase in commodity and food prices in international markets. In light of these supply shocks, inflation expectations for shorter terms are expected to be revised upwards, just like those for 2008. Inflation expectations for 2009 were also revised upwards, reaching levels above the inflation target in many of the economies included in Table 1. Since inflation expectations for 2009 consider a longer than 12-month horizon, the fact that they were revised upwards indicates, among other things, that the balance of risks for inflation has deteriorated.

Under the aforementioned environment, most central banks have expressed in press releases and various reports their concerns about the deterioration of inflation expectations. As shown in Table 1, a large number of central banks have raised their reference rates in 2008. It is important to mention that, in most cases, during the January-March period, the accumulated increase in these rates was lower than that observed since the second quarter of the year. This coincides, as already mentioned, with the recent deterioration of inflation expectations for 2009.

Among the central banks that have not raised their reference rates in 2008 are those of Canada, the U.S., and the United Kingdom. These central banks have even cut them in response to the considerable slowdown in their economic activity. The last time these central banks

reduced their reference rates was in April.<sup>1</sup> Their decision to stop diminishing these rates is explained by the recent deterioration of the outlook for inflation.

Finally, given the recent outcome of inflation expectations and nominal interest rates, two issues need to be addressed regarding short-term real interest rates.<sup>2</sup> On one hand, in most cases where reference interest rates (nominal rates) have increased during the year, real interest rates have decreased, because, up to now, the upward adjustments in the former have been more than offset by the deterioration of inflation expectations. In this regard, as some central banks have recently pointed out in their press releases, some economies might continue to raise their reference rates in the future. On the other hand, in several economies, short-term real interest rates have reached levels close to or below zero. By having relatively low real interest rates, some of these economies, especially in Asia, have been able to sustain world demand for energy and grains, while exerting upward pressures over their own inflations.

<sup>1</sup> In the case of New Zealand, on July 24, the central bank cut its reference interest rate by 25 basis points, in a context where economic activity is expected to slow down and, in the mid-term, inflation is anticipated to resume a path consistent with the inflation target.

<sup>2</sup> The real interest rate is calculated using the nominal reference rate of each central bank and an indicator of annual headline inflation expectations with a 12-month prospective estimated on the basis of inflation expectations for 2008 and 2009, as reported in the surveys of December 2007 and July 2008.

**Table 1**  
**Inflation, Inflation Expectations and Interest Rates**  
**in Advanced and Developing Economies**

Central Banks	Inflation Target <sup>1/</sup> (%)	Annual Inflation <sup>2/</sup> (%)		Inflation Expectations <sup>2/ 3/</sup> (%)				Nominal Reference Interest Rate		Real Interest Rate Indicator <sup>4/</sup>		
				March Survey		July Survey		Changes 2008 (Basis points)		Current Level (%)	Changes Jan-Jul 2008 <sup>7/</sup> (Basis points)	Current Level (%)
		Dec-07	Jun-08	2008	2009	2008	2009	Jan-Mar <sup>5/</sup>	Apr-Jul <sup>6/</sup>			
ECB	< 2	3.1	4.0	2.7	2.0	3.6	2.4	0	+25	4.25	-35	1.3
Australia	[2-3]	3.0	4.5	3.3	2.8	4.2	3.2	+50	0	7.25	-23	3.5
Brazil	4.5 (+/-2)	4.5	6.1	4.4	4.2	6.5	5.0	0	+175	13.00	11	7.0
Canada	[1-3]	2.4	3.1	1.6	1.9	2.4	2.1	-75	-50	3.00	-185	0.8
Chile	3 (+/-1)	7.8	9.5	4.4	3.4	7.4	4.5	+25	+100	7.25	-86	1.5
China	n.a.	6.5	7.1	5.0	3.6	7.0	4.8	0	0	7.47 <sup>11/</sup>	-158	1.7
Colombia	[3-4.5]	5.7	7.2	4.9	4.3	6.2	4.9	+25	+25	10.00	-56	4.3
South Korea	3 (+/-0.5)	3.6	5.5	3.3	2.9	4.6	3.8	0	0	5.00	-121	0.8
U.S.	n.a.	4.1	5.0	3.4	2.3	4.3	2.8	-200	-25	2.00	-299	-1.4
Philippines	4 (+/-1)	3.9	11.4	4.1	3.8	8.8	5.8	-25	+75	5.75	-291	-1.2
Hungary	3 (+/-1)	7.4	6.7	5.9	3.6	6.3	4.2	+50	+50	8.50	-1	3.3
India	n.a.	5.5	7.8 <sup>8/</sup>	5.8	5.1	7.8	6.3	0	+75	8.50 <sup>12/</sup>	-56	1.5
Indonesia	4.5 (+/-1) <sup>9/</sup>	6.6	11.0	7.0	6.4	10.1	7.9	0	+75	8.75	-137	-0.1
Israel	[1-3]	3.4	4.8	2.8	2.3	4.0	2.6	-100	+75	4.00	-141	0.8
Mexico	3 (+/-1)	3.8	5.3	3.8	3.4	4.9	3.9	0	+50	8.00	-3	3.5
Norway	2.5	2.8	3.4	3.4	2.2	3.5	2.7	0	+50	5.75	5	2.6
New Zealand	[1-3]	3.2	4.0	3.2	2.7	4.0	3.2	0	-25	8.00	-99	4.3
Peru	2 (+/-1)	3.9	5.7	3.3	2.9	5.3	4.4	+25	+75	6.00	-147	1.2
Poland	2.5 (+/-1)	4.0	4.6	4.0	3.1	4.3	3.6	+75	+25	6.00	19	2.0
United	2 <sup>9/</sup>	2.1	3.8	2.5	2.0	3.4	2.8	-25	-25	5.00	-144	1.9
Czech Republic	3 (+/-1)	5.4	6.7	6.4	3.4	6.6	3.4	+25	0	3.75	-17	-0.9
Russia	n.a.	11.9	15.1	10.4	8.8	13.2	10.6	+25	+75	11.00	-190	-0.6
South Africa	[3-6]	9.0	11.7 <sup>8/</sup>	7.3	5.7	9.6	6.6	0	+100	12.00	-117	3.8
Sweden	2 (+/-1)	3.5	4.3	3.1	2.3	3.7	2.7	+25	+25	4.50	8	1.3
Switzerland	< 2	2.0	2.9	1.8	1.3	2.5	1.5	0	0	2.75	-51	0.8
Turkey	4 (+/-2)	8.4	10.6	8.0	5.7	10.5	8.2	-50	150	16.75	-204	7.0
Venezuela	n.a.	22.5	32.2	29.8	28.6	30.5	28.5	-13	+12	10.31 <sup>13/</sup>	-1231	-14.7

1/ Cases in which a quantitative inflation target has not been determined are labeled as n.a.

2/ Numbers in blue indicate that reported inflation or inflation expectations are consistent with the central bank's inflation target. Numbers in red indicate that inflation or inflation expectations reported are above the target or the higher limit of the variability interval set around the target.

3/ For the Latin American and Russian economies, inflation expectations refer to the end of the year. For the rest of the economies, they refer to the year's average.

4/ The real interest rate is calculated using the nominal reference interest rate of each bank and an indicator of annual headline inflation expectations for the next twelve months, which is defined based on inflation expectations for 2008 and 2009 from the *Consensus Forecasts* surveys of December 2007 and July 2008.

5/ Change in reference interest rate from December 2007 to March 2008.

6/ Change in reference interest rate from March 2008 to July 2008.

7/ Change in real interest rate indicator from December 2007 to July 2008.

8/ Inflation target for 2009. The target for 2008 is 5 (+/-1).

9/ Although the inflation target is set at 2 percent, when inflation deviates more than 1 percentage point above or below the target, the central bank must send an official and public letter to the President explaining the recent developments in inflation and the actions that will be taken to make inflation return to the 2 percent target.

10/ Inflation corresponding to May.

11/ Lending rate of financial institutions. Although this rate has remained unchanged, the central bank has tightened its monetary policy stance by increasing the reserve requirements on five occasions during 2008.

12/ Corresponds to the reference repurchase rate.

13/ Corresponds to the weighted average for the overnight interbank interest rate in July 2008.

Sources: *Bloomberg*, *Consensus Forecasts* and central banks' web sites.

### 3.1.3. Financial Markets

The behavior of international financial markets during the April-June period was significantly influenced by two factors. First, in the balance of risks of some of the main central banks there was much more concern for those coming from inflationary pressures, and this view was reflected in their monetary policy stances. Second, doubts regarding the soundness of some financial institutions led to another period of uncertainty in money markets and, hence, to a new

increase in risk perception that affected various segments of financial markets, particularly in the United States.

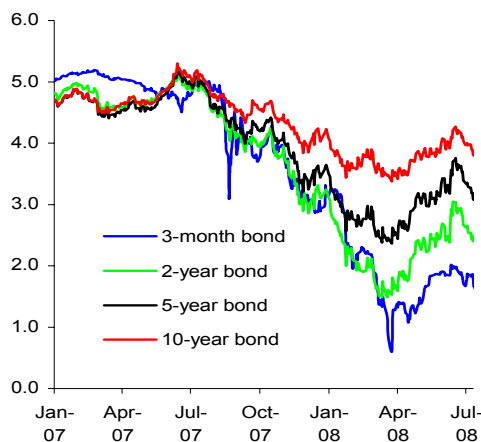
In light of the weakness of economic activity and the persistence of significant downward risks for the economy, during its April 30 meeting, the Federal Reserve's Open Market Committee (FOMC) decided to cut the federal funds rate by 25 basis points, to a level of 2 percent. With this reduction, the policy interest rate was 225 basis points below the figure prevailing at the end of 2007.

In its June meeting, the FOMC kept the target for the federal funds rate unchanged. This was partly due to a pattern of economic activity that was not as weak as anticipated and to the perception of lesser downward risks. While making this decision, U.S. monetary authorities highlighted the uncertainty about inflation expectations and the high readings of some indicators of inflation expectations. In this context, the futures curve for the federal funds rate shifted upwards during the quarter, thus suggesting the end of lax monetary conditions in the United States.

As soon as it became evident that the outlook for economic activity was improving and under the perception that the Federal Reserve was going to deal with inflationary pressures more vigorously, interest rates for U.S. Treasuries rose for most of the quarter (Graph 8). This situation partially reverted as of mid-June, mainly due to the uncertainty that arose again in financial markets. The negative differential that had been observed between the 3-month rate and the policy rate since the beginning of the credit market problems in last August diminished considerably when interest rates on Treasury bills increased. This differential, which basically had disappeared by mid-June, started to widen again as a result of the aforementioned factors. Long-term interest rates followed a pattern similar to that of short-term rates during the quarter. Hence, the yield curve continued with the positive slope it had shown since mid-March.

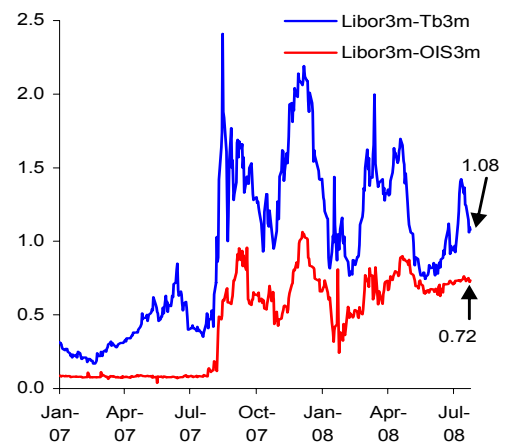
**Graph 8**  
**U.S.: Interest Rates**  
Annual percent

a) Yield on 10-year, 5-year, 2-year, and 3-month U.S. Treasuries



Source: Bloomberg.

b) Differential between 3-month Libor and 3-month OIS<sup>1/</sup> and 3-month Treasuries<sup>2/</sup>



Source: Bloomberg.

1/ The OIS (Overnight Index Swap) reflects expectations for the average of the reference rate for the next three months.

2/ As of July 29, 2008.



Due to the uncertainty in financial markets and its potential effects on economic activity, the European Central Bank kept its policy interest rate unchanged during the second quarter. However, in order to avoid second-round effects from the increase of inflation and to counteract growing risks for price stability in the medium term, during its July 3 meeting, the European Central Bank raised its policy interest rate by 25 basis points. In turn, the Bank of England left unchanged its policy rate since April 10, when it was cut by 25 basis points to place it at 5 percent. In Japan, monetary authorities kept the policy interest rate at 0.5 percent, the level fixed since February 2007.

The measures implemented by the United States and other industrialized countries' authorities during the first quarter eased the pressures on short-term bank funding markets, allowing a decrease of interbank interest rates. Moreover, the strength of various financial institutions improved as they continued to reduce their exposure to high-risk assets and increase their capitalization levels.

However, since mid-May credit default swaps for commercial and investment banks in the United States and in other countries rose considerably, although remaining at lower levels than those observed in mid-March. This was probably to a great extent due to fears related to the possibility of additional losses for some banks, given their exposure to collateralized debt instruments, high-yield bonds and leveraged loans, and the increase in non-performing loans. The situation became even more complex due to the need to raise capital in various institutions at a time when access to funding is difficult and more costly. In response to this situation, lending policies at commercial banks tightened. Problems in the banking sector hampered the development of money markets, particularly in the United States, at the beginning of June. Hence, given the higher uncertainty regarding counterparty risk, the differential between the LIBOR rate in dollars and the overnight index swap (OIS) interrupted the downward trend of the first two months of the quarter (Graph 8).

By July, these problems worsened due to doubts regarding the solvency of government sponsored enterprises (GSEs).<sup>3</sup> The uncertainty generated by the possibility of higher losses in the mortgage market, the ongoing increase in the non-performing portfolio of mortgages backed by these agencies, and the outlook for higher capital needs to comply with the requirements of regulatory authorities, raised greater concerns about the feasibility of GSEs. In July, the United States authorities issued plans to strengthen the financial situation of these agencies. The Federal Reserve announced by mid-July its authorization for GSEs to access immediate financing if needed through the Federal Reserve Bank of New York. Financing would be granted at discount window rates and backed-up by U.S. government and other agencies bonds. On July 26, the Senate approved a bill to temporarily allow the Treasury to buy equity or debt from GSEs and to have more supervision over those agencies.<sup>4</sup>

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<sup>3</sup> Federal Home Loan Mortgage Corporation (Freddie Mac) and Federal National Mortgage Association (Fannie Mae).

<sup>4</sup> Measures also include a plan for helping mortgage debtors refinance their mortgages by granting more favorable government-guaranteed loans, and tax rebates for home buyers. The bill was previously approved by the House of Representatives. To come into effect, however, it must be signed by President Bush.



This new period of nervousness affected other markets as well. The differential between investment grade private bonds and U.S. Treasury bonds, which had decreased in April and May, rose since mid-June, although it remained below the levels observed by the end of March. Corporate debt issuance for these firms reached record levels by May. However, bond markets' risk premia remained high as compared with their historical levels, a situation that suggests that investors were still worried by the growth outlook in some industries and firms. The increase in differentials for the period was much more pronounced for higher yield bonds.

Stock markets remained volatile during the April-June period. During the first half of the quarter, the Dow Jones, Nasdaq and S&P-500 indices rose as compared with the end of March. However, since mid-May the three stock indices followed a downward trend, due to, among other factors, the return of fears regarding the strength of several financial institutions and to a new wave of oil-price increases. The high-tech Nasdaq index ended the quarter with a small advance of 0.6 percent, while the Dow Jones and the S&P-500 fell 7.4 and 3.2 percent, respectively. In Europe, firms listed in the stock markets were affected by factors similar to those of the American market. Both the German and the British markets fell by more than 1 percent during the April-June period, while the French market contracted 5.8 percent. In contrast, the Canadian and Japanese markets rose 8.4 and 7.6 percent, respectively. In emerging markets, the cases of the Vietnam, China, India, and Turkey stock markets stand out, since they fell during the quarter 22.7, 18.2, 15.3, and 10.0 percent, respectively. During July, stock markets of both developed and emerging countries exhibited significant volatility, falling during the first half of July, in most cases, and slightly recovering by the end of that month.

During the second quarter, the dollar stopped its depreciation and slightly recovered, due to the apparent end of the domestic monetary loosening. The U.S. currency recovered slightly against the euro, the pound sterling, and the yen, and depreciated modestly against the Canadian dollar. According to the effective exchange rate index for the main currencies, the dollar appreciated 0.92 percent by the end of the third quarter. According to the broad index, during the same period, the dollar appreciated 0.19 percent in effective terms.<sup>5</sup> By July 29, the first of these indices continued to show signs of recovery by appreciating 1.08 percent as compared to the end of June. The broad index remained stable during this period.

Sovereign spreads for emerging markets recorded favorable results since mid-March and during the first two months of the second quarter. The EMBI Global indices for Latin American, Asian and European regions decreased 91, 43, and 59 basis points, respectively, from their maximum of the first quarter -reached on March 17- to June 12. However, from this date on, the EMBI indicators in the aforementioned regions deteriorated by increasing 45, 35 and 32 basis points on July 29. During this period, the EMBI Global Composite Index increased 39 basis points. Credit default swaps for emerging economies followed a downward trend during the first half of the second quarter, reaching a local minimum of 205 points

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<sup>5</sup> The exchange rate in relation to the main currencies (major currencies index) is a weighted average of the dollar exchange rate against 7 currencies that trade widely in currency markets outside their home areas. The broad index is a weighted average of the dollar exchange rate against 26 currencies. Weights for this index are estimated on the basis of each country's share of U.S. exports and imports.

by May 19, before increasing to 255 points by the closing of the quarter and remaining at 243 points by July 29.

#### 3.1.4. Outlook

Under the current environment, the outlook for the world economy is particularly uncertain and characterized by upward risks for inflation and downward risks for economic growth. This scenario implies difficult decisions for most central banks. The International Monetary Fund estimates that world economic growth will fall from 5 percent in 2007 to 4.1 percent in 2008.<sup>6</sup> Consumer headline inflation is expected to increase during that period, from 2.2 to 3.4 percent in developed countries, and from 6.4 to 9.1 percent in emerging and developing countries.

In the United States, although the outlook for economic activity has improved, GDP is expected to weaken again once the tax stimulus package fades away. Particularly, the recent behavior of the main determinants of consumption suggests that consumption will remain weak for a long period. Furthermore, there are no signs of an end of the decline in residential investment crash in the near future and risks of a further deterioration in financial market conditions persist. In general terms, analysts expect economic activity to decelerate during the second half of 2008, and to recover gradually next year. However, prospects are uncertain and the possibility of the U.S. economy falling into recession cannot be ruled out. The risks increase in light of the weakening of the European and Japanese economies.

With respect to the prospects for world inflation, headline inflation indicators are above expectations in several developed and developing countries, despite the recent decline in oil and other commodity prices. There is also the risk of new increases in the prices of these goods and of second-round effects on inflation. In many emerging economies, the risks of rising inflation increased due to the rapid growth of domestic demand.

The persistence of considerable imbalances in the current account balances of various economies continues to pose risks for the world economy. The United States current account deficit remains high despite the correction observed in the last few years, while considerable surpluses are observed in other countries. Under these circumstances, the risk of a sharp adjustment in international exchange markets has not disappeared, particularly considering that exchange rate fluctuations have not reflected the distribution of external imbalances. The correction of these imbalances requires efforts on the part of all countries involved, including a moderate growth of consumption in the United States that allows for a strengthening of the level of domestic savings in that country.

### 3.2. Aggregate Demand and Supply in Mexico

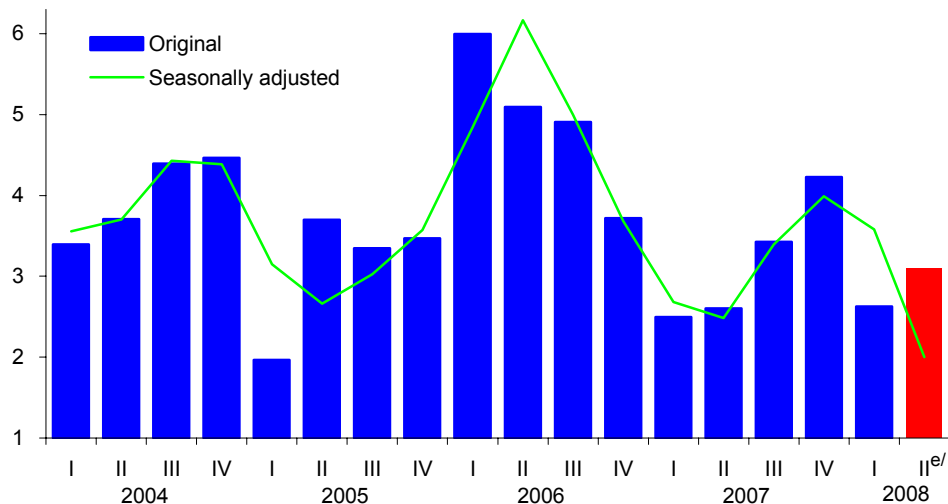
During the second quarter of 2008, economic activity continued slowing down as observed since that year's first quarter. This slowdown was seen in both aggregate demand and production indicators. During the second quarter,

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<sup>6</sup> In the accumulated figures of the worldwide economy, the GDP weighting factors used are based in the purchasing power parity.

economic activity was influenced, as in the first quarter, by an Easter statistical effect, since this year this holiday took place in March, while last year it took place in April. This implied that, during the second quarter of 2008, both production and demand annual growth rates were biased upwards, after having declined during the first quarter. Indeed, this effect caused that during the second quarter, GDP grew above first quarter figures (3.0 percent vs. 2.6 percent during the first quarter of the year). However, after seasonal adjustments (which also implies adjusting for the Easter effect), GDP is expected to have grown close to 2 percent in annual terms, below the 3.7 percent observed during the first quarter (Graph 9).

**Graph 9**  
**Gross Domestic Product<sup>1/</sup>**  
 Annual percentage change



e/ estimated.

1/ Calculations based on the National Accounts base year 2003.

Source: INEGI. Seasonal adjustments up to the second quarter of 2008 by Banco de México.

The slowdown of economic activity during the second quarter was mitigated by several factors that partially compensated for the impact of the weakening of the U.S. economy. However, as it will be seen later, some of these factors have lost dynamism in the last few months.

### 3.2.1. Production by Sector

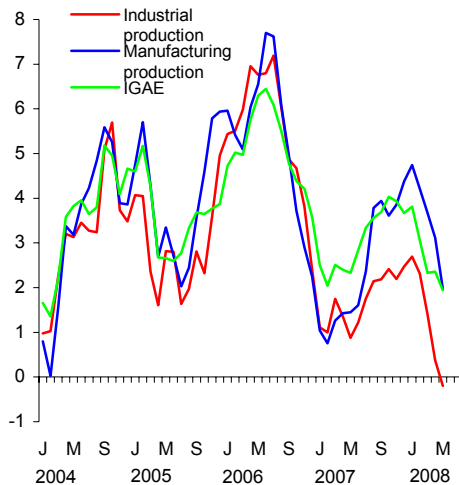
The annual growth of GDP during the second quarter was generated by its three sectors, with the services and agricultural sectors showing higher growth rates than the industrial sector.<sup>7</sup> In general, industrial production during the second quarter, measured with seasonally-adjusted data, slowed due to lesser growth in the manufacturing sector, weak expansion in the construction industry, and a fall in mining (Graph 10), which resulted from a considerable annual decline in oil production. In contrast, the electricity sector grew significantly, mainly as a

<sup>7</sup> During the April-May period the Economic Activity Global Indicator (IGAE, for its acronym in Spanish) registered an annual increase of 3.6 percent (1.9 percent considering seasonally-adjusted data) due to the aforementioned Easter effect. This rate stemmed from increases in its three sectors: the industrial or secondary activities sector increased in 2.1 percent, the services or tertiary activities in 4.5 percent, and the agricultural or primary sector in 6.4 percent.

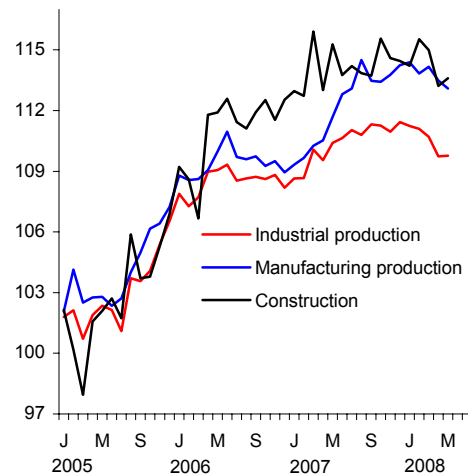
result of the dynamism of electricity-generation by concessionaries of electric energy.<sup>8</sup>

**Graph 10**  
**Production Indicators**

a) IGAE and Industrial Production  
Annual percentage change of seasonally adjusted data and 2-month moving average



b) Industrial, Manufacturing, and Construction Output  
Seasonally adjusted series; 2004=100



Source: INEGI.

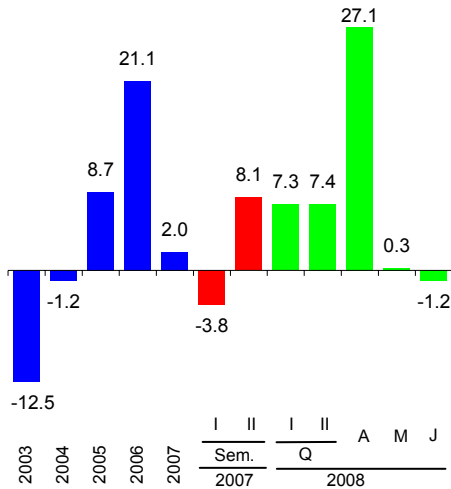
During the second quarter, manufacturing production was still significantly influenced by the sector's exports, although with considerable differences as compared to the first quarter of the year. Manufacturing exports to the U.S. continued to show an important dynamism, both those of the automobile industry and the remaining goods. In contrast, non-oil exports to the U.S. remained on a decelerating trend especially during the first quarter of the year. Among these, the decline in automobile exports stands out, since during the first quarter they grew significantly.

The automobile industry has a significant influence on manufacturing production (Graph 11). During the second quarter, export-oriented automobile production was subject to opposing shocks in the United States and in other countries. During this period, automobile exports to the U.S. weakened, although they continued recording a significant dynamism in other markets as a whole. The growth in manufacturing annual production of 4.9 percent (3.6 percent during the first five months of this year) during the April-May period resulted from a 21.9 percent growth in the subsector of transportation equipment (22 percent during the January-May period), which basically includes the terminal and the auto-parts industries, and from a 1.2 percent growth in the remaining manufacturing production (-0.3 percent during the first five months of the year).

<sup>8</sup> During the last months, the added value of the Electricity, Water, and Gas Duct-Supply to the Final Consumer has grown faster than its gross production. This is due to the fact that, marginally, the electric and hydroelectric power concessionaries had a higher dynamism. These segments have lower intermediate consumption coefficients to production (and hence, higher added value production coefficients) than the generation of electricity by means of thermoelectric plants).

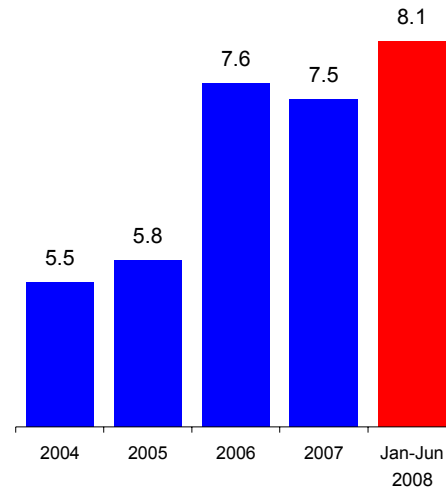
**Graph 11**  
**Automotive Industry**

a) Automotive Industry Production  
Annual percentage change of  
number of units



Source: Prepared by Banco de México with data from AMIA and ANPACT.

b) Share of Mexican-assembled Vehicles in  
U.S. Domestic Sales



Source: Prepared by Banco de México with data from AMIA and Automotive News

### 3.2.2. Aggregate Demand

Aggregate demand indicators for the second quarter of 2008 show that domestic demand, measured with seasonally-adjusted data, continued to grow at slower rates, as evidenced by the results of both private consumption and investment expenditure. Exports of goods and services, measured in constant pesos, continued to show signs of deceleration.

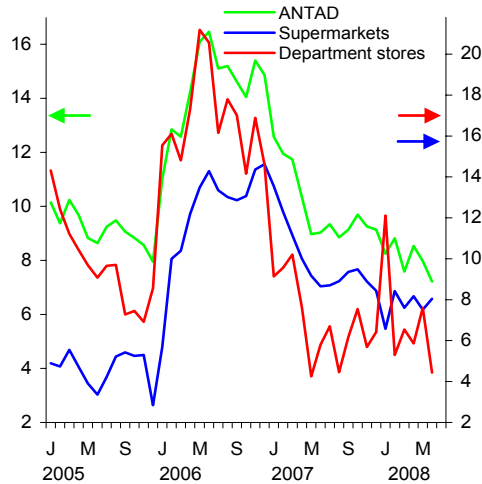
Private consumption indicators suggest that during the second quarter expenditure might have grown at a slower rate in annual terms. Such is the case of the sales indicators from the National Association of Supermarket Stores (*Asociación Nacional de Tiendas de Autoservicio*, ANTAD) and from consumer goods imports (after deducting oil-product imports). During the second quarter, ANTAD sales grew at an annual rate, measured in real terms and with seasonally-adjusted data, of 7.9 percent, below the 8.2 percent observed during the first quarter of the year and the 9.3 and 9.8 percent observed during the fourth quarter of 2007 and the entire 2007, respectively (Graph 12). As for consumer goods imports, they grew 8.4 percent in annual terms measured in dollars and with seasonally-adjusted data, during the second quarter, as compared to 27.2 percent during the first quarter of the year. After deducting oil-product imports from these imports, the corresponding annual rates are 1.6 and 12.2 percent, respectively. Regarding private consumption expenditure during the second quarter, the following aspects must be considered:

- i) Various determinants of expenditure, such as the wage bill in real terms, revenues from remittances, and credit for private consumption and housing, lost dynamism during the referred quarter. Consumer confidence indicators weakened considerably.

- ii) The slowdown of the wage bill has translated into a much more moderate rate of growth of job creation in both the economy as a whole and in the formal sector, and in lower increases in real earnings (Graph 13).<sup>9</sup>

**Graph 12**
**Indicators of Domestic Demand: Consumption**

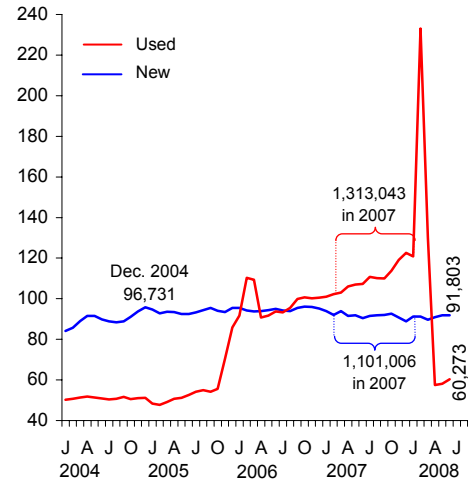
a) ANTAD, Supermarket and Department Stores Sales in Real Terms  
Annual percentage change of seasonally adjusted data<sup>1/</sup>



Source: ANTAD.

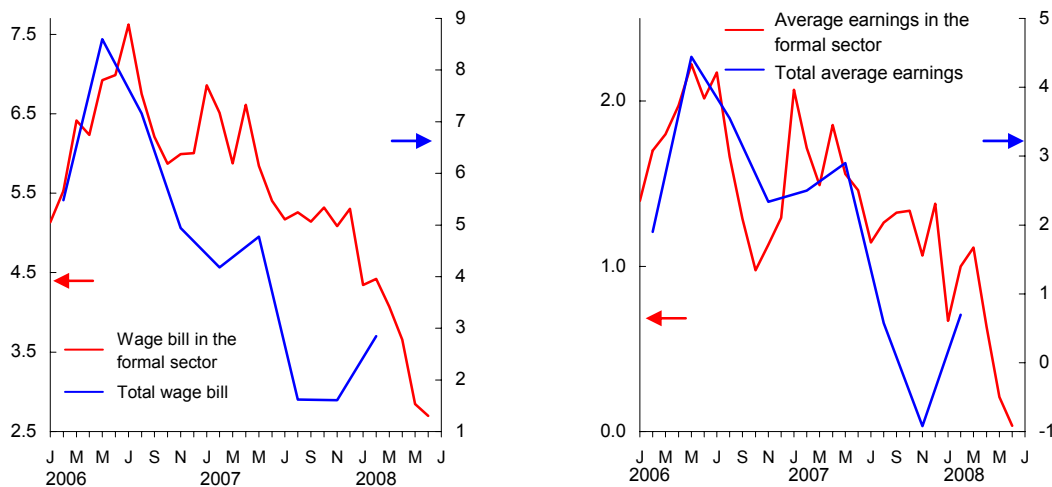
1/ Seasonal adjustments by Banco de México, 2-month moving average, except for 2008.

b) Domestic Retail Sales of New Vehicles and Used-vehicle Imports  
Thousand units per month and seasonally adjusted data<sup>1/</sup>



Source: AMIA and ANPACT.

1/ Seasonal adjustments by Banco de México, 2-month moving average, except for 2008.

**Graph 13**
**Total Wage Bill and Average Earnings in Real Terms**  
Annual percentage change


Source: Prepared with data from IMSS (average reference wage and number of workers insured) and INEGI (*Occupation and Employment Survey-Encuesta Nacional de Ocupación y Empleo, ENOE*, using earnings per hour-worked, hours worked per week, and paid workers).

<sup>9</sup> During the second quarter, the real wage bill grew 3.1 percent in annual terms in the formal sector, after having grown 5.9, 5.2, and 5.2 percent during the second, third, and fourth quarters of 2007; and 4.3 percent during the first quarter of 2008. The IMSS average reference wage grew 0.3 percent in real terms during the second quarter of 2008, as compared with 0.9 percent during the first quarter.

- iii) Private consumption expenditure has also been affected by the increase in foodstuff prices and by lower employment growth in the formal sector. This last trend has been more pronounced in the industrial sector, particularly in manufacturing, where employment has contracted, while the tertiary sector has also followed a decelerating trend.

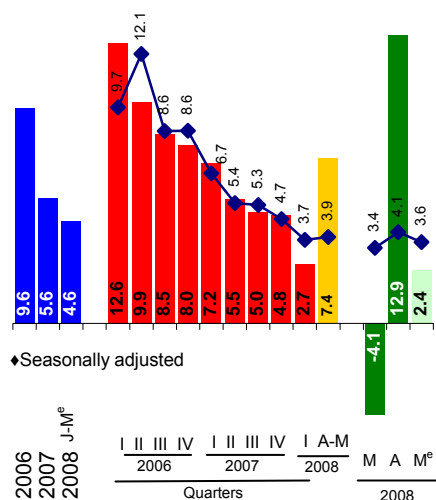
Investment spending kept growing at a slow rate during the first half of 2008, after losing dynamism throughout 2007. These results can be seen in its two components: construction and machinery and equipment expenditures. Gross capital formation is expected to have grown 3.9 percent in annual terms, measured with seasonally-adjusted data, during the April-May period of this year, as compared with 3.7 percent during the first quarter (Graph 14). During 2006 and 2007, it grew 9.7 and 5.5 percent, respectively. In relation to these developments, the following deserves mention:

- i) The reduced expansion of investment expenditure is partly due to the weak results since mid-2007 of the business climate and business confidence indicators, a trend which was more noticeable during the first half of this year.
- ii) There are indicators that suggest that during the first half of 2008 firms profit rates decreased and, hence, less resources were available to finance investment expenditure. These developments in firms profits are the result of the slower growth in firms' sales and the higher sales costs plus operation expenditures, as a reflection of the price increases in raw materials and commodities.
- iii) In contrast, a factor that might have favored investment and production expenditure is that during the second quarter financing for firms kept growing at a high annual rate.

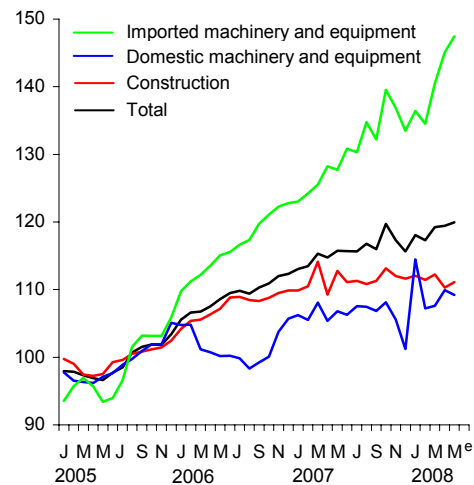
**Graph 14**

**Indicators of Domestic Demand: Investment <sup>1/</sup>**

**a) Gross Fixed Investment Annual percentage change**



**b) Gross Fixed Investment and Components 2005=100, seasonally adjusted series and 3-month moving average, except from 2007 onwards**



e/ Estimated.  
Source: INEGI.

<sup>1/</sup> Data for May 2008 and the corresponding seasonally adjusted series are estimated by Banco de México.



Available information suggests that during the second quarter, and similarly to the first, public expenditure contributed significantly to GDP growth. Indeed, during the April-May period public expenditure grew at an annual rate of 20.9 percent in real terms. This boost originated mainly from expenditure in physical investment (annual growth of 23.9 percent in real terms). The financing of this type of expenditure continued to be positively affected by the considerable revenues from the higher oil prices in international markets.

As it has been already mentioned, in regards to foreign demand during the second quarter, the dynamism of non-oil exports to the non-U.S. market stands out, including those from the automobile sector and the remaining manufactured merchandises. This dynamism helped to prevent more considerable effects on the domestic economy from the slower rate of growth of the U.S. economy. In contrast, exports to the U.S. market kept slowing down, even those of the automotive sector. These results contrast with those observed during the first quarter of the year, where automobile exports grew significantly.

During the second quarter of 2008, and line with the stage of the business cycle the Mexican economy is undergoing, aggregate demand did not generate pressures on the economy's production capacity that might have represented a source of pressures on prices:

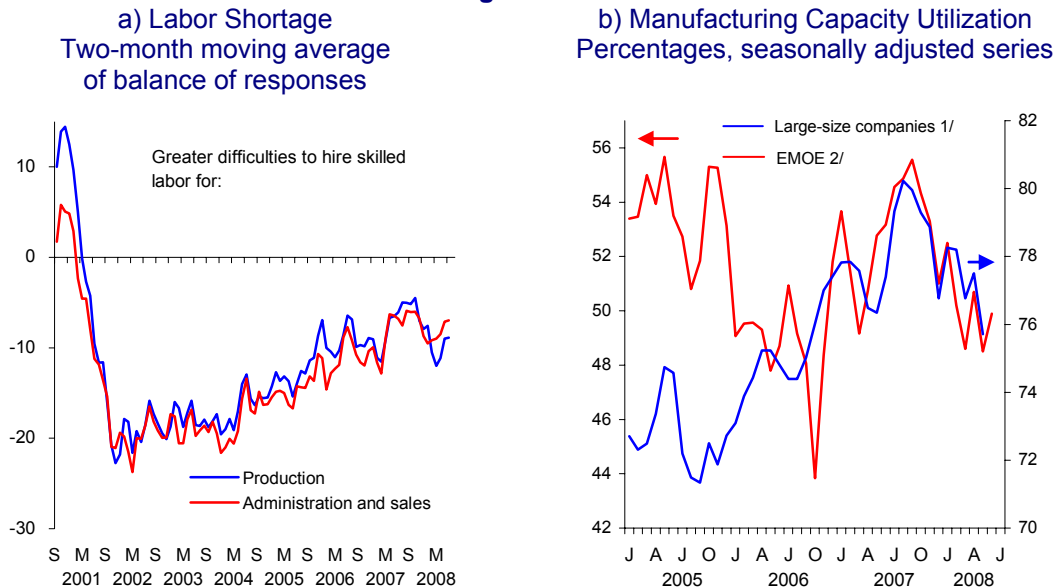
- i) During this quarter, different output gap indicators remained, in general terms, close to zero.
- ii) In the particular case of the manufacturing industry, different indicators on used installed plant capacity suggest that it weakened during the recent months. Various indicators prepared by Banco de México show that, during the first half of this year, the manufacturing sector did not face a scarcity of skilled labor that could have generated wage pressures (Graph 15). In fact, labor demand indicators lost strength both in this sector and in others.
- iii) Likewise, the moderate deficit estimated for the balance of payments' current account during the first half of this year is an additional indicator that demonstrates there were no pressures on demand which could have affected neither the exchange rate market nor domestic prices.

The development of economic activity during the first half of 2008 suggests that the effect of the U.S. slowdown has been mild. However, the risks of a greater slowdown of the Mexican economy are still considerable; particularly, GDP is expected to grow at a relatively slow pace in annual terms for the next months. As for the risk of a greater slowdown of aggregate demand, the following deserves mention:

- i) A greater slowdown of U.S. economic activity or even a long period of weakness, could lead to a lower growth of Mexican non-oil exports as well as to a significant fall in revenues from workers' remittances, as employment conditions deteriorate in the U.S. This situation could affect adversely exports of the Mexican automobile sector, as the demand for automobiles weakens further in the United States.



**Graph 15**  
**Manufacturing Sector Indicators:**



Source: Results obtained from Banco de México's Monthly Survey on Manufacturing Activity and Monthly Survey on the Business Sector (Encuesta Mensual de Opinión Empresarial, EMOE) conducted jointly by Banco de México and INEGI. Balance of responses refers to the weighted percentage of companies mentioning having faced difficulties to hire labor, minus those mentioning having faced less difficulties to hire labor.

1/ Large-size companies are those having more than 500 workers. Three-month moving average, except since December 2007.  
2/ Indicator with a 50-point reference.

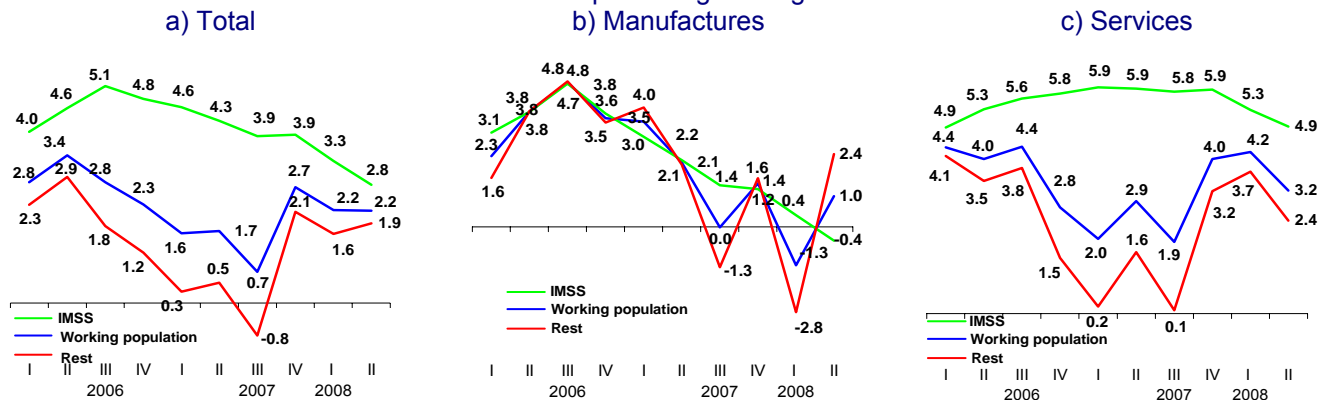
- ii) A scenario of a greater deterioration of financial conditions in international markets and/or a significantly adverse effect on the international prices of oil and of other commodities, could lead to lower world growth than that forecasted. In such an event, non-U.S. foreign demand could be negatively affected, hence magnifying the adverse impact of the world environment on Mexican exports.
- iii) The risk that the deteriorating external conditions might affect directly domestic demand still persists. The weakening of confidence indicators in the U.S. and in other industrialized countries has increased. This deterioration, together with possible downward revisions on economic activity in those countries, might affect negatively expectations about the Mexican economy and business confidence and business climate indicators. This situation would also affect negatively Mexican private sector's expenditure, particularly in terms of investment.
- iv) The modest growth of the Mexican economy during the present year not only responds to the cyclical phase undergone by both the world and Mexican economies: it has deeper connotations. In this context, Banco de México has reiterated on numerous occasions that a higher and sustained growth and a robust recovery of investment have been put on a stand-by due to the lack of progress in structural changes. This factor has been pointed out repeatedly in the surveys conducted by the central bank among the manufacturing sector, firms with foreign investment, and economic analysts as the main obstacle to reach higher levels investment that can allow to strengthen productivity, the different

sector's competitiveness and, consequently, economic growth.<sup>10</sup> In the results of the referred surveys, an improvement in the country's public security is also mentioned as a factor that could foster investment expenditure. In this context, in the last report on global competitiveness (2007-2008) of the World Economic Forum, from a total of 131 countries, Mexico ranks with the less favorable indicators in terms of public security.<sup>11</sup>

### 3.2.3. Employment

The slowdown of economic activity during the first half of 2008 generated a loss of strength in terms of job creation in all sectors of the economy, particularly in the formal sector. This trend is clearly revealed by the data on workers insured by the IMSS as well as by Banco de México's estimates based on the results from the National Occupation and Employment Survey (*Encuesta Nacional de Ocupación y Empleo, ENOE*) conducted by INEGI and which considers the total labor market in the country. These estimates suggest that the rate of growth of the employed population was still low during the second quarter of the year (Graph 16), particularly in various activities of the industrial and commerce sectors. The annual growth of the number of workers insured by the IMSS remained on the same downward trend followed since the end of 2006.

**Graph 16**  
**Total Population Employed and Workers Insured by IMSS**  
 Annual percentage change



Source: INEGI and IMSS. Data on Employed Population was obtained from INEGI's Occupation and Employment Survey (*Encuesta Nacional de Ocupación y Empleo, ENOE*) and includes the primary, secondary, and services sectors. Figures for Employed Population for the second quarter of 2008 were estimated by Banco de México. Quarterly information by IMSS corresponds to the same sectors and is presented as an average of monthly figures. The item Rest is obtained by deducting the number of workers insured by the IMSS from the employed population from the ENOE.

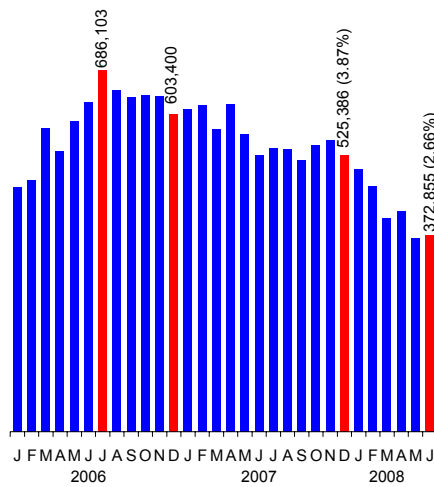
<sup>10</sup> According to the results of the first half of 2008 from the monthly survey conducted by Banco de México among more than 30 national and foreign private sector economic analysts, the main policies that must be implemented in the country to increase private investment levels are fundamentally structural. Among these policies or measures the following stand out: the energy reform, the labor reform, higher deregulation to foster domestic competition, macroeconomic stability, the strengthening of the country's legal principals, and improving public security in the country.

<sup>11</sup> Public security is a key issue for the business climate and a factor that influences investment destinations and international tourism. In this context, two issues deserve mention: first, the fall in the number of border tourists during 2007-2008 is partly due to the insecurity perceived in some border cities; second, in the results of the survey conducted by Banco de México and the Ministry of Economy in May-June 2007 among the main firms with foreign investment in the country, the security for their facilities, personnel and goods transportation was mentioned as factors that affect the competitiveness of Mexican firms as compared to other countries. In fact, firms stated that the expenses for security measures affect their costs since, on average, these turned to be around 1.5% of their total sales. See Box 3: Survey on Foreign Direct Investment and Competitiveness of the Mexican Economy: Inflation Report, April-June 2007.

At the end of June 2008, 14,389,961 workers were insured by the IMSS (permanent and temporary in urban areas), 372,855 more and 2.66 percent more in annual terms (Graph 17a).<sup>12</sup> Considering that, by the end of 2007 and the first quarter of 2008, the corresponding figures were of 525,386 and 405,082 workers, respectively (3.87 and 2.93 percent), this indicator has continued to grow at a slower rate. At the end of June, the referred annual variation included 342,045 permanent workers (2.74 percent) and 30,810 temporary workers (2 percent) in urban areas.<sup>13</sup>

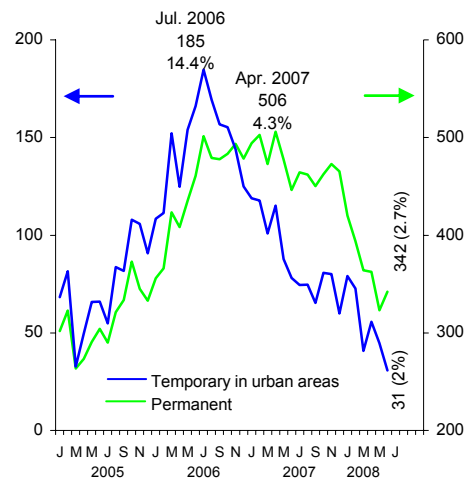
**Graph 17**  
**Workers Insured by IMSS**

a) Number of Insured Workers  
Annual change of original data



Source: IMSS.

b) Insured Workers: Permanent and Temporary in Urban Areas  
Absolute percentage change in thousands



Source: IMSS. Calculations by Banco de México.

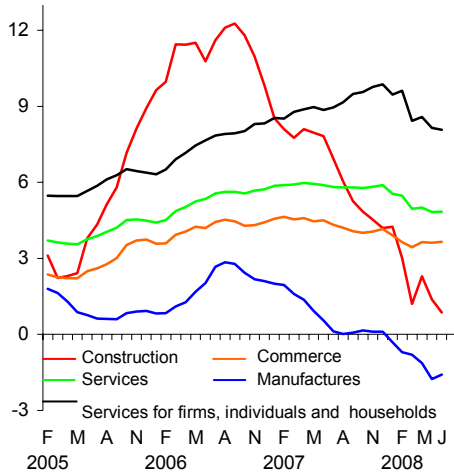
The loss of dynamism of employment in the formal sector has been more significant in the industrial sector, particularly in manufacturing and construction (Graph 18a). At the end of June, this indicator recorded a slight increase of 10.6 thousand workers (0.9 percent) in annual terms in the construction industry and a fall of 62.5 thousand (-1.6 percent) in the manufacturing sector. The slowdown of employment in the tertiary sector is very recent. At the end of June, employment in “services to firms, persons, and homes” was still growing significantly in annual terms (252.4 thousand persons, 8.1 percent), while in the commercial sector it fell by 100.5 thousand workers (3.7 percent). The lower dynamism in the number of workers insured by the IMSS has included all regions of the country; however, it has had a sharper impact in the Northern region where the industrial sector has a higher relative share in total employment (Graph 18b).

<sup>12</sup> The IMSS corrected downwards its figures for insured workers since the previous series had significant errors. This adjustment implied decreases in both the absolute and the percentage annual variations for this indicator of formal employment, originated by a significant fall in urban temporary workers and an increase in permanent workers.

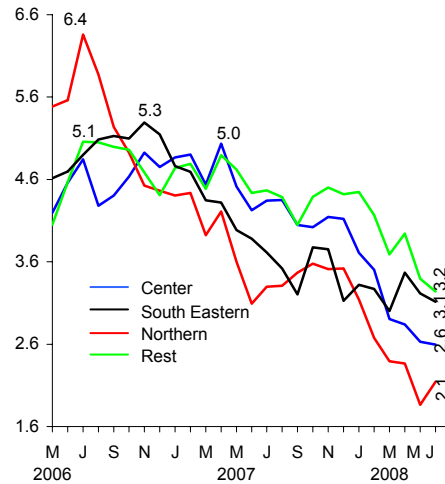
<sup>13</sup> Figures for workers insured by the IMSS for 2008 include corrections. These late registrations by workers’ bosses and might be partly due to the fiscal and auditing efforts from the IMSS. From January to June 2008 these changes accounted for an accumulated increase of 110,376 workers, which has already been included in the figures for the end of June.

**Graph 18**  
**Formal Employment Indicators**

a) Workers Insured by IMSS  
Annual percentage change, 3-month moving average, except for 2008



b) Insured Workers by Region  
Annual percentage change



Source: IMSS. Calculations by Banco de México.

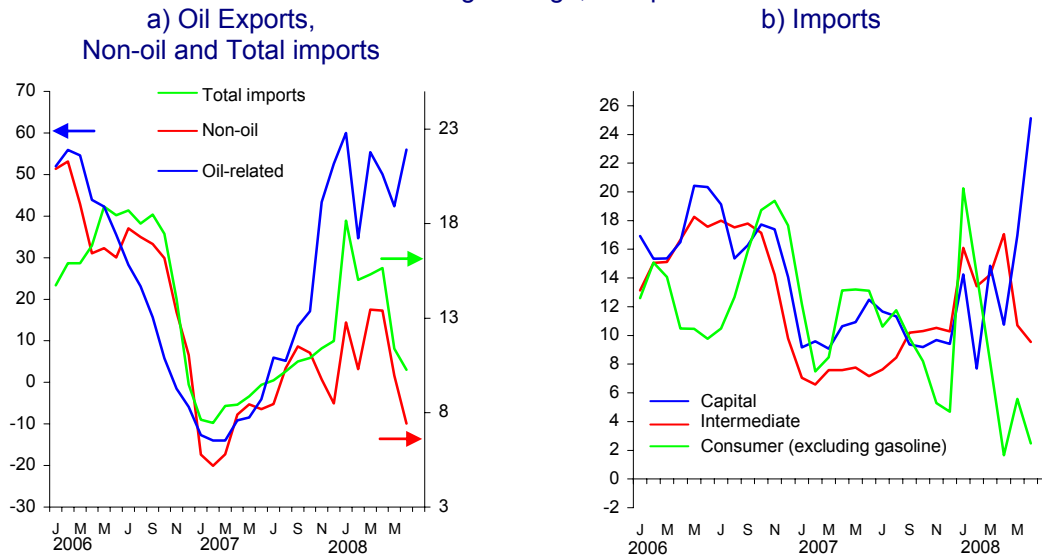
### 3.2.4. External Sector

The main aspects characterizing Mexico's external sector during the second quarter of 2008 were as follows:

- i) Total exports grew 17.3 percent in annual terms, rate higher than the ones recorded during the previous quarter and the entire 2007 (16.4 and 8.8 percent, respectively). This result was mainly due to the growth in oil exports (49.7 percent) and non-oil exports (11.6 percent) (Graph 19).
- ii) The significant growth of oil exports reflected an increase in the average price of the Mexican crude-oil export mix (103.37 US dollars during the second quarter) though the exported volume decreased considerably in annual terms (18.3 percent), a trend which is expected to prevail until the second half of the year. The value of oil exports increased more than that of oil imports. As a result, the oil trade balance recorded a higher surplus (6.061 billion US dollars during the second quarter of the year) than during the first quarter of this year (5.202 billion). Regarding the foreign trade of oil products, the value of gasoline imports continued to be outstanding, accounting for 28 percent of the oil exports value during the first half of 2008 (Graphs 20a, b and c) and 42 percent of the domestic consumption of gasoline.

**Graph 19  
Merchandise Exports and Imports**

Annual percentage change of seasonally adjusted data and 3-month moving average, except in 2008



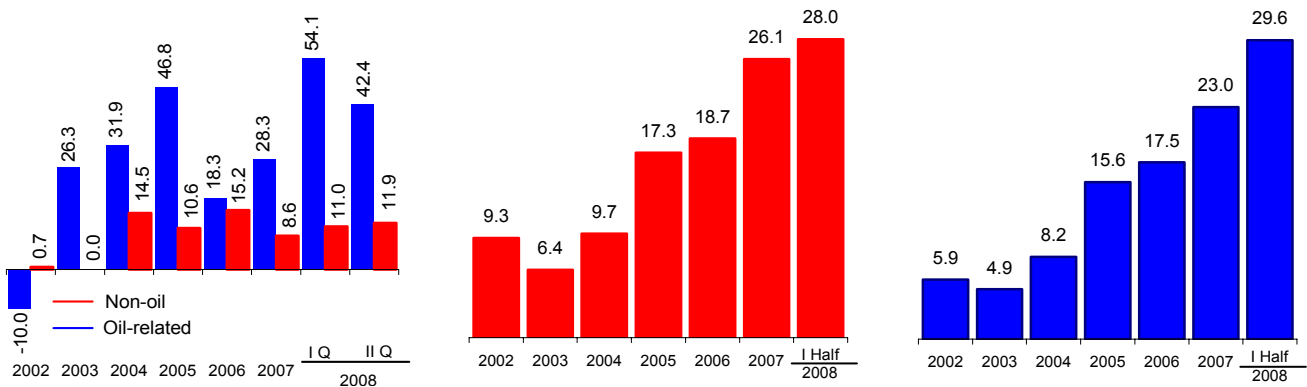
Source: Banco de México.

**Graph 20  
Indicators of Oil Product Imports**

a) Oil and Non-oil Imports  
Annual percentage change

b) As a Proportion of the Value of  
Crude Oil Exports

c) Share in Consumer Goods  
Imports



Source: Banco de México.

- iii) Non-oil exports rose 11.6 percent in annual terms during the second quarter of 2008, slightly above the previous quarter figure (10.7 percent). However, both rates were affected by the Easter holiday. Thus, after seasonal adjustments, growth for second quarter (10.2 percent) turned out to be smaller than that for the first quarter (12.2 percent).
- iv) Two factors influenced the development of non-oil exports: a considerable slowdown in automobile exports and a higher growth in the remaining non-oil products (Graph 21 and Table 3). Automobile exports

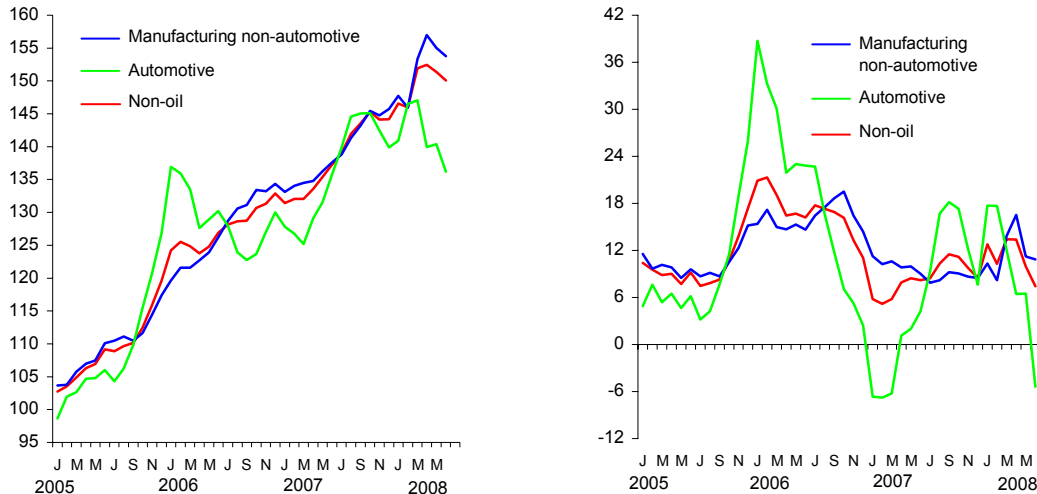
grew only 3.9 percent during the second quarter, after having grown 12.8 percent during the first quarter of the year (with seasonally adjusted data, from 15.7 to 2.3 percent, respectively). In contrast, the remaining non-oil exports grew in annual terms from 10.1 to 14.2 percent during the same comparison period (with seasonally-adjusted data, from 11.1 to 12.8 percent).

**Graph 21**  
**Merchandise Exports**

Three-month moving average, except in 2008

a) 2004=100 and seasonally adjusted data

b) Annual percentage change



Source: Banco de México.

**Table 3**  
**Growth of Non-oil Exports to Different Markets**  
Percent

	Share			Annual Growth			
	2004	2007	2008 II-Q	2007	2008		
					I-Q	II-Q	Jan-Jun
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>8.51</b>	<b>10.73</b>	<b>11.61</b>	<b>11.19</b>
<b>United States</b>	<b>88.65</b>	<b>82.54</b>	<b>79.63</b>	<b>4.83</b>	<b>7.69</b>	<b>6.57</b>	<b>7.10</b>
Automotive	22.95	20.40	18.65	-0.15	8.11	-2.08	2.61
Other	65.70	62.14	60.98	6.57	7.55	9.53	8.59
<b>Rest of the world</b>	<b>11.35</b>	<b>17.46</b>	<b>20.37</b>	<b>30.16</b>	<b>25.88</b>	<b>36.88</b>	<b>31.66</b>
Automotive	2.08	4.12	4.54	48.89	38.25	38.22	38.24
Other	9.27	13.34	15.83	25.30	22.39	36.50	29.80
<b>Total automotive</b>	<b>25.02</b>	<b>24.52</b>	<b>23.19</b>	<b>5.70</b>	<b>12.75</b>	<b>3.85</b>	<b>7.97</b>
<b>Total other</b>	<b>74.98</b>	<b>75.48</b>	<b>76.81</b>	<b>9.46</b>	<b>10.09</b>	<b>14.18</b>	<b>12.23</b>

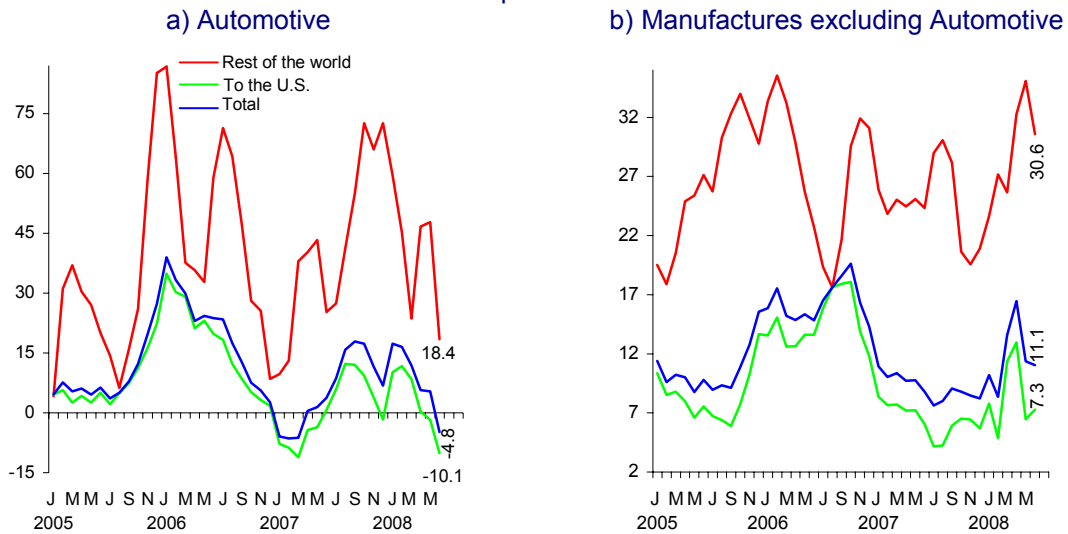
Source: Banco de México.

Non-oil exports to the United States grew at a slower pace during the second quarter of the year as compared to the first, due to the annual decline in the rate of growth of automobile exports (Table 3 and Graph 22). Automobile exports have been subject to two opposite forces. On the one hand, vehicles assembled in Mexico have increased their share in the U.S. market. On the other, this effect was offset during the second quarter by the impact of the significant weakening of U.S. automobile

sales on Mexican exports.<sup>14</sup> In contrast, non-oil exports to the non-U.S. market grew considerably in annual terms during the second quarter, non-automobile and automobile exports included. However, despite these results, automobile exports have shown clear signs of deceleration since June.

**Graph 22**  
**Manufacturing Exports to Different Markets**

Annual percentage change of seasonally adjusted data and 3-month moving average, except in 2008



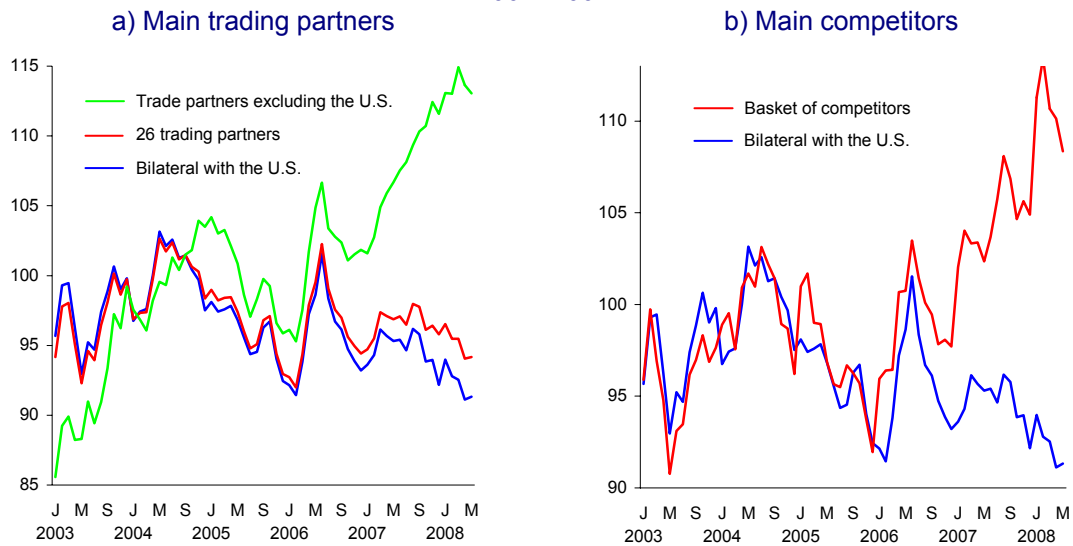
Source: Banco de México.

v) Since 2004, the share of the non-U.S. market in Mexican non-oil exports has increased significantly, from 11.4 percent that year to 20.4 percent during the second quarter of 2008. This significant change in regional trade diversification partly responds to the following factors: the real exchange rate of the peso against the US dollar has slightly appreciated (Graph 23), which, together with the significant depreciation of the US dollar against other main currencies, has implied a depreciation of the peso in real terms against non-U.S dollar currencies (of 9.7 percent against the 25 main trading partners, from 2007 to the first half of 2008).<sup>15</sup>

<sup>14</sup> During the first half of 2008, domestic sales of light commercial vehicles in the United States fell by 10.1 percent at an annual rate, thus reflecting a reduction of 16.9 percent for the three main American assembly companies and of 3.2 percent of the remaining brands. During that period, the three referred American brands manufactured 52 percent of the vehicles assembled in Mexico and accounted for 56 percent of vehicle exports.

<sup>15</sup> The multilateral real exchange rate considers the share of the 25 main markets of Mexican non-oil exports excluding the U.S. In Graph 23a the corresponding index of 26 trade partners includes the U.S., acknowledging its specific weight in non-oil Mexican exports.

**Graph 23**  
**Real Exchange Rate Indices for the Mexican Peso<sup>1/</sup>**  
 2004=100



1/ An increase in the index represents a real exchange rate depreciation.  
 Source: Banco de México.

- vi) During the period considered, the Mexican peso also depreciated in real terms against the basket of main trade competitors in the U.S. market (Graph 23b),<sup>16</sup> a situation that has helped to mitigate the impact of the U.S. lower economic growth on the volume of Mexican non-oil exports to that market.
- vii) During the second quarter, imports grew 14.8 percent in annual terms, slightly above the 14.4 percent of the first quarter. This result is due to two factors. On the one hand, imports of intermediate and capital goods grew at higher annual rates, whereas imports of consumer goods grew at slower annual rates.<sup>17</sup> On the other, the slightly higher growth rates recorded during the second quarter were due to the effect of the Easter holiday. With seasonally adjusted data, imports showed a clear deceleration by reducing their growth from 16.2 percent in annual terms during the first quarter to 12.4 percent during the second. These results are consistent with the performance of the different components of aggregate demand.

During the second quarter, the value of merchandise imports continued to increase influenced by oil-product imports and to the increases in the

<sup>16</sup> The basket of 11 countries that compete with Mexico in the U.S. market used in Graph 23b includes China, the Philippines, South Korea, Thailand, Malaysia, Hong Kong, Indonesia, Hungary, Turkey, Poland, and Portugal. The methodology for determining this basket of competitors is described in Banco de México's working paper 2007-12 "The Comparative Advantage and the Performance of Mexican Manufacturing Exports during the 1996-2005 Period" by Daniel Chiquiar, Edna Fragoso, and Manuel Ramos Francia. The currencies of these countries are weighted based on the value of imports of the United States from each of those countries during the period 2006-2007.

<sup>17</sup> During the second quarter of 2008, total, intermediate, consumer and capital imports grew 14.8, 14.1, 13.5 and 20.4 percent, respectively. Excluding oil products, the corresponding rates for total imports, and for intermediate and consumer goods imports are significantly lower (11.9, 11.7, and 3.8 percent, respectively).



average import prices of some commodities, particularly agricultural products and selected foodstuffs.<sup>18</sup>

During the second quarter of 2008, revenues from workers' remittances accounted for 6.281 billion dollars (1.1 percent reduction, in annual terms). During the first half of this year, the amount of workers' remittances turned to be of 11.601 billion dollars (2.2 percent reduction in annual terms). The factors that explain the decline in this source of revenue were analyzed in detail in the first Inflation Report of this year.<sup>19</sup>

On the basis of information described in the previous paragraphs and of that available from other external accounts, the current account of the balance of the payments is estimated to have recorded a deficit of around 0.8 billion dollars during the second quarter of 2008 (Table 4). During the first half of the year, the current account would thus have accumulated a deficit of 2.3 billion dollars, equivalent to 0.4 GDP percentage points. During the reported quarter the capital account is estimated to have recorded a surplus of around 2.4 billion dollars (including errors and omissions). This balance would be a net result of the following items: inflows from foreign investment, both direct and portfolio investment, and from financing of Pidiregas projects; and outlays from both a reduction of public sector's foreign debt as well as an increase in external assets.<sup>20</sup> Finally, during the second quarter of 2008, Banco de México's net international reserves increased by 1.629 billion dollars. Thus, by the end of June, the reserves balance turned out to be of 85.671 billion dollars.

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<sup>18</sup> During the twelve-month period from July 2007 to June 2008, the import value of 127 Mexican products that are agricultural raw materials or selected foodstuffs was of 13.755 billion dollars. During this period, the unit value of these imports exceeded by 48.8 percent that registered in 2005, a period when these values, on average, were stable. This implied a price increase in these imports of 4.350 billion dollars as compared to the amount resulting from keeping unchanged the unit prices observed in 2005.

<sup>19</sup> See Box 3 "Recent Developments in Revenues from Workers' Remittances", in the Inflation Report of January-March 2008, p.32.

<sup>20</sup> The increase in external assets reflects the normal transactions of a country strongly integrated to the world economy as Mexico, in terms of both the goods and services and financial markets. These transactions involve significant flows of direct investment from Mexican companies in other countries; bank deposits of Mexican companies (both export and import enterprises) for their commercial and financial transactions abroad; external assets of investment firms; bank deposits from both the private and public sector; and, external assets from public sector entities.

**Table 4**  
**Balance of Payments**  
Million US dollars

	2 0 0 7				2 0 0 8		
	Annual	I -Q	II-Q	I-Sem	I -Q	II-Q	I-Sem
<b>Current account</b>	<b>-5,525</b>	<b>-2,236</b>	<b>-1,511</b>	<b>-3,747</b>	<b>-1,516</b>	<b>-800<sup>e/</sup></b>	<b>-2,316</b>
Trade balance	-10,074	-2,454	-2,308	-4,762	-1,630	-893	-2,523
Exports	271,875	60,269	67,656	127,925	70,128	79,388	149,516
Imports	281,949	62,723	69,964	132,686	71,758	80,281	152,039
Non-factor services	-5,940	-525	-1,909	-2,434	-1,107	-2,138	-3,245
Factor services	-13,834	-4,869	-3,744	-8,613	-4,196	-4,158	-8,354
Transfers	24,323	5,611	6,451	12,062	5,417	6,389	11,806
Workers' remittances	23,970	5,508	6,351	11,859	5,320	6,281	11,601
<b>Capital account</b>	<b>18,307</b>	<b>4,794</b>	<b>2,355</b>	<b>7,149</b>	<b>8,911</b>	<b>2,429<sup>e/</sup></b>	<b>11,340</b>
<b>Errors and omissions</b>	<b>-2,496</b>	<b>-1,046</b>	<b>-99</b>	<b>-1,145</b>	<b>-1,355</b>	<b>0</b>	<b>-1,355</b>
<b>Change in net international reserves</b>	<b>10,311</b>	<b>1,516</b>	<b>744</b>	<b>2,260</b>	<b>6,051</b>	<b>1,629</b>	<b>7,680</b>
<b>Valuation adjustments</b>	<b>-25</b>	<b>-4</b>	<b>2</b>	<b>-2</b>	<b>-11</b>	<b>0</b>	<b>-11</b>

e/ Estimated figures.

Note: The capital account of the second quarter of 2008 includes errors and omissions.

Source: Banco de México.

### 3.3. Costs and Prices

#### 3.3.1. Wages

Most recent information on wages reveals, in general, a pattern similar to that observed during the previous quarter. In the case of nominal income of paid personnel, and on the basis of the National Occupation and Employment Survey (*Encuesta Nacional de Ocupación y Empleo*, ENOE), wages grew at a lower annual rate during the first quarter of 2008 as compared to the annual average increase recorded in 2007. During the second quarter of the year, the IMSS reference base wage and contractual wages exhibited similar results to those reported during the previous period and the second quarter of 2007, respectively (Graph 24).<sup>21</sup>

According to ENOE data, the increase in the nominal income of the total paid personnel in the country was 4.6 percent during the first quarter of 2008, 0.7 percentage points below the average figure observed during 2007 (Table 5).

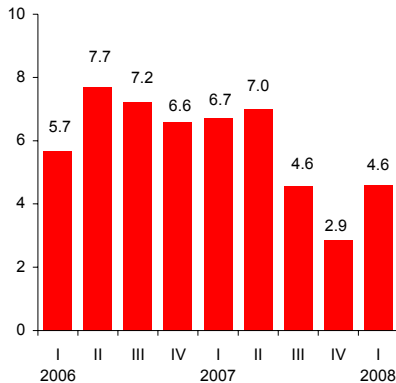
The IMSS reference wage recorded an average annual variation of 5.2 percent during the second quarter of 2008, which translates into an increase of

<sup>21</sup> The wage indicators with the broadest coverage are the nominal income of total paid personnel and the IMSS reference wage. The former is obtained from the National Occupation and Employment Survey (ENOE) and includes all monetary and non-monetary earnings received by the occupied population for its work during the reference period. The IMSS reference wage considers the daily wage of insured workers and some bonuses (for example, benefits, paid vacations, and commissions). In contrast, contractual wages include only the direct increase to the wage tabulator negotiated by workers in firms under federal jurisdiction, and which will be in-force for a year. The monthly figure of this last indicator is estimated using information from firms that revised their wages usually during the same period of the year. For this reason, this indicator follows a seasonal pattern. Contractual wages must therefore be analyzed comparing the same time periods.

5.0 percent for the January-June period, figure below the 5.5 percent observed on average during 2007 (Table 5).

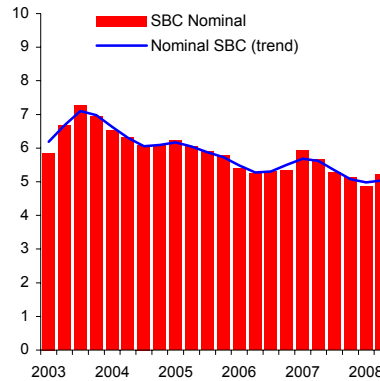
### Graph 24 Wages Trend

a) Nominal Income (ENOE)<sup>1/</sup>  
Annual percentage change



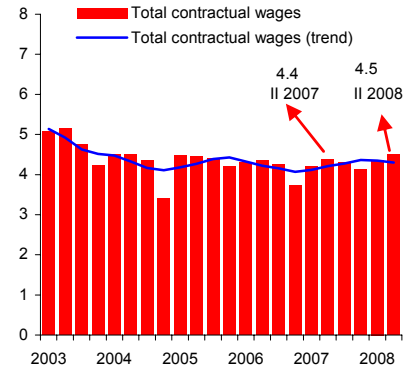
1/ Includes total remunerated workers, which averaged 40.4 million during the first quarter of 2008.

b) IMSS Nominal Reference Wage<sup>2/</sup>  
Annual percentage change



2/ Based on workers insured by IMSS. Includes 14.4 million workers on average during the first five months of 2008, which corresponds to 35.6 percent of total remunerated workers.

c) Contractual Wages<sup>3/</sup>  
Figures in percent



3/ Based on wage negotiations in firms under federal jurisdiction. Includes 1.9 million workers in 2007, which corresponds to 4.6 percent of total remunerated workers during that year.

**Table 5**  
**Wage Indicators**  
Annual percentage change

	2007					2008		
	I	II	III	IV	Jan-Dec	I	II	Jan-Jun
<b>Nominal Income (ENOE)<sup>1/</sup></b>	6.7	7.0	4.6	2.9	5.3	4.6	n.a.	4.6
<b>IMSS Reference Wage</b>	5.9	5.7	5.3	5.1	5.5	4.9	5.2	5.0
<b>Total Contractual Wages<sup>2/</sup></b>	4.2	4.4	4.3	4.1	4.2	4.4	4.5	4.4
Publicly-owned firms	3.9	4.2	4.3	4.0	4.1	4.1	4.2	4.2
Privately-owned firms	4.3	4.4	4.3	4.4	4.3	4.4	4.5	4.5

n.a./ Not available.

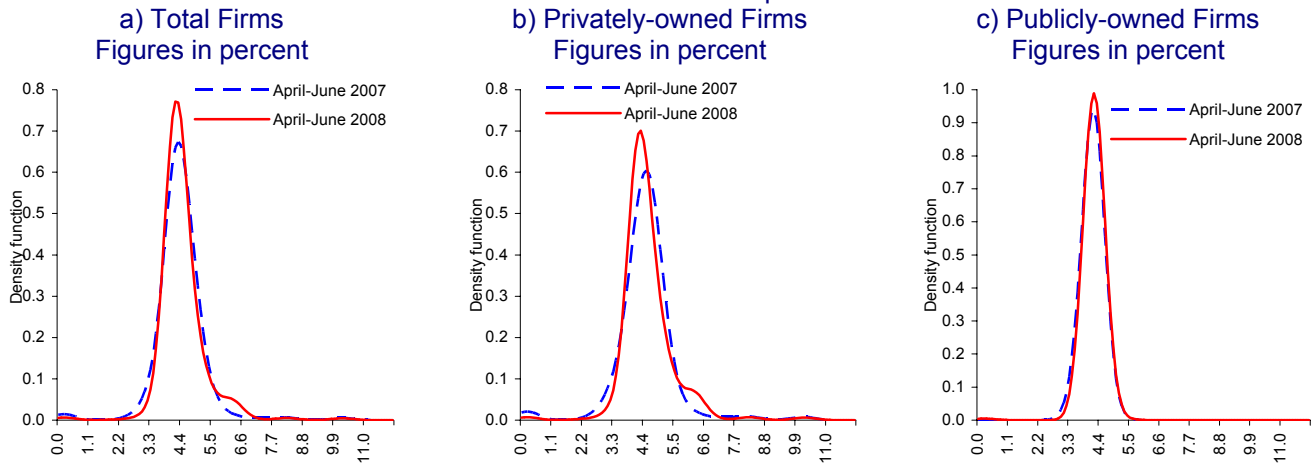
1/ The average for period January-June 2008 includes information for the first three months of the year.

2/ Weighted average (calculated based on the number of workers benefited each wage revision). For the second quarter of 2008, preliminary information is included.

Source: Calculations by Banco de México with data from INEGI, IMSS, and the Ministry of Labor (Secretaría del Trabajo y Previsión Social, STPS).

The average increase for the nominal wage negotiated in contractual revisions of firms under federal jurisdiction for the April-June period of 2008 was 4.5 percent, 0.1 percentage points above that registered during the same quarter of the previous year. In terms of firms' ownership, the increase was different. Workers from publicly-owned enterprises negotiated a 4.2 percent raise compared to workers from privately-owned firms, who agreed on a 4.5 percent hike. In the case of privately-owned firms, contractual revisions were 0.1 percentage points above those registered during the second quarter of 2007. The density functions to analyze the increase in contractual wages did not change significantly as compared to the same quarter of the previous year (Graph 25).

**Graph 25**  
**Distribution of Contractual Wage Increases<sup>1/</sup>**  
 Distribution of Relative Frequencies

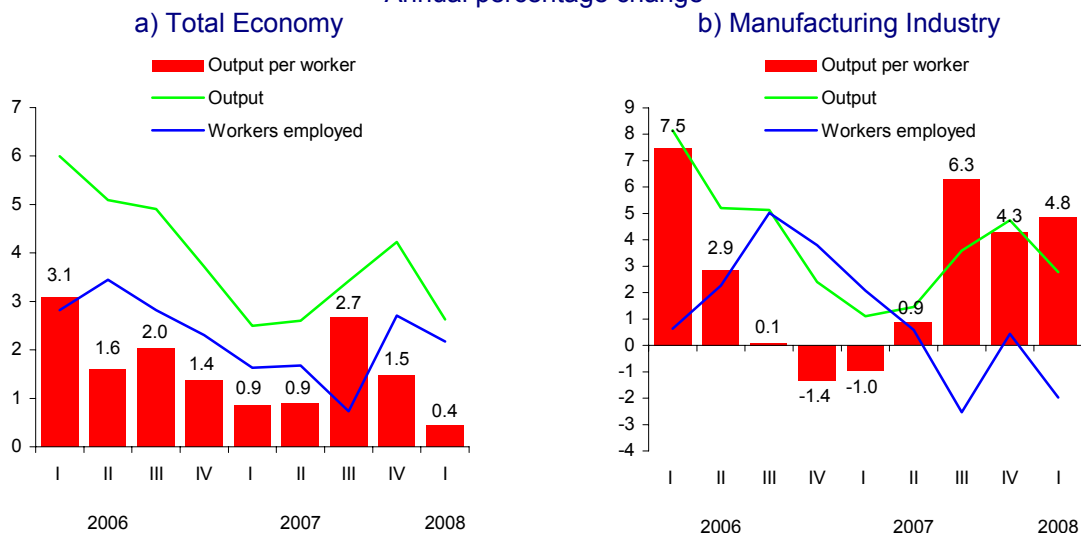


<sup>1/</sup>Graphs represent probability density functions calculated to adjust the data of contractual wage increases obtained by workers.

### 3.3.2. Output per Worker

Based on data from the ENOE and the National Accounts, output per worker for the entire economy increased 0.4 percent during the first quarter of 2008, figure below that observed during the last quarter of 2007 (Graph 26). In contrast, for the manufacturing industry, it did so by 4.8 percent. The higher growth in output per worker in the manufacturing sector was due, mainly, to the lower number of workers employed in this sector.

**Graph 26**  
**Output per Worker: Total Economy and Manufacturing Sector<sup>1/</sup>**  
 Annual percentage change



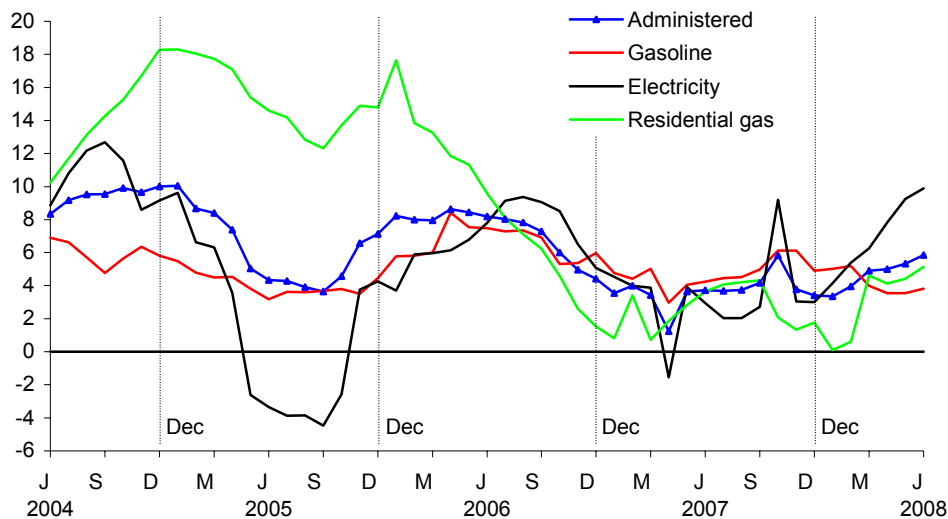
<sup>1/</sup> Average output per worker for the total economy is obtained with production data from the National Accounts and employed individuals from the ENOE survey.

### 3.3.3. Administered and Regulated Prices of Goods and Services

The subindex of goods and services with administered prices grew at an annual average rate of 5.38 percent as compared to 4.07 percent during the previous quarter (Table 1 and Graph 27). This result can be explained by the upward pattern followed by electricity and domestic gas inflation rates. As for the average annual variation rates for the prices of fuels that compose the administered prices subindex, the charges for electric energy consumption jumped from 5.25 percent during the first quarter of 2008 to 8.92 percent during the second quarter of the same year, and those for residential gas also did so from 1.75 to 4.56 percent for the same periods. Higher inflation in electricity was due to the faster rate of growth of DAC electricity tariffs. The official rate of change for these fees depends on the price variations of various fuels and of some PPI subindices that include certain metal products.<sup>22</sup> Price inflation of residential gas consumption rose as a result of the upward pattern followed by the prices of natural gas in international markets and the adjustment in the programmed rate of change for LP gas prices, from 3 cents in May to 6 cents in June. It is worth mentioning that the programmed rate of change of 6 cents was in force until July.

In June, the programmed rate of change for both Magna and Premium type gasoline increased by one cent as compared to the previous two months, from 3 to 4 cents per liter for the Magna type and from 4 to 5 cents for the Premium type. In July, the price for Magna type gasoline rose 7 cents and for Premium type, 5 cents.

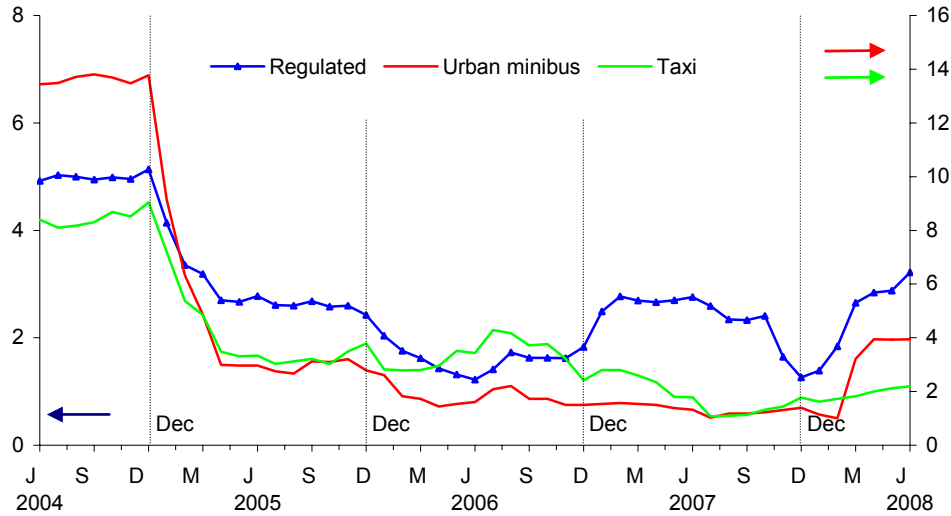
**Graph 27**  
**Subindex of Administered Prices**  
 Annual percentage change



As for the subindex of regulated prices, their annual quarterly variation jumped from 1.96 to 2.98 percent during the second quarter of 2008 (Table 1), due to the increase in bus and taxi fares in several cities (Graph 28).

<sup>22</sup> The estimation formula for high-consumption residential electricity tariffs (DAC, for its acronym in Spanish) is described in the Inflation Report January-March 2008, p.45.

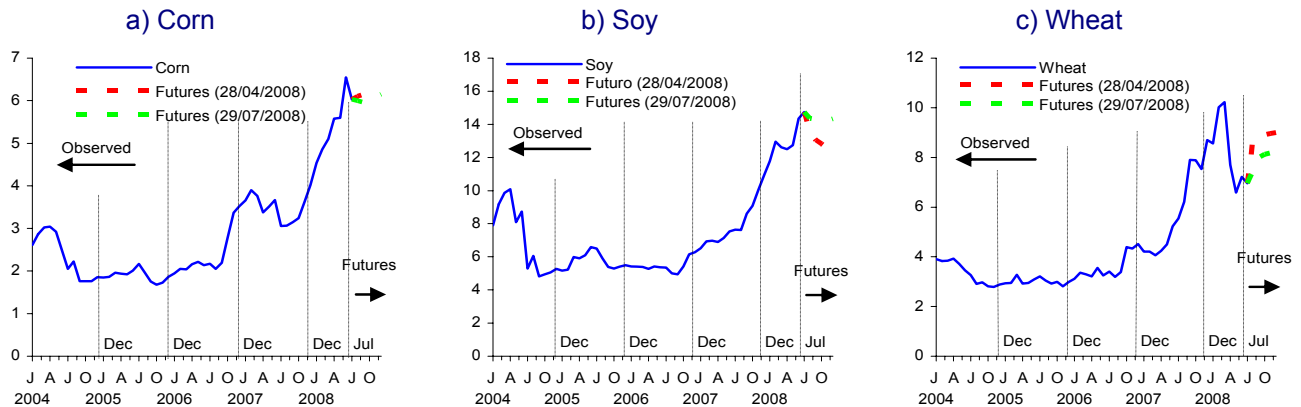
**Graph 28**  
**Subindex of Regulated Prices**  
 Annual percentage change



3.3.4. Food Commodities

Grain prices (except for wheat) in international markets continued to follow an upward trend during the second quarter of 2008 (Graph 29). The referred prices reached considerably higher levels than the ones shown by futures markets at the end of the first quarter of the year. Prices of corn, soy, and rice registered differences between the real price and that negotiated in futures markets for June 2008 as of March 31, the differences being 13.91, 18.91, and 46.98 percent, respectively (Graph 30).

**Graph 29**  
**International Prices of Grains <sup>1/</sup>**



<sup>1/</sup> USD per bushel.  
 Source: United States Department of Agriculture (USDA) and Chicago Board of Trade (CBT).



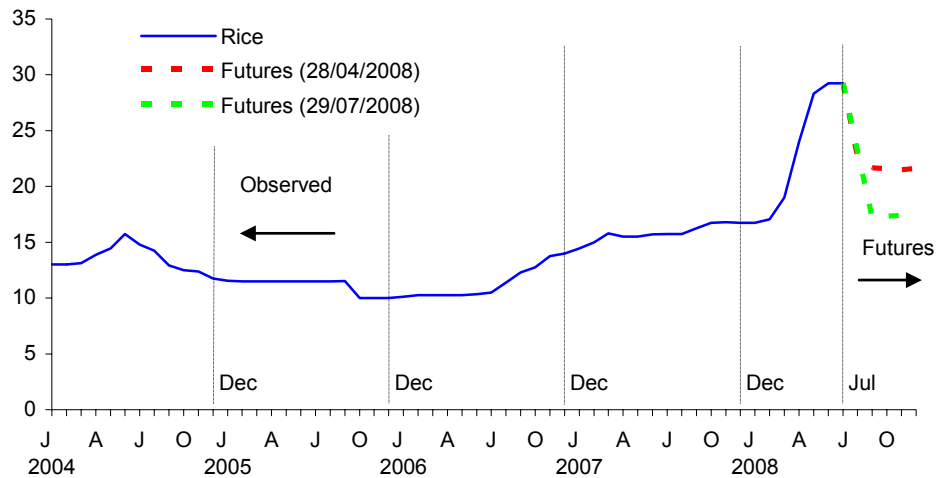




Vietnam, Pakistan, and India.<sup>23</sup> Nevertheless, the USDA estimates world rice production to grow 1.9 percent during the 2007/2008 cycle and eventually translate into lower prices, as shown in the futures curve (Graph 32).

In contrast to the aforementioned, wheat prices decreased after having reached record highs during the first quarter of the year (in March, 10.23 dollars per bushel as compared to 8.57 dollars in January). Nevertheless, these prices remained considerably high as compared to those observed in previous years. A moderate decrease in the spot price of this grain has been observed in July in view that the USDA foresees a 2.4 percent increase in wheat production (Graph 31).

**Graph 32**  
**International Price of Rice<sup>1/</sup>**



<sup>1/</sup> USD per CWT (USD/100Lb).  
Source: United States Department of Agriculture (USDA) and Chicago Board of Trade (CBT).

International prices of liquid and powdered milk moved upward during the second quarter of 2008 due to cost pressures originated by the high prices of grains used for cattle feeds. The futures curve suggests that, by the end of 2008, the price of powdered milk could increase even more, while that of liquid milk could decrease (Table 6 and Graph 33).

<sup>23</sup> Besides the aforementioned countries, other less important producers have also imposed restrictions to rice exports: Cambodia, Brazil, Ecuador, and Egypt (Food Outlook, June 2008, United Nations Food and Agriculture Organization).

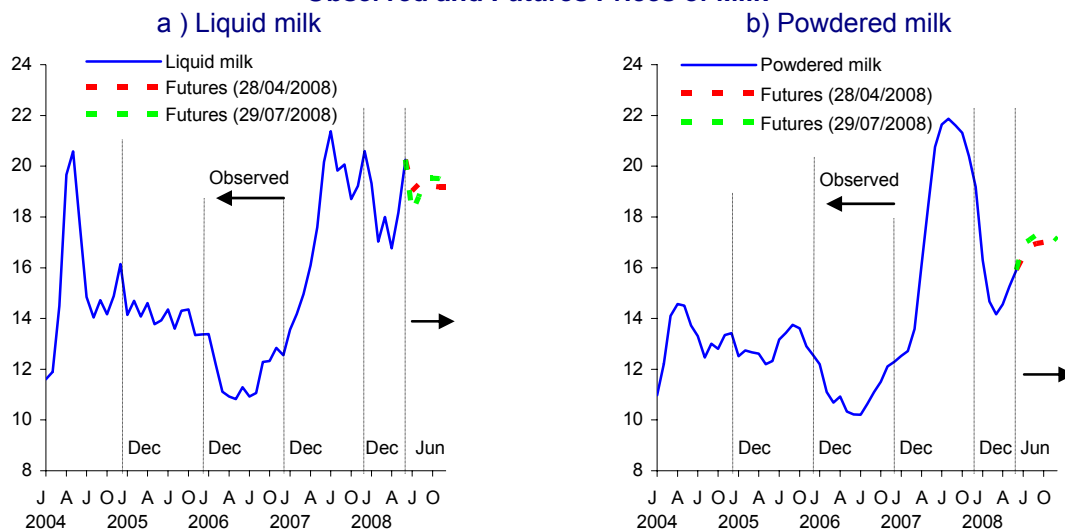
**Table 6**  
**International Observed and Futures Prices of Grains and Milk**

Prices						
Figures at end of period						
Date	USD per bushel			USD per CWT (100 Lb)		
	Corn	Wheat	Soy	Rice	Liquid milk	Powdered milk
2005	1.86	2.98	5.50	10.00	13.37	12.57
2006	3.53	4.51	6.29	14.00	12.55	12.30
2007	4.02	8.70	10.93	16.75	20.60	19.18
2008 <sup>1/</sup>	6.15	8.24	14.32	17.60	19.42	17.10
Change between reference years (percent)						
2006 - 2005	89.78	51.34	14.36	40.00	-6.13	-2.15
2007 - 2006	13.88	92.90	73.77	19.64	64.14	55.93
2008 - 2007	52.99	-5.29	31.02	5.07	-5.73	-10.84
2008 - 2005	230.65	176.51	160.36	76.00	45.25	36.04

1/ Forecast according to futures of 29/07/2008.

Source: United States Department of Agriculture (USDA), Chicago Board of Trade (CBT), and Chicago Mercantile Exchange (CME).

**Graph 33**  
**Observed and Futures Prices of Milk<sup>1/</sup>**



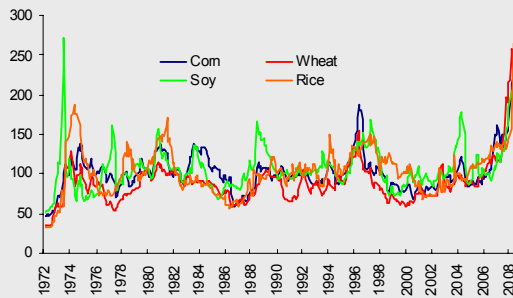
1/ USD per CWT (USD/100 Lb).

Source: United States Department of Agriculture (USDA) and Chicago Mercantile Exchange (CME).

**Box 2**  
**International Grain Prices (Developments and Outlook)**

Since 2006 and up to the second quarter of 2008, international grain prices have followed an upward trend (although in July the prices of certain grains have started to slightly decrease). In the last 36 years, prices of corn, wheat, soy, and rice have increased periodically, and although the price of one of these grains has usually increased the most, the prices of the rest have followed a similar pattern because these grains can be substituted among themselves for similar purposes (Graph 1). Nevertheless, the current upward cycle these grain prices have followed has been different from others in terms of the observed increase, which has been of greater magnitude, longer duration, and has taken place simultaneously for all grains.

**Graph 1**  
**International Prices of Selected Grains**  
Index Jan-1992=100



Source: IMF International Finance Statistics (IFS) and Bloomberg.

The development of international grain prices has been subject to both supply and demand factors. Among these factors, some can be considered of a short-term nature, while others can be affecting price formation in the long run.

*Long-term Factors*

Over the last decades, productivity growth of plowed land has decreased worldwide (Table 1). This result is mostly attributed to the decline in financing from governments and international agricultural research agencies.

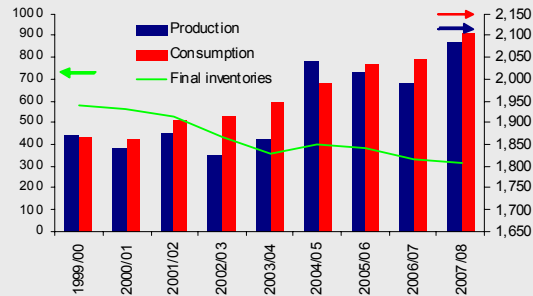
**Table 1**  
**World Production of Grains**  
Average annual growth rate

	1970-1990	1990-2007	2009-2017
Production	2.20	1.30	1.20
Returns	2.00	1.10	0.80
Area	0.15	0.14	0.39

Source: United States Department of Agriculture (USDA).

World inventories of grains have also followed a downward trend in the last decade (Graph 2). These developments are the result of governments' reduction of inventories due to low prices and the elimination of foreign trade barriers. Under supply shocks, the reduction of inventories has affected price volatility.

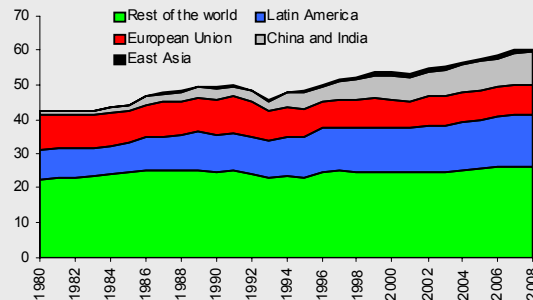
**Graph 2**  
**World Supply, Demand and Inventories of Cereals**  
Million metric tons



Source: USDA.

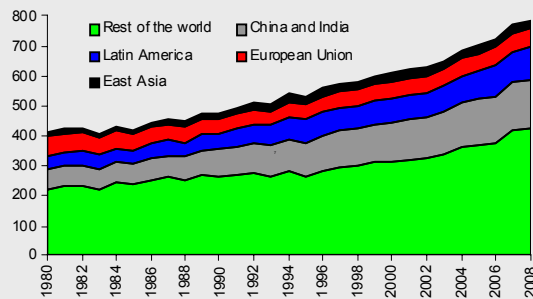
Among the long-term factors that have affected the demand for grains is the vigorous growth of many emerging market economies, especially China and India. In these countries, consumption of grains and meat (which also requires grains as an input for its production) rose (Graph 3 and 4).

**Graph 3**  
**World Consumption of Beef**  
Million tons



Source: USDA.

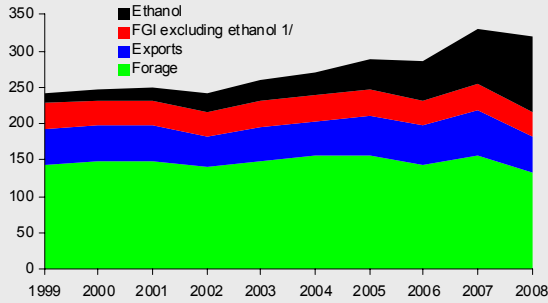
**Graph 4**  
**World Consumption of Corn**  
Thousand tons



Source: USDA.

A more recent phenomenon that could affect grain prices over the next years is the revision to the energy policies in both the U.S. and the European Union to boost the use of biofuels. In particular, the use of corn for ethanol production rose significantly in the U.S. in the last 3 years (Graph 5).

**Graph 5  
Corn Use in the U.S.  
Million metric tons**



1/ Foods, seeds, and industrial use less ethanol.  
Source: United States Department of Agriculture (USDA), July 2008.

**Short-term Factors which have Fueled Price Increases**

Grain production has been affected since 2006 by adverse weather conditions in many parts of the world. In 2008, corn harvests were affected by floods in the U.S. corn-belt area. Nevertheless, in July, weather conditions and prospects for production improved. Rice production was affected by both the Nargis Cyclone in Myanmar and by the earthquake in the Chinese region of Sichuan.

The supply of grains available in international markets has been affected by the trade policies adopted by grain-exporting countries between 2007 and 2008. The following measures have been implemented:

**Elimination of export subsidies**

China (several grains)

**Export duties**

- China (new taxes on several grains)
- Argentina (tax increases on several grains, although this measure was abolished July 2008)
- Russia and Tadjikistan (tax increases on wheat)
- Malaysia (new taxes on palm oil)

**Quantitative restrictions**

- Argentina (wheat)
- Ukraine (wheat)
- Pakistan and Brazil (wheat)

**Ban on exports**

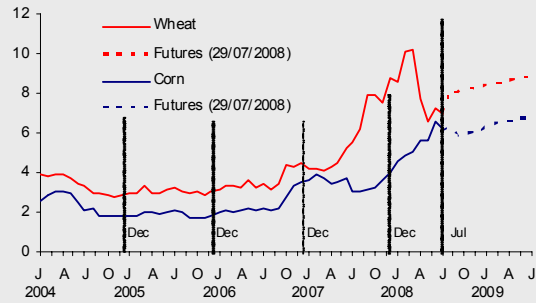
- Ukraine, Serbia, and India (wheat)
- Egypt, Cambodia, Vietnam, Indonesia, and India (rice)
- Kazakhstan (oil seeds)

Several policies have been implemented in grain-importing countries to smooth the price increase in food commodities, such as the elimination and reduction of trade barriers, food subsidies and price controls. These measures have raised the world demand for grains, and together with the lesser supply for these goods, have contributed to push upward even more international grain prices.

**Outlook**

Futures curves for corn, wheat and soy fell slightly in July; nevertheless, they still suggest that the international prices of these grains will remain high next year. In contrast, futures prices of rice show that rice prices could decrease for the rest of 2008 (Graph 6 and 7).

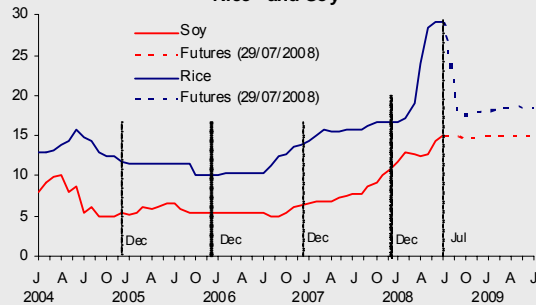
**Graph 6  
Observed Prices and Futures:  
Corn and wheat<sup>1/</sup>**



1/ USD per bushel.  
Source: United States Department of Agriculture (USDA) and Chicago Board of Trade (CBT).

Prices are continued to be pressured by the global demand for grains in the medium run. The latter is likely to occur as the Asian emerging economies are expected to grow at high rates over the next years. However, there is uncertainty about other factors that could affect grains prices, and changes in the energy policies of developed countries related to bio-fuel production goals should not be discarded.

**Graph 7  
Observed Prices and Futures:  
Rice<sup>1/</sup> and Soy<sup>2/</sup>**



1/ USD per CWT (100 lb).  
2/ USD per bushel.  
Source: USDA and CBT.

Under the described environment, the supply of grains is expected to increase in the future. Nevertheless, certain factors exist that make difficult to forecast the velocity and magnitude of the response. Among these are:

**Input-production costs**

Any price increase in fertilizers, fuels and seeds could limit grain production growth.

**Plowed land**

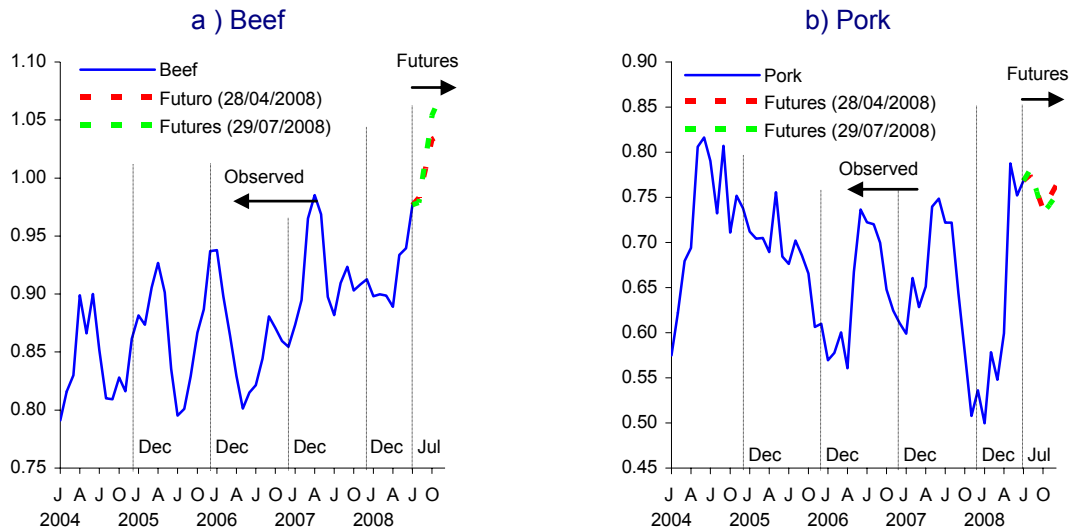
Large plowed areas exist in Kazakhstan, Ukraine, and Russia. Even though production in these countries has increased this year, the lack of infrastructure makes it difficult to incorporate larger plowed areas available.

**New seeds and biotechnology**

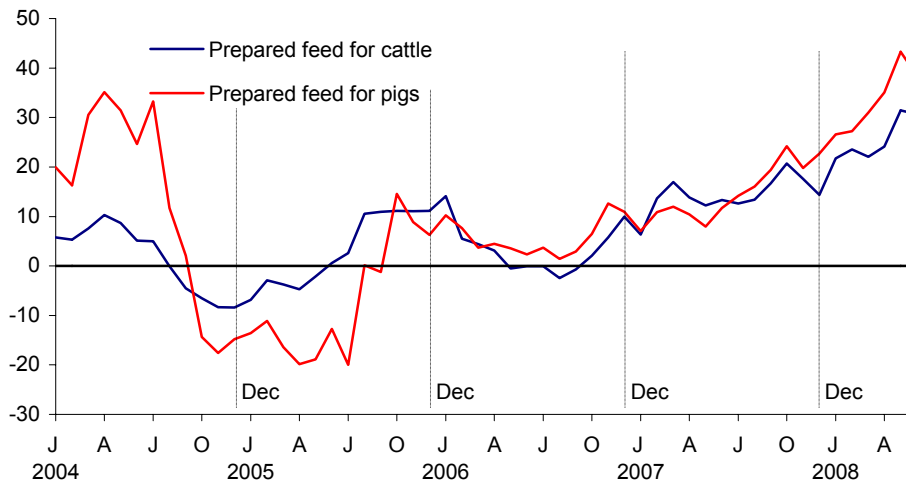
Biotechnology for agricultural production is mostly used in the U.S., Argentina, and Brazil. In contrast, in Mexico, its use is very limited. Nevertheless, the high prices of grains suggest that its use will increase worldwide in the next years.

During the second quarter of the year, international meat prices rose as compared to the three first months of 2008 (Graph 34). As in the case of milk, the high cost of prepared cattle feeds also affected production costs (Graph 35). Futures anticipate that beef prices will continue on an upward trend. In the case of pork prices, after registering relatively low prices due to an inventory increase during the previous quarter, prices have recovered due to a higher volume of exports, mainly to China and Hong Kong.<sup>24</sup>

**Graph 34**  
**Observed and Futures Prices of Meat <sup>1/</sup>**



**Graph 35**  
**Producer Price Index: Prepared Feed for Cattle and Pigs in the U.S.**  
**Annual percentage change**



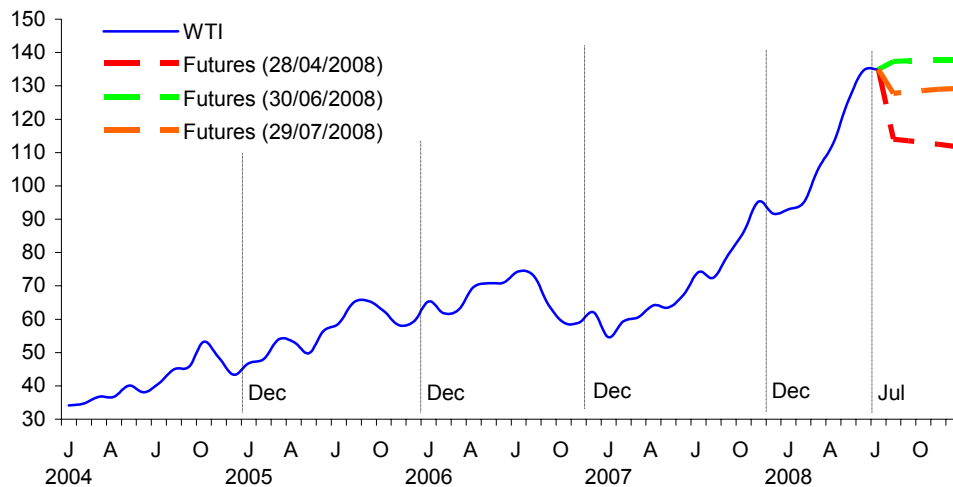
<sup>24</sup> According to USDA data, U.S. pork meat exports rose 36.2 percent from January to May 2008.

### 3.3.5. Energy Commodities

During the second quarter of 2008, oil spot prices continued to be subject to pressures. The average monthly price for the WTI increased 27.80 percent from March to June of the current year (Graph 36). This result was due mainly to the uncertainty regarding the supply capacity to cover the rapid growth of demand, particularly in emerging economies. Pressures on oil prices escalated due to both geopolitical risks and production breaks in several regions of Nigeria, Iran and the North Sea, among others. The continuous appeal of crude oil as an alternative investment instrument put more pressures on the referred prices during that period. However, as of the third week of July, oil prices decreased by 15.8 percent, when the price fell from 145.2 to 122.2 dollars per barrel from July 14 to July 29. This fall is associated to an apparent improvement in the perception about the world's oil supply and demand and to lesser concerns, at least for the time being, regarding risks of supply interruption due to geopolitical problems, among other factors (Box 3). At the end of July, oil futures prices were at levels below those registered in June.

The rise in oil prices during the second quarter affected the observed quotes for regular gasoline, LP gas, and natural gas, which increased as compared to the forecasted price in futures markets at the end of the first quarter (Graph 37). The gap between the domestic and foreign quotes for gasoline (California reference), LP gas, and diesel (California reference), continued widening and reached in June 70.7, 47.9 and 122.2 percent, respectively (Graph 38). As in the case of oil, international prices of these fuels have followed a downward trend since mid-July. Thus, the gap between domestic prices and their international references narrowed, reaching, in July 29, 57.9, 31.7, and 108.9 percent for gasoline, LP gas, and diesel, respectively.

**Graph 36**  
**Oil Price: Spot and Futures**  
 USD per barrel

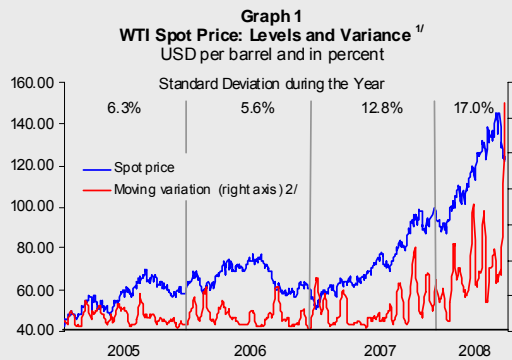


Source: Bloomberg.

### Box 3 Developments and Outlook for Oil, Gasoline and Natural Gas Markets

#### Recent Developments in the Oil Market

Crude oil international reference prices fell sharply during the second week of July. In the case of the West Texas Intermediate, after having moved upwards during the second quarter and during the first days of the third quarter of 2008, its price was USD122.2 per barrel on July 29, figure above the USD145 per barrel at the beginning of July. Oil prices have been subject to high volatility recently (Graph 1).

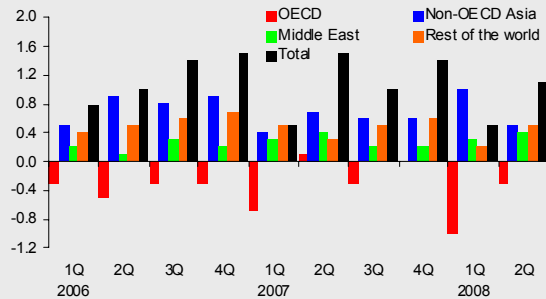


The recent fall in crude oil prices is mainly explained by the apparent improvement in the perception about the balance between world supply and demand for crude oil. The restrictive conditions in the world oil market have eased as the supply of crude oil has grown moderately, due to greater OPEC production -which has compensated for the fall in non-OPEC member countries production- and a reduction in the growth of world's demand for crude oil. This situation has made markets perceive that the higher supply of crude oil could be insufficient to cover, at least in the short term, the expected growth of demand, the increase in idle capacity, the possibility of facing disruptions in the supply of crude oil, and to allow for a faster recovery of inventories.

The higher demand for crude oil declined during the first half of 2008, due to a strong contraction of demand from OECD member countries, especially the U.S., in response to both the slower rate of growth and the effects of higher oil prices. In contrast, demand from non-OECD member countries, particularly China, India, and the Middle East, continued to grow steadily, due to the strong dynamism of these economies and the slow adjustment in the subsidy for oil product prices in some of them (Graph 2).<sup>1</sup>

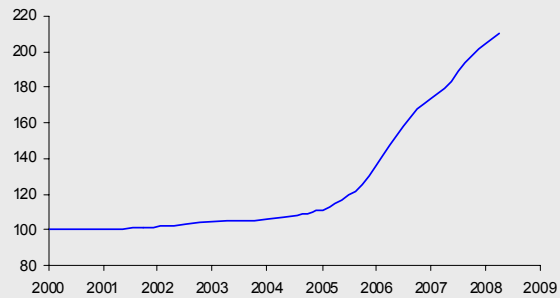
World production of crude oil recovered slightly during the first half of 2008, due to an increase in OPEC production. Production in non-OPEC member countries contracted during the period. These developments are attributed to the fall in oil production in countries like Mexico, the U.K. and Norway, which more than compensated for oil production growth in others like Brazil and the former Soviet Union.

**Graph 2**  
Annual Growth of World Demand  
Million daily barrels



The limited response of world's supply of crude oil despite the higher prices partly responds to the higher costs of oil exploration and development, greater technological needs, and the higher uncertainty regarding investments (Graph 3). Despite the higher levels of investment needed to maintain oil production levels, according to a recent IMF report, capital investments have grown slightly in real terms.<sup>2</sup>

**Graph 3**  
Upstream Capital Costs Index  
2000 = 100



The recent fall in oil prices has been also influenced by lesser concerns, for the time being, regarding interruptions in the supply of oil originated by geopolitical turmoil in countries like Iraq, Iran, Nigeria and Venezuela, and adverse weather conditions. Other factors that might have contributed to the decline in oil prices are the appreciation of the US dollar against the euro and the yen, and investor's lesser interest in commodities as an alternative asset. The appreciation of the US dollar has softened the impact of the decline in oil prices and therefore limited its expansionary effect on demand. On the other hand, investors have destined lesser resources to futures markets due to the decline in crude oil prices, the appreciation of the US dollar, the likelihood of an interest rate increase in some advanced economies, and lesser adverse problems in international credit markets.

Although investors' participation in futures contracts for crude oil (traders and indexed bonds) has increased significantly over the last years, no evidence seems to confirm that this situation explains the volatility in crude oil prices. Recent research on the role of financial participants in the oil market shows that, in general, these tend to follow rather than to determine price

<sup>1</sup> These economies have a high income elasticity of demand due to the greater use of energy.

<sup>2</sup> IMF, "The Role of Policies to Foster Oil Sector Investment in a Global Context", Remarks by John Lipsky, 11<sup>th</sup> Energy Forum/<sup>3rd</sup> International Energy Business Forum, Rome, Italy, April 20-22, 2008.

trends.<sup>3</sup> On the other hand, non-traders' net long positions in oil futures have not followed a clear trend since August of last year.

As explained further in this Box, despite their recent decline, oil prices are expected to remain high. Non-OECD member countries have adopted various measures to face the challenges originated by this situation. In general terms, Asian countries have decided to raise their domestic prices of oil products, in order to reduce the growing fiscal burden of the subsidy on them. In contrast, most Latin American countries have increased their subsidies or reduced some of their duties (Table 1).

#### Outlook

The main analysts forecast a gradual reduction in the restrictive conditions between world supply and demand for crude oil for the next years. Oil prices are expected to fall slightly as compared to current levels, although they are anticipated to remain high in the medium and long run. On the other hand, high prices along the futures curve and the dispersion of forecasts reflect the uncertainty that prevails regarding the future conditions of supply and demand fundamentals.

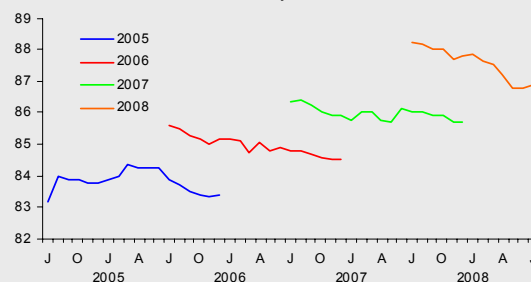
The higher prices throughout the futures curve and the dispersion in forecasts reflect the uncertainty that prevails on the main futures conditions of oil supply and demand.

One of the main sources of uncertainty in world's supply and demand for crude oil comes from the significant downward revisions in non-OPEC production forecasts, as a result of delays in expansion projects and greater-than-anticipated reductions in mature oil field production. The International

Energy Agency (IEA) revised downwards its forecast for production growth for these countries, from 1.1 million daily barrels in December 2007 to only 0.4 million daily barrels in July 2008.

The IEA has also revised considerably downwards its expectations for growth for world's demand for oil this year, from 2.1 million daily barrels in December 2007 to 0.9 million daily barrels in July 2008, in response to the lower growth expected for the world economy, the effects of the higher prices, and a reduction in the subsidies on fuels prices in several Asian countries (Graph 4).

**Graph 4**  
Forecasts for World Demand for Oil  
Million daily barrels



Source: International Energy Agency (IEA).

**Table 1**  
Energy Policy Actions in Response to High Prices of Oil

Country	Demand in 2007		Action Implemented	Retail Gasoline Price (% of Wholesale Price in the U.S.) <sup>1/</sup>
	Thousand Daily Barrels	Total Share in World		
Argentina	492	0.6%	No changes to government-regulated prices have been announced.	72%
Bangladesh	102	0.1%	A 37-80% increase in fuel prices has been proposed by the government.	N.A.
Brazil	2,192	2.6%	The government reduced the sales tax on gasoline.	80 - 90%
Chile	342	0.4%	A 8% subsidy on gasoline prices was announced on June 2008. The stabilization fund to absorb fuel price fluctuations was raised by 1 billion US dollars, and a 80% reduction on the diesel tax from July 1, 2008 to July 31, 2009 was announced.	110%
China	7,855	9.3%	A 16% and 18% increase in gasoline and diesel prices, respectively, was announced in June.	86%
Colombia	228	0.3%	The end of subsidies was postponed for another year (up to June 2010 in the case of gasoline and up to December 2011 in the case of diesel).	146%
Egypt	651	0.8%	A 50% and 46% raise in gasoline and diesel prices, respectively, was announced in May.	53%
India	2,748	3.3%	A 10% increase in gasoline and diesel prices was announced in June.	154%
Indonesia	1,157	1.4%	The prices of gasoline and diesel have increased by 33% and 28%, respectively, since May.	N.A.
Jordan	102	0.1%	Gasoline prices rose by 6% in May.	N.A.
Malaysia	514	0.6%	An increase of 40% and 67% for gasoline and diesel prices, respectively, was set in June.	94%
Pakistan	362	0.5%	Four price increases during the year have accounted for the annual increase in gasoline and diesel prices (15%).	N.A.
Russia	2,699	3.2%	Gasoline prices have increased by 11% in annual terms during the first quarter of 2008.	124%
Sina	276	0.3%	Gasoline prices rose by 11% in March.	N.A.
Sri Lanka	89	0.0%	Retail gasoline and diesel prices increased by 31% and 38%, respectively, in March.	N.A.
Thailand	911	1.1%	Several refineries have been requested to fully absorb the impact of a price increase announced in May. The only sectors that will benefit from the lower prices of diesel are freight carriers, fishermen and farmers.	125%
Taiwan	1,123	1.3%	Gasoline and diesel prices rose by 12 and 17 percent, respectively, in May. A mechanism of floating prices was set since July. The government will subsidize freight carriers, fishermen, and farmers.	128%
Venezuela	596	0.7%	No changes to government-regulated prices have been announced.	4%

<sup>1/</sup> Retail prices in the U.S. accounted for 123% of the wholesale price of May 2008. The international reference price used as a wholesale price in the U.S. is the Gulf Coast grade 87.

N.A.: Not available.

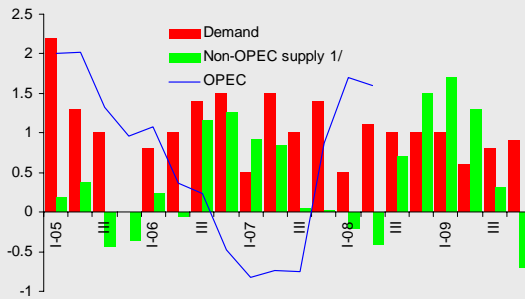
Sources: International Energy Agency, Bloomberg, British Petroleum, Credit Suisse, and Goldman Sachs Commodities Research.

<sup>3</sup> Commodity Futures Trading Commission (CFTC), "Written Testimony of Jeffrey Harris, Chief Economist Before the Senate Committee on Homeland Security and Governmental Affairs, US Senate, May 20, 2008.



Under this context, the IEA forecasts an improvement in the balance between supply and demand for oil during the second half of 2008 and the first half of 2009. Nevertheless, the balance deteriorates again for the second half of 2009, with a downward revision in non-OPEC member countries production and a slight recovery of world demand for oil (Graph 5).

**Graph 5**  
Growth of World Supply and Demand for Oil  
Million daily barrels



1/ Excludes Angola and Ecuador.  
Source: International Energy Agency (IEA).

In the medium term, the IEA forecasts the prevalence of restrictive conditions between world supply and demand for oil, with continuous solid growth of demand and practically stagnant production capacity of non-OPEC member countries, despite the expected significant growth in these countries' investments. The forecasts for the balance between supply and demand are very sensitive to assumptions related to world economy growth, the response of demand to the higher prices of crude oil, the materialization of new investment projects, and the declining rates in mature fields' production.

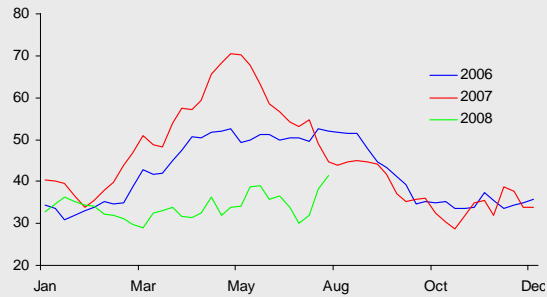
**Recent Developments and Outlook for the Gasoline Market**

The average retail price for regular gasoline in the U.S. reached record highs of USD 4.11 per gallon during the week that ended on July 7, 2008, reaching slightly one US dollar above that recorded during the same week of 2007, and then moving to 3.96 US dollars per gallon during the week that ended on July 28. The spread between gasoline and crude oil prices throughout 2008 has been below that observed during the two previous years (Graph 6).<sup>1</sup> The latter has been due to the following factors: 1) a fall in the demand for gasoline due to the higher oil prices and the slowdown of the U.S. economy; 2) the growing use of ethanol in gasoline mixtures, which has expanded the supply of fuels; 3) the re-establishing of domestic refining capacity, which was affected in 2007; and, 4) the increase in gasoline imports, due to the weak demand for gasoline in Europe, which is still in the process of changing car fuel from gasoline to diesel.

Diesel prices have increased due to the trend of higher demand growth in relation to world refineries' capacity to process low-sulfur diesel. Diesel prices have increased recently, reaching USD 4.76 per gallon in the U.S. the week ending on July 14, 2008 (USD 2.89 per gallon the previous year), and USD 4.60 per gallon the week ending on July 28.

The U.S. Department of Energy forecasts regular gasoline prices to average USD 3.84 and USD 4.06 per gallon in 2008 and 2009, respectively, as compared with USD 2.81 per gallon in 2007,<sup>2</sup> despite the assumption of a significant reduction in refining margins, due to a greater weakness of demand for gasoline and to higher ethanol production.

**Graph 6**  
Spread between Gasoline and Crude Oil Prices <sup>1/</sup>  
USD per barrel



1/ Between the spot price of retail regular gasoline sold in the U.S. and the WTI spot price.  
Source: U.S. Department of Energy.

Retail diesel prices are expected to average USD 4.35 and USD 4.48 per gallon in 2008 and 2009, respectively, as compared with the USD 2.88 per gallon observed in 2007. These forecasts are based on the strong demand for diesel worldwide, which is contributing to widen the margins between diesel prices and crude oil costs.

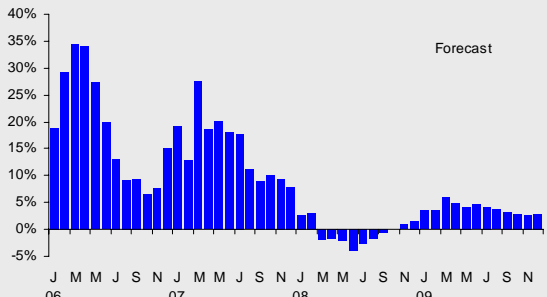
**Recent Developments and Outlook for the Natural Gas Market**

The prices of other energy goods, such as natural gas, have also been subject to the same downward pressures crude oil prices have faced recently. The prices of natural gas in the U.S. have decreased in the last two weeks, after having grown significantly for most of 2008, and after having remained practically in a slump during 2007. After having reached a maximum of USD 13.31 per thousand cubic feet on July 2, the Henry Hub gasoline price fell to USD 9.89 per thousand cubic feet on July 23, 2008.

The lesser restrictive conditions in the natural gas market respond to a series of factors, including the significant production growth and the lower prices of crude oil (which have softened the substitution effect).

Natural gas prices are expected to remain high in the short term, despite expectations of an improvement in the balance between supply and demand. The latter, due to the slow recovery of inventories in 2008 and, to a lesser extent, in 2009 (Graph 7), lower imports of LP gas due to a strong demand in Asia, Europe, and some Latin American countries; the uncertainty related with the next hurricane season and with the demand for natural gas in the electricity-generation sector, and expectations that crude oil prices will remain high.

**Graph 7**  
Usable Natural Gas Stored in the U.S.  
Percentage difference in relation to its 5-year average

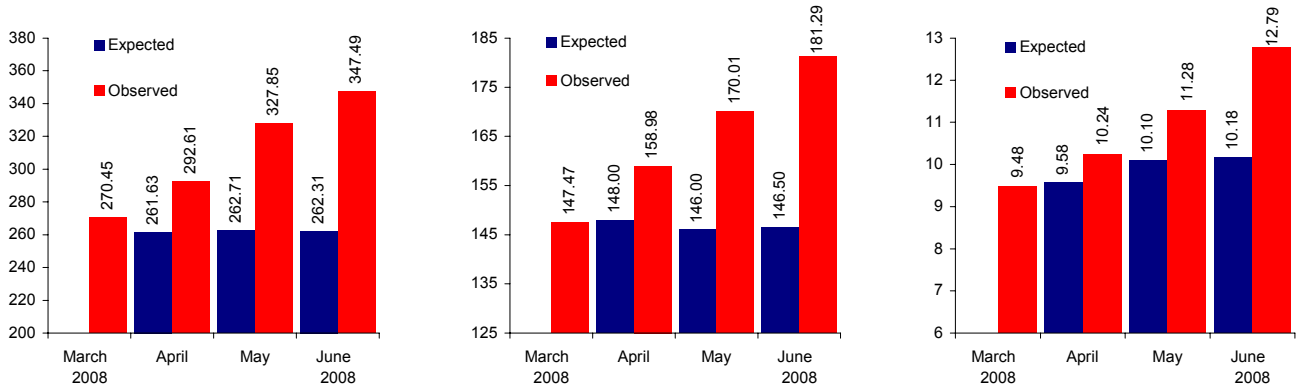


Source: U.S. Department of Energy.

<sup>1</sup> The cost of crude oil is the main component of retail gasoline prices, accounting for nearly 70 percent of the final price during the first quarter of 2008. Other components are taxes, the refining margin, and marketing and distribution costs.  
<sup>2</sup> Forecasts for gasoline, diesel and natural gas prices included in this Box were released prior to the decline in oil prices of the last weeks.

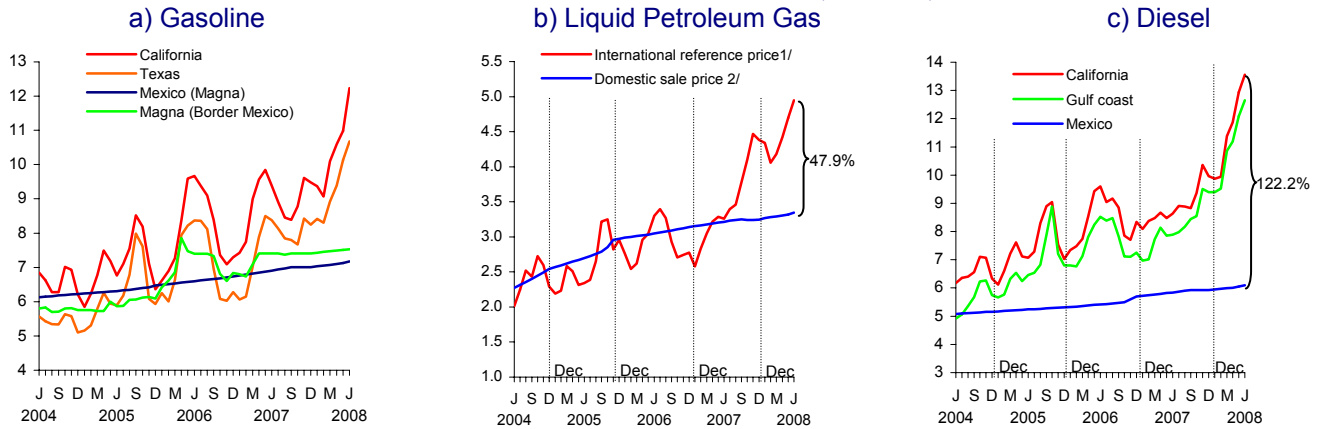
The U.S. Department of Energy expects the Henry Hub spot price to average around USD 11.9 and USD 11.6 per thousand cubic feet in 2008 and 2009, respectively, as compared with the average price of USD 7.17 per thousand cubic feet in 2007.

**Graph 37**  
**International Energy Prices: Observed and Expected<sup>1/</sup>**  
 a) Regular Gasoline<sup>2/</sup>      b) Liquid Gas<sup>3/</sup>      c) Natural Gas<sup>4/</sup>



1/ Information corresponding to futures of March 31, 2008.  
 2/ Texas, US cents per gallon.  
 3/ Mont Belvieu, Tex. US cents per gallon.  
 4/ TETCO, Tex. USD per MMBtu.  
 Source: Bloomberg, New York Mercantile Exchange (NYMEX), and Energy Information Administration (EIA).

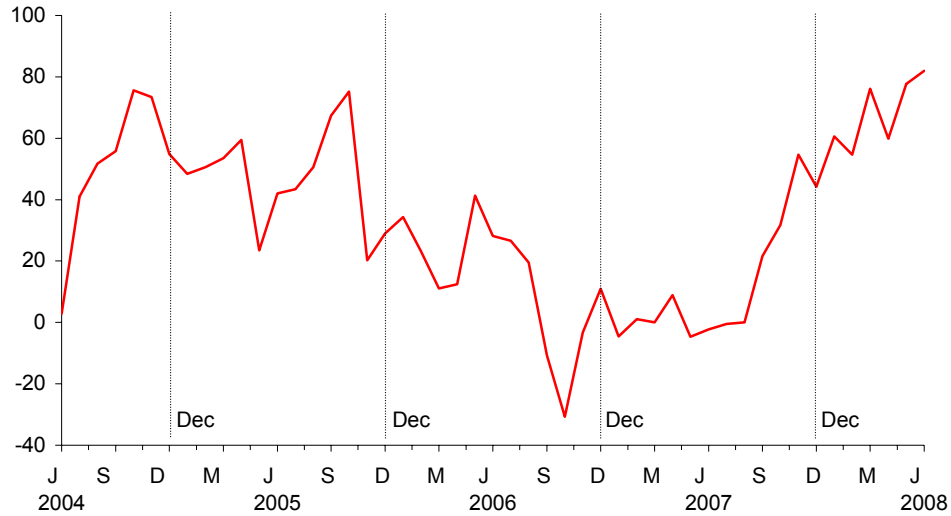
**Graph 38**  
**Domestic and International Prices of Gasoline, LP Gas, and Diesel**



1/ Mont Belvieu.  
 2/ First-hand average sale price.  
 Source: Pemex and Energy Information Administration (EIA).

Jet-fuel prices continued to grow at high rates, from an annual average rate of 63.90 percent during the first quarter of 2008 to 73.18 percent in the second (Graph 39). These results affected the operation of airlines, which continued raising their fares. In some low-cost airlines, for which the impact of the fuel price is far more significant, their flight schedules were scaled down.

**Graph 39**  
**Jet Fuel Producer Price Index**  
 Annual percentage change

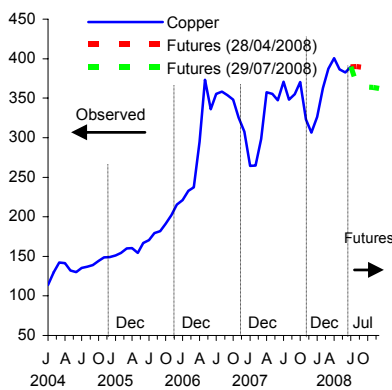


3.3.6. Metal Commodities

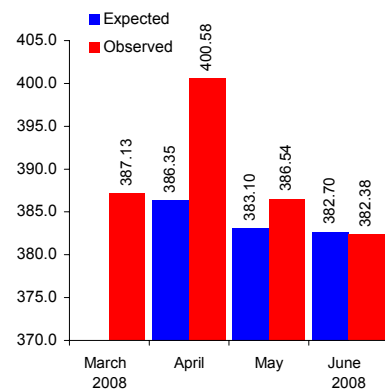
During the second quarter of 2008, the international price of copper decreased. From March to June of that year its price decreased by 1.23 percent. According to the March 31, 2008 curve, the international price of copper during June was 0.08 percent lower than that negotiated in futures markets for that month (Graph 40). Steel prices continued to grow due to the price increases in both raw materials (scrap metal and mineral ore) and fuels used for its production.

**Graph 40**  
**International Prices of Copper and Steel**  
 Observed and Expected Prices<sup>1/2/</sup>

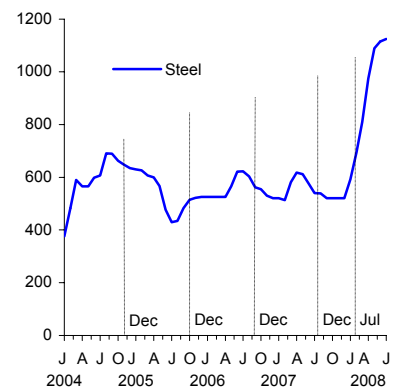
a) Copper<sup>1/</sup>



b) Copper  
 Observed and Expected Prices<sup>1/2/</sup>



c) Steel<sup>3/</sup>



1/ US cents per pound.  
 Source: Metal Bulletin, Commodity Exchange Inc. (CMX).

1/ US cents per pound.  
 2/ Information corresponding to futures of March 31, 2008.  
 Source: Metal Bulletin, Commodity Exchange Inc. (CMX).

3/ USD per short ton.  
 Source: Metal Bulletin.

### 3.4. Monetary and Credit Aggregates

#### 3.4.1. Monetary Base, Net Domestic Credit, and International Assets

During the second quarter of 2008, the monetary base continued to grow at a slow rate. During that period, it grew in annual nominal terms 9.9 percent as compared to 11.6 percent during the first quarter of the year (Graph 41a).<sup>25</sup> As pointed out in previous Inflation Reports, when an economy is passing from an environment of high inflation -which erodes money's purchasing power and discourages its demand- to low and stable inflation, the demand for money usually increases as economic agents are gradually able to hold more bills and coins. This phenomenon is reflected in a gradual increase in the monetary base as a percentage of GDP and is called remonetization. The recent developments in the monetary base reveal that the Mexican economy continues to undergo a moderate remonetization process (Graph 41b).

During the January-June 2008, net international assets increased by 6,842 million dollars, reaching 94,077 million dollars. During this period the monetary base decreased 47,129 million pesos, which, in turn, resulted in a reduction in Banco de México's net domestic credit of 119,529 million pesos for the period (Table 7).

**Table 7**  
**Monetary Base, International Assets, and Net Domestic Credit**  
Millions

	Stocks		Annual % change	Flows in 2008		
	At Dec. 31 2007	At June 30 2008		At June 30 2008	Quarter	
				I	II	
(A) Monetary base (Pesos)	494,743	447,614	9.5	-47,032	-97	-47,129
(B) Net international assets (Pesos) <sup>1/ 2/</sup>	952,227	969,639	15.3	42,576	29,824	72,400
Net international assets (USD) <sup>2/</sup>	87,235	94,077	20.7	3,931	2,911	6,842
(C) Net domestic credit (Pesos) [(A)-(B)] <sup>1/</sup>	-457,484	-522,025	20.7	-89,608	-29,921	-119,529
(D) Gross reserves (USD)	87,211	94,045	20.7	3,923	2,912	6,834
Pemex				4,962	5,830	10,792
Federal Government				-2,732	-650	-3,382
Sale of USD to commercial banks <sup>3/</sup>				-936	-1,760	-2,696
Other <sup>4/</sup>				2,628	-508	2,120
(E) Liabilities with less than six months to maturity (USD)	9,220	8,374	4.8	-2,128	1,282	-846
(F) International reserves (USD) [(D)-(E)] <sup>5/</sup>	77,991	85,671	22.5	6,051	1,629	7,680

1/ Net international assets' cash flows in pesos are estimated based on the exchange rate applied to each transaction.

2/ Net international assets are defined as gross reserves plus credit agreements with foreign central banks with more than six months to maturity, minus total liabilities payable to the IMF and credit agreements with foreign central banks with less than six months to maturity.

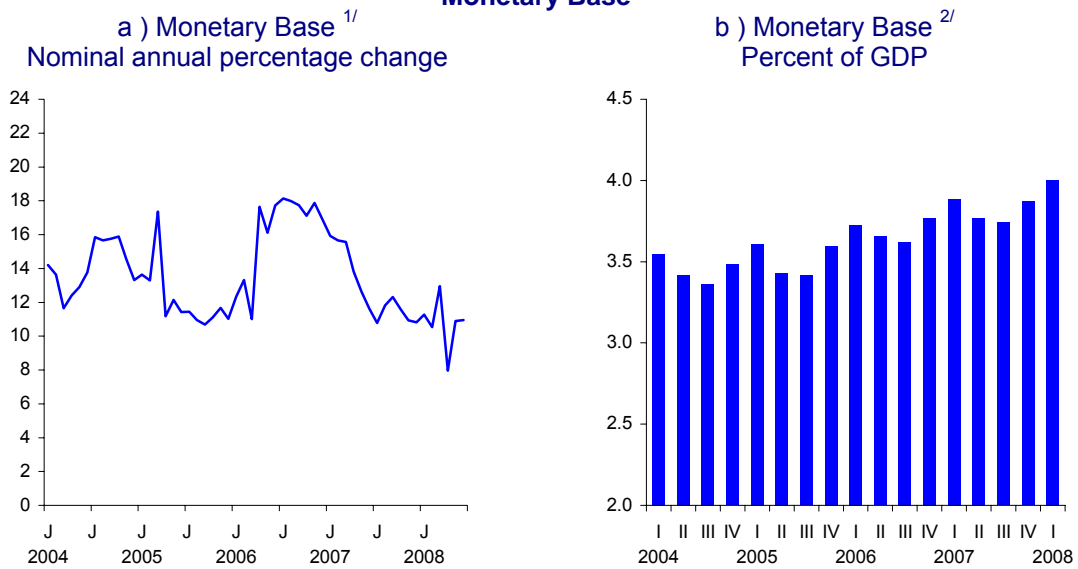
3/ Daily sales of US dollars according to the mechanism to reduce the pace of international reserve accumulation (see Foreign Exchange Commission's Press Release of March 20, 2003).

4/ Includes yields on net international assets and other transactions.

5/ As defined by the Law governing Banco de México.

<sup>25</sup> Variations based on quarterly average of daily balances.

**Graph 41**  
**Monetary Base**



1/ Monthly average of daily stocks.

2/ Quarterly average of daily stocks as a percentage of nominal GDP (base 2003).

### 3.4.2. Monetary Aggregates and Financing

By the end of the first quarter of 2008, the annual flow of the economy's sources of financing continued to follow the upward trajectory observed since the beginning of 2007, reaching 5.7 percent of GDP, figure higher than that registered during the same period of the previous year (3.7 percent of GDP). This figure results from an increase in both foreign and domestic sources of financing (Table 8). During the first quarter of 2008, the annual flow of the M4 monetary aggregate accounted for 5.9 percent of GDP (4.6 percent at the first quarter of 2007). This higher availability of resources resulted mainly from the higher dynamism of savings in domestic financial instruments by non-residents, which rose from 0.2 percent of GDP during the first quarter of 2007 to 1.3 percent during the first quarter of this year. The annual flow of foreign financing up to the first quarter of 2008 continued to be negative (-0.2 percent of GDP), which reflects a reduction in net foreign debt.

**Table 8**  
**Total Financial Resources (Uses and Sources)**  
**Percentage of GDP**

	Annual flows					Stock	
	2004-I	2005-I	2006-I	2007-I	2008-I	2008-I	% Structure
<b>Total sources</b>	<b>5.6</b>	<b>5.7</b>	<b>6.9</b>	<b>3.7</b>	<b>5.7</b>	<b>66.0</b>	<b>100.0</b>
M4	5.9	4.9	7.3	4.6	5.9	51.3	77.7
Held by residents	5.4	4.6	6.8	4.4	4.6	48.3	73.1
Held by non-residents	0.5	0.4	0.5	0.2	1.3	3.0	4.6
Foreign financing	-0.4	0.7	-0.4	-0.9	-0.2	14.7	22.3
<b>Total uses</b>	<b>5.6</b>	<b>5.7</b>	<b>6.9</b>	<b>3.7</b>	<b>5.7</b>	<b>66.0</b>	<b>100.0</b>
Public sector <sup>1/</sup>	1.9	1.9	1.2	0.2	1.2	30.3	45.9
States and municipalities	0.2	0.2	0.1	0.1	0.1	1.3	2.0
Private sector	1.1	2.2	2.4	4.1	4.2	29.1	44.1
Households	1.3	1.8	2.0	1.7	1.7	13.0	19.7
Consumption	0.5	0.9	1.1	1.0	0.8	4.7	7.2
Housing <sup>2/</sup>	0.7	0.9	0.9	0.7	0.9	8.3	12.6
Firms	-0.1	0.3	0.4	2.4	2.5	16.1	24.3
Credit granted by financial intermediaries <sup>3/</sup>	-0.3	0.3	0.3	1.6	1.4	7.7	11.6
Issue of debt instruments	0.6	0.0	0.1	0.0	0.3	1.7	2.6
Foreign financing	-0.4	0.1	0.1	0.8	0.8	6.7	10.1
International reserves <sup>4/</sup>	1.0	0.3	0.7	0.2	1.4	7.8	11.9
Other <sup>5/</sup>	1.4	1.2	2.6	-0.8	-1.2	-2.6	-3.9

Note: Figures may not add up due to rounding. Annual revalued flows and stocks are expressed as a percentage of annual average nominal GDP (base 2003) of the last four quarters.

1/ Public Sector Borrowing Requirements (*Requerimientos Financieros del Sector Público*, RFSP). The stock as a percentage of GDP refers to Public Sector Borrowing Requirements' historical stock (SHRFSP, for its acronym in Spanish) as reported by the Ministry of Finance (SHCP).

2/ Total portfolio of financial intermediaries and of the National Employees' Housing Fund (Instituto del Fondo Nacional de la Vivienda para los Trabajadores, Infonavit). Includes debt-restructuring programs.

3/ Total portfolio of financial intermediaries including debt-restructuring programs.

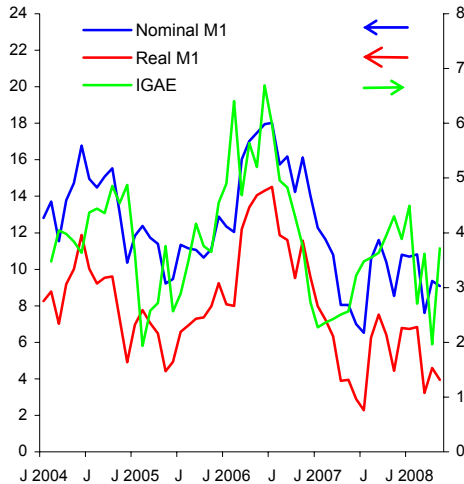
4/ As defined by the Law governing Banco de México.

5/ A positive flow (negative) of this concept refers to a use (source) of financial resources. Thus, a negative flow of this item means that the sources of financial resources not considered in M4 and foreign financing (such as capital accounts, results and reserves, and other liabilities of Banco de México, commercial and development banks, of financial intermediaries and Infonavit) more than compensate the uses not considered in the items of financing to the public sector, financing to states and municipalities, financing to the non-financial private sector, and financing to accumulate international reserves (such as non-sectorized assets and other assets from Banco de México, commercial and development banks, financial intermediaries and Infonavit). In the first quarter of 2008, this item of other concepts increased to -1.2 percent of GDP, constituting a source of resources resulting from: -0.7 percent of GDP from an increase in equities and commercial banks' reserves, -0.4 points of GDP from Banco de México's accounts, and -0.1 percent of GDP from other concepts.

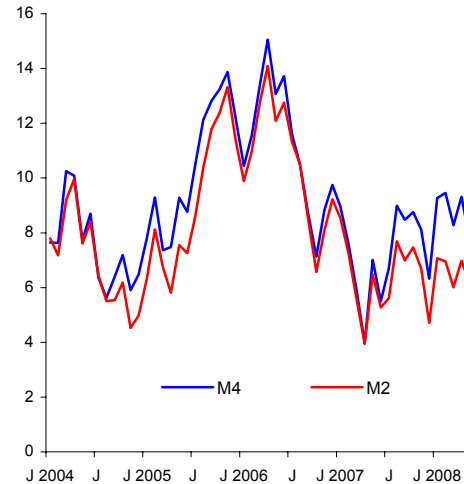
In an environment where economic activity has slowed, the narrow monetary aggregates kept growing at slightly lower rates during the first months of 2008. During the April-May 2008 period, the monetary aggregate M1 grew, in average nominal annual terms, 9.2 percent; as compared with the last quarter of 2007 and the first of 2008 when it grew in average annual terms, 9.9 percent and 9.7 percent, respectively (Graph 42a). The broad monetary aggregates grew at rates similar to those observed since the end of 2007. During the April-May period of 2008, the monetary aggregate M2, which considers residents' savings in domestic financial instruments, grew, on average, 6.6 percent in real annual terms (6.3 percent and 6.7 percent on average during the fourth quarter of 2007 and during the first of 2008, respectively) (Graph 42b). The broadest monetary aggregate (M4), which includes savings from residents and non-residents in domestic financial instruments, grew at a real annual average rate of 8.5 percent during the April-May period, as compared with 7.7 percent during the fourth quarter of 2007 and 9.0 percent during the first quarter of 2008 (Graph 42b).

**Graph 42**  
**Monetary Aggregates**

a ) Monetary Aggregate M1 and IGAE  
Nominal and real annual variation and  
Real annual percentage change<sup>1/</sup>



b ) Monetary Aggregates M2 and M4  
Real annual percentage change



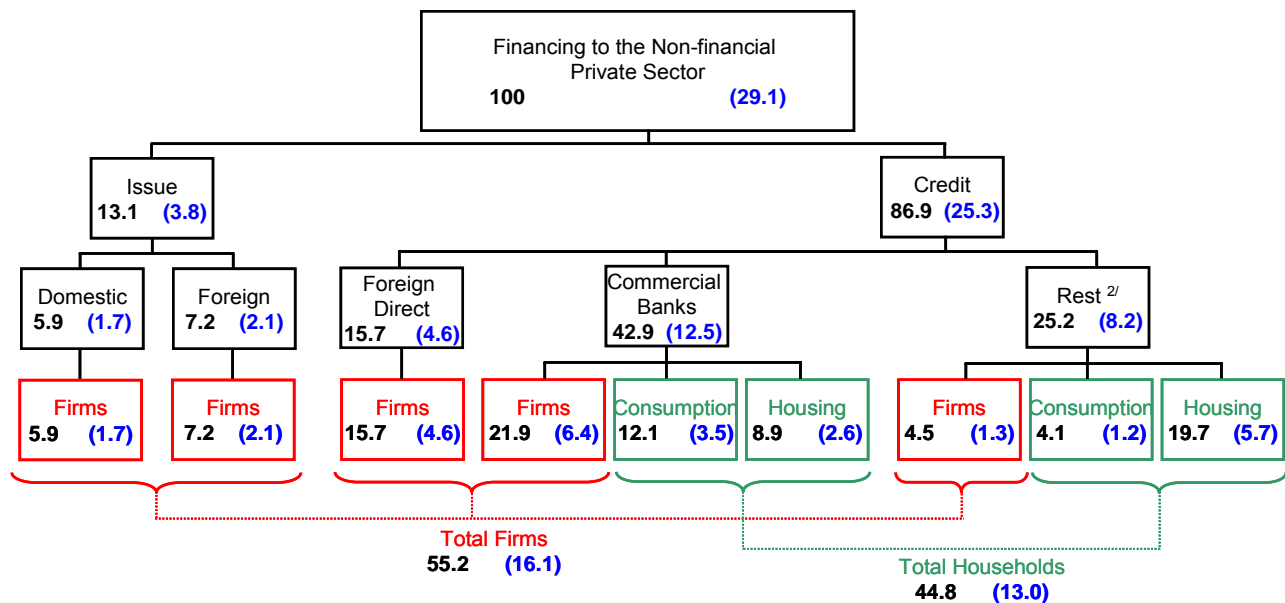
1/ In the case of IGAE, the 3-month moving average of the annual variation in real terms is reported.

As for financing (use of financial resources), as stated in Banco de México's Financial System Report for 2007, the Mexican financial institutions are healthy despite the volatility in international financial markets that started to become evident by mid-2007 and the significant losses of some U.S. financial institutions due to the deterioration of sub-prime mortgage credits in the U.S. economy.

In March 2008, the annual flow of financial resources used by the public sector (including states and municipalities) accounted for 1.3 percentage points of GDP (0.3 percent in the first quarter of 2007). The annual flow of resources to finance the private sector accounted for 4.2 percent of GDP, figure similar to the 4.1 percent of the first quarter of 2007 (Table 8). By the end of the first quarter of the year, the annual flow of resources to finance households accounted for 1.7 percent of GDP while that for firms, 2.5 percent of GDP.<sup>26</sup>

<sup>26</sup> Annual financing flows to households and firms for the first quarter of 2007 are affected by an accounting reclassification of bridge loans for housing construction from the item credit for housing (homes) to credit for enterprises. Although this reclassification does not affect the total financing flows to the private sector, it does modify their structure and the interpretation of how these flows are destined to these sectors. After eliminating this reclassification effect, annual flows of financing to households at the first quarter of 2008 (1.7 percent of GDP), decreased slightly as compared to the first quarter of 2007 (2.1 percent of GDP). After controlling for the effect of the accounting reclassification, annual flows of financing received by enterprises during the first quarter of 2008 (2.5 percent of GDP) turned out to be slightly higher than the corresponding flows for the first quarter of 2007 (1.9 percent of GDP).

**Table 9**  
**Financing to the Non-financial Private Sector: Stocks at March 2008**  
 Percentage structure (and percent of GDP)<sup>1/</sup>



Note: Figures may not add up due to rounding.

1/ Figures in black are the share of each item in the total stock of financing to the non-financial private sector March 2008. Figures in parenthesis and blue are the stock at March 2008 expressed as a percentage of average nominal GDP (base 2003) for the last four quarters.

2/ Includes credit granted by development banks, financial leasing companies, financial factoring companies, credit unions, Sofoles, Sofomes E.R., SAPs, and Infonavit.

During the first quarter of 2008, total financing to the non-financial private sector accounted for 29.1 percent of GDP (Table 9), figure above the 27.4 percent observed one year before. At the end of the first quarter 2008, total financing to the private sector grew at a real annual rate of 10.5 percent, similar to that of the last quarter of 2007 (10.6 percent).

During the first quarter of 2008, private non-financial firms' debt through securities issues accounted for 3.8 percent of GDP and 13.1 percent of total financing to non-financial private sector firms (Table 9). Of this balance, securities issues in the domestic market accounted for 1.7 percent of GDP while those in international markets, 2.1 percent of GDP.

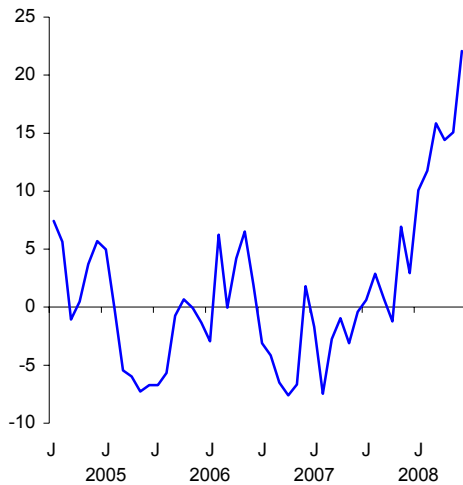
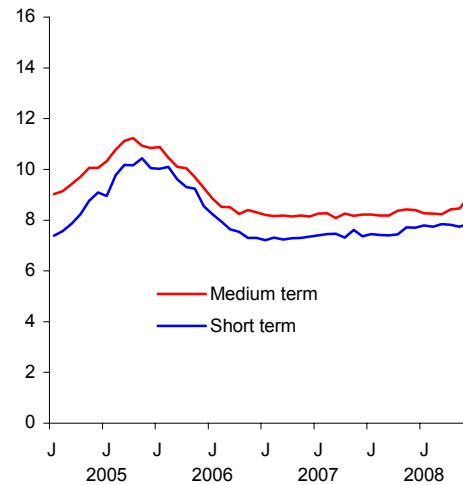
At the end of the first quarter of 2008, the debt in dollars issued in international markets by non-financial private sector firms residing in the country grew at an annual rate of 1.6 percent in real terms (9.8 percent in dollars), as compared to 13.6 percent (16.7 percent in dollars) during the last quarter of 2007.

Debt issued by non-financial private sector firms in the domestic market has shown greater dynamism. During the April-June period it grew at a real annual average rate of 17.2 percent, as compared to 2.9 and 12.5 percent during the fourth quarter of 2007 and the first quarter of 2008, respectively (Graph 43a). This type of financing comprises, mainly, private securities placed for more-than-one-year terms (89.4 percent of the total in June 2008).



Regarding the cost of domestic financing through securities issues (debt) from non-financial private sector firms during the April-June period, the average interest rate of private mid- and long-term securities placed in pesos was 8.6 percent while during the first quarter of 2008, 8.3 percent. For short-term securities, the average interest rate was 7.8 percent, similar to that observed during the first quarter of 2008 (Graph 43b).<sup>27</sup>

**Graph 43**
**Securities of Non-financial Firms and Interest Rates**

 a ) Securities of Non-financial Firms  
 Real annual percentage change

 b ) Weighted Average of Interest Rates on Non-financial Firms' Securities  
 Percent


As pointed out in previous Inflation Reports, credit from commercial banks is the main source of financing for the private sector. In March 2008, it represented 42.9 percent of the total financing received by this sector, accounting for 12.5 percent of GDP (Table 9). During the April-May 2008 period, commercial bank lending to the private sector continued to grow at lower rates. During the same period, direct performing credit from commercial banks to the non-financial private sector grew at a real annual average rate of 20.7 percent as compared to 25.2 percent during the first quarter of 2008.<sup>28</sup>

The annual rate of growth of commercial banks' direct performing credit to households continued to slow down, recording 13.9 percent in real terms during the April-May 2008 period, as compared to 20.2 percent, on average, during the first quarter of the year. As for commercial banks' direct performing credit for consumption, it grew at a real annual average rate of 11.6 percent during the April-May period (Graph 44a).<sup>29</sup> Direct performing credit to housing grew at a real annual rate of 18.2 percent during the same period (Graph 45a).

<sup>27</sup> Indicators of financing cost from the issue of securities in the domestic market refer to the average interest rate weighted by the stock of securities in the market. For short-term interest rates, 28-day placement rates were used. For mid- and long-term rates, the yield to maturity was used.

<sup>28</sup> From March 2008, these figures include consumer credit granted by non-bank banks (Sofomes E.R.), which are subsidiaries of commercial banks.

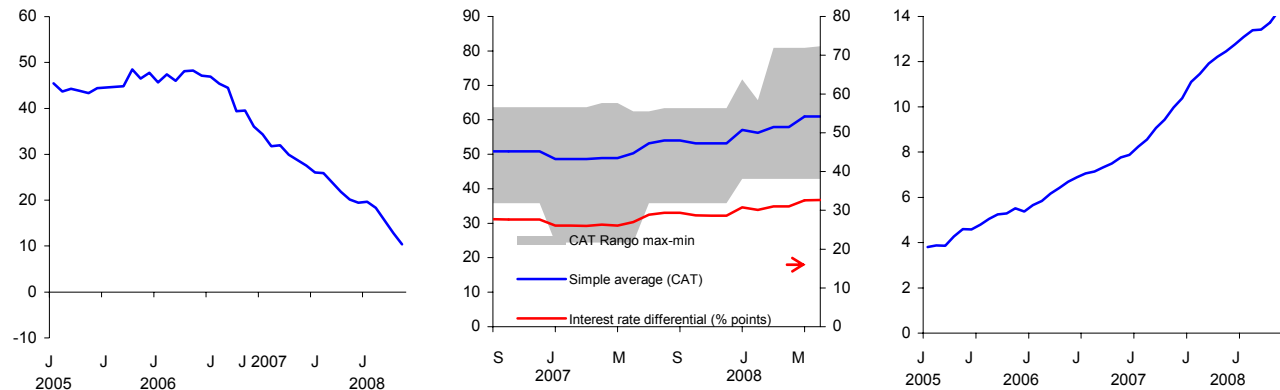
<sup>29</sup> From March 2008, these figures include consumer credit granted by non-bank banks (Sofomes E.R.), which are subsidiaries of commercial banks.

### Graph 44 Commercial Banks' Performing Consumer Credit, Annual Percentage Rate of Charge to Credit Cards, and Adjusted Delinquency Rate

a) Consumer Credit <sup>1/</sup>  
Real annual percentage change

b) Credit Cards Annual Percentage  
Rate of Charge (CAT) and  
Differential between Credit Card  
Interest Rates and Average Cost  
of Bank Deposits <sup>2/3/</sup>  
Annual percent

c) Adjusted Delinquency Rate for  
Consumer Credit <sup>4/</sup>  
Percent



1/ Includes credit portfolio from non-bank banks (Sofomes E.R.), which are subsidiaries of commercial banks.

2/ Information referring to the annual percentage rate of charge (*Costo Anual Total*, CAT) of credit cards used to calculate the simple average corresponds to the cost of a group of credit cards known as "classic" (*clásicas*) and is provided by the National Commission for the Defense of Users of Financial Services (*Comisión Nacional para la Defensa de los Usuarios de las Instituciones Financieras*, Condusef). The range of dispersion (Range max-min) is defined using in each point the maximum and minimum levels of the CAT reported for this group of credit cards.

3/ The differential is defined using both the simple average of interest rates of a group of credit cards known as "classic" (*clásicas*) and is provided by the National Commission for the Defense of Users of Financial Services (*Comisión Nacional para la Defensa de los Usuarios de las Instituciones Financieras*, Condusef) and commercial banks' average cost of bank deposits (*costo de captación promedio de la banca*, CCP).

4/ The adjusted delinquency rate of commercial banks' credit is defined as the stock of overdue credits plus charges or losses recognized by banks in the previous twelve months divided by the stock of total credit. From March 2008, these figures include consumer credit granted by non-bank banks (Sofomes E.R.), which are subsidiaries of commercial banks.

As for commercial banks' cost of credit for households, the dispersion range of the Annual Percentage Rate of Charge (APRC or CAT, for its acronym in Spanish) for credit cards has risen in the last months.<sup>30</sup> The simple average for this indicator has continued to follow an upward trend: an average of 59.9 percent during the second quarter of the year, almost three percentage points above the 57 percent average during the first quarter of 2008 (Graph 44b).<sup>31</sup> As pointed in previous reports, this increase in the cost of credit through credit cards is due, mainly, to the policy followed by some banks of granting credit to new market segments with no previous credit history; hence, credit risk is higher. In a context where risk for this portfolio has increased, the differential between the simple average of the interest rate charged by banks for this type of credit and its average cost for holding bank deposits (CCP, for its acronym in Spanish) also rose during the last few months to nearly 33 percentage points (Graph 44b). Although the increase in the referred differential might compensate for some of

<sup>30</sup> Information on the CAT on credit cards corresponds to the cost of the so-called "classic-type" cards and was obtained from the National Commission for the Defense of Finance Institutions Users" (*Comisión Nacional para la Defensa de los Usuarios de Instituciones Financieras*, Condusef). The dispersion range is defined by using the maximum and minimum levels of credit card CATs reported for all credit cards.

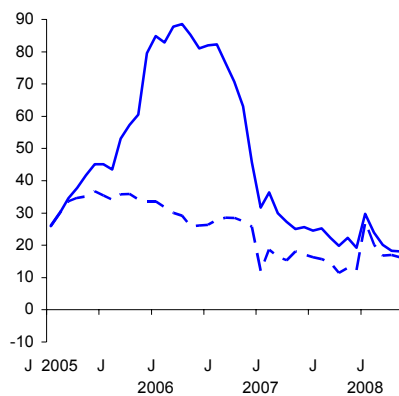
<sup>31</sup> It is important to point out that the simple average rate for the credit card CAT is not necessarily an indicator that reflects, in general terms, the cost conditions for financing through credit cards. In the case of credit cards this is evident because not all products have the same share in the total credit granted by commercial banks through these instruments. A better indicator for these purposes would be an average of the CATs weighted by the credit balance associated with each product. At this moment, the available disaggregation related to the information on credit granted through credit cards by commercial banks does not allow for estimating this type of indicator.

the losses originated by the greater risk in this portfolio, it can also worsen the delinquency problem of this type of portfolio.

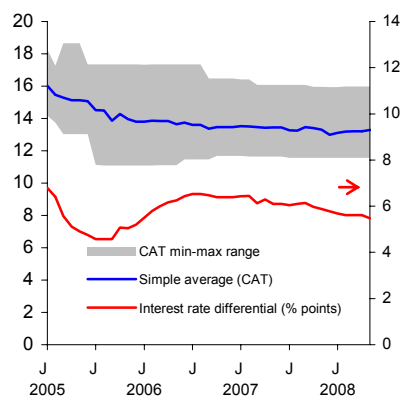
In regards to the cost of credit for housing, the dispersion range for commercial banks' mortgage CAT has not changed significantly in the last few months, as compared to the first quarter of the year and the fourth quarter of 2007 (Graph 45b).<sup>32</sup> The simple average for this indicator has also remained stable in recent months, at around 13 percent.<sup>33</sup> The mortgage CAT also remained stable, despite the fact that the differential between the simple average of interest rates for mortgage credits offered by banks and their average cost for holding bank deposits (CCP) has continued to follow a slight downward trend, remaining at levels between 5 and 6 percentage points (Graph 45b).

**Graph 45**  
**Commercial Banks' Performing Mortgage Credit, Annual Percentage Rate of Charge of Mortgage Credit, and Adjusted Delinquency Rate**

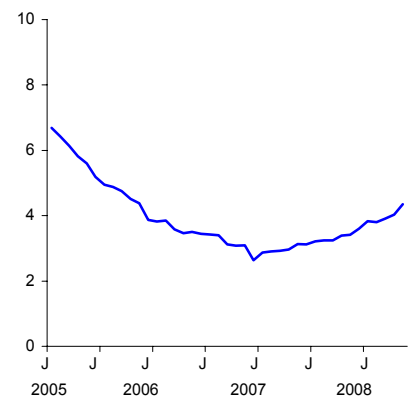
a) Mortgage Credit<sup>1/</sup>  
 Real annual percentage change



b) Mortgage Credit Annual Percentage Rate of Charge (CAT) and Differential between Mortgage Credit Interest Rates and Average Cost of Bank Deposits<sup>2/3/</sup>  
 Annual percent



c) Adjusted Delinquency Rate of Mortgage Credit<sup>4/</sup>  
 Percent



1/ The dotted line excludes the purchasing of mortgage Sofoles' portfolio from commercial banks.

2/ Simple average. Summarizes the annual percentage rate of charge (CAT, for its acronym in Spanish) for a standard mortgage product. The range of dispersion of the mortgage credit CAT (max-min range) is defined using the maximum and minimum indicators reported by commercial banks for the CAT for a standard mortgage product during a particular month. CAT information is obtained from Banco de México's Search Engine Simulator of Mortgage Credits.

3/ The differential is defined using both the simple average of interest rates of mortgage credits (standardized product) granted by commercial banks' and the average cost of bank deposits (CCP, for its acronym in Spanish). Information on interest rates related to mortgage credits is obtained from Banco de México's Search Engine Simulator of Mortgage Credits.

4/ The adjusted delinquency rate is defined as the stock of overdue credits plus charges or losses recognized by banks in the previous twelve months divided by the stock of total credit.

As for commercial banks' direct performing credit for non-financial private firms, during the April-May 2008 period, this type of credit grew at a real annual rate of 28.3 percent, figure below the 30.7 percent recorded during the first quarter of the year (Graph 46a).

<sup>32</sup> The CAT dispersion range for mortgage credit is defined on the basis of the maximum and minimum indicators reported by commercial banks for a standard mortgage product during the analyzed month (see Banco de México's monthly press release on Monetary Aggregates and Financial Activity).

<sup>33</sup> In the present case, the simple average for the Annual Percentage Rate of Charge (APRC or CAT, for its acronym in Spanish) of credit for housing is presented instead of the corresponding data for the weighted average of this CAT because there is no available information on the credit balance for each of the mortgage credit products considered in this indicator.

During the April-May 2008 period, the adjusted delinquency rate of commercial banks' credit to households continued to worsen. In May this index recorded 10.9 percent, as compared with 10.2 percent in March 2008.<sup>34</sup> The adjusted delinquency rate for consumer credit rose to 14.3 percent in May (Graph 44c), while that for mortgage credit stands at 4.3 percent for the same period (Graph 45c).

Regarding the cost of commercial banks' credit to firms, the dispersion range for interests rates associated with this type of financing has not changed significantly in the last few months. During the second half of 2007, the upper limit of this range increased considerably in its extreme upper limit (Graph 46b).<sup>35,36</sup> The simple average of these interest rates was 15.5 percent during April and May of 2008, figure similar to the average of the first quarter of 2008 (15.7 percent) (Graph 46b).<sup>37</sup> As for the differential of the simple average of interest rates for commercial banks' credit to firms and the cost for holding bank deposits (CCP, for its acronym in Spanish), Graph 46b shows that during 2008 it has remained relatively stable at around 9 percentage points, after having increased in 2007. As pointed out, this increase was partly due to the growth of credit granted to small-size firms, which, in general terms, have a higher credit risk.

Finally, in May of this year, the adjusted delinquency rate of commercial banks' credit to firms recorded 1.7 percent, as compared with 1.4 percent in March of 2008 (Graph 46c).<sup>38</sup>

<sup>34</sup> The delinquency rate defined as overdue portfolio over total portfolio is an indicator that although affected by debtors' lack of payment, its level is also affected by banks' decisions regarding their overdue portfolio, among others. The sale and penalties of overdue portfolio allow for reducing the delinquency rate regardless of any changes in the debtors' situation. For this reason, this section reports an adjusted delinquency rate for commercial banks' credit for households and non-financial private firms. This index is defined as the ratio non-performing direct loans plus penalties or losses acknowledged by banks in the previous twelve months to total direct credit plus penalties or losses previously mentioned. For this reason, this index reflects more accurately the deterioration of debtors' payment commitments. Credit statistics considered for this index are drawn from banks' balances published by Banco de México.

<sup>35</sup> The dispersion range of interest rates of credit to firms is defined considering the trimmed distribution of interest rates associated with each credit. The range is defined by excluding the 10 percent of the observations in each upper limit (the highest and the lowest) of the interest rates' distribution. The interest rates located in the upper and lower limits of the distribution are therefore excluded.

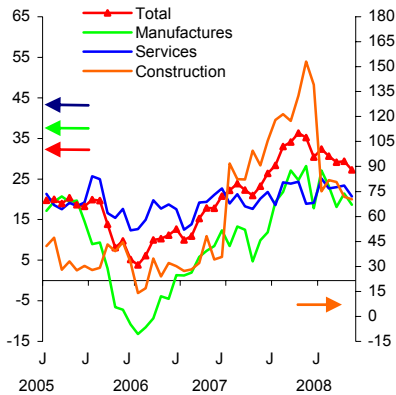
<sup>36</sup> As mentioned in the previous Inflation Report, the increase in the range for interest rates of credit to firms during the second half of 2007 was due to the growth of credit to smaller-size firms, which, in general terms, have a higher credit risk. The increase in interest rates of credit to firms in the range's upper limit mainly corresponds to interest rate increases in a smaller number of credits.

<sup>37</sup> As mentioned, a simple average does not necessarily reflect the cost conditions of banks' financing. Banco de México is currently preparing an indicator of interest rates of credit to firms, in which firms are weighted by the stock of credit associated to each of them.

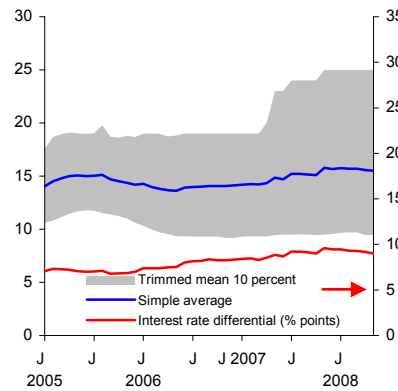
<sup>38</sup> The adjusted delinquency rate of commercial banks' credit to non-financial firms is the ratio of non-performing direct credit portfolio plus penalties or losses acknowledged by banks in the twelve previous months to total direct credit portfolio plus penalties or losses previously mentioned (see p.34). The credit portfolio used to prepare this index is drawn from banks' balances published by Banco de México.

**Graph 46**  
**Commercial Banks' Performing Credit to Firms, Interest Rates of Credit to Firms, and Adjusted Delinquency Rate**

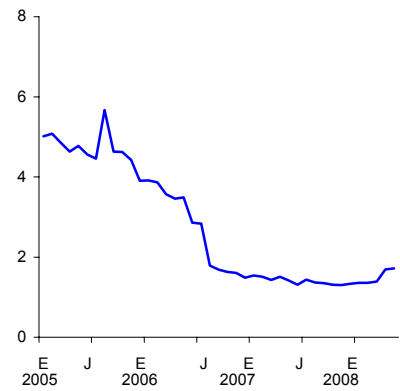
a) Credit to Firms  
 Real annual percentage change



b) Interest Rates of Credit to Firms and their Differential in Relation to Average Cost of Bank Deposits <sup>1/2/</sup>  
 Annual percent



c) Adjusted Delinquency Rate of Credit to Firms <sup>3/</sup>  
 Percent

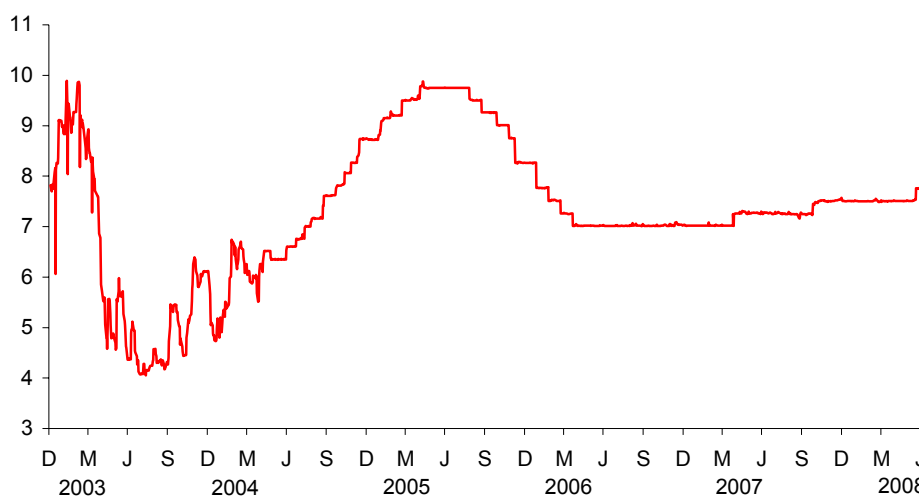


- 1/ Simple average of the nominal interest rate of performing credits granted by commercial banks to firms in pesos during the period. Information provided by CNBV. The trimmed interval (10 percent) of interest rates of credit to firms is defined using the trimmed distribution of interest rates associated with each credit. The interval is therefore defined by excluding the 10 percent of the extreme observations of the distribution (the lowest and the highest) from the interest rates in each point. The interest rates in the extreme sides of the distribution are therefore excluded.
- 2/ The differential is defined using both the simple average of interest rates of credit to firms and the average cost of bank deposits (CCP, for its acronym in Spanish).
- 3/ The adjusted delinquency rate is defined as the stock of overdue direct credits plus charges or losses recognized by banks in the previous twelve months divided by the stock of total credit.

## 4. Monetary Policy

In June and July 2008, Banco de México's Board of Governors decided to increase the target for the overnight interbank interest rate by 25 basis points each time. With these actions, this rate, which had remained at 7.50 percent since October 2007, was raised to 8.00 percent (Graph 47).

**Graph 47**  
**Interest Rates**  
 Overnight Interbank Interest Rate  
 Annual percent



Due to the international increase in commodity prices and the slowdown process the world economy is undergoing, several central banks have been facing a situation characterized by risks of higher inflation and lower economic activity. Several decades have gone by without such a marked generalized increase in commodity prices, especially in a context of a sharp slowdown of economic activity. Under this environment, many central banks have tightened their monetary policies.

Several elements, nevertheless, could contribute to ease world inflationary pressures in the following months. As mentioned in Sections 3.3.4, 3.3.5 and 3.3.6 as well as in Boxes 2 and 3 of this report, the prices of different commodities in international markets might follow more stable patterns and even revert part of the strong increases registered during the two previous years. This is reflected in the recent results of certain spot markets, such as those of fuels and wheat. In other markets, this is due apparently to the trajectory of futures prices. The sharp slowdown of the global economy is a determinant factor of this situation.

In the case of Mexico, inflation's development in the last months responds to the materialization of certain upward risks that had been pointed out in the past, despite the fact that no inflationary pressures have been detected on the demand side.

As in basically all of the world's economies, a series of indicators that provide information on the recent *trend* followed by inflation have deteriorated in the past months. As detailed in the information below, a significant part of this deterioration is directly associated to the price increase in food and other commodities in international markets.

Among the indicators than have been used in previous Inflation Reports to analyze the recent development of inflation are the trimmed means. Graph 48 presents those for headline inflation, core inflation (new definition which includes the education price subindex), and non-core inflation (new definition which excludes the education price subindex).

In the case of headline inflation, during the second quarter of the year, the trimmed mean remained below inflation and the gap between them continued to widen (Graph 48a).<sup>39</sup> However, the trimmed mean rose from 3.71 percent in March to 4.18 percent in June.

As in the previous case, the trimmed mean for core inflation remained below core inflation during the second quarter while the gap between both widened. The trimmed mean for core inflation followed an upward pattern (Graph 48b). From March to June, this indicator rose from 3.77 to 4.13 percent. Among the items with price variations located recently within the distribution's curve are those included in the core subindex of processed foods (which reflect the increase in grains international prices) and those included in the core price subindex of housing services (which reflect the increase in metals' international prices).

During the second quarter, and due to adjustments in certain administered and regulated prices and to price increases in some agricultural products, non-core inflation moved from below to above its trimmed mean. Particularly, during the quarter, the trimmed mean rose from 4.52 percent in March to 4.87 percent in June (Graph 48c).

Another set of indicators that allows for analyzing the recent developments in inflation is obtained by estimating the share of CPI basket items and items from the core price index with annual price variations below or equal to 2 percent, between 2 and 4 percent, and above or equal to 4 percent.

In the case of the CPI, the share of basket items whose prices have been increasing more than 4 percent (shaded gray area, Graph 49a) jumped during the reference period, from 43.2 percent in March to 48.5 percent in June. As stated in the previous Inflation Report, in January 2006 this indicator was at 30.3 percent and, since then, it has followed an upward trend, mainly as a result of the price increases in products related to commodities. Between January 2006 and June 2008, this indicator rose 18.2 percentage points.<sup>40</sup> Table 10 includes an exercise which shows that, from these increases, those related to food commodities account for 12.9 percentage points; those related to metals, 1.1 points; those related to fuels, 0.9 points; and, those to other goods and services

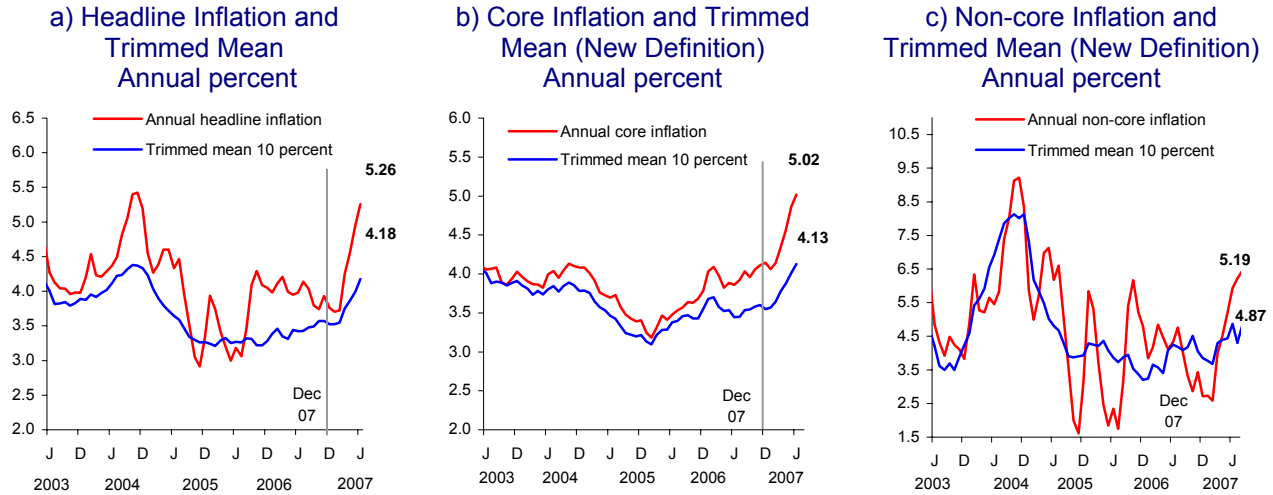
<sup>39</sup> As pointed out, this is due to the fact that the effect on headline inflation of the upper 10 percent of the CPI that concentrates the items with the highest price variations, more than offsets the effect of the other 10 percent that concentrates the items with the lowest price variations.

<sup>40</sup> The 18.2 percentage-point increase is the result of adding the weights of those items whose annual price variations moved from less than 4 percent in January 2006 to 4 percent or more in June 2008 and then subtracting from this total the weights of those items whose prices recorded annual variations from equal or higher than 4 percent to below 4 percent during the period.



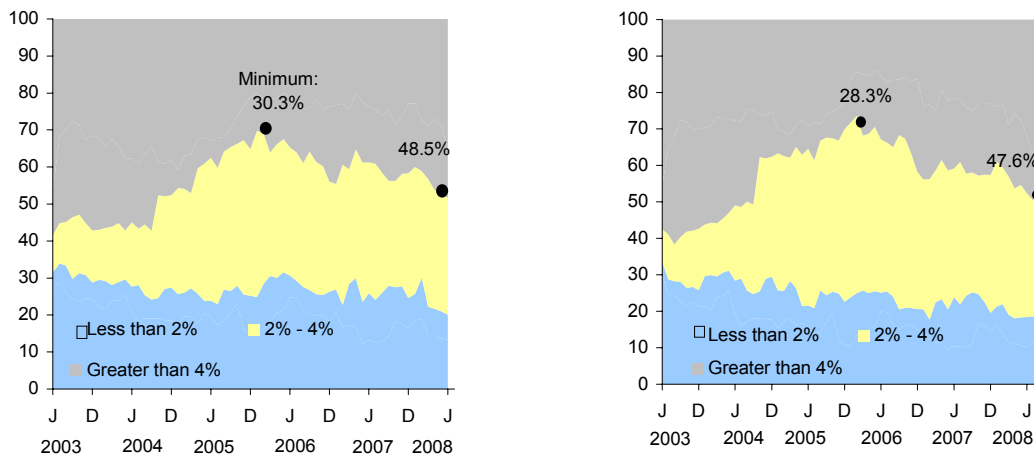
not directly related to foodstuffs, metals and fuels, 3.4 percentage points.<sup>41</sup> From the 18.2 referred percentage points, around 15 (more than 80 percent) are associated to price increases in several commodities.

**Graph 48**  
**Headline Inflation and Inflation Indicators excluding the Contribution of Extreme Upper and Lower Variations' Trimmed Means at 10 Percent**<sup>1/</sup>



1/ The trimmed mean excludes the contribution of extreme variations in certain items' prices from headline inflation. To strip these variations, the following calculations are done: i) monthly seasonally adjusted variations of CPI prices are arranged in descending order; ii) the items with the highest and lowest variation are excluded, considering up to 10 percent of the CPI basket, respectively, in each distribution tail; and, iii) with the remaining items, which, by construction, are located at the center of the distribution, the trimmed mean indicator is constructed.

**Graph 49**  
**Share of Items in the CPI and in the Core Price Subindex with Annual Price Variations within a Range**<sup>1/</sup>



1/ The share of a price index's basket whose annual price variations fall within a range is calculated as follows: i) interest ranges are defined; ii) annual inflation of each of the items of the price index is calculated; iii) items are classified in the interest ranges according to their annual inflation; and, iv) the weights of the items in each range are added.

<sup>41</sup> Total figures do not add due to rounding.



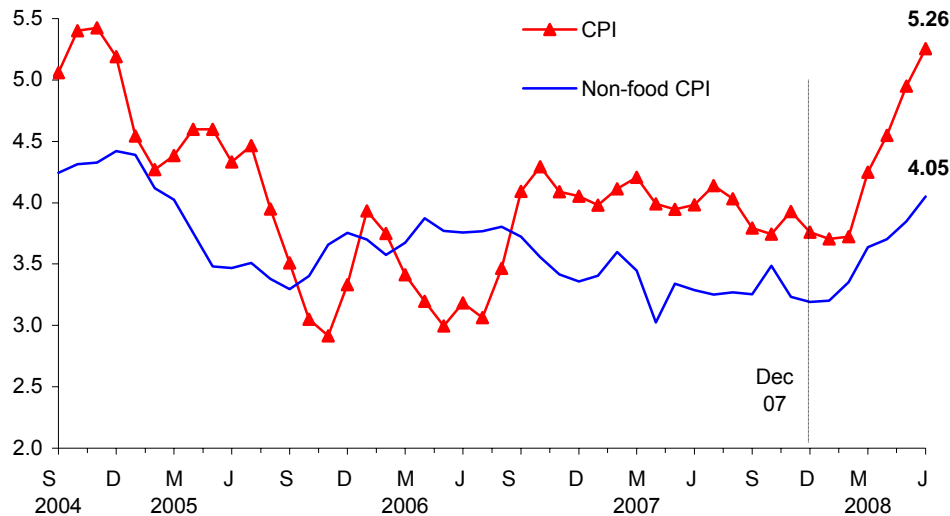
**Table 10**  
**Increase in the Percentage of CPI Basket Items with Annual Price Variations Above or Equal to 4 Percent**  
**(from January 2006 to June 2008)**

Weights and Annual Price Variations of Some Food-related Items <sup>1/</sup>					Weights and Annual Price Variations of Some Metal-related Items <sup>1/</sup>						
Percent					Percent						
Weight	Item	2006		2008		Weight	Item	2006		2008	
		Jan	Dec	Mar	Jun			Jan	Dec	Mar	Jun
<b>1.1% Wheat</b>					<b>1.1% Metal-related goods</b>						
0.22	White bread	1.68	8.91	15.75	19.17	0.85	Materials for home maintenance	3.47	5.87	4.54	5.36
0.18	Packaged sliced bread	2.00	6.44	13.27	23.82	0.05	Kitchen batteries	2.41	2.19	6.26	6.41
0.06	Cakes and pastries	1.96	5.36	12.09	17.32	0.03	Other kitchen appliances	-0.06	1.23	6.79	6.67
0.14	Soup pasta	0.74	0.03	7.06	16.84	0.18	Razor blades and razors	-2.75	2.49	4.03	5.42
0.08	Popular cookies	2.88	4.16	9.17	15.25	<b>0.9% Energy-related goods</b>					
0.07	Wheat tortillas	2.96	5.34	12.00	19.55	2.27	Electricity	3.71	5.07	6.26	9.90
0.05	Other cookies	1.82	2.26	7.19	11.63	1.32	Urban buses	3.62	5.87	4.10	4.26
0.03	Wheat flour	-0.66	5.16	20.80	32.28	0.50	Inter-state buses	3.02	2.49	5.48	4.42
0.26	Cereal flakes	1.18	3.20	6.28	7.59	-3.19	Low-octane gasoline	5.99	5.59	3.74	3.52
<b>2.0% Sugar</b>					<b>0.9% Energy-related goods</b>						
0.16	Bottled juices and nectars	1.18	-3.27	10.21	5.51	0.9%	<b>Other merchandise</b>				
0.03	Other canned fruits	1.22	4.60	7.82	9.63	0.07	Rooms adjacent to dining room	-0.22	0.93	6.02	4.61
1.45	Bottled soft drinks	3.50	4.33	4.03	4.07	0.02	Water heaters	3.87	3.00	5.20	5.30
0.06	Chocolate	1.93	3.41	6.27	5.45	0.16	Mattresses	3.06	6.32	3.26	6.58
0.05	Candies, candy milk syrup, honey	1.92	2.59	6.66	7.04	0.10	Bedrooms	2.51	1.65	4.26	4.33
0.14	Other liquors	0.18	1.88	4.44	5.65	0.04	Light matches	1.46	3.36	5.05	4.30
0.12	Rum	1.34	5.14	5.17	6.90	0.06	Other bed linens and towels	3.18	2.86	4.89	4.22
-0.03	Powdered gelatine	12.31	5.20	7.54	3.81	0.38	Fabric softeners and cleaning agents	1.61	2.60	3.06	5.06
<b>0.2% Rice</b>					<b>0.9% Energy-related goods</b>						
0.15	Rice	0.44	10.25	12.04	52.92	0.16	Bleaches	-0.20	5.87	2.41	4.78
<b>0.0% Corn</b>					<b>0.9% Energy-related goods</b>						
0.02	Corn	1.43	9.69	9.14	9.46	0.15	Detergents	3.44	0.51	16.48	17.46
<b>1.9% Soy and other seeds</b>					<b>0.9% Energy-related goods</b>						
1.46	Beer	2.44	4.30	6.59	7.65	0.09	Air fresheners	0.53	0.09	3.47	4.81
0.32	Edible vegetable oils	-3.18	1.23	33.29	53.99	0.06	Skin care products	3.93	5.40	3.34	4.08
0.14	Canned tuna and sardines	2.72	1.28	7.41	10.86	0.39	Bath soap	2.75	2.76	4.07	7.95
<b>0.4% Dairy products</b>					<b>0.9% Energy-related goods</b>						
0.20	Yoghurt	-3.39	-1.56	7.98	4.08	0.03	Storage batteries	3.17	7.45	14.48	17.58
0.10	Milk cream	2.88	2.77	9.79	7.97	0.13	Paper napkins	2.98	2.27	3.63	5.15
0.10	Chihuahua and Manchego cheese	3.58	-0.08	20.60	17.37	-0.14	Pain killers	7.14	9.60	3.68	2.42
0.03	American (yellow) cheese	3.11	1.58	15.62	16.66	-0.09	Cough syrups and decongestants	7.06	4.10	4.33	2.85
<b>7.4% Other foodstuffs</b>					<b>0.9% Energy-related goods</b>						
1.05	Sliced chicken	-0.14	8.03	9.92	7.83	-0.07	Other medicines	9.55	8.45	2.91	3.21
0.15	Whole chicken	-3.32	10.91	11.94	9.31	-0.07	Dentures	4.02	3.05	3.49	3.91
0.19	Grinded pork meat	-0.93	1.43	1.07	4.69	-0.39	Diapers	6.66	4.13	2.67	3.73
0.14	Pork chops and lard	-0.09	-1.33	3.51	9.38	-0.08	Facial tissues	4.36	3.98	2.84	3.60
0.03	Chicken legs	-3.67	-0.49	0.61	4.19	-0.06	Other	4.83	3.96	2.44	2.57
0.07	Prime beef cuts	2.86	-2.03	4.62	6.73	<b>2.3% Goods with regulated prices</b>					
0.05	Beef liver	2.75	0.92	5.24	7.14	0.43	Services for house maintenance	2.10	4.84	4.36	4.01
0.03	Other beef entrails	-1.12	-1.07	2.51	8.78	1.49	Cleaning and maid services	3.11	5.05	5.20	5.10
0.45	Ham	1.67	6.01	3.08	5.90	0.83	Medical consultations	3.53	4.59	5.38	5.75
0.18	Sausages	2.71	8.01	2.29	7.57	0.24	Dental cleaning	3.19	4.27	4.32	4.72
0.16	Highly-seasoned sausage	2.80	4.57	4.73	7.14	0.06	Medical assistance during labor	2.88	2.72	3.65	5.21
0.06	Other cold meats	1.34	5.39	2.09	6.11	0.43	Hair cuts	2.97	5.47	4.35	6.52
0.09	Shrimp	-1.18	-1.31	1.34	5.05	0.15	Car maintenance	3.63	4.43	5.52	4.96
0.09	Yellow fin <i>mojarra</i>	-1.58	-1.16	5.98	16.56	-0.28	Surgical operations	5.01	2.71	2.92	3.21
0.03	Red snapper	-0.88	5.02	4.96	5.11	-0.16	Hospital entry due to labor	4.36	4.72	4.15	3.65
0.03	Other fish and sea food	0.30	0.42	7.84	7.72	-0.14	Medical tests	4.27	3.45	2.05	2.32
0.53	Eggs	-8.45	15.79	23.49	21.84	-0.04	Pregnancy tests	4.17	4.69	1.53	1.82
0.21	Apples	3.99	23.53	2.75	11.57	-0.17	Auto repair	4.13	4.91	4.33	3.98
0.06	Grapes	-15.15	17.55	5.07	21.93	-0.19	Sports club	5.32	6.92	3.63	3.14
0.14	Onions	-15.76	186.09	-70.62	9.32	-0.13	Sports events	5.14	4.10	2.28	2.87
0.12	Other vegetables	-2.93	8.76	0.58	4.37	-0.24	Short-distance race	6.14	4.38	4.48	3.89
0.11	Green tomato	-25.01	77.10	139.27	54.95	<b>0.2% Goods with regulated prices</b>					
0.06	Carrots	-11.25	11.83	-38.99	5.79	0.18	Property tax	3.37	3.66	19.84	19.80
0.05	<i>Poblano</i> chilis	-21.84	39.37	9.62	13.69	<b>3.4% Goods and services not related with foods, metals, and/or energy</b>					
0.05	Lettuce and cabbages	1.16	19.80	0.04	6.12						
0.05	Peas	-0.06	80.47	19.64	11.18						
0.03	Dried chilis	2.06	-3.73	8.98	9.28						
0.05	Canned vegetables	2.44	-0.75	4.04	6.32						
0.04	Tomato paste and canned soups	2.17	4.54	3.59	5.24						
0.03	Prep.fruits and vegetables for babies	2.60	3.56	5.84	6.79						
0.35	Bottled water	-1.36	-1.63	4.46	4.36						
0.04	Other herbs and spices (seasoning)	-0.25	2.56	4.64	5.57						
0.22	Barbecued goat and <i>birria</i>	2.17	3.38	4.29	4.78						
0.13	Pizzas	2.42	3.72	9.01	7.53						
0.11	Pet food	-0.50	0.63	7.19	11.61						
2.33	Restaurants	3.54	4.49	3.76	4.48						
0.42	Bars	2.65	2.84	3.64	4.62						
-0.16	Beef scraps	4.31	-1.04	2.44	3.98						
-0.09	Other fish	4.60	2.47	-1.86	-1.69						
-0.14	Oranges	12.51	10.41	-4.30	-25.49						
-0.09	Mangos	7.24	13.40	-19.17	-0.24						
-0.03	Grapefruits	6.42	4.04	-3.77	-10.40						
-0.03	Guavas	13.62	6.66	3.87	1.89						
-0.02	Green beans	7.31	-18.44	-16.63	-2.59						
12.9%	<b>Food-related raw materials</b>										

<sup>1/</sup> The annual price variations of items above or equal to 2 percent, between 2 and 4 percent, and above or equal to 4 percent, are identified in colors blue, yellow and grey, respectively. These colors are the same as those used in Graph 49 of this Report.

Another indicator that allows for assessing the recent developments in annual inflation excluding the effects of the price increases in foodstuffs (both processed foods from the core price index and agricultural foods from the non-core price index) is presented in Graph 50. During the second quarter, this indicator continued to follow an upward trajectory, reaching 4.05 percent in June.

**Graph 50**  
**Non-food Inflation Indicator<sup>1/</sup>**  
 Annual percentage change



<sup>1/</sup> The non-food inflation indicator excludes from the CPI basket the items from the group of agricultural products and the group of processed foods and beverages of the merchandise price subindex (except tobacco-related items). This indicator accounts for 77.86 percent of the CPI basket.

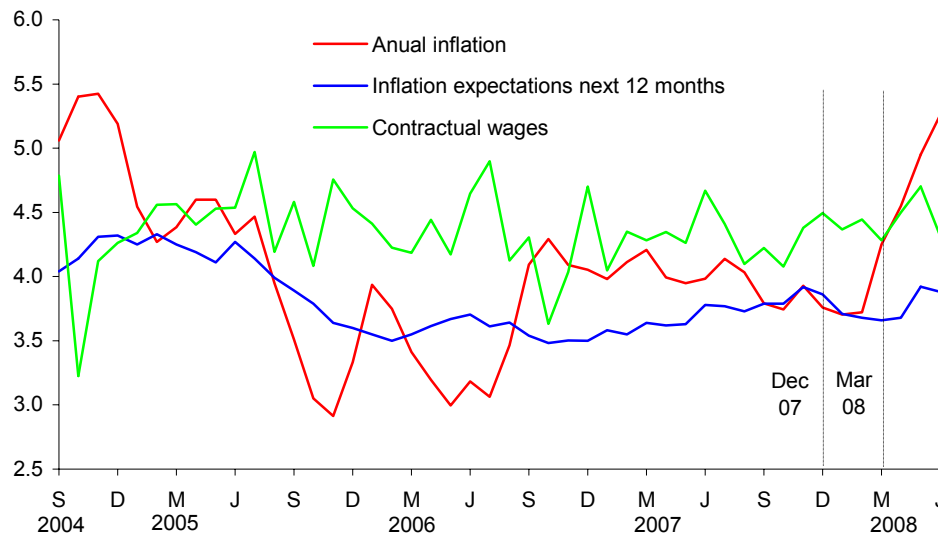
Summing up, *backward-looking* indicators, which describe the recent developments in inflation, and some of its subindices continue to show that the recent upturn in inflation may be mainly associated with the development of commodity prices in international markets. When comparing inflation indicators for Mexico and other countries (as in Box 1), based on the magnitude, frequency, and intensity of the inflationary shocks worldwide, inflation in our country has increased in lesser magnitude than in other countries. To delve into this issue, the recent developments of a second group of inflation indicators that provide *forward-looking* information are analyzed below.

Wage indicators are part of this group. As pointed out in Section 3.3.1 of this report, several wage indicators recently followed a lateral movement. Among these are the contractual wages negotiated by federal-jurisdiction firms which, during the second quarter grew, on average, 4.5 percent in annual terms (Graph 51). The other wage indicators in the economy (presented in the aforementioned section) also remained stable. As for Banco de México's monthly survey on inflation expectations carried out among private sector analysts, short-term expectations were revised upwards during the second quarter. As inflation has grown higher than that forecasted in recent months, expectations for annual headline inflation for the end of 2008 have also been revised upwards.

Particularly, average responses increased from 3.98 percent in March to 4.74 percent in June (Graph 52).<sup>42</sup>

However, annual headline inflation expectations for the medium and long terms (end of 2009 and average for the next 4 years), remain well “anchored”. The average for expectations for the end of 2009 rose from 3.52 percent in March to 3.71 percent in June, while that for the next 4 years, from 3.44 to 3.54 percent during the same period (Graph 52).<sup>43</sup>

**Graph 51**  
**Annual Inflation, Inflation Expectations, and Annual Variation in Contractual Wages<sup>1/</sup>**  
 Annual percent



1/ Inflation expectations are obtained from Banco de México's survey.

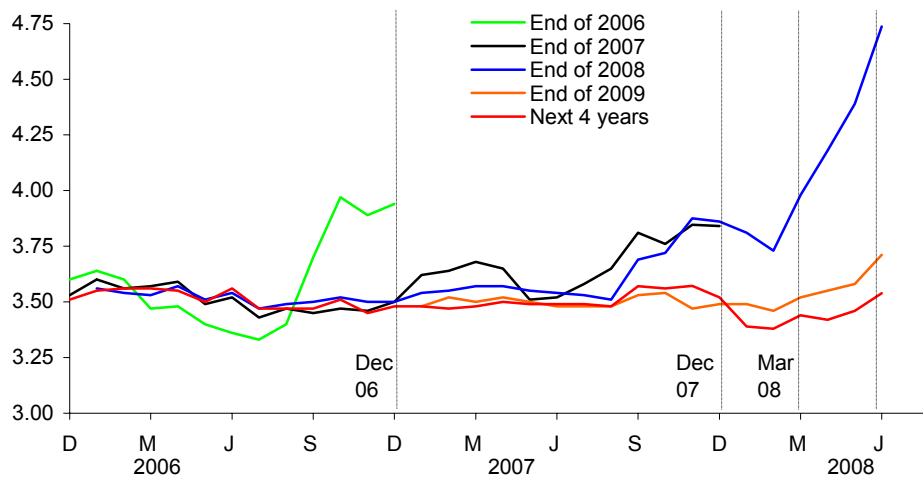
Another indicator that offers information on economic agents' long-term inflation expectations is the compensation for inflation (inflation expectations plus an inflation risk premium) implicit in long-term bonds (10 years). Graph 53 shows that this indicator increased from close to 3.85 percent at the end of March, to close to 4.80 percent by mid-July.

Nevertheless, it is important to analyze the reasons for this increase. On the one hand, its magnitude might be affected by factors related to the scarce liquidity of some bonuses due to the volatility in financial markets. On the other hand, the stability of inflation expectations for longer terms (Graph 52) obtained from various surveys suggests that a significant part of the rise in the compensation for inflation is due to higher risk premia, a situation that, in turn, would be reflecting the materialization of several risks for inflation observed in the last few months.

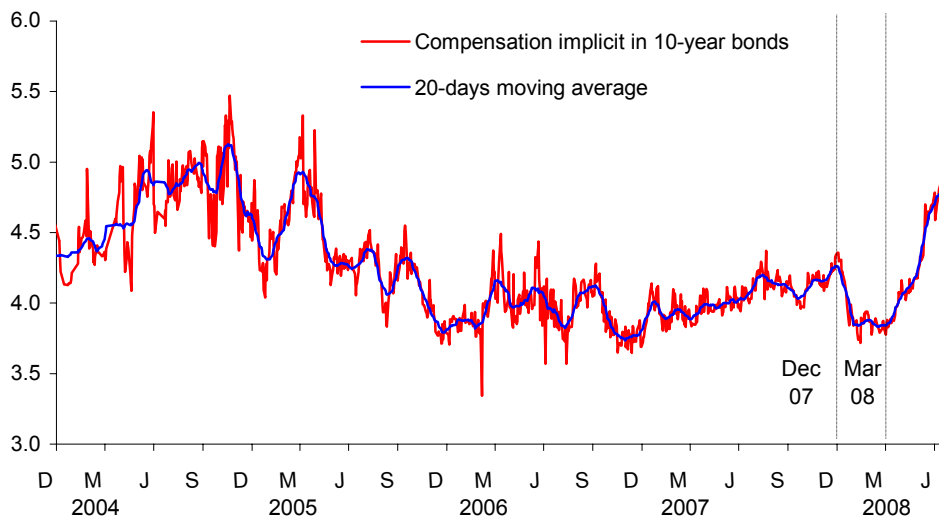
<sup>42</sup> In the case of expectations obtained from the Infosel survey, the average for those for the end of 2008 jumped from 3.99 percent in March 28 to 5.04 percent in July 25.

<sup>43</sup> The average for annual headline inflation expectations for the end of 2009 obtained from Infosel increased from 3.47 percent in March 28 to 3.80 percent in July 25. The average for the next 4 years rose from 3.41 to 3.59 percent during the same period.

**Graph 52**  
**Annual Headline Inflation Expectations: Banco de México Survey**  
 Annual percent



**Graph 53**  
**Compensation for Inflation and Inflationary Risk on Long-term Bonds**  
 Annual percent



Summing up, during the last few months several inflationary risks about which Banco de México had been warning about materialized. In order to prevent the upturn in inflation from affecting the “anchorage” of medium-term inflation expectations and, consequently, the price formation process in the economy, Banco de México’s Board of Governors tightened its policy stance in June and July. Up to now, the upturn in inflation apparently has not affected the “anchorage” of medium- and long-term inflation expectations, as perceived by the stability of wages indicators. Given the current economic conditions, the tighter monetary policy stance adopted is clearly expected to contribute to improve significantly the balance of risks for inflation.

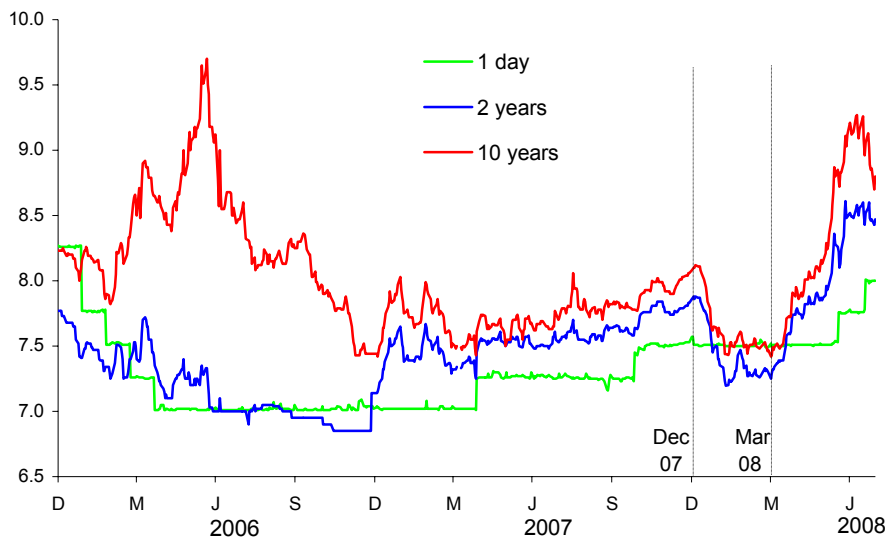
One of the most significant transmission channels of monetary policy is its effect on medium- and long-term inflation expectations (Box 4). If, in the

presence of shocks that affect firms' production costs, economic agents revise their expectations upward, the probability of new increases in firms' costs rises thereby triggering again the abovementioned process. If, on the contrary, the referred expectations remain stable, the risk of firms making constant upward revisions in their prices diminishes. Thus, to safeguard price stability, monetary policy actions must focus on keeping medium- and long-term inflation expectations well "anchored":

The upturn in inflation and the recent monetary policy actions have been reflected in the yield curve. After the curve's flattening observed during the first quarter of the year (Graph 54 and Graph 55), interest rates in Mexico began to increase considerably since April as a reflection of the referred materialization of the different risks faced by inflation.<sup>44</sup> The longer part of the curve (30 years) rose around 180 base points from the end of March to the end of June, while mid-term yields (2 years), approximately 130 basis points (Table 11 and Graph 55). These results led to a yield curve *steepening*. As stated before, a considerable part of the increase in longer term rates may be reflecting a higher demand for risk premium against inflation on the part of economic agents.

In July, and in response to the actions taken by Banco de México's Board of Governors, the yield curve flattened (both due to an increase in short-term interest rates and a decrease in longer term rates as compared to those at the end of the quarter). Even if the slope of the yield curve is still steeper than that registered at the end of March (in July 29, the differential between the 30-year and the 2-year interest rate was of 50 basis points while in March 31 it was of 34 basis points), in the days previous to the publication of this report, the yields for higher terms were following a downward trend.

**Graph 54**  
Interest Rates in Mexico  
Percent



<sup>44</sup> Even if in previous Inflation Reports the information on the yield curve has been presented in terms of the averages observed in each quarter, this time, in Graph 55, the information considers end-of-quarter figures in order to show more accurately the changes in interest rates during the last few months.

### Box 4 Inflation Expectations in the Monetary Policy Transmission Mechanism

Central banks do not control prices directly, because these are determined as a result of the interaction between supply and demand in goods and services markets. However, they can influence the price determination process through monetary policy.

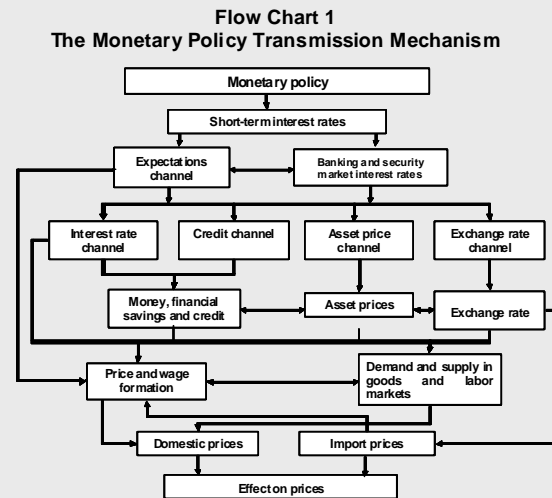
In general terms, the monetary policy transmission mechanism can be defined as the way the central bank induces changes to satisfy the liquidity needs in an economy and these changes affect the rest of the economic variables, particularly inflation. Monetary policy has both long-lived and variable lagged effects on inflation. For this reason, monetary authorities must fully dimension the effects of their actions on key aspects of the economy, particularly on the price determination process.

In the process of modifying the conditions for providing liquidity, monetary policy usually affects short-term interest rates. Nevertheless, prices are affected via the effect of monetary policy's actions on the determinants of aggregate supply and demand, which are also affected by both short-term and long-term interest rates. A key issue for understanding the functioning of the monetary policy transmission mechanism is thus the extent to which short-term interest rates affect the rest of interest rates.

Flow Chart 1 shows the functioning of the monetary policy transmission mechanism. In the first stage, transmission from short-term interest rates to the rest of the yield curve occurs in financial markets. Monetary policy's effect on medium and long-term interest rates depends on economic agents' expectations about the future path of short-term interest rates and their perception of inflationary risk for different horizons. These determinants depend also on economic agents' expectations on inflation and economic activity.

Monetary policy affects differently all interest rates comprising the inter-temporary interest rate structure. When inflation expectations deteriorate, an increase in the short-term interest rate induced by a tighter monetary policy stance generates lower increases, and even reductions, in longer term interest rates. The latter leads to a "flattening" of the yield curve. This "flattening" takes place as the monetary authority's commitment to price stability gains credibility, that is, as inflation expectations remain well anchored.

As shown in Flow Chart 1, once monetary policy affects interest rates, the different mechanisms or channels of transmission start operating. Among these are the traditional channels (the interest rate channel, the credit channel, the asset-price channel, and the exchange rate channel) and the expectations channel. Regarding the latter channel, its importance for the monetary policy transmission mechanism has been increasingly recognized over the last years. This is due to the fact that expectations about the future developments of inflation, the economy, and interest rates affect households and firms' present and future decisions on spending and the price and wage determination processes.



#### I. The Traditional Monetary Policy Transmission Channels

##### a) The interest rate channel

The interest rate channel operates directly through aggregate demand. As mentioned, a monetary policy-induced increase in short-term interest rates is transmitted to the rest of the yield curve and, in the presence of nominal rigidities, prompts real interest rates to increase. As a result, the cost of credit for firms changes, thus modifying their plans for spending in both working capital and investments and in turn affecting aggregate demand. Higher real interest rates prompt changes in relative prices between present and future consumption and, therefore, intertemporal substitution in household consumption, which reduces the current levels of aggregate demand. Finally, a reduction in aggregate demand leads to lower inflation.

In recent years in Mexico, the convergence to an environment of low and stable inflation has contributed to reduce the uncertainty about the level of real interest rates, thus enabling this channel to operate more effectively.

##### b) The credit channel

The banking credit channel operates via monetary policy's effects on the supply of banking credit. An increase in interest rates originated by a tightening in the monetary policy stance can lead to a lesser supply of credit. A real interest rate increase can imply a greater risk of recuperating credit portfolio. For this reason, banks usually moderate their supply of credit. Finally, a lesser supply of credit reduces aggregate expenditure (investment, working capital and consumption) of bank credit debtors and, eventually, of inflation.

In Mexico, in the years following the 1995 crisis, the banking credit crunch reduced significantly monetary



policy's effectiveness via this channel (and the traditional interest rate channel as well). Nevertheless, in recent years, commercial banks' credit to the non-financial private sector has recovered considerably and, therefore, this channel has gradually become more relevant. In an environment of price stability, this channel is expected to continue gaining importance in the future.

#### c) The exchange rate channel

A monetary policy-induced increase in interest rates makes domestic financial instruments more appealing than financial assets of external markets. This condition can also make the nominal exchange appreciate, and, when domestic prices adjust slowly, enables domestic prices to rise in relation to imports. The increase in interest rates leads to a reduction in net exports and, therefore, to a decline in aggregate demand, which eventually results in lower inflation.

An exchange rate appreciation means a decline in the cost of imported goods, which translates into lower costs for firms and allows aggregate supply to grow, which also contributes to lower inflation. In this regard, the pass-through effect from external to domestic inflation is composed of the exchange rate pass-through and external prices.

A few years ago, in Mexico, fluctuations in the nominal exchange rate were perceived, in general, as permanent and therefore the nominal exchange rate had a high pass-through movement to prices. As a result, exchange rate fluctuations were considered an important signal for inflation expectations formation. Nevertheless, in recent years, the floating exchange rate regime and the transition to equilibrium with low and stable inflation have contributed to make short-term fluctuations in the nominal exchange rate contain less information on the price determination process. In contrast, external prices as determinants of inflationary pressures have gained relative importance.

#### d) The other-asset price channel

By affecting the financial conditions of an economy and economic agents' expectations, monetary policy can affect the prices of other assets, such as private and government securities, equity, and real estate assets. Changes in the prices of these assets can also have wealth effects on households and firms and, therefore, the decisions on spending in an economy.

In developed economies that have access to a broad set of financial and real estate assets, and where these assets can be used to support consumer spending, reductions in asset prices generated by interest rate increases can lead to a reduction of household spending. As for firms, a reduction in their equity prices, due to an increase in interest rates, makes investments more costly. At an aggregate level, a decline in equity prices reduces investments, aggregate demand and, eventually, inflation. However, in economies where the level of development of financial markets does not allow for using mortgage wealth to finance consumer spending, or where firms have a small share in capital markets, this channel has a limited importance.

## II. The Expectations Channel in the Monetary Policy Transmission Mechanism

In Flow Chart 1, the inflation expectations channel is on a level above the other channels because it affects directly both the price and wage determination processes and the rest of the transmission channels.

Monetary policy decisions affect economic agents' expectations regarding the future development of the economy, in particular, the future path of inflation. Based on these expectations, firms and households make decisions regarding consumption, savings, investment and employment, which affect both price and wage determination.

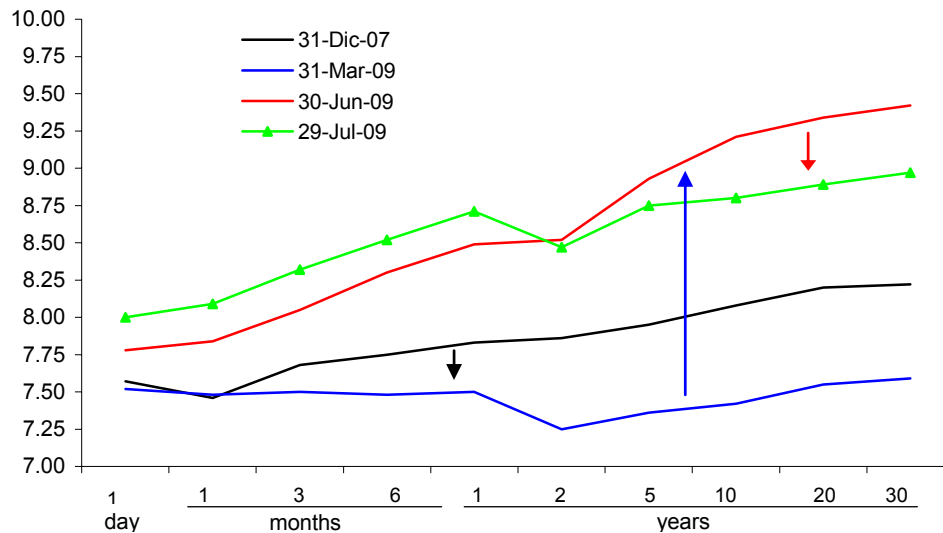
When monetary policy's commitment to low inflation gains credibility, it becomes more effective and it is therefore able to affect medium and long-term inflation expectations. When there is credibility in the event of a demand-side shock (for example, a temporary increase in public expenditure), economic agents would expect the central bank to offset this effect by tightening monetary conditions. This perception from agents "anchors" medium and long-term inflation expectations and, therefore, wage settlements and price determination are less likely to be contaminated.

In the event of a supply-side shock which increases firms' production costs, monetary policy would be expected to take the necessary actions to prevent medium and long-term inflation expectations from being contaminated and, in turn, from having second-round effects on prices and therefore on inflation. In this case, if firms and households expect the monetary authority to react in such a way, in general terms, the central bank would have more flexibility to adapt the initial impact of the shock on inflation, without jeopardizing the "anchoring" of medium and long-term inflation expectations.

Monetary policy credibility allows medium and long-term inflation expectations to remain "anchored", despite the inflationary pressures that could arise in the short term.

Banco de México's research shows that, in recent years, in Mexico, monetary policy's effectiveness in offsetting inflationary pressures cannot be totally explained without considering the expectations channel. Monetary policy's commitment to price stability has gained credibility, among other reasons, because of an adequate response to inflationary shocks. The benefits of this credibility have been reflected in an "anchoring" of medium-and long-term inflation expectations which, likewise, has increased the relative importance of the expectations channel in Mexico's monetary policy transmission mechanism.

**Graph 55**  
**Interest Rates Yield Curve in Mexico**  
 Percent



**Table 11**  
**Interest Rates Yield Curve in Mexico**  
 Percent

Term	31-Mar-08	30-Jun-08	29-Jul-08
1 day <sup>1/</sup>	7.52	7.78	8.00
6 months	7.48	8.30	8.52
2 years	7.25	8.52	8.47
10 years	7.42	9.21	8.80
30 years	7.59	9.42	8.97

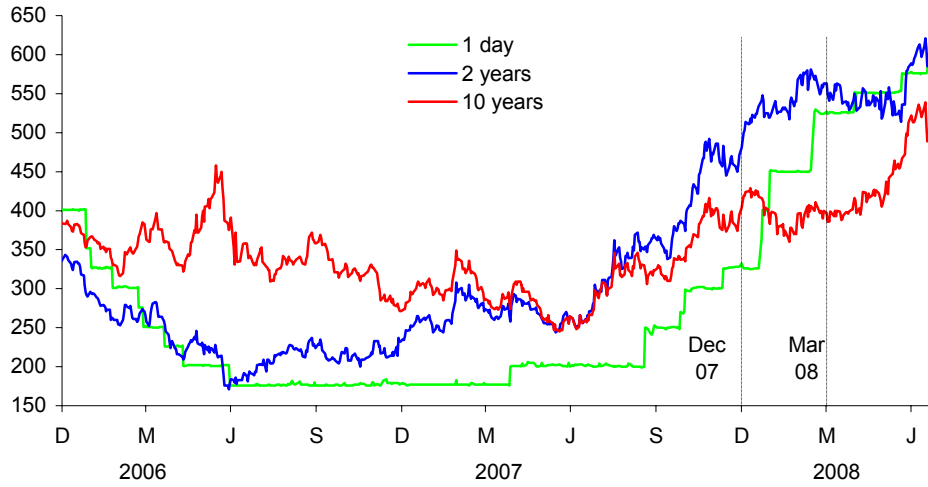
<sup>1/</sup> Overnight inter-bank interest rate.

In regards to the interest rate differentials between Mexico and the U.S., despite the fact that interest rates in the U.S. rose from the end of March to the end of June, the differentials between both countries increased, because interest rates in Mexico during that period, especially those for longer term instruments, rose more (Graph 56). The differential for 10-year interest rates between both countries moved approximately 165 basis points during the analyzed period, while that for 2-year interest rates, by around 120 basis points. As mentioned before, in July, longer term interest rates in Mexico decreased, thus reverting part of the aforementioned increase in longer term interest rate differentials between both countries.

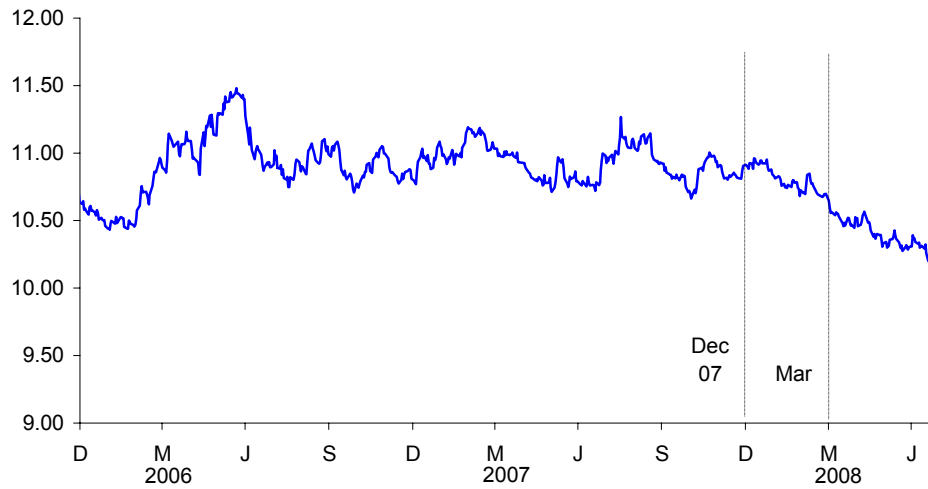
Finally, in response to the widening in spread returns registered during the second quarter, the nominal exchange rate of the peso against the US dollar appreciated significantly during that period (Graph 57).



**Graph 56**  
**Spread between Mexico and U.S. Interest Rates**  
Basis points



**Graph 57**  
**Nominal Exchange Rate**  
Pesos per USD



## 5. Prospects for Inflation and Balance of Risks

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The macroeconomic scenario forecasted by Banco de México is based on the following external considerations:

- i) The recent revisions to the outlook for U.S. growth suggest that economic activity will remain weak for a longer period than that recently expected. Analysts' most recent forecasts point to real GDP growth of 1.6 percent in 2008, and industrial GDP growth of 0.1 percent.<sup>45</sup> As mentioned, downward risks associated to this forecast are significant, particularly given that the problems in the U.S. housing sector have not ended.
- ii) International financial markets are expected to continue to be affected by the uncertainty that prevails regarding the losses of some financial institutions.

Based on the information analyzed in this Report, Banco de México's expected scenario for the Mexican economy is as follows:

**GDP Growth:** Between 2.25 and 2.75 percent in real terms in 2008.

**Employment:** 370 thousand jobs (number of workers insured by the IMSS) are expected to be created for 2008.<sup>46</sup>

**Current Account:** Current account deficit of around 0.5 percentage points of GDP in 2008.

This macroeconomic scenario is conditional to previsions based on most recent information on the development of the U.S. economy and international financial markets. Therefore:

- i) A greater-than-expected deceleration of economic activity in that country could make non-oil exports slow their rate of growth and could also reduce the flow of workers' remittances, due to the deterioration of employment conditions.
- ii) Greater uncertainty in international financial markets could tighten credit conditions for emerging economies' access to international capital markets, among those, the Mexican economy.
- iii) Confidence indicators in the U.S. and some other industrialized countries have weakened significantly. This deterioration, together with the likely downward revision to the forecasts for economic activity in those countries, could affect adversely expectations about the Mexican economy. A greater deterioration in both confidence and business climate indicators in Mexico than that observed could also lead to a greater slowdown in private sector spending.

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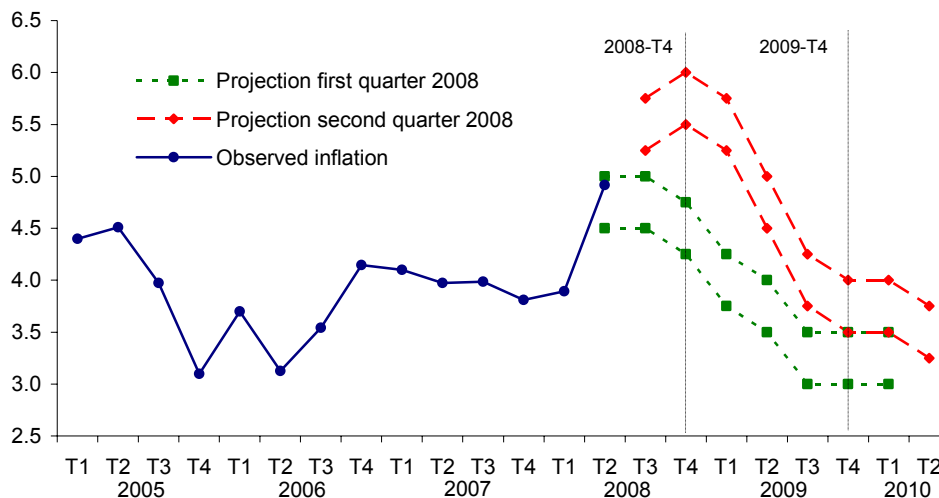
<sup>45</sup> These figures reflect most recent information on forecasts from many analysts.

<sup>46</sup> These estimates already include the correction to the data on insured workers made by the IMSS in May.

**Inflation:** The forecast for annual headline inflation has been revised upwards as compared with the figures released in the Inflation Report of January-March 2008. On average, the band adjustment for the seven quarters considered is of 89 basis points.

Graph 58 and Table 12 show the current prevision for the interval for average inflation for each of the forecasted quarters.

**Graph 58**  
**Annual Headline Inflation and Forecasts for Base Scenario**  
 Quarterly average in percent



**Table 12**  
**Base Scenario for Annual Headline Inflation**  
 Quarterly average in percent

Quarter	Forecast	
	first quarter 2008	second quarter 2008
2008-I	3.89 <sup>1/</sup>	3.89 <sup>1/</sup>
2008-II	4.50 – 5.00	4.92 <sup>1/</sup>
2008-III	4.50 – 5.00	5.25 – 5.75
2008-IV	4.25 – 4.75	5.50 – 6.00
2009-I	3.75 – 4.25	5.25 – 5.75
2009-II	3.50 – 4.00	4.50 – 5.00
2009-III	3.00 – 3.50	3.75 – 4.25
2009-IV	3.00 – 3.50	3.50 – 4.00
2010-I	3.00 – 3.50	3.50 – 4.00
2010-II	—	3.25 – 3.75

<sup>1/</sup> Observed data.

Banco de México's forecast has been revised due to the following reasons. First, the prices of food, energy, and metal commodities in international financial markets in the last months have followed an upward pattern, higher than those expected in futures markets at the end of the previous quarter; and second, although spot prices of certain food (like corn and soy) and energy (like oil and

natural gas) commodities declined during July, the pass-through effect of the high levels of these price quotations to consumer prices does not seem to have come to an end. The latent inflationary pressures originated by the previous increases in commodity prices have been included in Banco de México's current previsions. Finally, the rate of correction of the energy subsidy in Mexico has increased: on the one hand, the international price of gas and gasoline, among others, has declined; on the other, government-determined rises for the domestic prices of both goods have increased. The upward revision to the current forecast (even above the forecast included in July's monetary policy release) is mainly due to the latter factor.

Second, the new forecast also considers the following:

- i) Although international prices of commodities are expected to remain high, their recent pattern and/or the futures quotations for several of them suggest a more positive outlook for the next months. That is the case for fuels and some grains as wheat. The further weakening of economic activity worldwide is a decisive factor in this consideration. In particular, the outlook for growth in the U.S., the Euro Zone, and Japan is not promising. The forecasts for growth in many emerging market economies have also been revised downwards, although to a lesser extent. These factors are expected to contribute to ease world inflationary pressures.
- ii) Monetary policy's channels of transmission affect the economy with a certain lag. Thus, the tightening of monetary policy is expected to gradually affect inflation, through the different channels, within a period of 18 to 24 months.

The assumptions considered in the new estimates for the inflation interval imply that inflation is expected to follow an upward pattern for the rest of the year, and begin to decline in 2009.

As for the forecast's current pattern, as already mentioned, it shows that during the third quarter of 2008 inflation could grow more than during the first two quarters of the year. This increase is mainly attributed to the non-core price subindex, particularly the expected pattern followed by goods and services with administered and regulated prices. The increases for gasoline and LP gas prices, and the adjustment in public transportation fares in Mexico City and its surroundings, practically account for all of the increase. The prices of agricultural products are expected to escalate further due to the volatility of fruits and vegetables prices, and the impact that prepared feed prices have on poultry, pork meat, and egg quotes. As for core inflation, price inflation of merchandise and services (except for education) is expected to continue to rise. The price increases observed in practically all of the CPI subindices which are relatively inflexible downwards constitute staggered blocks in annual headline inflation, which fade away twelve months after the shocks take place.

Average annual headline inflation is expected to increase once more during the fourth quarter of 2008. Non-core price inflation, particularly that related to the subindex of administered prices, should account for this increase, as the rises determined for energy prices, which were suspended in October 2007, remain in effect during the same month of 2008. In addition to the aforementioned,

on the part of the subindex of regulated prices, there is an arithmetic effect originated by the discounts to mobile telephone services granted from October to December 2007, and which are not expected to take place in 2008.

Inflation would thus stop increasing in 2009 once the shocks that affected the economy in 2008 disappear. The pattern followed by commodities' futures curves point in this direction by not showing significant variations in the next twelve months. For this period, the pressures that have affected consumer prices and are still latent, are anticipated to materialize completely. On the other hand, the different monetary policy channels are expected to operate more strongly during 2009. By the end of 2009, inflation is expected to fall in the upper level of the variability interval around the 3 percent target and is anticipated to converge more clearly to such target only until 2010.

Inflation is therefore expected to converge to a level close to the 3 percent target in 2010. This prevision is foreseen to take place once Banco de México's monetary policy measures thoroughly impact the price determination process of the economy and the external shocks that have been affecting domestic inflation finally dissipate.

Finally it is important to point out that the forecast for inflation that is presented in Table 12 refers to the average annual inflation for each of the forecasted quarters, meaning that annual headline inflation in a particular month could be above or below the forecasted interval, even if the quarterly average falls within the referred interval.

The previsions for inflation are conditional to not having any additional shocks than those currently forecasted. Among the risks that have been identified are:

- i) International prices of commodities higher than those currently expected.
- ii) Adverse weather conditions could affect the supply and prices of vegetables.
- iii) Uncertainty regarding the magnitude and speed of the pass-through from higher tax burden on prices.

It is clear that the cyclical phase the Mexican economy is undergoing is a factor that mitigates both pressures and risks currently faced by inflation. If the economic slowdown were to be of a greater magnitude, both inflationary pressures and risks would also decrease.

Summing up, although the forecast for inflation for a relevant horizon is being revised upwards, nowadays, it is clearer that the factors that have caused the main inflationary problem worldwide since the seventies have moderated significantly. The aforementioned undoubtedly is a positive element in Mexico's future inflation outlook.

Monetary policy's best contribution to improve Mexicans welfare is to promote sustained growth by providing an environment of price stability. Banco de México considers the anchorage of medium and long-term inflation expectations



key in achieving such a goal. Thus, it will continue to monitor closely the balance of risks on inflation so that the 3 percent inflation target can be attained by 2010.