Inflation Report

October – December 2008

and

Monetary Program

for 2009

BANCO DE MEXICO

JANUARY 2009

BOARD OF GOVERNORS

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Unless otherwise stated, this document has been prepared using data available as of January 26, 2009. Figures are preliminary and subject to change.

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1. Introduction

The escalating turmoil in international financial markets since mid-September severely affected the world economy during the fourth quarter of 2008. Despite the actions implemented in some economies to mitigate the effects of the financial crisis, global economic activity weakened considerably during that quarter. Most recent information suggests that during the fourth quarter, GDP of both the U.S. and other advanced economies, as well as that of some emerging economies, contracted significantly, while other economies of the latter group grew at a slower rate. Consequently, in 2009, the world economy is expected to experience its sharpest slowdown in decades.

The economic slowdown and the fall in international commodity prices allowed inflationary pressures to ease worldwide. The inflation rate in advanced economies fell considerably and, in some of them, the monthly growth rate of their price indices turned negative. In many emerging market economies, the growth rate of prices followed a downward path during the quarter. Nevertheless, in some of them, inflation remained high and even rose. Inflationary pressures in both advanced and emerging economies are expected to diminish in 2009.

The bankruptcy of an important U.S. investment bank at the end of the third quarter of 2008, and initially the lack of clarity about the use of emergency funds to aid the U.S. financial sector, led to a general loss of trust in international financial markets. Both advanced and emerging economies were severely affected by these events. Emerging economies were considerably impacted in their equity, foreign exchange, and domestic debt markets, impairing them to have access to foreign financing. In contrast with previous episodes, the current crisis has engulfed all countries and is considered the first global financial crisis in history.

In response to the crisis, both advanced and emerging economies implemented extraordinary measures during the last quarter of 2008 to improve the functioning of financial markets and regain confidence. Joint and individual measures were implemented such as injecting capital to banks, fostering interbank credit and granting guarantees for bank credit, together with coordinated actions among the central banks of various advanced economies to loosen their monetary policy stances. The challenge for the financial authorities is to break the negative feedback between a deteriorating financial sector, the consequent credit crunch, and the weakening of the economy.

These measures alleviated the uncertainty and improved the functioning of some financial market segments during the fourth quarter. Albeit remaining at historically high levels, the cost of interbank financing decreased and conditions in the commercial paper market improved significantly. Despite this situation, turmoil still reigned in financial markets.

Once it was evident that these measures were insufficient to prevent the problems in the financial sector from adversely affecting the real sector, many advanced and emerging economies announced fiscal-support packages for both households and companies in order to attenuate the negative impact of the crisis.

The deterioration and uncertainty about both U.S. financial markets and the outlook for the U.S. and the rest of the world economies, negatively impacted the Mexican economy and its financial markets. Under this scenario, the Mexican economy, which had been growing at a slower rate since 2008, at the end of the year began to grow even more slowly. Risks of a downward adjustment in growth for 2009 have also increased considerably. Indeed, during the fourth quarter of 2008, economic activity in Mexico continued to weaken. Practically all indicators were affected: external and domestic demand, production of different sectors, and the labor market. During this period, both confidence and business climate indicators deteriorated significantly as well. Based on available information, during the fourth quarter, Mexican GDP is expected to have contracted 1.0 percent in annual terms.

The environment of risk aversion that prevailed worldwide raised considerably market volatility in Mexico's financial markets during the last quarter of 2008. In response, Banco de México, together with the Ministry of Finance, set off multiple actions to maintain the proper functioning of domestic capital markets. If these measures had not been implemented, the high costs originated by the global crisis would have escalated, having pernicious consequences on Mexico's economic activity.

In contrast with other countries, during the last quarter of 2008, annual headline inflation in Mexico continued to follow an upward trend and rose more than expected. This result is partially due to the constant increases in energy and food prices and to the exchange rate depreciation's impact on costs. Nevertheless, the decline in international commodity prices, the greater contraction expected for demand, the reduction in LP gas prices and in electricity tariffs, and the freeze in gasoline prices for the rest of the year allow for anticipating that inflation might have reached a turning point in December 2008 and, for 2009, it will follow a downward path and end the year at levels below 4 percent.

This outlook indicates that the balance of risks has deteriorated worldwide more in terms of economic activity than of inflation, and Mexico is not the exception. In line with these developments, in January, Banco de México's Board of Governors decided to reduce the overnight interbank interest rate target by 50 basis points.

The financial market imbalances are still a risk factor for inflation. Consequently, Banco de México will continue to monitor closely the balance of risks. Monetary policy measures decided by the Board of Governors will be conditioned to attaining the 3 percent inflation target at the end of 2010.

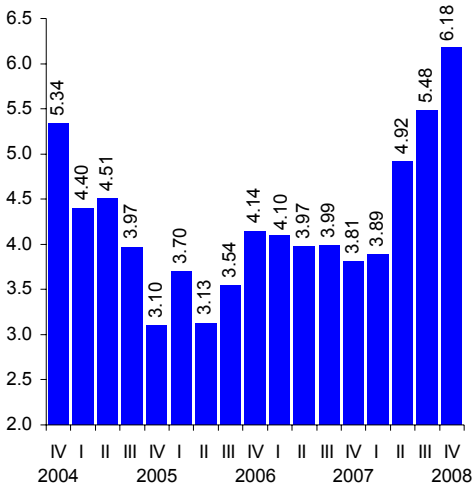
2. Recent Developments in Inflation

2.1. Inflation

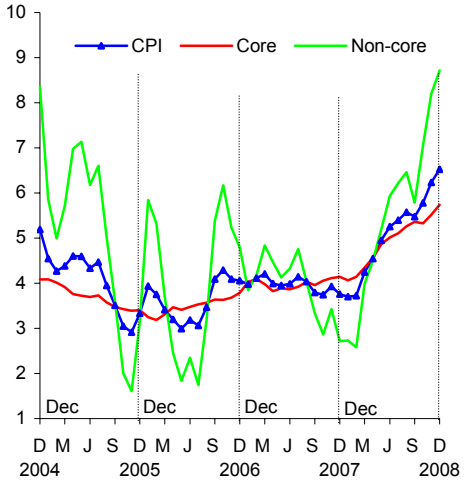
During the fourth quarter of 2008, average annual headline inflation was 6.18 percent, 0.70 percentage points above the 5.48 percent recorded during the third quarter. In December, annual headline inflation reached 6.53 percent (Table 1 and Graph 1).

Graph 1
Consumer Price Index
Annual change (percent)

a) Consumer Price Index



b) Core and Non-core Price Indices



During the fourth quarter 2008, annual headline inflation followed an upward trend from October to December. This result was mainly due to the following factors:

i) The policies for administered prices implemented during the fourth quarter of 2008 changed as compared with the same period of 2007. During the last three months of 2007, prices of low-octane gasoline, LP gas, and electricity remained unchanged, thus widening the gap between domestic prices and their international references. In order to improve these conditions, domestic prices of fuels were raised during 2008. This situation was finally corrected when, in August, the international price references of gasoline and LP gas fell significantly. At the end of 2008, domestic prices were thus above their international references.

ii) Food, beverage and tobacco prices grew at higher rates (processed foods, agricultural goods, beverages and tobacco included). In the case of agricultural products, prices rose due to the high cost of animal feed and the unfavorable weather conditions that affected the supply of certain vegetables. In the case of cattle products, the exchange rate might have affected prices, particularly beef prices. As for processed foods, although its average annual price inflation decreased during the

analyzed period, its monthly price inflation in annual terms followed an upward pattern during the last three months of 2008.

iii) In the case of non-food merchandises, price increases were probably influenced by both the exchange rate depreciation and the price increases in various commodities (metals, and chemical and strategic raw materials, such as cellulose).

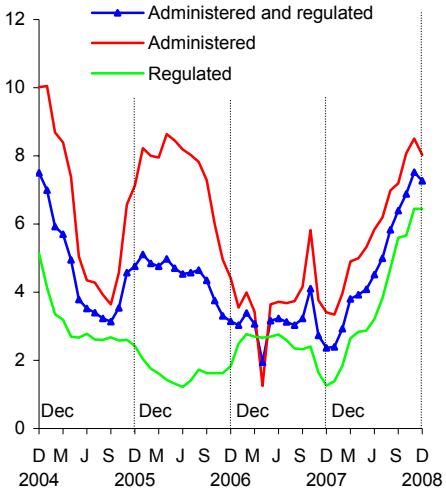
iv) As for prices of other services, such as fast-food establishments, restaurants, hotels, and air transportation, these could have been affected by the rise along the year in some commodity price quotes, like foodstuffs, and in fuels' domestic prices. In the case of air transportation, the recent lesser supply in this sector might have affected air fares.

The growth in annual headline inflation during the analyzed period was thus due to the upward movement in both its core and non-core indices. The latter index, however, had a more significant incidence on prices by growing on average from 6.15 percent in annual terms during the third quarter to 7.99 percent in annual terms during the fourth, as compared with the core index, which grew from 5.24 to 5.53 percent, respectively.

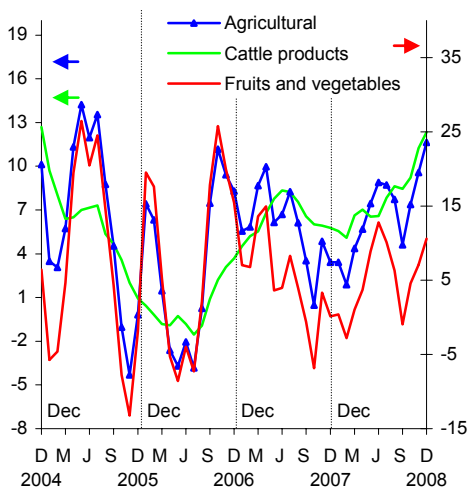
The upward path followed by the CPI non-core price index was determined by the rise in both the subindex of administered and regulated prices and in the agricultural price subindex (Graph 2, for more details, see Section 3.2.1 on administered and regulated prices of goods and services).

Graph 2
Non-core Price Subindex
Annual change (percent)

a) Administered and Regulated Prices



b) Agricultural

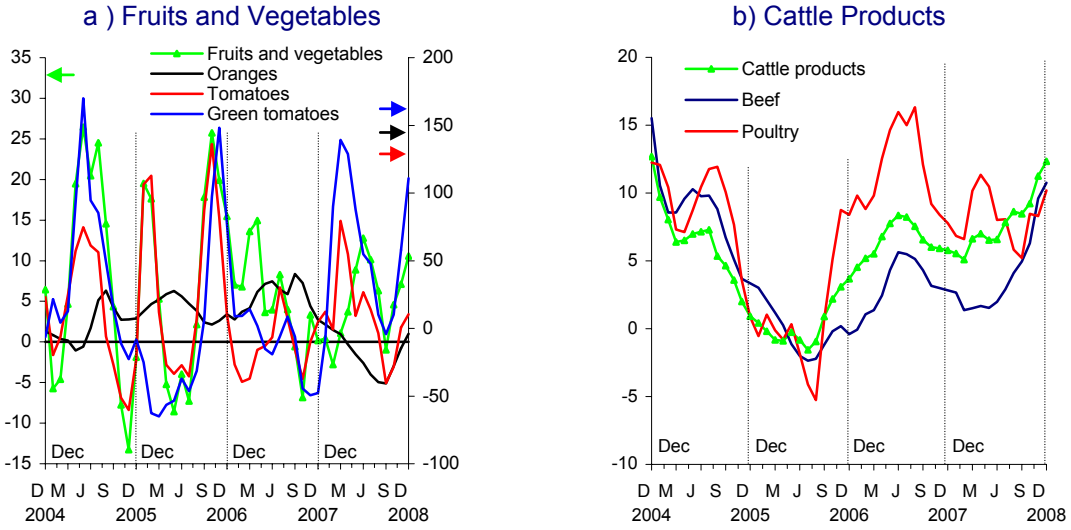


During the fourth quarter of 2008, annual agricultural inflation rose on average by 2.57 percentage points, reaching 9.54 percent (as compared with 6.97 percent during the previous quarter, Table 1). This situation was due mainly to the upward movement in meat product price quotes. The corresponding indicator for cattle product prices moved from 8.31 to 10.94 percent from the third to the fourth quarter of 2008, while fruits and vegetables' prices rose on average from 4.92 to 7.46 percent during the same period. Table 1 presents those items which, on the

basis of their incidence, had the greatest impact on agricultural inflation. Beef and poultry prices recorded the highest incidences as well as orange, tomato and green tomato prices (Graph 3).

Annual core inflation increased on average from 5.24 to 5.53 percent from the third to the fourth quarter of 2008. Core services inflation moved from 4.60 to 4.97 percent. Housing and remaining services recorded the highest price variations, while education prices remained practically unchanged. In the case of merchandise prices, they grew from 5.95 to 6.13 percent from the third to the fourth quarter. The upward pattern followed by average price inflation for the remaining merchandises (non-foods) was partially offset by the lower average growth of processed food prices, though the latter still show high inflation figures (Graph 4).

Graph 3
Agricultural Price Subindex
Annual change (percent)



Graph 4
Core Price Subindex
Annual change (percent)

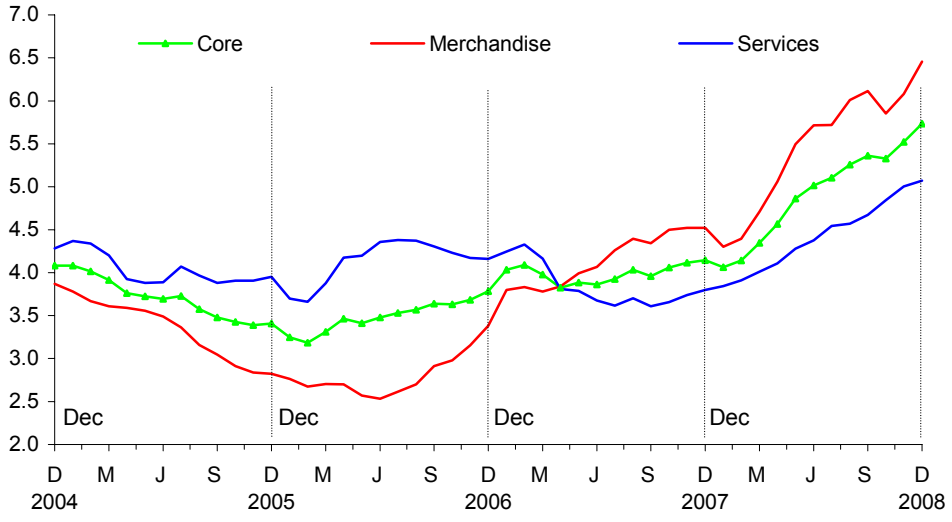


Table 1
Consumer Price Index and Components

	Annual Change Percent				Average Annual Change Percent [1/]	
	Sep-2008	Oct-2008	Nov-2008	Dec-2008	Q-III 2008	Q-IV 2008
CPI	**5.47**	**5.78**	**6.23**	**6.53**	**5.48**	**6.18**
Core	**5.36**	**5.33**	**5.52**	**5.73**	**5.24**	**5.53**
Merchandise	**6.11**	**5.85**	**6.08**	**6.45**	**5.95**	**6.13**
Foods	**9.40**	**8.59**	**8.71**	**9.46**	**9.48**	**8.92**
Other grocery products [2/]	8.94	9.68	12.97	14.14	8.26	12.27
Corn products [3/]	6.14	6.47	6.53	7.83	5.56	6.95
Sugar products [4/]	2.25	2.30	3.07	3.95	2.13	3.10
Prepared foods [5/]	7.26	7.71	8.85	9.29	7.15	8.62
Other [7/]	11.97	10.22	9.44	10.03	12.42	9.90
Remaining merchandise	**3.55**	**3.71**	**4.01**	**4.07**	**3.21**	**3.93**
Services	**4.67**	**4.84**	**5.01**	**5.07**	**4.60**	**4.97**
Housing	**3.84**	**4.11**	**4.27**	**4.22**	**3.87**	**4.20**
Own housing	3.66	3.95	4.08	3.92	3.76	3.98
Home rentals	2.97	3.30	3.40	3.48	2.91	3.40
Housing maintenence materials	6.87	7.75	8.91	9.19	6.48	8.62
Other [7/]	4.53	4.43	4.47	4.68	4.48	4.53
Education	**5.76**	**5.77**	**5.77**	**5.76**	**5.73**	**5.77**
Remaining services	**5.19**	**5.31**	**5.54**	**5.77**	**4.97**	**5.54**
Food services [6/]	5.83	5.85	6.34	6.60	5.48	6.26
Travel package services	8.78	10.53	10.91	10.78	7.74	10.74
Hotels	1.42	1.91	3.34	3.31	1.37	2.86
Other [7/]	4.24	4.28	4.22	4.43	4.23	4.31
Non-core	**5.79**	**7.05**	**8.20**	**8.72**	**6.15**	**7.99**
Agricultural	**4.61**	**7.38**	**9.57**	**11.63**	**6.97**	**9.54**
Fruits and vegetables	**-0.95**	**4.60**	**7.11**	**10.58**	**4.92**	**7.46**
Oranges	-40.73	-27.81	-14.64	-3.99	-38.28	-17.10
Tomatoes	-40.33	-28.39	0.63	10.33	-13.68	-5.41
Green tomatoes	-4.31	10.11	58.01	110.96	14.03	59.74
Other [7/]	12.07	13.44	7.96	8.59	11.91	9.94
Cattle products	**8.46**	**9.22**	**11.25**	**12.34**	**8.31**	**10.94**
Beef	4.95	6.30	9.60	10.75	3.98	8.89
Poultry	5.21	8.46	8.29	10.18	6.36	8.98
Other [7/]	16.77	14.42	16.23	16.47	16.93	15.72
Administered and Regulated	**6.39**	**6.88**	**7.52**	**7.27**	**5.74**	**7.23**
Administered	**7.19**	**8.08**	**8.50**	**8.03**	**6.79**	**8.21**
Low-octane gasoline	5.02	6.26	6.84	4.91	4.53	6.00
High-octane gasoline	7.28	8.66	8.79	5.77	6.60	7.73
Electricity	10.87	9.75	9.12	9.45	10.43	9.43
Gas for residential use	6.53	8.54	9.82	10.72	6.35	9.70
Regulated	**5.60**	**5.66**	**6.45**	**6.44**	**4.70**	**6.19**

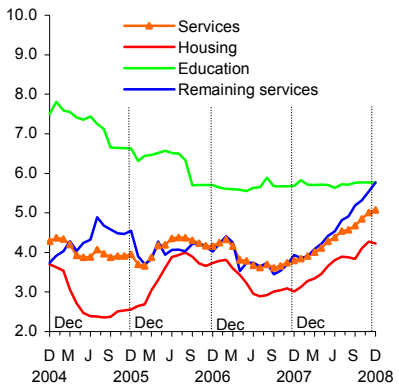
1/ Items are arranged by difference in incidences during the fourth quarter of 2008 as compared with the third.
2/ CPI products related to other groceries are: Ham; Sausages, Highly-seasoned sausage (*Chorizo*); Other cold cuts; Dried meat; Bacon, Canned tuna and sardines; Other preserved fish and sea food; Other dried vegetables; Processed chili-peppers; Canned/Bottled vegetables; Tomato paste and Canned soup; Fruit and legume-based prepared food for babies; Instant coffee; Grain coffee; Chicken and Salt concentrates; Other seasonings; Concentrates for soft drinks; and, Powdered gelatin.
3/ CPI corn products are: Corn tortillas; Corn dough and flour; and, Corn.
4/ CPI sugar products are: Sugar; Bottled juices and Nectars; Other canned fruits; Bottled soft drinks; Chocolate; and, Candies, Caramel topping and Honey.
5/ CPI products related to prepared foods are: Other cooked foodstuffs; Deep-fried pork (*Carnitas*); Roasted chicken; Barbecued goat meat and *Birria*; and, Pizzas.
6/ CPI food services are: Diners/Snack bars; Restaurants, Bars; and, Coffee shops.
7/ Meaning the other items of the subindex.

Within core services inflation, the average annual growth of the housing price subindex jumped from 3.87 to 4.20 percent from the third to the fourth quarter of 2008 (Table 1). The prices of privately-owned property, materials for housing maintenance, and home rentals determined such an increase. As for housing, in the Northern border it is a common practice to negotiate rents in US dollars and, therefore, the exchange rate depreciation also influenced the aforementioned result (Graph 5).

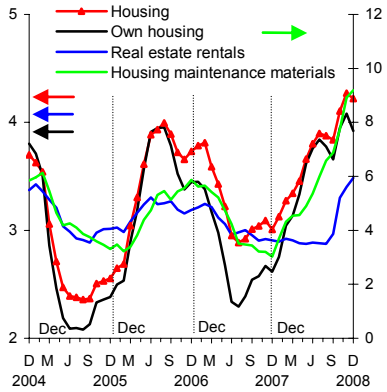
In the case of the remaining services, their prices grew on average from 4.97 to 5.54 percent in annual terms, from the third to the fourth quarter of 2008. Prices of food services (fast-food establishments and restaurants), travel packages, and hotels accounted for the entire price growth of remaining services (Graph 5). Regarding food services, its prices have grown steadily in annual terms during the year, probably mirroring the upward shift in the prices of raw materials used in this activity. The rate of change set for energy prices (gasoline, LP gas and electricity) adjusted more rapidly mainly during the last quarter of the year, although the federal government's announcement in January 2009 to suspend the rate of change for gasoline prices and to reduce LP gas prices and electricity tariffs should contribute to ease this situation. The upward pattern followed by food prices was also a relevant issue in determining food-services companies' costs structure. As for travel packages and hotels, the highest fare increases were registered in tourism centers that traditionally have a strong demand, such as Veracruz, Acapulco, and Oaxaca.

Graph 5
Core Services Price Subindex
Annual change (percent)

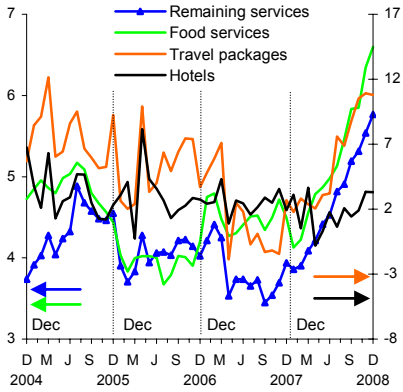
a) Services



b) Housing



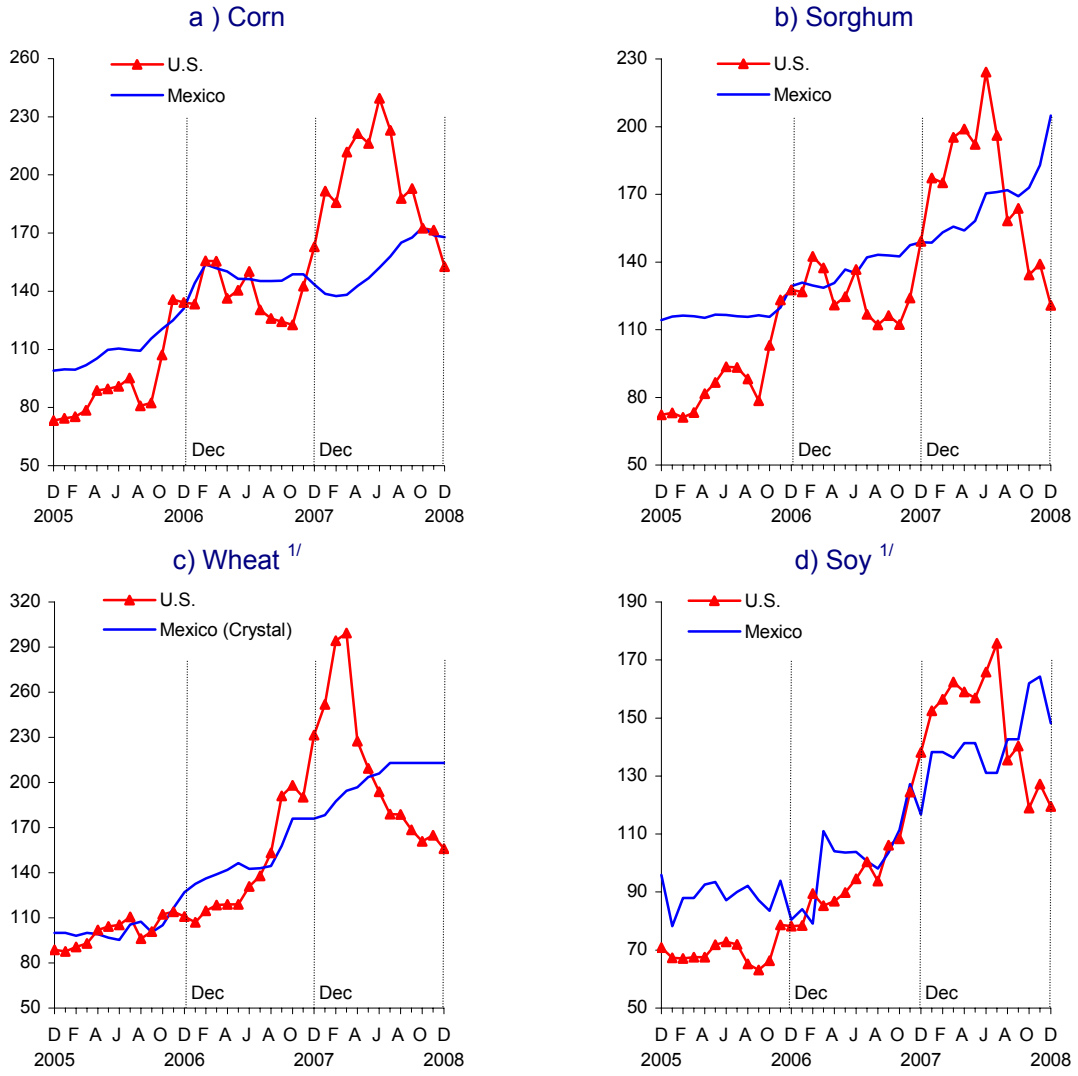
c) Remaining Services



Between the third and the fourth quarters of 2008, the average annual growth rate of processed foodstuff prices declined from 9.48 to 8.92 percent (Table 1). This result is due to the fact that during the fourth quarter of 2007 there was a high comparison base due to the significant growth in the prices of several items, such as pasteurized and fresh milk, cigarettes, sweet bread, white bread and edible vegetable greases and oils. Nevertheless, annual food inflation (which also includes processed foods, beverages and tobacco) rose by the end of the year mainly due to price adjustments in cigarettes, packed corn tortillas, and in pasteurized and fresh milk (Box 1). In the case of cigarettes, part of the increase might be due to an anticipated reaction to the adjustment in the Excise Tax (*Impuesto Especial sobre Producción y Servicios, IEPS*), which was programmed

for January 2009.[1] Price increases of the other aforementioned items took place in an environment in which international commodity price quotes have fallen significantly, with the corresponding effect on their domestic references. Thus, there are high probabilities that prices will be subject to lower cost pressures during the first months of 2009 (Graph 6 and Box 2).

Graph 6
Producer Price Index (Grains)
Mexico and U.S. (pesos)
December 2003=100



1/ The series for Mexico was constructed based on the prices of crystal wheat and soy prices from main produce domestic wholesale markets (*centrales de abasto*) considered in the items Wheat and Other grain seeds and Industrial seeds, respectively, from the PPI.
Source: Banco de México and SNIIM (for data on Mexico); and, BLS (for data on the U.S.).

[1] In 2006, cigarettes and tobacco were subject to an excise tax *(Impuesto Especial sobre Producción y Servicios*, IEPS) of 110%. However, in the Fiscal Update on the Tax System (*Miscelánea Fiscal*) of 2007, the corresponding IEPS rate was set at 140% for that year, 150% for 2008, and 160% for 2009.

Box 1

Market Structure and Other Rigidities and Distortions: Effects on Observed Inflation

This box discusses how the lack of competition in markets, together with other rigidities and distortions, temporarily affect both observed inflation and the response of consumer prices to various demand and cost related shocks. Discussion focuses on the effect of market structure on inflation and how, together with other rigidities, lack of competition might make prices adjust less and less rapidly in the event of different shocks or else make them respond asymmetrically in the event of increases or reductions in costs.

Inflation (defined as a sustained increase in the general price level) is basically a monetary phenomenon and therefore its main determinant is money market conditions. Under this context, the discussion in this box is associated with changes in prices that are not sustainable and therefore only affect inflation temporarily. In particular, the market structure and the type of rigidities discussed herein only affect inflation insofar as how fast and to what extent the prices of several goods and services adjust in the event of various shocks to the economy. Indeed, since annual inflation is estimated as the accumulated growth of prices for twelve consecutive months, the effect of these shocks on annual inflation should last, at least, the same number of months.

1. Competition and its Effect on Inflation

First, the temporary effect on inflation of higher competition among producers in a particular market is analyzed. It is well known that in a sector characterized by significant trade barriers producers have market power to fix prices above the marginal cost of the goods they produce. These prices are above those that would be observed in a more competitive market. The extreme case is monopoly. It is clear that in a market where firms can take advantage of monopoly power, if competition suddenly increases, the market power of each particular firm would diminish and, therefore, equilibrium prices would be expected to decrease for some time. Even if everything remains constant, this decline in prices would make annual inflation fall temporarily. This effect would persist only until the market reaches a new balance.[1]

An additional mechanism that would favor a temporary decline in inflation as a result of greater competition is the fact that, in general, greater competition enables firms to allocate the resources used in their productive processes more efficiently, leading to higher productivity and lower prices while, when a monopoly dominates the market, there could be not only static market inefficiencies (e.g. lower than optimal production and higher consumer prices), but also dynamic inefficiencies which reduce productivity. This situation is due to the fact that, in the absence of greater competition, monopolists have lesser incentives to adopt more efficient technologies or to expand their investments in research and development.[2]

The decline in observed inflation originated by greater competition would be significant insofar as there is more flexibility in the price formation process. As will be discussed later, this suggests that, in order to identify the response of prices to diverse shocks, it is not enough to understand the structure of each particular market but also its interaction with other rigidities in the price formation process.

2. Market Structure's Impact on both the Velocity and Response of Prices to Various Shocks

Another mechanism through which the market structure can temporarily affect inflation is how this structure affects the velocity and degree of adjustment of consumer prices to different demand and cost related shocks. Regarding the velocity of price adjustment, both theory and empirical evidence suggest that greater competition favors a faster adjustment.[3] Thus, if input prices were to be subject to downward pressures, a more competitive environment would enable any cost reduction to be transmitted to consumers more rapidly.

An example of the aforementioned mechanism is the case of a firm with local market power and accumulated inventories of an internationally traded product. Assuming that, at a certain point, the international price of this product starts to decrease, the firm, due to its market power, can maintain a high price in the local market, thus preventing losses generated by its change in inventory value. However, if the firm faces more competition, it would have no option but to lower consumer prices, even if would imply assuming the loss of its inventory value.

It is important to recognize that when input prices are subject to upward pressures, the relationship between competition and velocity of adjustment in prices would imply that consumer inflation would temporarily increase more as there is more competition in markets. This suggests that a faster response to cost and demand related shocks from more competitive firms is not necessarily more favorable in terms of its temporary effect on consumer inflation.

Regarding the existing relationship between market structure and the degree to which several shocks are passed on to consumers, the forecasts from the current economic theory are more dubious and, therefore, it has not been possible to reach more general conclusions regarding the degree to which a particular market structure influences this pass-through. To illustrate the latter, consider the following: when a market is competitive, any cost-related shock would be expected to pass on to consumer prices, one by one. This is particularly true once the number of active firms adjusts to the shock. For example, if costs increase in a certain percentage, equilibrium prices would be expected to eventually increase in the same proportion. This would also be the case in monopoly markets, if the demand function faced by the monopoly is characterized for having constant (iso-elastic) elasticity. However, if the same monopoly faced a linear demand, it would only pass on to consumers a fraction of the changes in costs. In this case, prices would increase less after an increase in costs and would decrease less prior to a cost reduction, as compared with the observed with a monopoly that faces an iso-elastic demand or a competitive market (see Asplund M. and Friberg, R., *op. cit.*). Among the extreme cases of perfect competition and monopoly are countless forms of oligopolistic competition that might show a high variety in terms of the response of firms to changes in costs. This diversity depends, among other factors, on the functional form of demand. For example, in oligopolistic markets in which firms fix their offered quantities, price response would be less than proportional to changes in costs (but higher than that of a monopolistic

[1] See Jonsson, M. (2007). "Increased Competition and Inflation", Sveriges Riksbank Economic Review 2007:2, 41-60.

[2] See e.g. Motta, M. (2004), "Competition Policy", Cambridge University Press and Nickell, S., (1996), "Competition and Corporate Performance", Journal of Political Economy 4, 724-46.

[3] See Martin, C. (1993), "Price Adjustment and Market Structure", Economic Letters 41, 139-143, and Asplund M. and Friberg, R. (1998), "Links Between Competition and Inflation", Sveriges Riksbank Quarterly Review 3, 50-73.

response) if there is a linear demand or a more than proportional response to costs if there is a constant elasticity in demand.[4]

To conclude, a firm's change in cost would be passed on to consumer prices differently, depending on factors such as the nature of the competition among firms and the functional form of demand functions. Since there are no a priori reasons to assume that in a particular economy some functional forms of demand or competition prevail upon others, it is impossible to declare the existence of a general and unique relationship between the degree of competition and the degree of response of consumer prices to cost or demand related shocks.

3. Interaction between Market Structure and Other Rigidities

The difficulty to reach general conclusions on the degree to which market competition favors or not the pass-through of changes in costs to consumer prices is heightened by the fact that a lack of market competition goes, generally, hand in hand with other distortions that might operate in different directions and might not be observed in all markets. In this context, the temporary effect that various shocks could have on observed inflation depends not only on the market structure but also on its interaction with diverse price rigidities that can lead to slower and partial adjustments in some markets. In this context, the fact that some sectors show more rigidity to a decline in inflation as compared to others is not necessarily associated with the market structure; it can be the result of other types of rigidities inherent to certain markets.[5]

There are several cases where it must be assumed that an interaction of a particular market structure with other rigidities is present in order to rationalize the existence of price responses different to the expected. For example, there is evidence that, in some markets, a cost increase is passed on to consumer prices faster than an equivalent decrease; that price reductions are higher but less frequent than price increases; and that the degree of asymmetry diminishes in terms of the variance of cost-related shocks.[6] These kinds of asymmetries are difficult to explain on the basis of the conventional economic theory, even when relevant firms are assumed to have considerable market power.[7] In fact, the previously described asymmetry seems to be present in markets that have different degrees of competition and therefore, to explain it, the presence of some kind of rigidity must be assumed.

In relation to the aforementioned, Ball and Mankiw (1994) suggest that when inflation is positive the existence of costs from price adjustments ("menu costs") can make firms be more willing to adjust their prices upwards when they face a positive cost-related shock than to reduce them in the presence of a negative shock. In the latter case, this is due to the fact that inflation would eventually lead to a decline in relative prices without the need to pay for a cost adjustment. Clearly, this kind of costs can be more significant for some sectors than for others. Nakamura and Steinsson (2008) found that, for the United States economy, the degree of price rigidity varies considerably among sectors. In some sectors the frequency of price changes is 90% per month, while in others it is only 5%. In another study, Davis and Hamilton (2004) show that in certain particular sectors the kind of asymmetry in price response might depend on the size of the shocks. Both authors argue that, in the event of small shocks, as suggested by Ball and Mankiw (1994), firms are more willing to increase than to reduce prices. This might suggest that, in these particular cases, rigidities do not reflect "menu costs" but firms' strategic considerations regarding consumers and competitors' response to changes in prices.[8]

Thus, asymmetry in price responses to various shocks does not seem to depend on market structure but on the interaction of market structure with factors and rigidities that might characterize certain particular markets and not necessarily all sectors of the economy. An example of these rigidities is the public policies that seek to guarantee the income of producers of a certain product, even when the equilibrium price of such product diminishes.

4. Conclusions

It is possible to state that in the presence of market power, it might interact with other rigidities in such a way that consumer prices respond quite differently to those forecasted by the competition paradigm and, therefore, observed inflation is affected temporarily. Empirical experience seems to suggest that, in some markets, the development of prices differs considerably from such paradigm, thus suggesting that market structure, together with several rigidities, could be leading to observe this kind of responses which are difficult to rationalize on the basis of the conventional theory. A clear example is the apparent asymmetry in prices' response to an increase or reduction in costs.

The results obtained from this kind of responses are not general but depend on each particular market. This suggest that understanding the market structure is not enough and identifying the market structure's interaction with other characteristics peculiar to each sector is also necessary in order to fully grasp and explain the development of observed prices in each market when costs or demand change.

[4] See Asplund M. and Friberg, R., *op. cit.* and Dixit, A. (1986), "Comparative Statics for Oligopoly", International Economic Review 27, 107-122.

[5] The prevalence of nominal rigidities, i.e. the fact that some prices in the economy do not adjust immediately to the desired levels, has been widely documented for several countries, including Mexico (see Castañón, V., Murillo, J. A. and Salas, J., (2008), "Formación de Precios en la Industria Manufacturera de México", Trimestre Económico, Vol. LXXV, Núm. 297, 143-181).

[6] See Peltzman, S. (2000). "Prices Rise Faster Than They Fall", Journal of Political Economy 108 no. 3, 466-502.

[7] See Peltzman, S. *op. cit.*

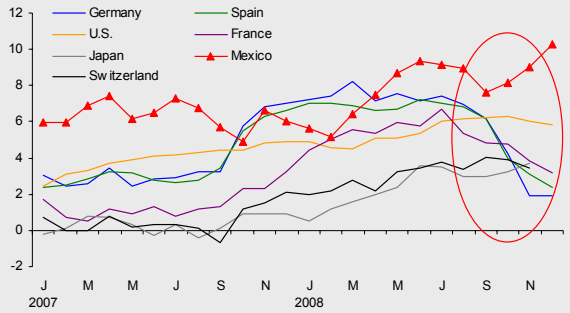
[8] See Ball, L. and Mankiw, G. (1994), "Asymmetric Price Adjustment and Economic Fluctuations", The Economic Journal 104, No. 423, 247-261; Davis, M. and Hamilton, J. (2004), "Why are Prices Sticky? The Dynamics of Wholesale Gasoline Prices", Journal of Money, Credit and Banking 36, 17-37; and Nakamura, E. y Steinsson, J. (2008) "Five Facts About Prices: A Reevaluation of Menu Cost Models", about to be published in Quarterly Journal of Economics.

The remaining merchandise (non-food) core price subindex grew on average from 3.21 to 3.93 percent in annual terms from the third to the fourth quarter of 2008 (Table 1). Exchange rate fluctuations together with several increases during the year in the international price quotes of chemical and petrochemical by-products and in other commodities such as cellulose might have been determinant for the price development of domestic manufacturing products that use the aforementioned goods as inputs. Other products that could have also been affected by the exchange rate are automobiles, pet food, and tires. Prices of personal and household cleaning products also rose (Graph 7).

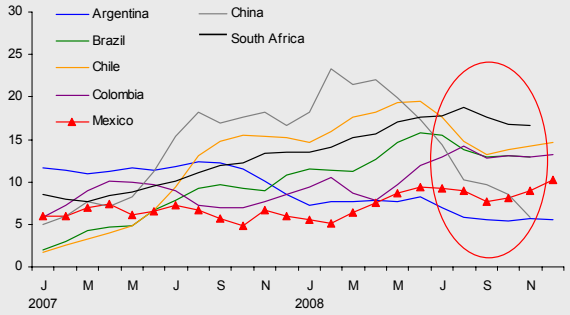
Box 2
Food Prices: Recent Impact on the CPI

During the second half of 2008, international food commodity prices fell sharply (see Section 3.2 Costs and Prices). These developments made annual food inflation in various countries decline or else stop increasing. In most advanced economies, food inflation apparently has decreased, while in some emerging economies it seems to have stopped growing (Graph 1).

Graph 1
Annual Food Inflation
A. Advanced Economies



B. Emerging Economies



Source: Statistical bureaus of different countries, Bloomberg and Banco de México.

The recent developments in food inflation in emerging economies were probably influenced by the depreciations of the currencies of some of these countries during the last quarter of 2008. Together with other factors, these depreciations might have offset to some extent the effect of the decline in international food price quotes on food inflation levels in these countries.

In Mexico, annual food inflation (processed and agricultural foods) followed an upward trend during the fourth quarter of 2008, from 8.15 to 10.24 percent between October and December of 2008. As a result, foodstuff prices were one of the items with the highest incidence in the CPI (Table 1).

In the particular case of processed food prices in Mexico, although average inflation during the fourth quarter was below that observed during the previous two quarters, during the last quarter it grew at an increasing monthly rate, reaching 9.46 percent in December. The latter despite the fact that in the last months of 2008 commodity-related pressures have diminished and are likely to fade away more in the next months. Commodities (raw materials) have a greater share in these items' cost structure (Graph 2). Among the items that make up the processed foods price subindex, cigarettes, sliced tin loaf, and pasteurized milk recorded an annual inflation of 12.48, 17.02 and 4.57 percent, respectively, in December 2008.

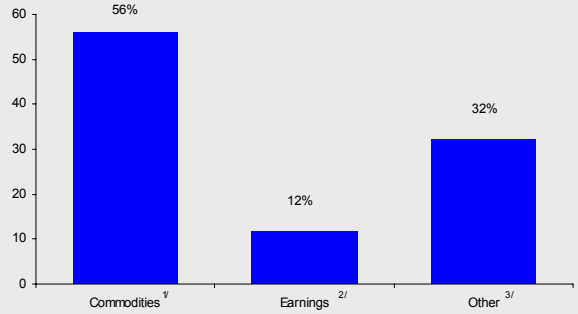
Annual food inflation in Mexico is expected to emulate that of other countries and, in the next months, to stabilize or even start to decrease. In one previous episode, after the fall in international commodity prices, annual food inflation in Mexico was affected with some lag as compared with other countries. Graph 3 shows these developments. In June 2004, food began a declining trend, partly as a result of a decline in international commodity prices. Mexico began to show the same trend until November of that same year.

Table 1
Annual Food Inflation in Mexico

ITEM	Annual change in percent					
	Q-II	Q-III	Oct	Nov	Dec	Q-IV
	2008					
CPI	4.92	5.48	5.78	6.23	6.53	6.18
Food	8.50	8.58	8.15	9.02	10.24	9.14
Processed food	9.17	9.48	8.59	8.71	9.46	8.92
Agricultural	7.31	6.97	7.38	9.57	11.63	9.54
Other	3.79	4.49	5.02	5.34	5.33	5.23
	Incidence					
CPI	4.92	5.48	5.78	6.23	6.53	6.18
Foods	2.03	2.07	1.98	2.19	2.50	2.23
Processed foods	1.40	1.46	1.33	1.35	1.47	1.39
Agricultural	0.63	0.61	0.65	0.84	1.03	0.84
Other	2.88	3.41	3.80	4.04	4.03	3.96

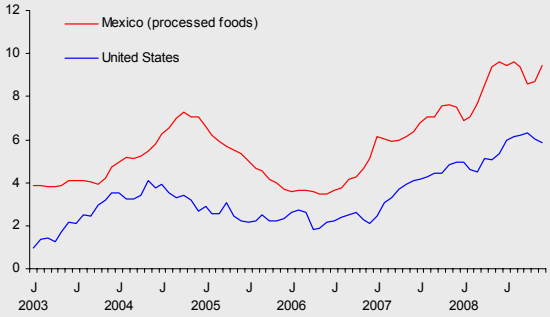
Source: Banco de México.

Graph 2
Cost Structure of Processed Foods



1/ Includes grains, oils and fat, sugar, meat and dairy products, fruits and vegetables.
2/ Contractual wages in the processed foods' sector.
3/ Includes containers and wrap packaging, fuels, electricity, real estate rentals, and advertising.
Source: INEGI, 2004 Economic Census.

Graph 3
Annual Food Inflation in Mexico and the U.S.

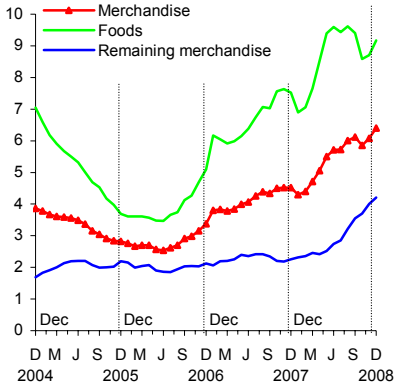


Source: Banco de México and Bureau of Labor Statistics (BLS).

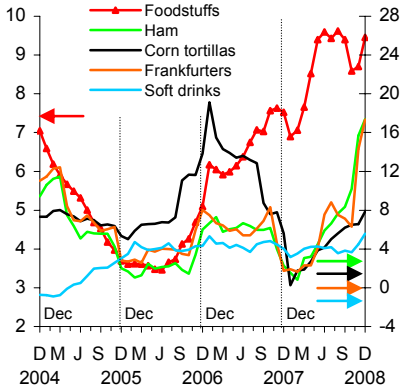
Among the probable causes of food prices' lagged response between Mexico and the U.S. are i) the different market structures between both countries (for example, difference in distribution/retail channels); (ii) the different contract terms; and, (iii) the different public agricultural policies. As mentioned in Box 1 of this Report, the lack of market competition, together with other rigidities, can make prices adjust less and less rapidly to the cost structure in the event of shocks.

Graph 7
Core Merchandise Price Subindex
Annual change (percent)

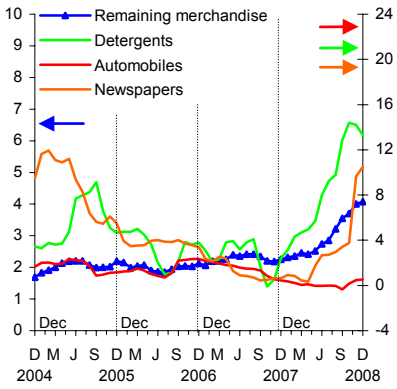
a) Merchandise



b) Foods



c) Remaining Merchandise

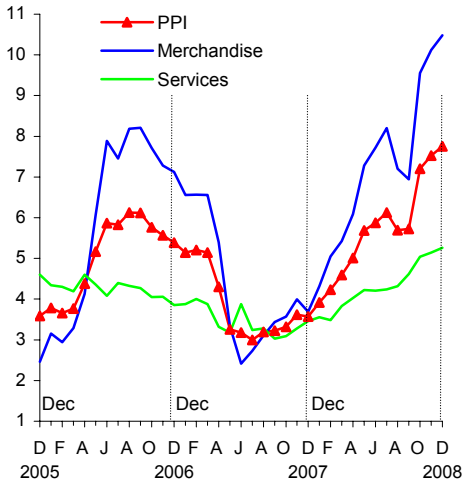


2.2. Producer Price Index

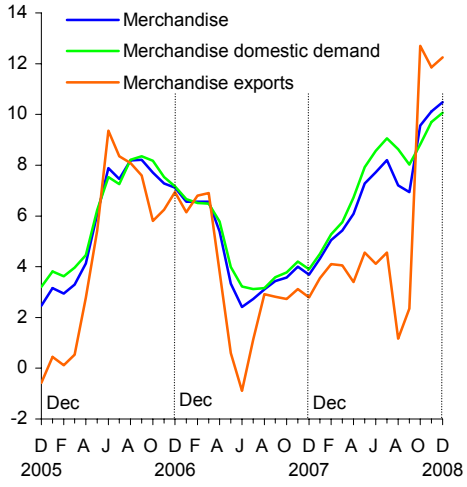
During the last quarter of 2008, the Non-oil Producer Price Index grew at an average annual rate of 7.49 percent, figure higher than the 5.85 percent of the previous quarter. Merchandise prices contributed significantly to PPI inflation. General merchandise items were affected by the peso depreciation against the US dollar, mainly those for exports which, by being quoted in foreign currency, have an immediate impact on the PPI (Graph 8).

Graph 8
Non-oil Producer Price Index
Annual change (percent)

a) Merchandise and Services



b) Merchandise for Domestic Demand and Exports



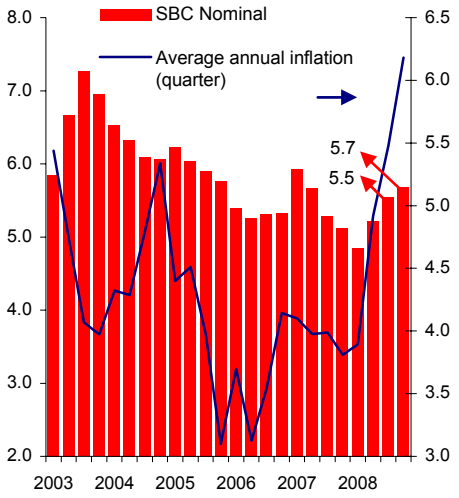
2.3. Wages

During the fourth quarter of 2008, the IMSS reference wage was 0.2 percentage points above the figure observed during the previous quarter. This figure was below the increase recorded by average annual inflation during the

quarter (0.7 percentage points). Average contractual wages for the fourth quarter of 2008 were 0.1 percentage points above the figure registered during the same quarter of the previous year and below inflation expectations figures for the next twelve months (0.2 percentage points, Graph 9 and Table 2).[2] The minimum wage increase for 2009 was above that agreed for the previous year.

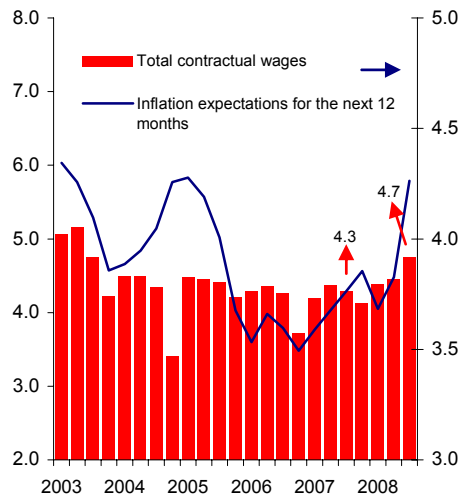
Graph 9
Main Indicators on Wages

a) IMSS Nominal Reference Wage [1/]
Annual change (percent)



1/ Based on IMSS-insured workers. Includes 14.4 million workers on average during the first eleven months of 2008, which corresponds to 35.6 percent of total paid workers.

b) Contractual Wages[2/]
Figures in percent



2/ Based on wage negotiations in firms under federal jurisdiction. Includes 1.9 million workers in 2008, which corresponds to 4.6 percent of total paid workers during that year.

The IMSS reference wage grew on average 5.7 percent during the fourth quarter 2008 (as compared with 5.5 percent during the previous quarter). According to this indicator, both extractive and processing industries registered the highest annual growth rates during the aforementioned quarter; on the contrary, transportation, communications and services for firms and individuals grew more moderately (Table 2).

Contractual wages negotiated by federal jurisdiction firms rose on average 4.2 percent during the fourth quarter of 2008 (0.1 percentage points over the figure of the previous year quarter). The highest wage increase was obtained by workers in privately-owned firms (4.7 percent for the period). Workers in publicly-owned firms obtained a 4.0 percent increase. The increase obtained by this type of firms was significantly influenced by wage settlements in a medical and social security institution (Table 2).

[2] The IMSS reference wage considers the daily wage that, on average, insured workers received during that period as well as some benefits (e.g., bonuses, paid vacations, and commissions). On the contrary, contractual wages only comprise the direct increase to the tabulator negotiated by federal jurisdiction firms' workers and remains in force for the following twelve months. The monthly composition of this last indicator is based on information from firms that negotiated wage increases usually during the same period of the year. For this reason, this indicator follows a seasonal pattern. Therefore, the IMSS reference wage must be analyzed by comparing consecutive periods. In the case of contractual wages, these must be analyzed by comparing annual periods.

Table 2
Wage Indicators
Annual change (percent)

	2007					2008				
	I	II	III	IV	Jan-Dec	I	II	III	IV	Jan-Dec
IMSS reference wage	**5.9**	**5.7**	**5.3**	**5.1**	**5.5**	**4.9**	**5.2**	**5.5**	**5.7**	**5.3**
Agriculture, farming, forestry, hunting and fishing	15.7	10.5	4.4	3.6	8.5	3.3	4.4	5.7	5.8	4.8
Extractive industries	7.4	7.9	8.3	8.6	8.0	10.6	11.7	11.6	12.8	11.7
Processing industries	6.0	6.3	6.0	5.9	6.0	6.0	6.4	6.5	7.1	6.5
Construction	7.7	7.2	6.5	4.9	6.6	5.3	5.1	5.4	5.8	5.4
Electric industry and water collection/supply	8.6	9.5	7.7	6.1	8.0	5.1	6.7	6.8	5.4	6.0
Commerce	6.6	5.7	5.1	4.4	5.4	3.7	5.0	5.6	5.9	5.1
Transport and communications	4.5	4.0	3.9	3.4	3.9	3.3	4.0	3.9	4.5	3.9
Services for firms and individuals	4.4	4.6	4.6	5.3	4.7	4.8	4.4	4.6	4.0	4.5
Social and community services	4.6	4.8	5.4	5.7	5.1	5.3	5.7	6.1	6.0	5.8
Total contractual wages[1/]	**4.2**	**4.4**	**4.3**	**4.1**	**4.2**	**4.4**	**4.4**	**4.8**	**4.2**	**4.4**
Publicly-owned firms	3.9	4.2	4.3	4.0	4.1	4.3	4.3	4.8	4.0	4.3
Medical and social assistance	d.n.e.	d.n.e.	d.n.e.	4.0	4.0	d.n.e.	d.n.e.	d.n.e.	4.0	4.0
Privately-owned firms	4.3	4.4	4.3	4.4	4.3	4.4	4.5	4.7	4.7	4.5
Average annual inflation during the period	4.1	4.0	4.0	3.8	4.0	3.9	4.9	5.5	6.2	5.1
Inflation expectations for the next average 12 months of the period	3.6	3.7	3.8	3.9	3.7	3.7	3.8	4.3	4.5	4.1

d.n.e/ No wage revisions are available for the reference period.
1/ Weighted average by number of workers benefited during the period.
Source: Calculations by Banco de México with data from INEGI, IMSS, and the Ministry of Labor (Secretaría *del Trabajo y Previsión Social*, STPS).

The Minimum Wages Commission (*Comisión Nacional de los Salarios Mínimos,* CONASAMI) agreed on an average increase of 4.6 percent for the minimum wage (*Salario Mínimo General, SMG*) for 2009 (as compared with 4.0 percent in 2008). The minimum wage was thus set at 53.19 pesos per day. This increase was higher for the geographical region "C" (4.95 percent). Regions "A" and "B" had a 4.20 and 4.51 percent increase, respectively. With this agreement, a trend towards gradually standardizing minimum wages to a single level in all three geographical regions was retaken (Table 3).

Table 3
Nominal Minimum Wage
Pesos per day and annual change (percent)

Period	Pesos per day				Annyual percentage change			
	General	Geographic region			General	Geographic region		
		A	B	C		A	B	C
2001	37.57	40.35	37.95	35.85	6.99	6.50	8.09	9.68
2002	39.74	42.15	40.10	38.30	5.78	4.50	5.70	6.90
2003	41.53	43.65	41.85	40.30	4.50	3.56	4.36	5.22
2004	43.30	45.24	43.73	42.11	4.25	3.64	4.50	4.50
2005	45.24	46.80	45.35	44.05	4.50	3.50	3.70	4.60
2006	47.05	48.67	47.16	45.81	4.00	4.00	4.00	4.00
2007	48.88	50.57	49.00	47.60	3.90	3.90	3.91	3.90
2008	50.84	52.59	50.96	49.50	4.00	4.00	4.00	4.00
2009	53.19	54.80	53.26	51.95	4.62	4.20	4.51	4.95

Source: Minimum Wages Commission (*Comisión Nacional de los Salarios Mínimos*, CONASAMI).

3. Main Determinants of Inflation

3.1. External Conditions

Despite the monetary stimulus and financial support measures implemented in some countries and the fiscal actions announced in several of them, the world economy weakened further during the fourth quarter of 2008. Most recent information suggests that economic activity in advanced and in some emerging economies contracted, while other emerging economies slowed down significantly during the same period. Expectations for GDP growth for 2009 in both groups of countries have been revised downwards considerably and continuously. The increase in idle capacity originated by this situation, together with the fall in commodity prices, eased inflationary pressures worldwide. However, various emerging economies continued facing high inflation rates. By the end of the third quarter and the beginning of the fourth, the international financial market crisis worsened, thus encouraging the implementation of extraordinary measures in several countries which significantly improved some segments of these markets. Nevertheless, markets continued to be subject to significant pressures. In a context of higher risk aversion, sovereign risk indicators for emerging economies deteriorated considerably.

The current crisis is the result of high levels of indebtedness in some advanced economies, generated by high global imbalances, extremely lax monetary policies for a long period, inefficient regulation and supervision schemes, and insufficient transparency in the financial sector, among other factors. The deleveraging process to improve these conditions led to a fall in household consumption and to huge losses in financial institutions, particularly in the United States. Given the widespread weakening of economic activity worldwide and the unusual turmoil in international financial markets, the current economic crisis is unprecedented.

3.1.1. Global Economic Activity

The United States GDP contracted 0.5 percent at an annualized quarterly rate during the July-September 2008 period, its worst performance since the third quarter of 2001. In annual terms, GDP grew 0.7 percent during the same period. These figures confirmed the U.S. economy recessionary conditions.[3] The main components of domestic absorption showed downbeat results. Private consumption fell (-3.8 percent at an annualized quarterly rate) for the first time since the fourth quarter of 1991. Furthermore, both non-residential and residential investment decreased (-1.7 and -16.0 percent at an annualized quarterly rate, respectively). In turn, inventory accumulation, government expenditure, and net exports had positive contributions to GDP growth, which prevented a sharper fall in economic activity.

[3] The National Bureau of Economic Research (NBER) – the institution in charge of defining recession periods – considers said periods as significant falls in all sectors of economic activity which last more than a few months and usually affect real GDP, employment, industrial production, and wholesale and retail sales. The NBER estimated that the current recession started in December 2007.

Most recent information points to a significant contraction of GDP of around 5 percent at an annualized quarterly rate during the fourth quarter. Consumer spending continued to be affected during this period by the plummeting of households' wealth, families' high levels of indebtedness, falling employment, and the persistent credit crunch in financial markets, among others. Although the Federal Reserve's measures contributed to reduce mortgage interest rates, residential investment kept on falling due to high home inventories and homes' falling prices. The pattern of capital goods orders and shipments and spending on structures suggest that non-residential investment continued weakening during the fourth quarter. Exports declined in October and November due to the appreciation of the US dollar and the weakening of foreign demand. Net exports contribution to quarterly GDP growth might have diminished or even turned negative during the fourth quarter. Worth mentioning is the weakening of industrial production, which contracted more sharply during the October-December period. That was also the situation of world industrial production, whose fluctuations in the last two last recessions have tended to emulate those of the U.S. industry (Box 3).

Due to the weakening of economic activity, the Federal Reserve reduced its federal funds rate target during the quarter, from 2 percent to between 0 and 0.25 percent, and adopted a series of additional measures to increase liquidity and reestablish orderly operations in financial markets (for further details, see Section 3.1.3 of this Report).

The Committee on Appropriations and the Committee on Ways and Means of the U.S. Chamber of the House of Representatives presented, by mid-January 2009, legislative proposals for a Recovery and Reinvestment Plan that will make up the fiscal stimulus package of the new administration. These proposals consider 825 billion dollars for a two-year period (accounting for approximately 2.9 percent of GDP per year) that, according to the plan, will be distributed between an increase of 550 billion dollars in expenditure and 275 billion dollars in tax cuts. The proposed funds will be channeled to investment in key areas in order to create and protect employment and to strengthen the economy.[4] The package is expected to create and preserve between 3 and 4 million jobs.[5] The aforementioned proposals are part of a legislative process and a final proposal will be sent to Congress to be approved no later than by mid-February.

[4] The funds will be channeled to investment in energy, science and technology, transportation, education and health. Fiscal incentives for states are included as well as financing for social programs to soften the crisis negative effects. As for tax cuts, the measures included fiscal rebates for families and firms, several support programs for education, housing, state and local governments, and fiscal incentives for the energy sector.

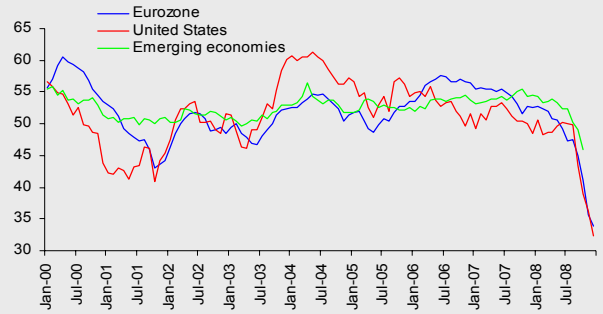
[5] According to a recent study (Christina Romer and Jared Bernstein, "The Job Impact of the American Recovery and Reinvestment Plan", January 9, 2009) which evaluates a stimulus program of 775 billion dollars (and which is quite similar to the one proposed by Congress), these actions are intended to make real GDP grow an additional 3.7 percent, to create 3.7 million jobs, and to reduce the unemployment rate by 1.8 percentage points during the fourth quarter of 2010.

Box 3

World Industrial Production: Recent Developments and Outlook

Since the last quarter of 2008, world industrial activity apparently has contracted at a faster rate in both advanced and emerging economies. In the U.S., industrial production fell 6.0 percent in annual terms during that period. The Purchasing Managers Indices, the most timely sector indicators, show that other main economies are expected to contract at a faster rate in December (Graph 1).[1] Although world industrial sectors have become more interrelated in the last years, the present episode is characterized by the greater adverse effects of the U.S. industrial contraction on emerging economies' industrial production.

Graph 1
Purchasing Managers Index (PMI)
Index points (higher than 50 indicates growth)

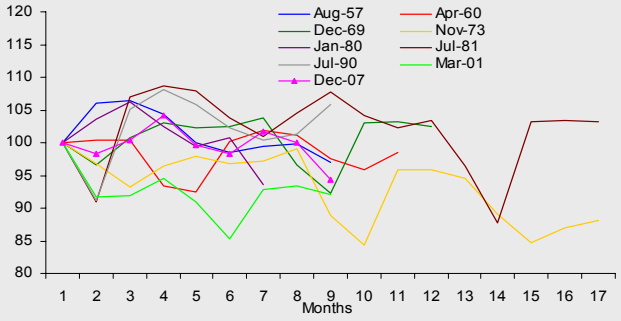


Source: IMF.

Advanced Economies

During the first 11 months of the current stage of the cycle, industrial production in advanced economies has contracted less than during the 2001 recession (Graph 2). However, it has also affected a larger number of countries than in other post-war recessions (Graph 3).

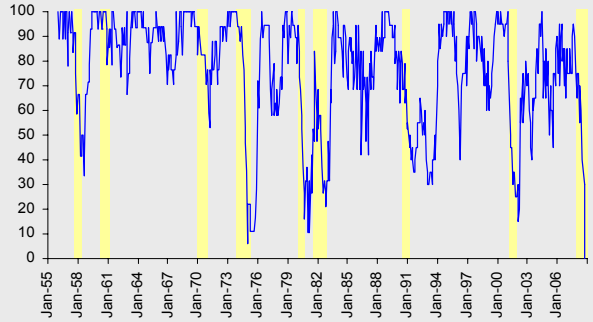
Graph 2
Industrial Production in Advanced Economies in Recession Periods [1/]
Start of recession in the U.S.=100



1/ Recession period according to National Bureau of Economic Research (NBER).
Source: IFS (IMF).

Industrial production in advanced economies had started to show signs of weakness since the end of 2007 due to the deterioration of the financial crisis at the beginning of that year and, later, to the widespread weakening of world economic activity. Nevertheless, forecasts about world economic activity in those dates suggested that the world economy would slow down only during the first part of 2008 and then recover as a result of the anticipated effects of the fiscal and monetary policies that were being adopted at that time, particularly in the U.S. Afterwards, both the industry's situation and its outlook have gradually deteriorated.

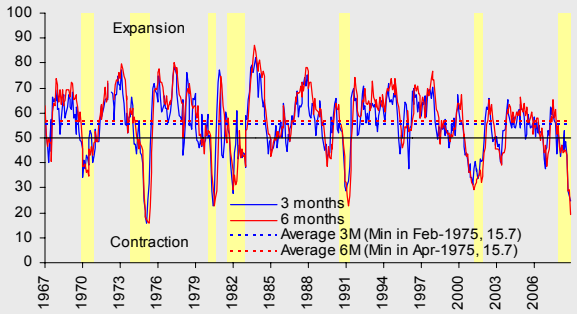
Graph 3
Percentage of Advanced Countries with Positive Annual Industrial Production Growth



Source: OECD.

In the U.S., the sectors that have contracted the most are vehicles and automobile parts and construction materials. Nevertheless, as recorded by the diffusion indices of the latest months, the economic weakness has also spilled over to the remaining sectors (Graph 4). Automobile sales were affected in 2008 not only by the stagnant condition of households' income, but also by the significant increase in fuel prices and tighter credit conditions. The latter factor is particularly relevant for the demand for durable goods and, therefore, the industries that produce this type of goods have been affected more by the financial situation. The sector of construction materials has besides been affected by the persistent crisis in the housing market. The high-tech sector has also slowed considerably. Despite its low share (close to 4 percent in November 2008, but more than offset by the high growth rate of 23 percent in annual terms), production of high-tech goods has contributed since 1990 with more than one half of the cumulative growth of U.S. industrial production. However, since the third quarter of 2008, high-tech production began to decelerate rapidly and thus its contribution to industrial production's annual growth turned slightly negative in November and December.

Graph 4
U.S. Difussion Indices of Industrial Production
Index points



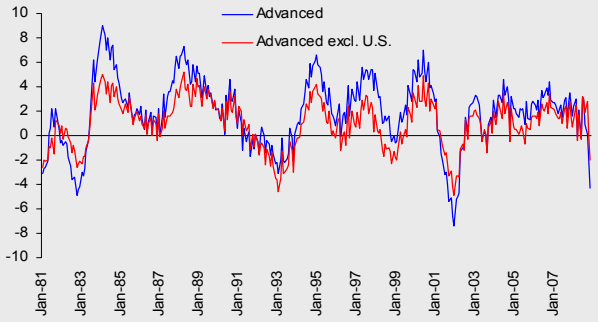
Source: Federal Reserve.

In other advanced economies, the industrial sector is also in a slump, mainly because of the strong relationship between their

[1] The Eurozone PMI recorded 33.9 in December 2008, although it rose slightly to 34.5 in January 2009. In the case of India, in December, this index recorded a contraction (i.e., figures below 50) for a second month in a row.

industries since decades (Graph 5). In Japan, where industrial production depends strongly on its exports to the U.S. and to other advanced economies, industrial production contracted 8.5 percent at an annual rate in November (its greatest contraction since the index began computing in the 1950s), as compared with 3.1 percent during the previous month. The Eurozone economies have also been affected by the decline of external demand. Industrial production in Germany, France, and the U.K. fell in November between 2 and 3 percent on a monthly basis. The Purchasing Managers Index of the Eurozone suggests a strong contraction for the region in December.

Graph 5
Industrial Production Indices
Annual growth rates



Source: IMF.

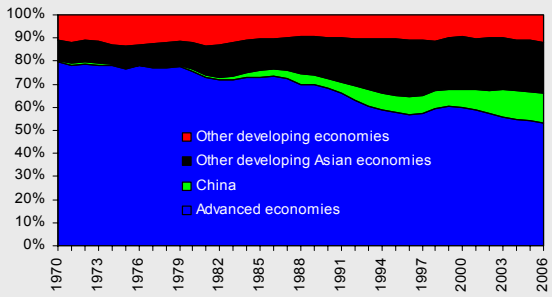
Emerging Economies

Industrial production in emerging economies was still resisting the adverse environment at the beginning of the financial crisis in 2007, partly because the financial conditions for them had deteriorated much less than for advanced economies and for themselves during previous periods of volatility. The destination of their manufacturing exports has also diversified since the beginning of the eighties (Graph 6).

Nevertheless, when the financial turmoil escalated in September and October, emerging economies were affected more directly and their indicators (for example, sovereign debt spreads) deteriorated significantly. Industrial production in these economies began to lose dynamism since the end of the second quarter of 2008. However, it was not until the fourth quarter that it began to slow down similarly than in advanced economies. In contrast with the 2001 recession, under the current recession, emerging economies' aggregate industrial production has fallen, and thus it is practically at the same level as when U.S. industrial production started to fall (Graph 7).

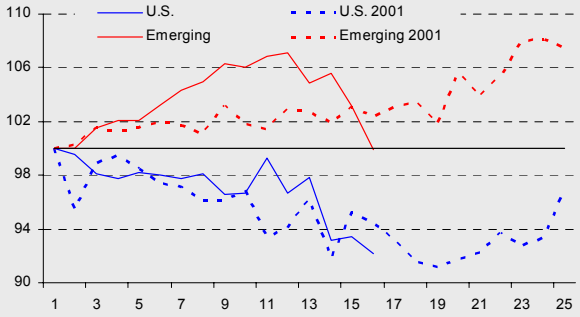
The latest available data on emerging economies' industrial production reveals the significant adverse effect of the falling international demand for manufactures. In Asia, the case of China deserves mention. Its industrial production index started growing at a lower rate of 5.7 percent in December, figure far below its record average (13.8 percent in annual terms since 1999). Industrial production in India contracted in October in annual terms (-0.3 percent) for the first time in 15 years, and then grew in November (2.4 percent in annual terms). Korea's industrial production index fell 10.7 percent in annual terms in November (seasonally adjusted figures). In Latin America, in November, industrial production in Argentina recorded its first stagnation in annual terms since 2002, while in Chile it contracted 5.7 percent in annual terms during the same month. In Brazil, industrial production fell 5.2 percent in November as compared with October (seasonally adjusted figures), it's most significant contraction in thirteen years. In the European emerging economies, in November, the industrial production indices of the Czech Republic and Hungary fell 17.4 and 9.9 percent in annual terms, respectively, while those of Russia and Poland did so by 10.3 and 4.4 percent, respectively, in annual terms in December.

Graph 6
Emerging Economies' Share in Manufacturing Exports
Percent



Source: IMF.

Graph 7
Industrial Production Indices
Maximum Cycle of U.S. Index=100

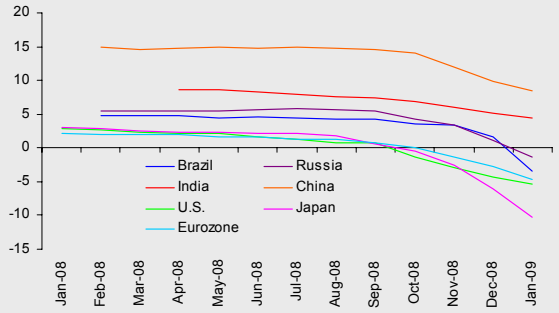


Source: IMF.

Outlook

The outlook for world industrial production in 2009 is not positive. Although the considerable monetary and fiscal measures that have been implemented in advanced economies will contribute to boost the demand for manufactures, the credit crunch and consumers and firms' low confidence point to a year of contraction for industrial production in these countries (Graph 8). In light of the episode of financial turmoil in September and October and of most recent data, expectations for industrial production growth in emerging economies have also been revised downwards significantly, despite the countercyclical measures adopted by many of them. The low levels of industrial production worldwide have affected considerably the prices of commodities, and these will likely remain below their record highs observed in mid-2008.

Graph 8
Expectations for Industrial Production Growth in 2009
Percent

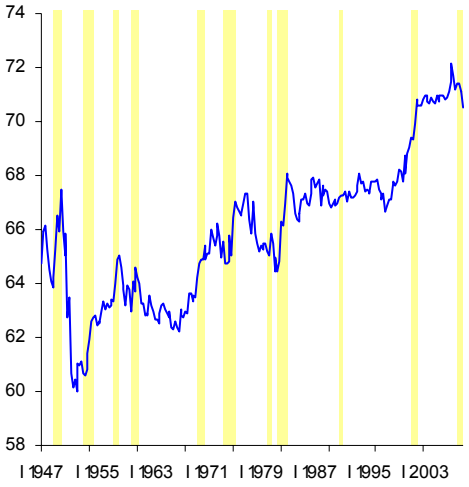


Source: Consensus Forecasts.

In general, analysts expect the economy to continue contracting during the first half of 2009 and then recover gradually in the following months. These forecasts are subject to high uncertainty due to the probable impact of the new administration's fiscal package, among other factors. Regardless of this situation, and considering a mid- and long-term perspective, both the financial markets crisis and the deleveraging process that is taking place to solve the high levels of debt accumulated by families since previous years are expected to lead to a fall in consumption's share in GDP and to a reduction in the U.S. economy's potential growth for the next few years. As seen in Graph 10, the share of consumption in GDP rose from 67.5 percent in 1996 to 70.5 percent during the third quarter of 2008. This expansion was supported by high levels of household debt which, as a proportion of disposable income, jumped from 92.5 to 136.4 percent during the same period.

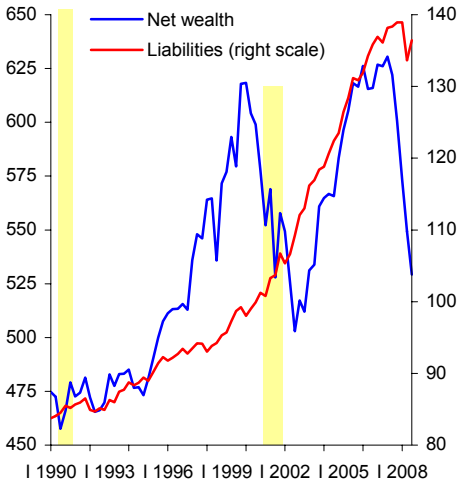
Graph 10
U.S.: Families' Liabilities and Wealth and Personal Consumer Spending

a) Real Personal Consumer Spending
Percent of GDP



Source: BEA.

b) Families' Liabilities and Wealth
Percent of personal disposable income, original figures



Source: Federal Reserve.

Economic activity in other advanced economies also deteriorated at the end of 2008. U.K. GDP contracted during the fourth quarter for a second consecutive time (-5.9 percent at an annualized quarterly rate). In the Eurozone, GDP decreased during the July-September period for a second consecutive quarter (-0.7 percent at an annualized quarterly rate) and most recent information suggests an even sharper fall during the fourth quarter due, to a great extent, to both the higher impact of the financial market turmoil on the real sector and the deterioration of the external environment. Japan's GDP continued contracting during the third quarter due to the decline of world economic activity. Timely indicators such as sales, exports, capital expenditure, and the Tankan indices for large corporations, and the Shoko Chukin indices for small firms, pointed to a significant contraction of GDP during the fourth quarter. Apparently, economic activity in Canada also fell during the October-December period.

In general terms, emerging economies slowed down towards the end of 2008 and their outlook for growth for 2009 has deteriorated considerably. Besides recording lower growth in exports, the global crisis has affected emerging

economies through various channels. A feedback of financial markets' problems to the real sector of these economies and a generalized loss of confidence has been observed. Expectations of some analysts in the sense that emerging economies would decouple from developed economies and become an engine for world economic growth have not materialized (Box 4). In China, after having grown 9.0 percent during the third quarter, GDP grew at an annual rate of 6.9 percent during the October-December period, the lowest rate in seven years, mainly as a result of the strong deceleration of external demand. In India, foreign sales contracted in October and November. Under this environment, and for the first time in fifteen years, industrial production fell 0.3 percent in annual terms in October, albeit growing 2.4 percent in November. In Russia, industrial production fell at an annual rate of 10.3 percent in December, its worst contraction since 1998. In Latin America, several countries were still growing at high rates during the third quarter (Argentina, Brazil, Chile, Peru and Venezuela grew 6.5, 6.8, 4.8, 9.5, and 4.6 percent in annual terms, respectively). However, most recent data for many countries in the region show signs of a strong weakening of economic activity during the fourth quarter.

In response to the slowdown experienced during the last few months, many economies implemented expansionary policies to support demand. At the beginning, this policy response was based mainly on monetary measures; however, more recently, fiscal measures to foster economic activity in 2009 have been widely used in both advanced and emerging economies (Box 5).

3.1.2. Inflation Trends

Commodity prices continued to fall during the fourth quarter of the year in an environment of high volatility (Graph 11). The price of the Brent crude oil plummeted from 97.4 US dollars per barrel at the end of September to 34.0 US dollars in December 24 (a level unseen since June 2004). Afterwards, in January 26, 2009, it rose to 48.5 US dollars per barrel.[6] Non-oil commodity prices also fell significantly during the October-December period. These trends continued at the beginning of 2009.[7]

The decline in commodity prices, together with the stronger slowdown of economic activity prompted a reduction of headline inflation in advanced economies (Graph 12), allowing many of them to speed up monetary policy easing. Lesser inflationary pressures were also observed in a significant number of emerging economies, mainly of Asia (Graph 13). However, in other emerging economies inflation remained high and, in some cases, it rose further. Although during the fourth quarter the number of central banks in these economies that cut their reference rates increased, several of them had very narrow maneuvering margins to implement monetary policy measures.

[6] Currently, the WTI oil is not the best indicator for crude oil prices. The WTI price has declined considerably as compared with other similar crude oils, such as the Brent, due to the record inventory levels registered in the last few weeks in Cushing, Oklahoma, the location where the regulated WTI futures agreements negotiated in the New York Stock Exchange are handled.

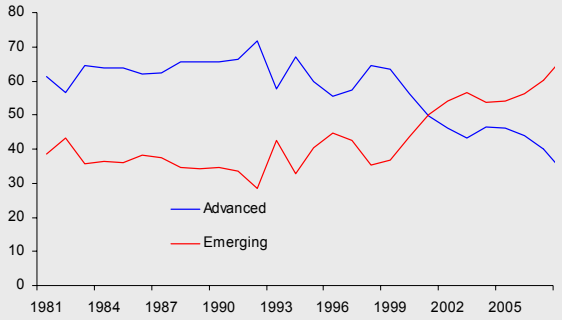
[7] For a more detailed description of the development of commodity prices, see sections 3.2.2, 3.2.3 and 3.2.4 of this Report.

Box 4
Recent Evidence on Decoupling

Background

Between 2003 and 2007, world economic growth was mainly driven by the expansion of emerging and developing economies (Graph 1). In 2007, China accounted for close to one fourth of world growth; Brazil, China, India and Russia, for nearly half; and the group of emerging and developing economies, for nearly two thirds.[1] In contrast, during the 70s, approximately half of the world's economic growth stemmed from this group of countries. Currently, emerging economies account for nearly 40 percent of total world GDP, as compared with 25 percent two decades ago.

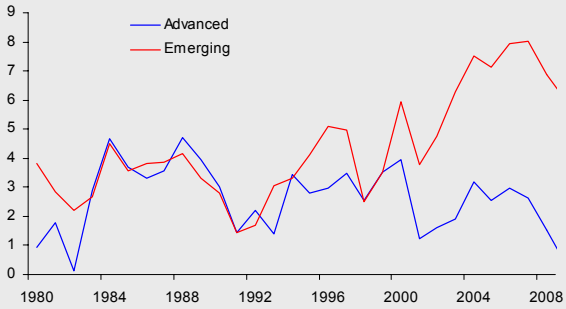
Graph 1
Contribution to World Growth
Percent



Source: WEO October 2008, IMF.

Emerging economies grew at fast rates during 2007 and part of 2008, despite the weakening of economic activity in the U.S. and other advanced economies (Graph 2). This situation led to a debate about emerging economies business cycles' decoupling from the fluctuations in advanced economies.

Graph 2
GDP by Region
Annual change (percent)



Source: IMF.

From a theoretical point of view, two opposite effects seem to take place. On the one hand, in an environment of globalization, the stronger links between emerging and advanced economies are potentially able to reduce the gap between these economies' business cycles more sharply and, therefore, cyclical fluctuations would be expected to converge more. On the other hand, as emerging economies become new engines for world growth, the economic events in the U.S. and other advanced economies could have a lesser impact on their growth dynamics.

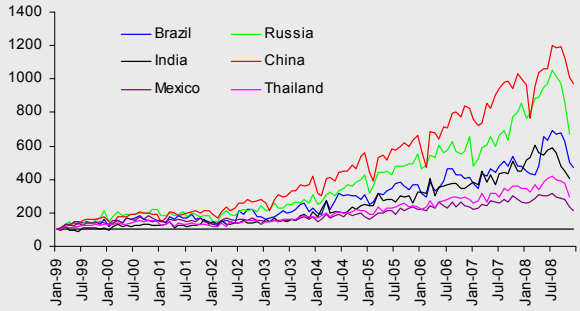
On the basis of the latter interpretation, many analysts considered that the business cycles of emerging economies could diverge (or decouple) from the slowdown in the U.S. and other advanced economies. Other factors that supported the idea of decoupling where: i) the implementation of sounder macroeconomic and structural-change policies in many emerging and developing economies in the last years, which made them less vulnerable to external shocks; ii) the change in trade patterns in emerging and developing economies, which has currently enabled nearly half of their exports to be channeled to other economies of the same group; iii) the reduced exposure of emerging economies' financial institutions to the subprime mortgage market; and, iv) the increasing demand for commodities, originated by the significant expansion of emerging and developing economies. The last factor contributed to an increase in commodity prices, in spite of the weakness in advanced economies and it was an important element in the expansion of commodities' exporting countries.

Decoupling Starts to Weaken

As the financial crisis in the advanced economies worsened, the idea of decoupling in emerging economies started to weaken. In particular, Lehman Brothers' bankruptcy in mid-September and the uncertainty about the use of emergency funds to help the U.S. financial system, showed how fragile the decoupling argument was. The overall loss of confidence originated by these events led to the most acute episode of financial turmoil for the ongoing crisis so far. It was thus evident that contagion of advanced economies to emerging economies can follow a non-linear pattern. That is, although contagion can be moderate in stages where advanced economies face lesser difficulties, it is more acute when the situation worsens. The latter partly obeys to the risk of having stages of more difficult problems in the world economy suddenly interrupting the reversal of capital flows. Emerging economies are very vulnerable to these problems.

The financial crisis of advanced economies has affected emerging economies through two channels: one real and the other financial. The former was first reflected in the lower growth rates of exports, as a result of the slowdown of economic activity in advanced economies (Graph 3). Many economies faced this situation along with a decline in commodity prices, a decline in revenues from workers' remittances, and the loss of both firms and consumers' confidence.

Graph 3
Emerging Economies' Exports of Goods (USD)
January 1999 = 100

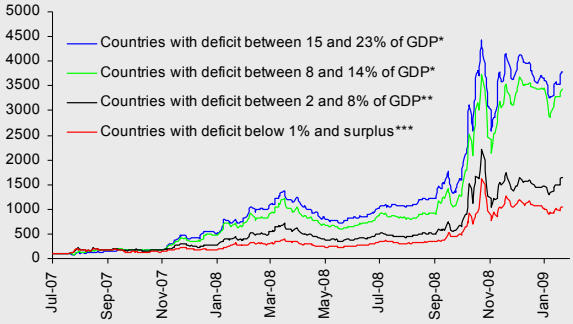


Source: INEGI, Bloomberg and Thomson Financial.

[1] For these calculations, GDP of each country is adjusted by purchasing power parity.

The financial channel, on the other hand, operated in several ways. First, the tighter conditions for foreign financing restricted emerging economies' access to it. The latter, together with the fall in the demand for riskier assets considerably deteriorated sovereign risk indicators, thus affecting more those economies in greater need for foreign financing (Graph 4).

Graph 4
Credit Default Swaps of Emerging Economies Classified According to the Size of their Current Account Deficit
02/07/2007=100

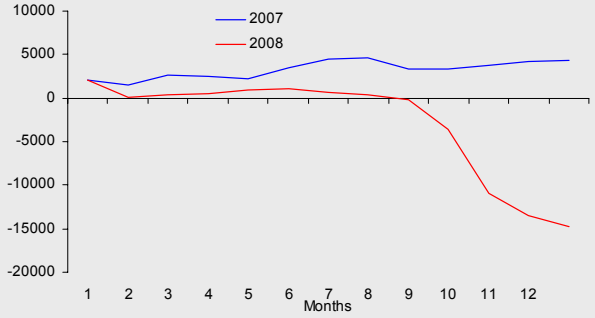


*Sample of 3 countries, **Sample of 6 countries, ***Sample of 12 countries.
Source: IMF and Bloomberg.

The increase in risk perception worldwide and the process of decoupling also led to significant capital outflows (Graph 5), which in turn translated into sharp exchange rate depreciations and falling stock markets. The financial turmoil also unveiled weaknesses which had not been previously identified. Worth mentioning are the pressures in exchange rate markets in many countries, when firms involved in derivatives operations raised their demand for foreign currency. All of these mechanisms set the trigger for feedback problems between the financial and the real sector of emerging economies.

The crisis has affected the financial market segments of some emerging economies more than those of advanced economies. For example, expressed in local currency, in 2008, China's Shangai B, India's Bombay Stock Exchange, Russia's RTS, and Brazil's Bovespa fell 70, 58, 72 and 41 percent respectively, while the U.S. Dow Jones, Germany's DAX and England's FTSE-100 fell 34, 40 and 31 percent, respectively.

Graph 5
Emerging Economies' Flow of Funds (Debt)
Million USD

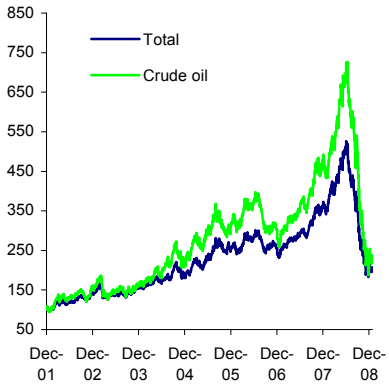


Source: Emerging Portfolio Fund Research.

As a result of the crisis, forecasts for economic growth in emerging economies for 2009 have been revised downwards significantly. Considering the fall in emerging economies' growth rate from its recent record high level up to the year it is expected to reach its lowest level, under the current forecasts, the cyclical adjustment of emerging economies (5.0 percentage points) is similar to that of advanced economies (5.2 percentage points). It is important to consider that the financial crisis can also affect the prospects for long-term growth in emerging economies. On the one hand, as a result of the financial process of deleveraging, the potential growth of some advanced economies is expected to decline over the next years. The redistribution of capital flows originated by the financial crisis has created distortions in world allocation of capital, which could negatively affect global economic growth. In light of the aforementioned, emerging economies' authorities must be prepared to preserve stability and make their economies more efficient under a very adverse external environment.

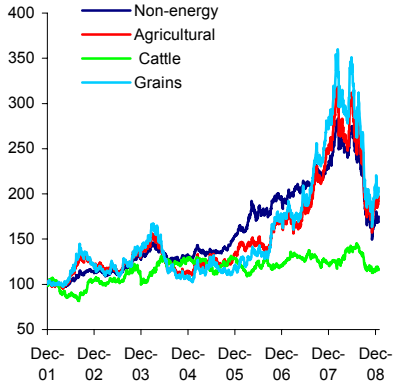
Graph 11
Commodity Prices
December 31, 2001= 100

a) Prices of Commodities and Oil



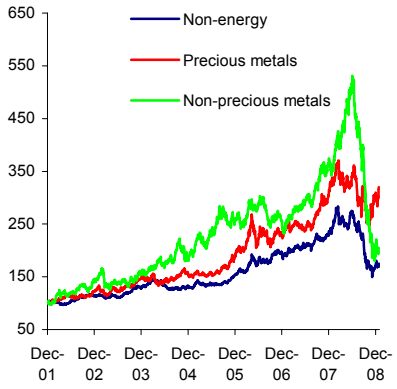
Source: Bloomberg.

b) Prices of Non-energy, Agricultural, Cattle and Grain Commodities



Source: Bloomberg.

c) Prices of Non-energy Commodities, Precious Metals and Non-precious Metals



Source: Bloomberg.

Box 5

World Fiscal Support Measures to Face the Crisis

In light of the weakening of economic activity in recent months, several advanced and emerging economies have implemented macroeconomic stimulus measures. In the early stages of the crisis, these stimulus measures consisted mainly of monetary policy loosening, but as the lowest part of the cycle deepened, the stimulus policies have been reinforced through fiscal measures. The financial crisis has prompted this shift in the policy response, as it has hampered traditional monetary policy transmission mechanisms and, in some countries, interest rates are at extremely low levels.[1] In general, the fiscal measures announced include increases in public spending in areas such as infrastructure, support to small and medium firms, job creation, as well as expansion of consumers' and firms' disposable income via tax cuts and other kind of incentives.

Fiscal stimulus packages have a higher impact when they are implemented in a timely fashion and are large enough, lasting, and well-diversified. They have a higher multiplying effect when they are introduced in a coordinated manner in several countries. The International Monetary Fund considers that the size of the global stimulus required under the current conditions is of around 2 percent of world GDP. It has also emphasized that some countries have a wider margin of maneuvering and that stimulus programs must be sustainable in the mid-term.

Below is a non-exhaustive list of the main fiscal stimulus measures announced during the fourth quarter of 2008, in both advanced and emerging economies. Although the authorities of some countries informed on the immediate implementation of these actions, in most cases the precise implementation date is uncertain. The Committee on Appropriations and the Committee on Ways and Means of the U.S. House of Representatives, after consulting with the new administration, made public by mid-January the proposal of a new law to stimulate the economy through increases in public spending and tax cuts (For more details, see Section 3.1.1 of this Report).

Japan — In October, a plan was announced to support consumers' standard of living for a total of 5 trillion yen. It includes regional spending programs and economic and financial stabilization programs, and a plan "to relieve the population's anxiety". Later, on December 24, the authorities announced that 3 extra triillion yens were going to be channeled to such plan. If these resources are added to the support program announced in August 2008, total expenditure is of 10 trillion yens (around 2% of GDP).

E. Union — By mid-October, Euro country members announced an economic recovery plan for 30 billion euros (0.3 percent of GDP), oriented to infrastructure, social funds, and employment protection. On November 26, the European Commission announced an economic stimulus plan for 170 billion euros, equivalent to 1.2 percent of Eurozone GDP. The total amount (170 billion) includes programs implemented in the member countries, and is additional to the 30 billion previously announced.

Germany — On November 5, the Parliament's Lower Chamber approved a plan for 32 billion euros (1.3 percent of GDP), though the details of the program are still under discussion. As mentioned before, this plan is part of that announced by the European Commission. On January 14, Germany announced an additional stimulus for 50 billion euros (2.0 percent of GDP) for the next two years. The package includes tax cuts for 18 billion euros as well as an investment program in public infrastructure for 17 billion euros.

France — On October 31, the French President announced that the government had approved spending in infrastructure and investment credits for 10.5 billion euros. Support measures for corporate treasuries were also announced for 11.4 billion euros together with a support for industries of 22 billion euros (the housing sector will receive 1.8 billion euros, the automobile sector 0.2 billion euros, and small and medium firms, 0.2 billion euros). Finally, two extra billion euros will be channeled to social programs. In total, the plan amounts to 26 billion euros (1.3 percent of GDP), which must be added to the other countries' programs to reach the amount announced by the European Commission on November 26.

Italy — According to a press release of November 28 and due to its considerable debt, the Italian government will only implement tax cuts for households and firms for 6.3 billion euros (0.4 of GDP).

Spain — On November 28, the government announced that it will channel 8 billion euros to the Municipal Investment Fund and 3 billion to the Economy and Employment Stimulus Fund (a total of 11 billion euros or 1 percent of GDP).

Portugal — On December 13, the authorities announced an economy support package of up to 2.2 billion euros (1.3 percent of GDP), which will be channeled through fiscal stimulus, support for employment plans, and spending in infrastructure.

Netherlands — The fiscal stimulus program announced on November 21 will reach 6 billion euros (1 percent of GDP) and will be distributed among investment in infrastructure programs, support for liquidity programs through a fast-induced depreciation, and programs to reduce working hours (compensated through unemployment insurance). This last program allows firms to reduce spending in payroll by reducing working hours instead of firing employees.

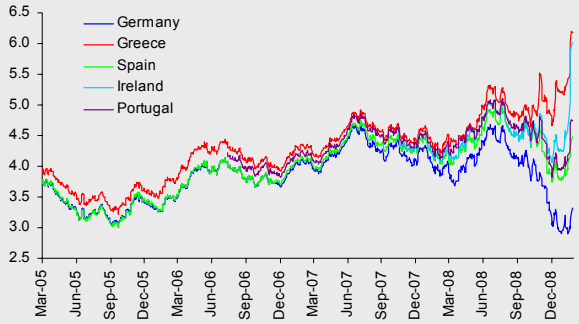
U.K. — On November 24, the government announced that it will channel 20 billion sterling pounds (which account for 1 percent of GDP) to support the economy through tax cuts and by reducing the VAT (from 17.5 percent to 15 percent since December 1, 2008). Of the 20 billion sterling pounds approved, 3 billion will be channeled to capital expenditure.

[1] For example, in its meeting of December 16, the Federal Reserve cut its policy rate to between 0 and 0.25 percent. In Japan, the reference rate is at currently at 0.1 percent.

Hungary	The support plan for businesses announced by the government on November 13, 2008 amounts to 1.4 billion Hungarian forints (5.5 percent of GDP).
Sweeden	On December 5, Sweden announced a stimulus plan close to 23 billion Swedish krona (equivalent to 0.5 percent of GDP). The government will use 8 billion krona in 2009, the same amount in 2010, and 5 additional billion krona in 2011. The remaining amount will be used by government offices to hire up to 50 thousand persons.
Australia	On October 14, the government announced that around 10.4 billion Australian dollars (1 percent of GDP) will be used to support retired people and middle and low-income families.
China	On November 9, 2008, the authorities announced the biggest fiscal stimulus plan to date, for a total of 4 trillion renminbis, around 8.9 percent of GDP, which will be channeled to spending in infrastructure (transport and rural infrastructure), reconstruction projects in areas affected by natural disasters, ecological and biological conservation/protection programs, housing for low-income people, technical innovation and industrial restructuring programs, and health, education and cultural plans.
India	The fiscal expansion program announced on December 7 amounts to 4 billion dollars (1.5 percent of GDP). These resources will be channeled to support plans for exporters, re-financing facilities, guarantee programs for small firms, investment in infrastructure, and to reduce the VAT for non-oil products. On January 4, 2009, the government announced and additional package which, among other measures, loosens firms' conditions to access financing, broadens the limits for foreigners to hold corporate bonds, and provides direct support to some industries in order to raise investment in infrastructure.
Korea	On November 3, the first stage of the plan to stimulate economic activity was announced. Through this plan, 11.3 billion dollars (1.1 percent of GDP) are considered for capital investment projects, support for agriculture and small and medium firms, local government expenditure, transfers to low-income families, and programs to support employment.
Argentina	According to the most recent press release on fiscal support of December 22, 2008, the government will channel 21 billion dollars to public works and 3.8 billion dollars to a program to foster consumption, investment, employment, and production. Around 500 million dollars will be channeled to the agricultural and live-stock sector (the total accounts for 6 percent of GDP). Since November 25, measures have been announced to boost economic activity by supporting different sectors.
Brazil	The fiscal stimulus package announced on December 11, 2008 for 13.6 billion dollars financed with international reserves (0.3 percent of GDP) is channeled as follows: 3.6 billion dollars in tax cuts and 10 billion in credits for Brazilian indebted firms.
Chile	On January 5, the government launched a fiscal stimulus plan for around 4 billion dollars (equivalent to 2.8 points of GDP) to stimulate the economy and to protect employment, by raising investment in infrastructure, the allocation of a special bond for head of families, the temporary elimination of the stamp duty, the reduction of monthly tax installments, the implementation of income subsidies, and stimuli for training as an alternative to firing workers. The plan implies an additional increase of 1 percent of GDP in public expenditure in 2009, a temporary reduction in fiscal income for the same amount, and the transfers of capital to the National Copper Corporation (*Corporación Nacional del Cobre*, CODELCO) and to the Production Promotion Corporation (*Corporación de Fomento de la Producción*, CORFO) for 0.8 of GDP.

The sustainability of these programs is crucial. If market participants doubt that these fiscal stimulus measures are sustainable, there can be negative effects in financial markets, interest rates, and in consumer spending. The constraints originated by the crisis could make it more difficult to finance fiscal deficits and generate a crowding out in private spending, even in the short term. The cases of European countries like Spain, Greece, Ireland and Portugal deserve particular attention given that the recent deterioration of their public finances led to higher financing costs than countries with more solid public finances, such as Germany (Table 1).[1] While Spain and Portugal announced the fiscal stimulus programs mentioned before, Greece and Ireland have only implemented support programs for their respective financial systems. In fact, the public deficit is so high in Ireland that considerable reductions in public spending have been announced for 2009.

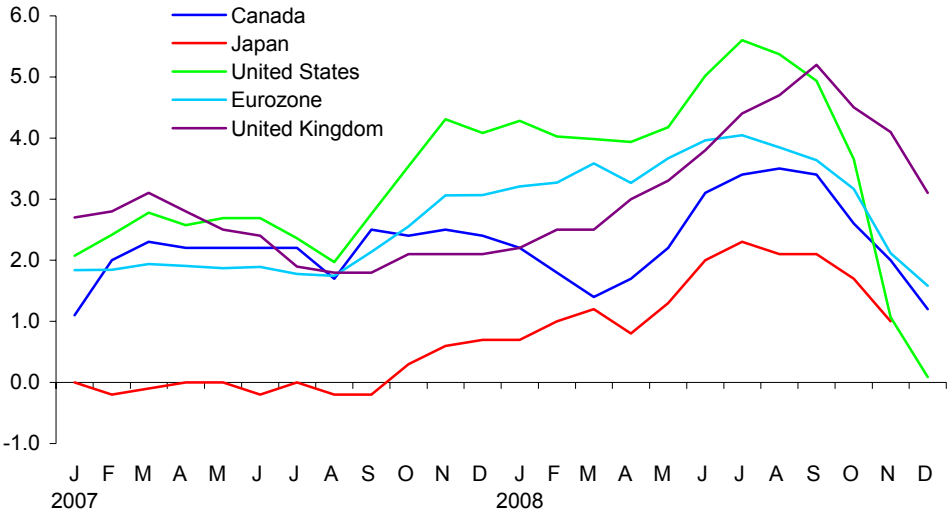
Graph 1
Yield of 10-year Bonds in Selected Countries
Annual percent



Source: Bloomberg.

[1] On January 9, Standard & Poors (S&P) announced that the credit rating for Greece and Ireland could be downgraded due to the significant deterioration of economic conditions and the pressures on public finances in these countries. On January 12, the same warning was given to Spain. Portugal was also warned on January 13. On January 14, the lower rating for Greece was announced, followed by Spain in January 19. On January 21, S&P downgraded its rating for Portugal from AA- to A+.

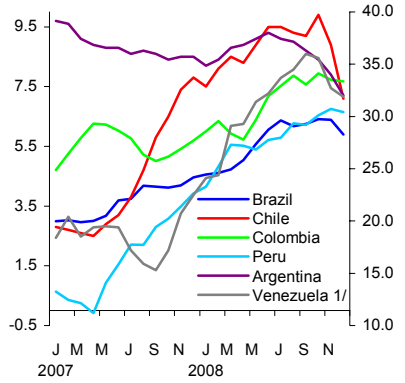
Graph 12
Consumer Price Indices in Advanced Economies
Annual change (percent)



Source: National Statistics Bureaus.

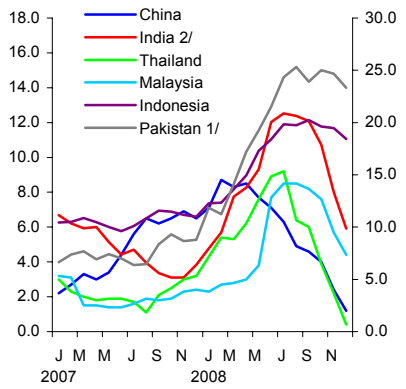
Graph 13
Consumer Price Indices in Emerging Market Economies
Annual change (percent)

a) Headline Inflation in Latin America



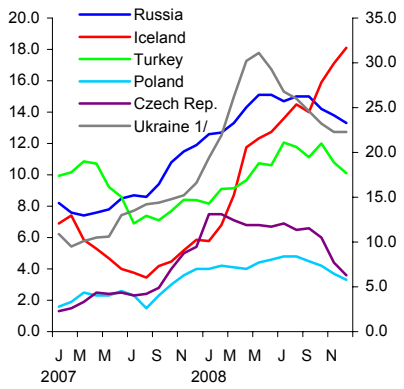
1/ Right scale.
Source: Bloomberg.

b) Headline Inflation in Asia



1/ Right scale.
2/ Refers to the annual change of the wholesale price index of the last week of each month.
Source: Bloomberg.

c) Headline Inflation in Europe



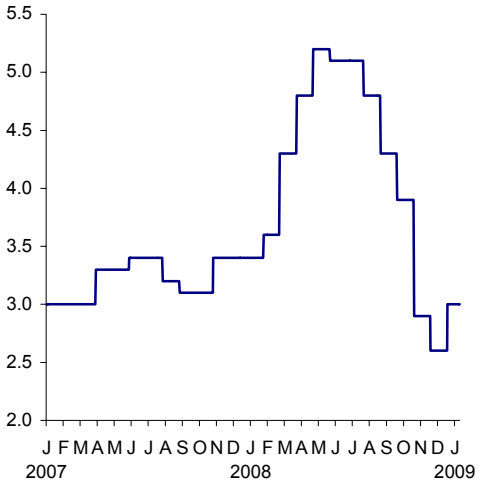
1/ Right scale.
Source: Bloomberg

In the United States, in October, November and December, consumer headline inflation recorded the sharpest declines in monthly terms in the history of the index (-1.0, -1.7, and -0.7 percent, respectively). In December it fell to 0.1 percent in annual terms. After declining to 2.5 percent at a monthly rate in September, consumer core inflation fell to 1.8 percent in December. The economic contraction and the decline in inflation generated some fears about the possibility that the U.S. economy could be facing a deflationary period similar to that of Japan in the 90s. However, although future inflation implicit in the spreads between nominal and inflation-indexed bonds' yields for some periods show negative figures, different surveys on inflation expectations do not point to a possible deflationary period. For example, in January of this year, consumer

inflation expectations for the next five years from the University of Michigan survey were 3.0 percent (Graph 14).

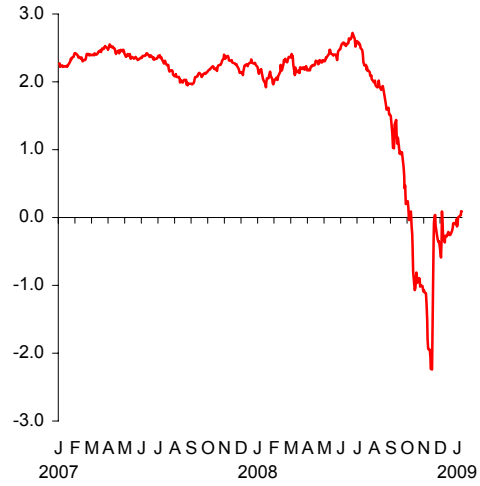
Graph 14
U.S.: Inflation Expectations for the Next 5 Years

a) University of Michigan Inflation Expectations for the Next 5 Years
Percent



Source: University of Michigan.

b) Compensation for Inflation and Inflationary Risk[1/]



1/ Difference between the nominal and real yield on 5-year U.S. Treasuries. This indicator excludes inflation expectations plus an inflationary risk premium.
Source: U.S. Federal Reserve.

In the Eurozone, inflation declined considerably during the October-December period. Consumer headline inflation was 1.6 percent in annual terms in December, down from 3.6 percent observed at the end of the previous quarter and even far below the European Central Bank's target (slightly below 2 percent). In Japan, the appreciation of the yen, together with the fall in both commodity prices and GDP, contributed to reduce the rate of price growth: consumer headline inflation fell from 2.1 percent in annual terms in September to 1.0 percent in November. In the United Kingdom, consumer headline inflation remained at levels far over the 2.0 percent target (3.1 percent in annual terms in December). However, due to its weak economy (as will be later explained) the Bank of England continued to loosen its monetary policy. In Canada, consumer headline inflation reached 1.2 percent in December, far below its operating band's centre (between 1 and 3 percent).

Though inflationary pressures in many emerging economies decreased during the fourth quarter, several of them still recorded high inflation. Measured by the consumer price index, inflation in China fell from 4.6 percent in annual terms in September, to 2.1 percent in December. In India, wholesale prices grew in December at their lowest annual rates in the last 10 months (5.9 percent). In Russia, consumer headline inflation remained high, although its annual rate of growth fell from 15 percent at the end of the third quarter to 13.3 percent in December. Latin American countries did not follow similar inflation patterns during the fourth quarter. For example, while inflation in Argentina, Brazil, Chile, Ecuador and Venezuela fell in December 2008 as compared to the end of the previous quarter, in Colombia and Peru it rose during the same period. The growth rate of

prices in Latin American countries remained, in general terms, above the inflation targets set by their authorities.

3.1.3. Financial Markets

The beginning of the fourth quarter 2008 was characterized by unusual volatility in global financial markets and by a series of extraordinary measures from the authorities throughout the world to face this situation. Although the worsening of the crisis was due to several factors, Lehman Brothers' bankruptcy by mid-September and the uncertainty that followed regarding the use of emergency funds to aid the U.S. financial system, where key elements for the loss of confidence observed during such period.

The actions the U.S. and other advanced economies authorities had been implementing to face the crisis intensified during the fourth quarter. Among the measures adopted in October, the most relevant are the loosening of monetary policy in several advanced economies, including the joint decision of various central banks to cut their reference rates; simultaneous actions of several European economies to inject a significant amount of capital to their banking systems, foster interbank credit, guarantee the issue of certain debt instruments, and broaden the deposits' protection schemes; the creation in the U.S. of facilities to provide liquidity to the commercial paper market (CPFF)[8] and to mutual funds in the money market (MMIFF),[9] the introduction of a Temporary Liquidity Guarantee Program (TLGP) by the Federal Deposit Insurance Corporation (FDIC), which considers granting guarantees to new issues of non-guaranteed preferential debt to accounts that do not accrue interest;[10] the approval by the U.S. Congress of an emergency plan for 700 billion US dollars (the Troubled Asset Relief Program, TARP), which allowed the Treasury Department to buy troubled assets from financial institutions, grant guarantees, and inject capital to the financial system. The U.S. Treasury decided also to use 250 billion US dollars from the aforementioned emergency fund to capitalize banks, credit unions, saving associations and some financial controllers in exchange for preferential stocks.[11]

Since purchasing troubled assets was not the most effective way to use TARP funds,[12] the Treasury Department announced on November 12 that the 700 billion dollars approved by Congress for the emergency plan were not to be used for this purpose and instead be channeled to raise banks and other eligible entities' capitalization levels. It also decided that these resources would be destined to foster credit through guarantees to securitize car, education, credit card and similar products' loans and that measures to reduce the number of disclosures would be studied.

In this context, on November 25 the Federal Reserve announced the creation of a new facility to finance the purchase of instruments backed by consumer, car and education loans, and small business loans (SBAs). Under this

[8] Commercial Paper Funding Facility.
[9] Money Market Investor Funding Facility.
[10] The final version of the TLGP was approved on November 21.
[11] For a detailed description on the main measures implemented during the July-October period, see the Inflation Report of July-September 2008.
[12] Due to the weakness of banks and other financial institutions, it was more important to continue strengthening their capitalization levels and reestablishing credit flows in the economy in order to preserve the functioning of markets. Otherwise, risks of a greater turmoil in the financial system would build considerably.

facility, known as TALF,[13] loans for up to 200 billion US dollars for a term of up to 3 years will be channeled to holders of new or recent AAA investment grade issues. The U.S. Treasury will also grant a credit risk protection to the Federal Reserve for 20 billion US dollars, using part of the funds approved by the TARP.

Other measures implemented by the U.S. authorities in November and December are:

1. On November 25, the Federal Reserve announced a program to buy direct liabilities issued by Government Sponsored mortgage Enterprises (GSEs)[14] and also Mortgage-backed securities (MBS) guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae.[15] This action aims at reducing costs and increasing the availability of mortgage loans. For that purpose, up to 100 billion US dollars will be channeled to buy direct liabilities from GSEs and up to 500 billion to buy MBS.

2. On December 2, the Federal Reserve announced the extension of the validity of the three financing facilities up to April 30 2009 (originally, the facility expired January 20, 2009). This measure includes the Primary Dealers Credit Facility (PDCF), the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMFL), and the Term Securities Lending Facility (TSLF). The maturity terms for the mentioned facilities were thus brought into line to other facilities created by the Federal Reserve.[16]

3. On December 19, and in order to support General Motors and Chrysler, the Automotive Industry Financing Program was created to prevent any disordered bankruptcy from extending to other companies and industries. The Treasury Department granted 4 billion USD in loans to Chrysler and 13.4 billion to General Motors through the Troubled Asset Relief Program. On December 29, the Treasury also announced an investment of 5 billion USD in GMAC's (General Motors' financial arm) preferential stock. The Treasury will also grant a 1 billion USD loan to General Motors to foster GMAC's transformation to a banking holding company.[17]

With the support of banks through the buying of shares, the granting of guarantees, the loan granted to AIG, the guarantees for TALF's operation, and the loans granted to the automotive industry, the Treasury Department compromised in 2008, the first half of the funds authorized by Congress (i.e., 350 billion US dollars). On January 15, the U.S. Congress approved President George Bush's request to use the remaining 350 billion US dollars from the TARP. On January 16, the Treasury Department announced that it would channel 20 billion US dollars of the resources available under the TARP to increase Bank of America's

[13] Term Asset Backed Securities Loan Facility.
[14] Refers to Federal Home Loan Mortgage Corporation (Freddie Mac), Federal National Mortgage Association (Fannie Mae) and Federal Home Loan Banks.
[15] Government National Mortgage Association. Just like other government-sponsored mortgage enterprises, Ginnie Mae grants collateral over certain mortgage loans, but unlike other agencies it does not issue mortgage-backed instruments.
[16] The other facilities maturing on April 30, 2009 are the Commercial Paper Funding Facility (CPFF), the Market Investor Funding Facility (MMIFF), and the foreign-currency swap lines established with 14 central banks.
[17] This amount is additional to the one for the credit announced December 19.

capital in exchange for preferential stock.[18] The U.S. government also announced the granting of a loan to Chrysler's financial unit (Chrysler Financial) for 1.5 billion US dollars in order to support the granting of car loans, as part of the Automotive Industry Financing Program announced in December 2008.[19]

Due to the worsening of the economic activity outlook, an additional measure was taken to reduce significantly the federal funds rate target during the fourth quarter. On December 16, the monetary authorities decided to adjust downwards this target from 1 percent, to between 0 and 0.25 percent (Graph 15). Previously, the Federal Reserve had reduced its target for the reference rate by 50 basis points in the meetings of both October 29 and October 8. In its meeting of December, the Federal Reserve stated that the weak economic conditions in the U.S. are expected to justify that the federal funds rate remains exceptionally low for some time. In the next months the Federal Reserve will support operations in financial markets and will foster the economy through open market operations and other measures to keep the size of the Federal Reserve's balance sheet at high levels (Box 6).

During the fourth quarter, the European Central Bank (ECB) expanded both financing facilities in US dollars and asset swap arrangements to increase liquidity in the financial system. As for monetary policy decisions, the ECB cut its main policy rate on three occasions during that period, for a total of 175 basis points. In its first meeting of 2009, the ECB further adjusted downwards (50 basis points) its policy rate, to 2 percent. From October 2008 to January 2009, the Bank of England cut its reference rate on 4 occasions, down to its lowest record level (1.5 percent). During the fourth quarter, the Bank of Japan also cut its target for the policy rate by 40 basis points to 0.1 percent, leaving it unchanged in its January meeting. The Bank of Canada reduced by 200 basis points its reference interest rate from the end of the third quarter to January 2009, to 1.0 percent, reaching its lowest record levels (Graph 15).

The actions adopted in the U.S. and other advanced economies during the fourth quarter had a positive impact in some financial market segments. For instance, the differential between the London Inter-Bank rate in US dollars (LIBOR) and the indicator of expectations for the federal funds rate (the Overnight Index Swap, OIS), which had interrupted its downward trend in mid-November 2008, fell again since the second week of December of the same year (Graph 16), remaining well above its historical average.[20] The spread between the LIBOR rate and the yield on 3-month Treasury bills recorded similar results. The conditions in the commercial paper market improved significantly during that period. Nevertheless, in general terms, financial markets continued to be subject to considerable turmoil, influenced by the high uncertainty regarding the true state of

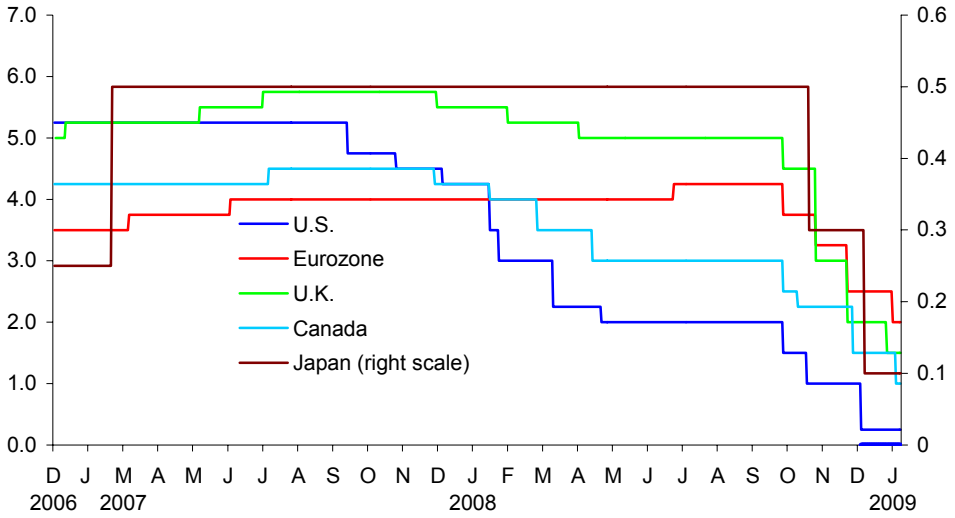
[18] The Treasury Department and the Federal Deposit Insurance Corporation (FDIC) will grant guarantees to this bank for 118 billion US dollars over a number of assets (loans and asset-backed instruments, among others), which were mainly obtained from the acquisition of Merill Lynch. The Federal Reserve undertook to grant a non-recurrent loan to Bank of America if the residual risks materialize.

[19] The authorities of other countries also announced additional efforts to support their financial systems. Worth mentioning is the case of the United Kingdom, whose government announced on January 19 a second banking-support program which includes, among other actions, a new set of guarantees for asset-backed instruments, creating a new program to buy high-quality private sector assets, extending the validity of various financing facilities, extending the financing term granted through the Bank of England's discount window, and increasing government's shares in the Royal Bank of Scotland.

[20] This spread widened considerably since Lehman Brothers' bankruptcy, reaching 3.64 percentage points on October 10, the highest in records. This situation was motivated by a higher counterparty risk perception in the interbank market.

financial institutions, and by the relevant doubts about rating agencies' efficient supervision.

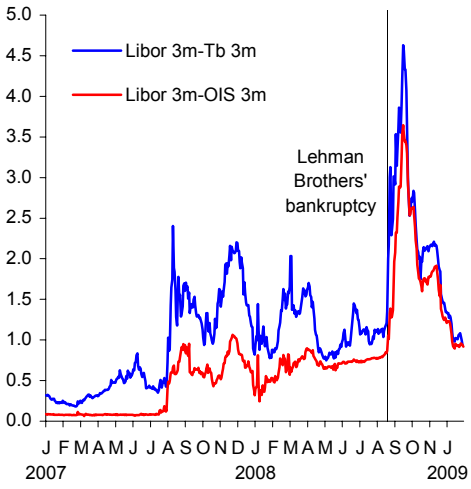
Graph 15
Central Bank Reference Rates (Advanced Economies)
Percent



Source: Central banks.

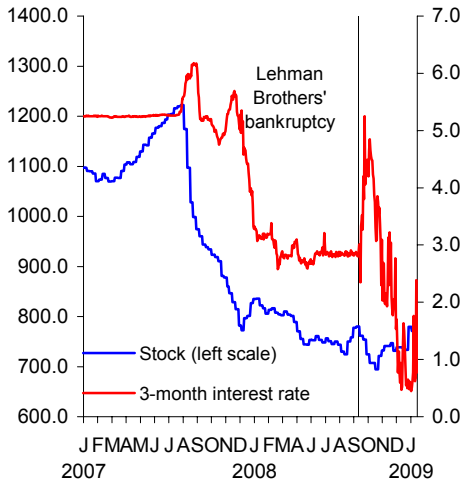
Graph 16
U.S. Interest Rates
Percentage points and percent

b) Differential between 3-month Libor in USD and 3-month OIS [1/] and 3-month U.S. Treasuries



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

b) Interest Rate and Asset-backed AA Non-financial Commercial Paper
Percent and billion USD



Source: U.S. Federal Reserve.

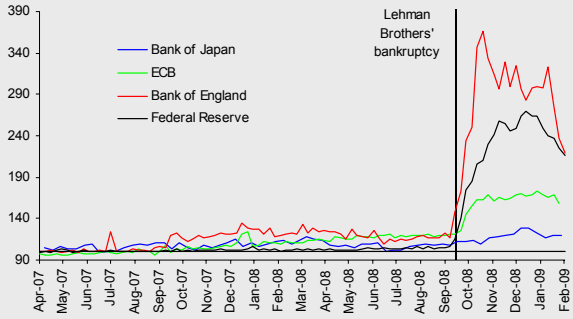
Box 6
Growth of Central Banks' Balance Sheets

The central banks of many economies have responded aggressively to the problems originated by the global financial crisis. From September 2007 to January 2009, the Federal Reserve cut its target range for the federal funds rate by 4.75 percentage points when compared to the lowest bound for its current policy rate (0-0.25 percent). During the same period, the European Central Bank also cut its policy rate by 2.25 percentage points and the Bank of England by 4.25 percentage points.

Implementing monetary policy under the current environment has become significantly difficult. First, the problems in international financial markets have interrupted the adequate functioning of the monetary policy transmission mechanisms. In particular, monetary policy loosening has not been reflected in an adjustment of loans interest rates, as would be expected under normal conditions. Given the extraordinary uncertainty prevailing in financial markets, risk spreads for loans have widened, partly offsetting the effect of the cuts in policy rates. Given the greater concerns about credit risk and the need to raise their capitalization indices, banks are still reluctant to grant credit. Second, as a result of these efforts, the policy rates of some advanced economies have been cut to very low levels and thus the margins for maneuvering any additional adjustments have diminished and even disappeared. Worth mentioning are the cases of the Federal Reserve, whose reference interest rate is currently at levels between 0 and 0.25 percent, and the Bank of Japan, whose reference interest rate is at 0.1 percent.

Under this situation, the authorities of several countries have decided to use other monetary policy instruments to boost their economies and support their financial systems. Significant changes have therefore been done regarding the size and structure of their central banks' balance sheets (Graph 1). Because of the amounts involved, the case of the Federal Reserve deserves special mention.

Graph 1
Central Banks' Total Assets
Index end of June 2007 = 100



Source: Central banks.

For the last decades, the Federal Reserve's balance had remained stable. The Federal Reserve's initial measures to face the financial market crisis led to a change in the composition of its balance sheet, but not to a significant increase in the total size of assets. Nevertheless, when the crisis escalated, the Federal Reserve's balance sheet increased considerably. Total assets went from 927 billion USD at the end of the second quarter to 1.2 trillion at the end of the third. The most recent information (corresponding to January 21, 2009) indicates that total assets have reached 2.1 trillion USD.

The growth in the Federal Reserve's balance sheet is the result of the Fed's decision to use various instruments. First, it has granted short-term emergency funds to financial institutions with liquidity problems, and has also approved foreign exchange swap agreements with several central banks in order to ensure adequate levels of liquidity in US dollars in those economies. Second, liquidity has been supplied to borrowers and investors in key credit markets, such as the markets for commercial paper and asset-backed securities. Finally, the Federal Reserve began purchasing long-term securities as a mechanism to improve the functioning of credit markets, particularly through the acquisition of securities from housing-related government-sponsored enterprises (GSEs). According to the Federal Reserve, these measures have the advantage of allowing the central bank to loosen credit conditions and induce a downward adjustment in interest rates, despite the fact that the federal funds rate (policy rate) is at levels close to zero.

As shown in Table 1, the highest growth in the Federal Reserve's balance sheet is explained by the loans granted by the Temporary Auction Facility (TAF) and the Commercial Paper Funding Facility (CPFF).

Table 1
Structure of Federal Reserve Assets
Billion USD

	July 25, 2007	August 27, 2008	January 21, 2009
Security holdings	790.7	479.6	505.3
Temporary Auction Facility (TAF)	0	150	416
Other loans	0.2	18.6	148.3
Primary Dealer Credit Facility (PDCF)	0	0	32.7
Asset-Backed Commercial Paper Money Market Fund Liquidity Facility (AMLF)	0	0	15.5
Loans to AIG	0	0	38.4
Commercial Paper Funding Facility (CPFF)	0	0	349.9
Other	104.7	288.2	681.8
Total assets	895.6	936.4	2101.3

Source: U.S. Federal Reserve.

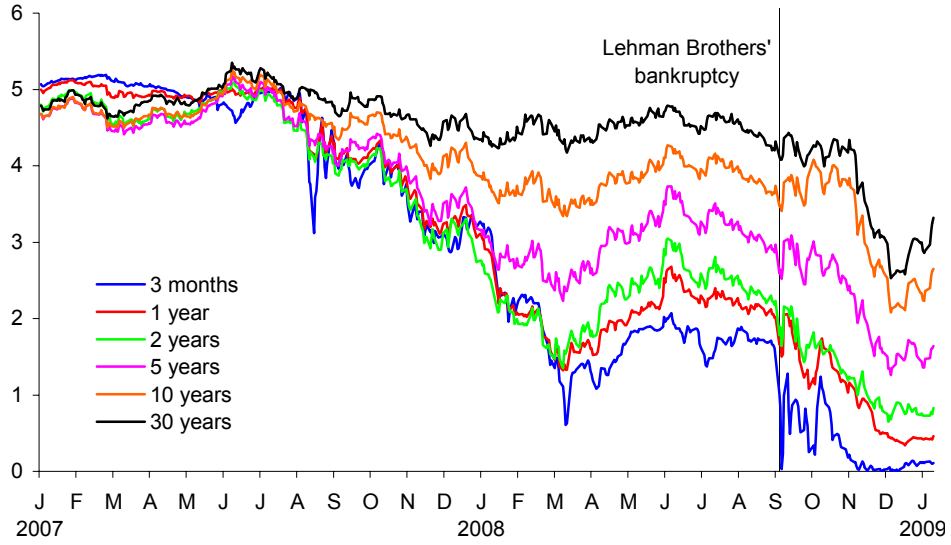
The program to buy mortgage-backed securities (MBS) backed by GSEs and direct obligations of these institutions, which came into effect at the end of November 2008, could lead to an additional increase in the Federal Reserve's balance sheet. This trend is expected to be greatly affected by the coming into effect of the Term Asset-Backed Securities Loan Facility (TALF), which is intended help market participants meet the credit needs of households and small businesses by supporting the issuance of asset-backed securities (ABS) collateralized by loans of various types to consumers and businesses of all sizes..

The growth of a balance sheet like that observed recently in the U.S. and in other advanced economies is not exempt of risks. Some analysts have pointed out that the latter can lead to future inflationary pressures and to make the central bank get involved in activities that are not necessarily part of its mandate. The greater intermediation of the central bank that results from the growth of its balance sheet can, in some cases, reduce the incentives for commercial banks to restart their intermediary operations. On the contrary, other voices argue that these measures are essential to preserve the stability of the financial system and, therefore, of the economy; that during the current phase of the cycle, inflationary risks are very limited; that various programs that have contributed to the growth of the balance sheet have predetermined maturity dates; and, that as the economy and credit markets recover, the need to use these type of facilities, and therefore, the central banks' balance, is expected to diminish.

The conditions for granting credit in that country continued to deteriorate in the last months. The most recent survey from the Federal Reserve conducted among credit executives (obtained in October), shows a higher percentage of banks tightening the conditions for granting credit in all categories.[21] A significant number of banks reduced their credit limits on credit cards to clients with both high and low credit quality. Information available suggests that these trends have continued. Indeed, under the current conditions, providing massive liquidity to the financial system does not seem to have translated into an increase of credit in the economy.

During the third quarter, interest rates on Treasury bills declined for all terms, due to the strong demand for risk-free assets, the deterioration of economic activity, and prospects for a long period of monetary easing. Historical minimums were observed for several terms. In particular, the 3 month-rate remained at levels close to zero most of the quarter and even moved into negative figures during intraday operations on December 10, while 10 and 30-year rates reached historical minimums on December 18. At the end of the quarter, the yield on 3-month Treasury bills had declined 81 basis points, reaching barely 0.11 percent. The rest of the curve shifted downwards in almost equal amounts during the October-December period. The rates for one, two, five, ten and thirty years ended the quarter at 0.37, 0.76, 1.55, 2.25 and 2.69 percent, respectively (Graph 17).[22] At the beginning of 2009, the longer part of the yield curve, particularly for 30-year bonds, has increased due to investors' concerns about the U.S. government efforts to bolster the economy implying a significant fiscal deficit increase.

Graph 17
Yield on 30-year, 10-year, 5-year, 2-year, 1-year and 3-month U.S. Treasuries
Annual percent



Source: Central banks.

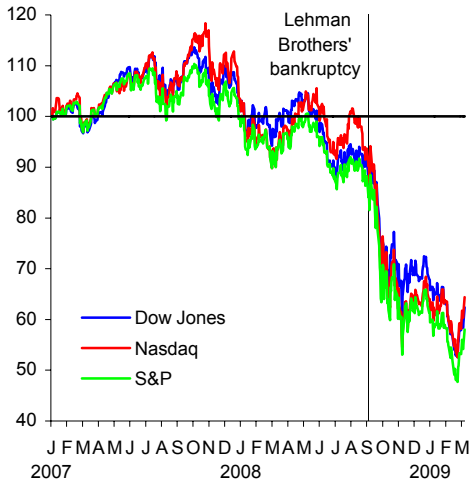
[21] Banks received the survey on October 2 and had until October 16 to send their responses. The survey reflects the changes in credit practices during the three previous months. See Senior Loan Officer Opinion Survey, Federal Reserve Bank, October 2008.

[22] By January 23, the rates for 1, 2, 5, 10 and 30 years were 0.46, 0.83, 1.64, 2.65 and 3.32 percent, respectively, while the 3-month rate was 0.11 percent.

During the fourth quarter, stock markets of advanced economies were affected by both the financial crisis and the measures implemented by the authorities to contain it. As a result, stock markets in those countries fell throughout the quarter, in an environment of high volatility (Graph 18). In the U.S., the S&P 500 index fell 23 percent during the October-December period, leading to an accumulated fall of 38.5 percent during the year. Similarly, losses in local currency in Japan, Germany, and the United Kingdom's stock exchanges were of 21, 17.5 and 10 percent, respectively, during the quarter, thus accumulating falls of 42, 40 and 31 percent, respectively, in 2008.[23] During the first weeks of January 2009, the stock markets of these countries continued to drop significantly.[24]

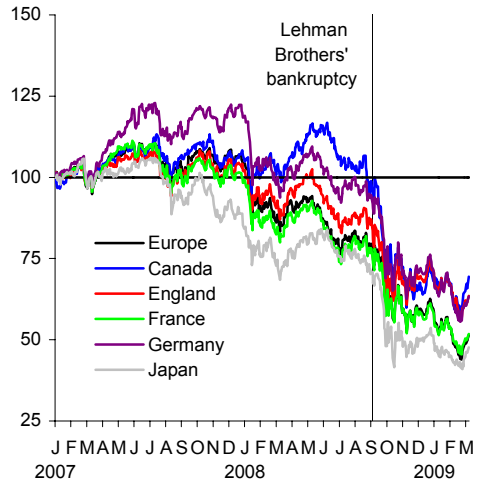
Graph 18
Stock Markets in Advanced Economies

a) Stock Markets in the U.S.
01/01/2007=100



Source: Bloomberg.

b) Stock Markets in Other Advanced Economies
01/01/2007=100



Source: Bloomberg.

The U.S. dollar continued to appreciate against the main currencies (except for the yen) during the first two months of the quarter, mainly due to the demand for low-risk financial assets (Graph 19). Nevertheless, in December the US dollar depreciated basically due to perceptions about cuts in interest rates in other countries not being as significant as in the U.S. In nominal effective terms, and considering the broad definition, the US dollar appreciated 5.9 percent during the quarter (8.6 percent during the year) and 4.3 percent against the main currencies (8.4 percent during the year).[25] The US dollar depreciated 15 percent against the yen during the quarter and 19 percent during the year, reaching at the end of 2008 its lowest value against such currency in 13 years. In January, the

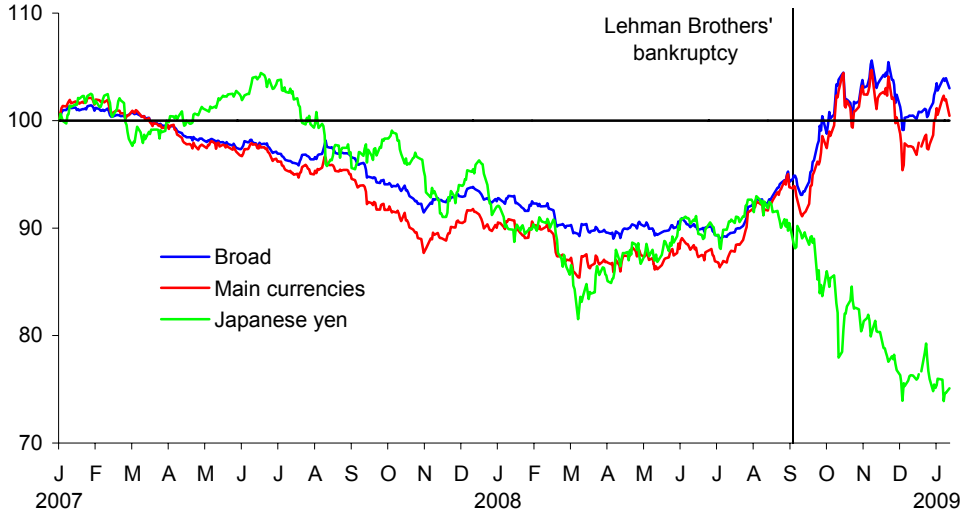
[23] The changes in the stock exchange indices in US dollars must consider in addition to fluctuations in local currency, exchange rate fluctuations. Therefore, for those countries whose currencies depreciated against the US dollar, stock-market losses denominated in that currency would be greater.

[24] For January 26, 2009 the stock exchanges of the U.S., Japan, Germany and the United Kingdom fell 7.4, 13.3, 10.0 and 5.1 percent, respectively, as compared with the end of 2008.

[25] The Federal Reserve defines the exchange rate against the main currencies as a weighted average of the foreign exchange value of the US dollar against 7 major currencies. The broad index is a weighted average of the foreign exchange value of the US dollar against 26 currencies. Weights of this index are calculated based on the share of each country in U.S. total exports and imports.

U.S. effective exchange rate continued to appreciate against the main currencies.[26]

Graph 19
U.S.: Nominal Effective Exchange Rate and Yen/USD [1/]
02/01/2007 = 100



1/ An increase in the index implies a USD appreciation.
Source: U.S. Federal Reserve.

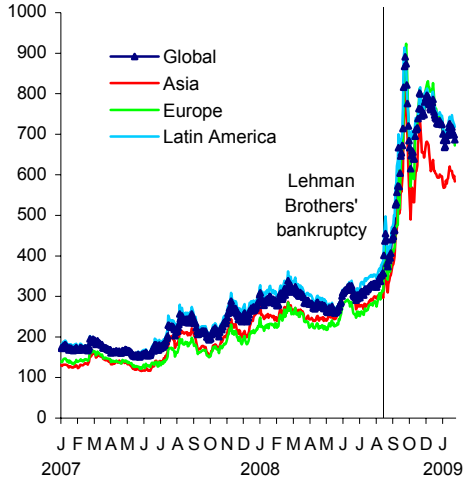
The financial turmoil in advanced economies affected emerging economies significantly. The increase in risk aversion led to capital flows from emerging to advanced economies, thus reverting the trend observed in previous years. This situation impacted considerably risk spreads, exchange rates, and stock markets in emerging economies. Those economies with lesser needs for foreign financing were less affected by these problems.

Thus, sovereign risk spreads for these economies increased during the fourth quarter more rapidly than during the first nine months of the year. In particular, as a result of October's episode of financial uncertainty, at the end of that month, spreads rose to levels unseen since 2002 (Graph 20). Actions implemented in the U.S. and other countries to underpin financial markets and alleviate the slowdown of economic activity, contributed to widen these spreads (in a context of volatility) at the end of 2008 and the beginning of this year. On another front, the cost for insuring debt against default continued growing during the quarter, recording a maximum of 1,020 basis points on October 23, 2008, and then falling to a level of 746 basis points on January 26, 2009. The cost for insuring debt against default thus rose moderately.[27]

[26] From December 31, 2008 to January 26 of this year the US dollar appreciated 2.2 percent (broad definition) and 2.5 percent (major currencies definition).
[27] Up to January 26, 2009, the cost for insuring debt against default rose 20 basis points.

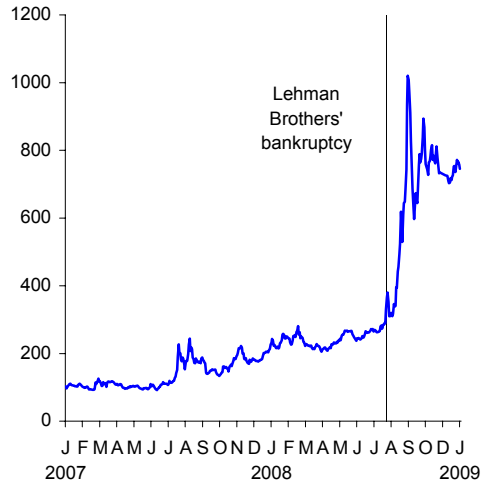
Graph 20
Sovereign Risk Spreads and Default by Emerging Market Economies

a) Sovereign Risk Spreads of Emerging Markets (EMBIs)
Basis points



Source: Bloomberg.

b) Sovereign Credit Default Swap Spreads of Emerging Markets (CDS)
Basis points

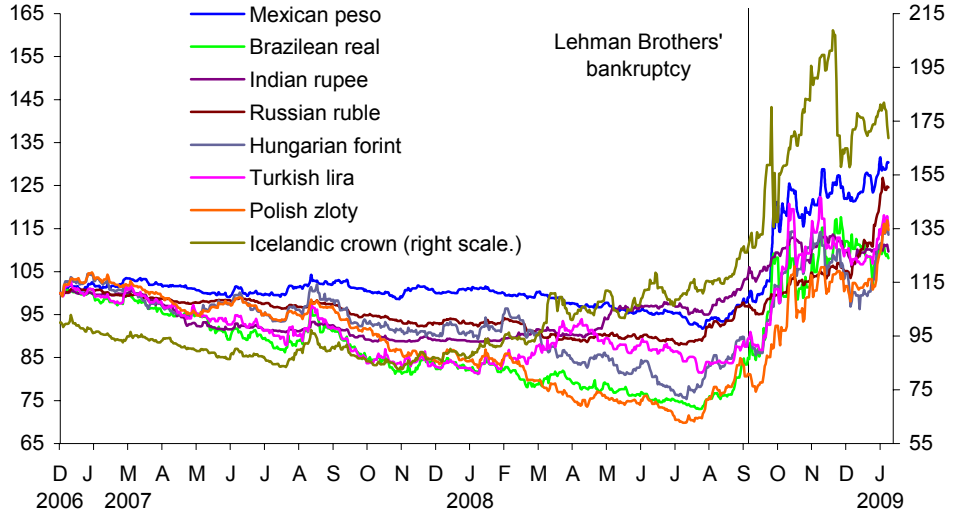


Source: Bloomberg.

The currencies of a large number of emerging economies were subject to considerable pressures during the fourth quarter (Graph 21). In addition to the general loss of confidence, the currencies of many of these countries were affected by the demand for currency from companies which had been involved in operations with derivatives and experienced significant losses. In Latin America, the Mexican peso and the Brazilian real depreciated around 26 and 22 percent, respectively, while the Chilean and Argentinean pesos did so by 16 and 10 percent. During January, both currencies fluctuated significantly.[28] En Europe, during the October-December period the Russian rubble depreciated 14.7 percent, while the Hungarian forint, the Turkish lira, the Polish zloty, and the Czech crown did so 10.6, 21.3, 23.2, and 10.5 percent, respectively. European emerging economies' currencies continued to depreciate at the beginning of this year.[29] As for Asian emerging economies, only the Indonesian rupee depreciated considerably (17 percent), due to foreign investors' flight from local stock markets. In other Asian economies, central banks' interventions in the money exchange markets seem to have eased exchange rate pressures. Nevertheless, during the year, the Thai baht and the Indian rupee depreciated 16.7 and 23.8 percent, respectively. In January 2009, both currencies remained relatively stable.[30]

[28] Up to January 26, the Chilean peso had appreciated 3.3 percent, while the real, the Mexican peso, and the Argentinean peso depreciated 0.4, 0.7 and 0.8 percent, respectively.
[29] Up to January 26, the Hungarian forint was the currency that depreciated the most (14.5 percent), while the Turkish, Polish, Russian, and Czech currencies did so 6.0, 12.0, 11.5 and 9.8 percent, respectively.
[30] Up to January 26, the currencies had fluctuated less than 1 percent as compared with the end of 2008.

Graph 21
Emerging Economies Exchange Rate vs. US dollar
31/12/2006 = 100



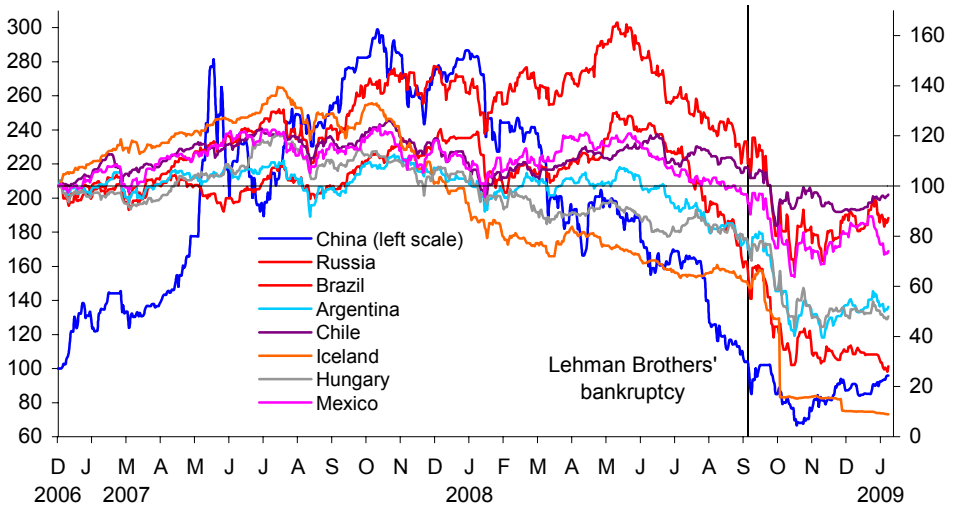
Source: U.S. Federal Reserve.

In local currency, during 2008, the securities markets of many emerging economies fell more sharply than of advanced economies. If US dollar fluctuations are considered, the relative loss of these economies turns out to be even more dramatic. The main reason is the rapid increase in risk aversion in September and October as a result of Lehman Brother's bankruptcy, which led to massive outflows of capital to the advanced economies. During the fourth quarter, the stock exchanges of many countries fell: China (16.5 percent); Russia (47.9 percent); Brazil (24.2 percent); Argentina (32.4 percent); Chile (12.7 percent); Iceland (81.7 percent); and, Hungary (35.1 percent) (Graph 22). Up to the beginning of 2009, emerging economies' stock exchanges had not followed a uniform trend.[31]

Emerging economies have adopted many actions to face the financial turmoil and reduce its impact on economic activity. Regarding monetary policy, in view of the downward pattern followed by inflation, several central banks loosened their monetary policy stances since the end of the third quarter. The case of Brazil, Chile, China, Colombia, India, Thailand, and South Africa deserves mention. Nevertheless, in light of the persistence of both inflationary pressures and capital outflows, other countries either left unchanged their reference rates (Croatia, Egypt and Peru) or else raised them (Iceland, Pakistan, Russia, and Uruguay). Many of these countries also implemented fiscal actions to boost their economies in 2009, which include measures to increase spending in infrastructure and programs to support employment, and tax rebates (see Box 3). Other exchange rate and financial measures have also been implemented, including central bank interventions in the foreign exchange market, financing in foreign currency to local financial intermediaries and non-financial firms, a reduction in reserve requirements for commercial banks, an increase in eligible collateral to access central bank financing, and the granting of guarantees for domestic banks' debt, among others.

[31] Up to January 26, the stock exchanges of Argentina, Mexico, Russia and Iceland fell 1.1, 12.5, 14.6 and 9.4 percent, respectively. In contrast, those of Brazil, Chile and China rose 2.6, 5.6, and 12.5 percent, respectively.

Graph 22
Emerging Economies Securities Markets
31/12/2006 = 100



Source: U.S. Federal Reserve.

3.1.4. Outlook

As a result of the current uncertainty, both business and consumer confidence plummeted in various countries. This situation, together with the prevailing serious difficulties in financial markets, the ongoing deleveraging process and an adverse foreign environment for exports, deteriorated economic growth perspectives for 2009, both in developed and emerging economies (Graph 23).

Advanced economies GDP is expected to fall in 2009 for the first time in the post-war period. For the United States, most analysts estimate GDP to fall to -1.6 percent. As mentioned above, these projections have adjusted downwards constantly and significantly. Available information suggests that, by the end of January, corrections will continue. In the case of emerging economies, a significant slowing down of economic activity is also expected.

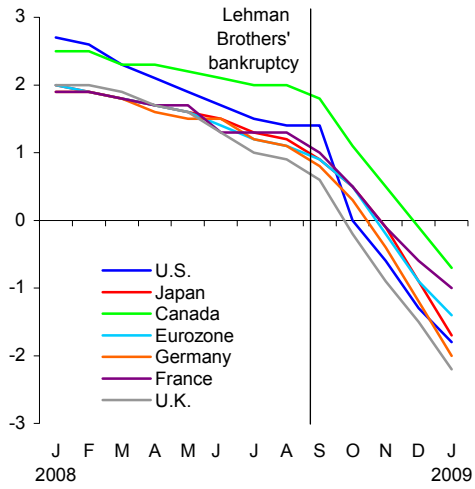
The outlook for global economic activity is highly uncertain. The possibility of a more intense and longer-than-expected deleveraging process and, therefore of a worsening of the crisis in financial markets, cannot be ruled out. Besides, the weakening of global economic activity has increased the risks of more trade barriers. In contrast, the implementation of fiscal and monetary stimulus actions could significantly contribute to attenuate the lower part of the world business cycle.

Given the lower economic growth and lesser pressures on commodity prices, global inflation is expected to decline for 2009 as compared to the previous year. In general terms, inflation is anticipated to adjust more gradually in emerging economies and, in some of them, prices are expected to continue growing at high rates. This scenario faces several risks. On the one hand, some analysts are worried about the possibility, though low, of the current cyclical phase generating a deflationary process in some advanced economies. On the other hand, the monetary and fiscal stimulus policies implemented to face the cycle as well as the

absorption of low-quality assets by central banks might considerably drive inflation upward in the mid-term.

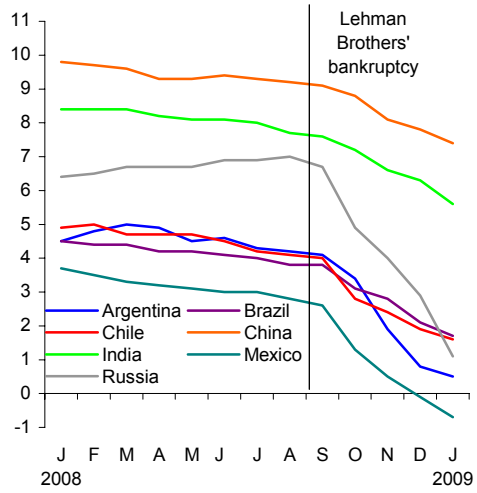
Graph 23
Expectations for Growth in Advanced and Emerging Economies

a) Expectations for Growth in Advanced Economies
Percent



Source: Consensus Forecasts.

b) Expectations for Growth in Emerging Economies
Percent



Source: Consensus Forecasts.

3.2. Costs and Prices

3.2.1. Administered and Regulated Prices of Goods and Services

During the fourth quarter of 2008, the average annual growth of administered prices of goods and services (gasoline, residential gas and electricity) was mainly due to a policy of higher adjustments to both gasoline and LP gas prices. The lower base of comparison of the last quarter of 2007 (a period in which gasoline, LP gas and electricity prices did not increase) also influenced this result. Administered prices grew 8.21 percent in annual terms, as compared with 6.79 percent during the previous quarter (Box 7).

Regarding gasoline, low-octane gasoline prices grew at an average annual rate of 6.00 percent during the fourth quarter 2008 (as compared with 4.53 percent during the previous quarter) while high-octane gasoline prices did so 7.73 percent (6.60 percent during the third quarter). Both types of gasoline recorded negative inflation due to the fall in both fuels' prices in Mexico's Northern border cities, which are fixed according to the prices of the nearest U.S. city. Residential-use gas prices, which are mainly made up of LP gas prices (87 percent) and natural gas prices (13 percent) were subject to a higher rate of change during the last quarter of the year (natural gas prices rose in line with their international references). Thus, residential-use gas prices grew on average, in annual terms, from 6.35 to 9.70 percent during the fourth quarter of 2008 (Table 1 and Graph 24).

Box 7

Recent Impact of Administered and Regulated Prices of Goods and Services on Inflation in Mexico

Headline inflation grew at high annual rates during 2008. The administered and regulated prices' subindex contributed the most to such growth. In Mexico, most of the prices of these goods and services are set by governments, both at the national and local level, and because of their relevance in households' consumption (their weight in the CPI equals 17.17 percent), they have a high incidence on headline inflation. The development of goods and services with administered and regulated prices during 2008 resulted in a higher incidence of this item on annual headline inflation, from 55 to 128 basis points from the first to the fourth quarter of 2008 (Table 1).

Table 1
Incidence of Administered and Regulated Prices of Goods and Services on Headline Inflation

ITEM	Weight	Annual change (percent)					Incidence				
		Q-IV 2007	Q-I 2008	Q-II 2008	Q-III 2008	Q-IV 2008	Q-IV 2007	Q-I 2008	Q-II 2008	Q-III 2008	Q-IV 2008
CPI	**100.00**	**3.81**	**3.89**	**4.92**	**5.48**	**6.18**	**3.81**	**3.89**	**4.92**	**5.48**	**6.18**
Core (new definition)	**74.77**	**4.10**	**4.18**	**4.81**	**5.24**	**5.53**	**3.01**	**3.06**	**3.55**	**3.87**	**4.06**
Non-core (new definition)	**25.23**	**3.00**	**3.10**	**5.21**	**6.15**	**7.99**	**0.80**	**0.83**	**1.36**	**1.61**	**2.12**
Administered and regulated	**17.17**	**3.06**	**3.04**	**4.18**	**5.74**	**7.23**	**0.55**	**0.55**	**0.73**	**1.00**	**1.28**
Administered	**7.77**	**4.30**	**4.07**	**5.38**	**6.79**	**8.21**	**0.39**	**0.38**	**0.47**	**0.59**	**0.75**
Electricity	2.27	4.80	5.25	8.92	10.43	9.43	0.14	0.16	0.22	0.24	0.27
Gas for household use	1.84	1.72	1.75	4.56	6.35	9.70	0.04	0.05	0.12	0.16	0.24
Low-octane gasoline	3.19	5.37	4.54	3.34	4.53	6.00	0.17	0.14	0.11	0.15	0.19
High-octane gasoline	0.47	7.91	5.95	5.51	6.60	7.73	0.04	0.03	0.03	0.03	0.04
Regulated	**9.39**	**1.77**	**1.96**	**2.98**	**4.70**	**6.19**	**0.16**	**0.17**	**0.26**	**0.41**	**0.53**
Minibus	1.82	1.31	1.79	3.94	9.34	13.18	0.02	0.03	0.07	0.17	0.23
Water-supply fees	0.74	5.41	11.23	13.66	13.90	14.73	0.04	0.09	0.11	0.11	0.12
Urban bus	1.32	5.79	3.05	4.39	5.16	7.11	0.08	0.04	0.06	0.07	0.10
Other[1/]	5.52	0.23	0.19	0.44	1.29	1.81	0.01	0.01	0.02	0.06	0.08

1/ Includes Phone Services, Public transportation except for Minibuses and Urban buses, Property tax, Parking lots, Lubricating oils for vehicles, Highway tolls, Car tax, and Fees on Licenses and Other documents.
Source: Banco de México.

Average annual inflation recorded 6.18 percent during the fourth quarter of 2008, of which 1.28 percentage points were explained by the contribution of administered and regulated goods (20.7 percent). Considering, according to the latest information available, an additional impact of the IETU on the CPI of between 0.25 and 0.30 percentage points, both effects would contribute with 25 percent to average annual inflation during the fourth quarter of 2008.[1]

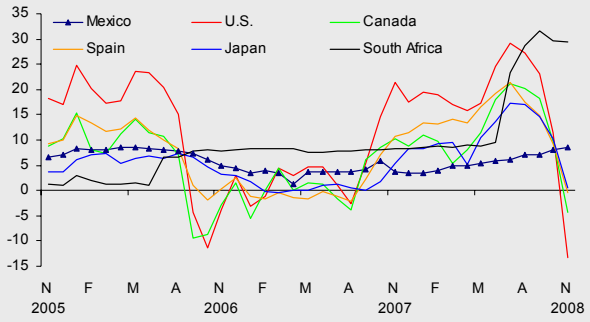
Administered Prices

Administered prices of goods and services are made up of the following four energy items: Electricity, High-octane gasoline, Low-octane gasoline, and Gas for household use. Due to the Mexican regulatory framework, historically, the federal government has been the only supplier of these products, fixing their prices under criteria that not necessarily are in tune with the corresponding international price references. For this reason, usually there are price discrepancies between these goods' domestic prices and their international references (Graph 1).

During the second half of 2008, the federal government adopted a policy to reduce subsidies on administered prices of goods and services in an effort to put these prices at the levels of their international references. However, this strategy affected annual headline inflation. As a result, administered prices' incidence on annual headline inflation rose from 38 to 75 basis points from the first to the fourth quarter of 2008 (Table 1).

As for electricity tariffs, the annual growth rate of this item followed an upward pattern during the year, reaching an average annual growth rate of 9.43 percent, with a 27 basis point incidence on headline inflation. The raise in the charges for electricity consumption are associated, basically, with residential-use high-consumption electricity tariffs (*tarifas domésticas de alto consumo*, DAC).[2]

Graph 1
Energy Inflation in Selected Countries
Annual change (percent)



Source: OECD, Bloomberg, and Statistical Bureaus.

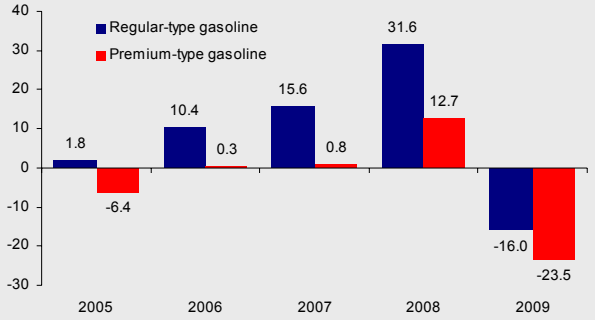
The prices of other oil derivatives, such as gasoline and LP gas, followed an upward pattern during 2008 and, especially, during the third and fourth quarter. This was due to the higher rates of change set to these products' prices aimed at narrowing the differences between domestic prices and international references (Graph 2). The fall in energy prices in international markets speeded the convergence between domestic and international

[1] For estimating an impact of between 0.25 and 0.30 percentage points of the IETU on the CPI, tax collection (for this particular tax) up to November 2008 was considered. The Inflation Report of July-September 2007 included preliminary estimates on the IETU's impact on the CPI in 2008. In those estimates, according to additional tax collection expected in the economic package for 2008 (of 1.1 percent of GDP), the IETU would have an impact of between 40 and 50 basis points.

[2] Electricity tariffs are set according to two considerations: first, an ordinary tariff, in which users are charged for electricity consumption up to a certain level of average kilowatt/hour during the month; and, second, on residential-use high-consumption electricity tariffs (DAC, for its acronym in Spanish), which consider an initial charge plus a fee according to consumed kilowatt/hour. The formula for calculating DAC tariffs in force until December 31, 2008 was reported in the Inflation Report of January-March 2008, p.45. In the formula, the price of natural gas corresponded to a 4-month moving average. Starting January 2009, the method will change to incorporate the direct price of natural gas with a 1-month lag.

prices. In December 2008, international gasoline and LP gas prices even ended below their domestic references.

Graph 2
Gaps between International and Domestic Prices of Gasolines[1/]
Price differential in percent, annual average



1/ Regular and Premium type gasoline are compared with their U.S. equivalents. For 2009, the average for the first twenty six days of January is considered.
Source: Energy Information Agency (EIA) and PEMEX.

In the case of gasoline, government monthly price adjustments intensified its magnitude and frequency since the third quarter of 2008. During the first two quarters of 2008, the rate of change for Magna type (low octane) gasoline prices was of 16 cents and for Premium type (high octane) gasoline, 26 cents (Table 2). During the third quarter, the prices for both type of gasoline were raised 25 and 30 cents, respectively. In the last quarter, the prices of both fuels increased 28 cents. As a result, they contributed with 19 and 4 basis points, respectively, to headline inflation during the fourth quarter (Table 1). The rates of change for Magna and Premium type gasoline prices were of 69 and 84 cents, respectively (Table 2).

Table 2
Increases in Gasoline and LP Gas Prices

	Gasoline				LP Gas	
	Magna		Premium			
	Rate change Monthly $	Change Monthly %	Rate change Monthly $	Change Monthly %	Rate change Monthly $	Change Monthly %
2008						
Jan	0.02	0.29	0.04	0.46	0.03	0.40
Feb	0.02	0.28	0.05	0.57	0.03	0.34
Mar	0.02	0.28	0.04	0.45	0.03	0.26
Apr	0.03	0.42	0.04	0.45	0.03	0.34
May	0.03	0.42	0.04	0.45	0.03	0.37
Jun	0.04	0.56	0.05	0.56	0.06	0.61
Jul	0.07	0.89	0.05	0.49	0.06	0.60
Aug	0.09	1.21	0.09	0.95	0.07	0.81
Sep	0.09	0.84	0.16	1.11	0.09	0.95
Oct	0.09	1.22	0.16	1.76	0.10	1.03
Nov	0.09	1.31	0.12	1.68	0.10	1.20
Dec	0.10	1.16	0.00	0.29	0.09	1.17
Accumulated in the year	0.69	9.27	0.84	9.61	0.72	8.38

Source: PEMEX.

Regarding gas for residential use, its annual inflation rate followed an upward pattern during 2008. This item is composed of two specifics: Natural gas and LP gas. The latter item accounts for more than 80 percent of total gas consumed by households and, for this reason, its price mostly determines the pattern of the price index of gas for residential use. During 2008, the price of LP gas was subject to a 3 cent monthly rate of change until May, and since that month, rates were adjusted upwards until they reached 9-10 cents in the last four months of the year (Table 2). This factor was determinant for the higher inflation rates of gas for residential use, as this item's inflation rose from an average annual rate of 1.75 percent during the first quarter of 2008 to 9.70 percent during the fourth quarter. Its incidence on annual inflation also did so, from 5 to 24 basis points during the same period (Table 1).

Regulated Prices

Regulated prices are set by either federal or local authorities. From the first to the fourth quarter of 2008, their incidence on annual headline inflation rose from 17 to 53 basis points (Table 1). Within this group, water supply fees and minibus and urban bus fares grew at high annual rates due to their growth in several country locations.

During the first quarter of 2008, water supply fees grew at an annual rate of 11.23 percent and, by the fourth quarter, they reached 14.73 percent, with a 12 basis point incidence on headline inflation (Table 1). Mexico City and surroundings, Monterrey, Puebla and Tijuana contributed largely to regulated prices' inflation (Table 3).

Table 3
Regulated Prices of Selected Services
Annual change (percent)

Water

	Q-IV 2007	Q-I 2008	Q-II 2008	Q-III 2008	Q-IV 2008
National	**5.41**	**11.23**	**13.66**	**13.90**	**14.73**
Mexico City and surroundings	3.80	26.62	37.48	37.48	37.48
Monterrey, N. L.	4.95	12.23	11.98	14.95	16.30
Matamoros, Tamps.	10.74	10.74	8.79	9.85	19.70
Puebla, Pue.	15.31	14.15	14.97	15.42	15.50
Tijuana, B. C.	7.93	3.83	4.65	5.35	5.97

Transit

	Q-IV 2007	Q-I 2008	Q-II 2008	Q-III 2008	Q-IV 2008
National	**1.31**	**1.79**	**3.94**	**9.34**	**13.18**
Mexico City and surroundings	0.00	0.00	0.63	9.63	15.92
Puebla, Pue.	0.00	7.19	25.00	25.00	25.00
Matamoros, Tamps.	0.00	2.00	10.00	10.00	10.93
Toluca, Edo. De Méx.	0.00	0.00	0.00	10.00	20.00
Tlaxcala, Tlax.	0.00	10.32	11.19	11.19	11.19

Urban bus

	Trim IV 2007	Q-I 2008	Q-II 2008	Q-III 2008	Q-IV 2008
National	**5.79**	**3.05**	**4.39**	**5.16**	**7.11**
Guadalajara, Jal.	11.62	3.70	11.11	11.11	11.11
Mexico City and surroundings	0.00	0.24	1.43	5.62	9.98
Veracruz, Ver.	0.00	0.00	0.00	3.33	20.00
Córdoba, Ver.	0.00	0.00	0.00	3.21	19.23
Monterrey, N. L.	9.90	5.27	3.62	3.62	3.62

Note: Information is ordered according to the city's impact on each item's inflation.
Source: Banco de México.

As for minibus fares, they grew in annual terms from 1.79 percent during the first quarter of 2008 to 13.18 percent during the fourth quarter of that year, contributing with 23 basis points to headline inflation during the last period (Table 1). Mexico City and surroundings, Puebla, Matamoros, Toluca, and Tlaxcala were the cities that contributed the most to this item's inflation (Table 3).

Urban bus fares grew at annual rates from 3.05 percent during the first quarter of 2008 to 7.11 percent during the fourth quarter of that year (Table 1). Guadalajara, Mexico City and surroundings, Veracruz, Córdoba, and Monterrey were the cities that contributed the most to this item's inflation (Table 3).

Future headline inflation will depend mainly on the developments of administered and regulated prices, which will basically depend on the development of the international prices of energy (mainly crude oil), and on any actions to be implemented by the federal government.

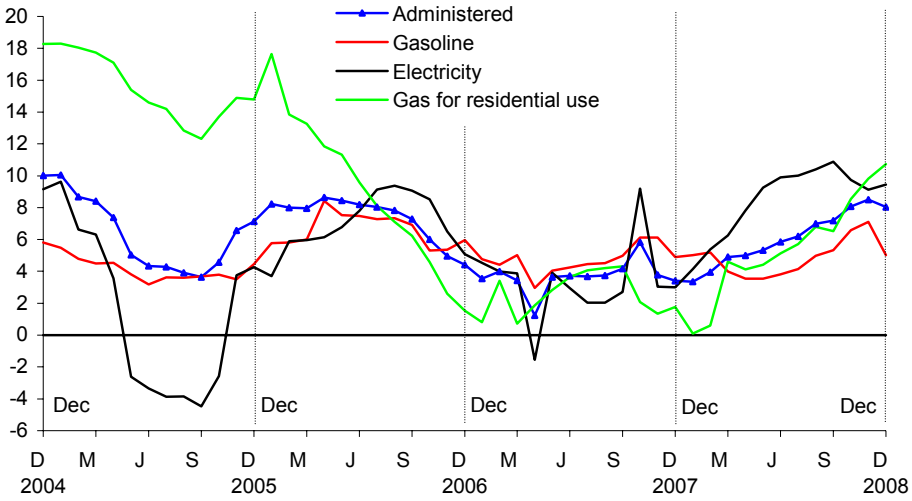
The recent events show that the international prices of energy have declined significantly, especially since the second half of 2008, which combined with government's price-fixing policies have made domestic prices of gasoline and LP gas rise above their international references since the end of 2008. In light of

this scenario, and as part of a strategy to face the effects of theworld economic slowdown, the Mexican government announced a freeze on gasoline prices, a 10 percent and 9 percent reduction on LP gas and low tension electricity prices, respectively, during 2009 in order to maintain price levels that year.[3] Both decisions are expected to contribute to ease inflationary pressures in 2009.

The tax collection policies to be implemented by the local governments will also be important for the determination of regulated prices.

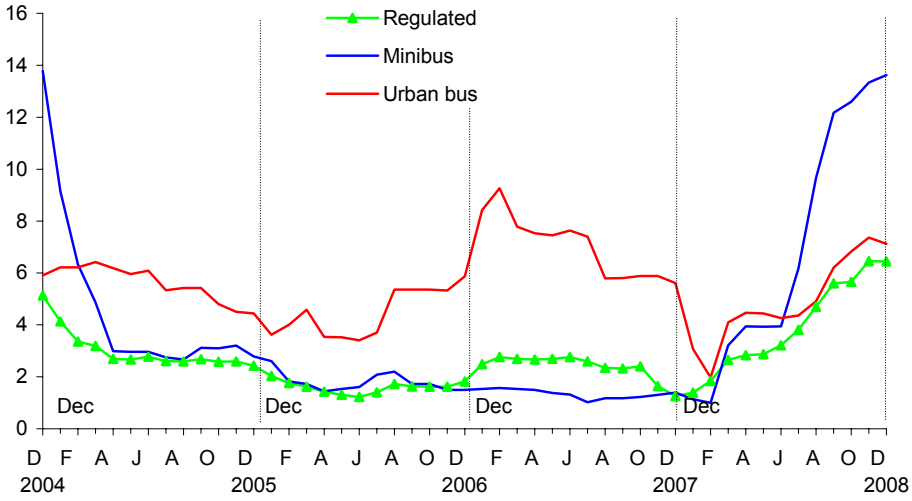
[3] Measures included in the National Agreement to Support Households' Income and Employment, presented by the federal government on January 7, 2009.

Graph 24
Subindex of Administered Prices
Annual change (percent)



As for the regulated prices subindex, it grew on average 6.19 percent in annual terms during the fourth quarter of 2008, 1.49 percentage points above the figure of the third quarter (Table 1). The pattern followed by this subindex was mainly influenced by increases in minibus and urban transportation fares in cities like Mexico City (metropolitan area), Puebla, Toluca, Mérida, Guadalajara, and Veracruz (Graph 25).

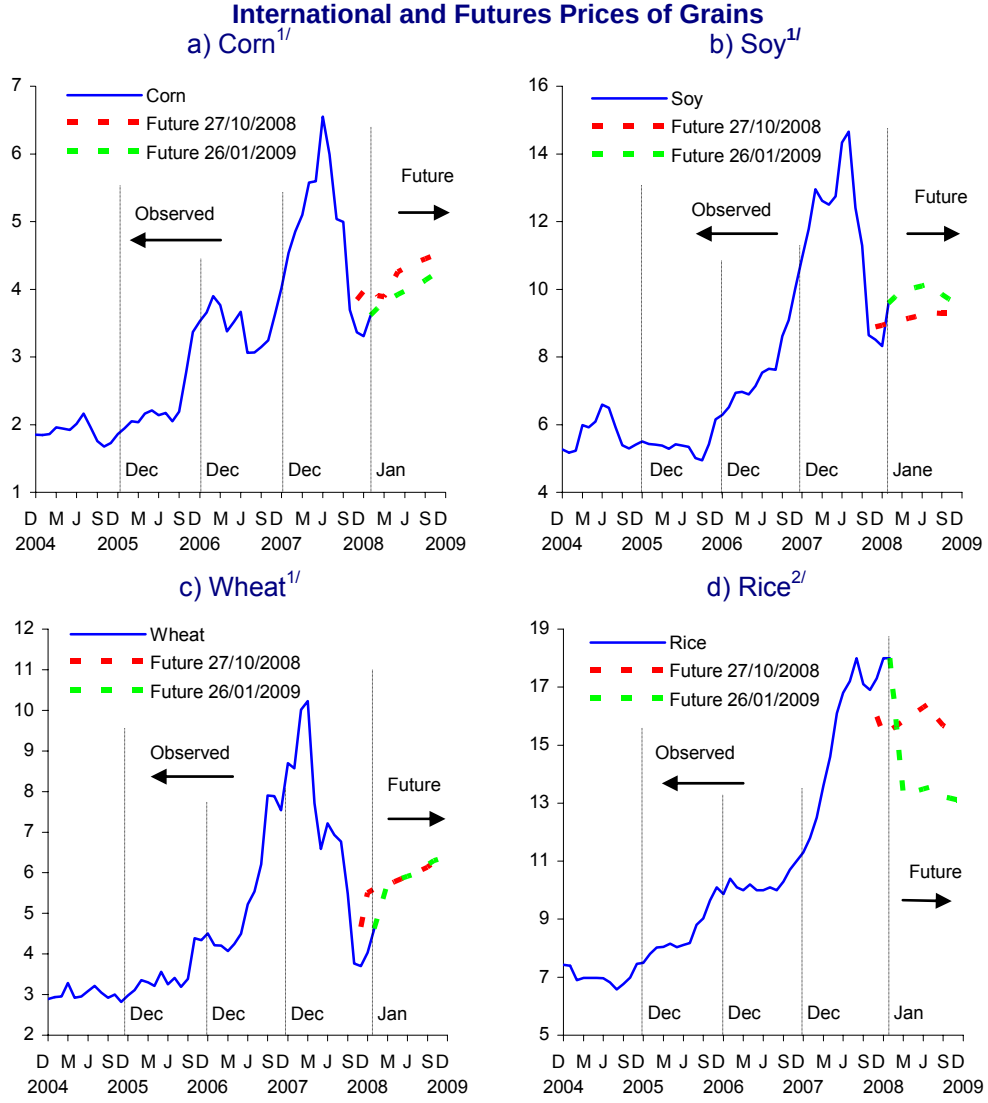
Graph 25
Subindex of Regulated Prices
Annual change (percent)



3.2.2. Food Commodities

The sharp downward trend followed by grain prices in international markets that began in mid-2008 continued during the fourth quarter of that year. International prices of corn, soy, and wheat changed in -33.80, -26.22, and -26.59 percent, respectively, between September and December, while rice prices rose 5.26 percent (Graph 26). From mid-2008 to December of that year, prices fell close to 50 percent in some cases. At the end of December, futures curves for corn, soy and wheat prices for the next 12 months are very similar to those forecasted at the end of October, thus suggesting a possible increase in these three grain prices in 2009.

Graph 26
International and Futures Prices of Grains



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

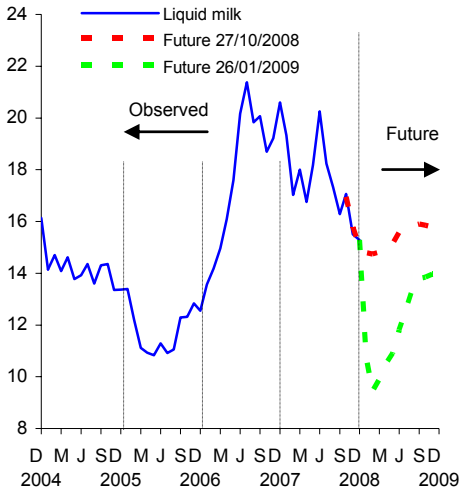
The economic events related to the global financial crisis and the decline in international oil prices together with demand and supply factors in each market have prompted grain prices to fall worldwide. In the case of corn, price

quotes were affected by lesser demand in the European Union, by a higher-than-expected harvest in the U.S., and by abundant production in Russia and Ukraine. As for wheat, exporting countries in the northern hemisphere (mainly the U.S., Canada, the European Union, Russia, and Ukraine) recorded nearly historical high harvests. As for rice, Thailand and Vietnam also had record harvests; however, this grain price exhibited downward rigidities due to the export quotas set by India and Egypt.

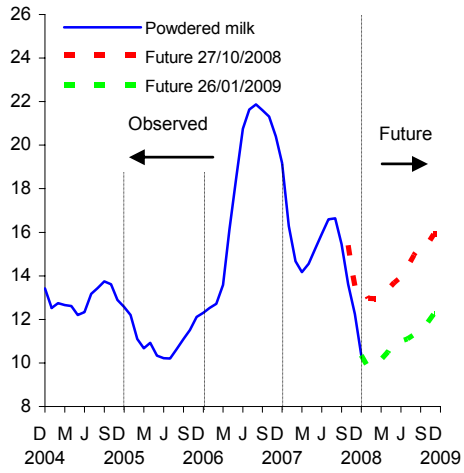
International prices of liquid and powdered milk also shifted downwards during the reported quarter. As compared with the September-December 2008 period, the international price of liquid milk declined -6.14 percent, while that of powdered milk, -33.01 percent. Futures markets show that liquid milk prices could decline further and end 2009 slightly below their levels recorded at the end of 2008. As for powdered milk, price quotes are expected to increase but still remain at relatively low levels, similar to those of November 2008 (Graph 27).

Graph 27
Observed and Futures Prices of Milk[1/]

a) Liquid Milk



b) Powdered Milk



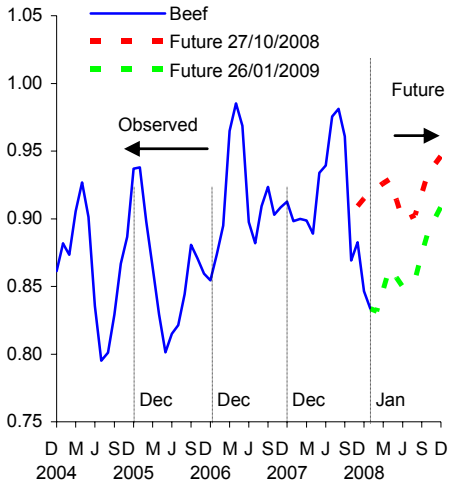
1/USD per CWT (USD/100 Lb).
Source: United States Department of Agriculture (USDA).
Chicago Mercantile Exchange (CME).

Between September and December 2008, international prices of beef and pork meat declined -11.46 and -24.66 percent, respectively. Futures beef prices show fluctuations for the next twelve months and a sharp increase in December 2009. On the contrary, future prices for pork meat at both the end of October and the end of December 2008 suggest these prices will escalate during the first quarter of 2009, and then decline and set 23.64 percent above the prices observed in December 2008 (Graph 28).

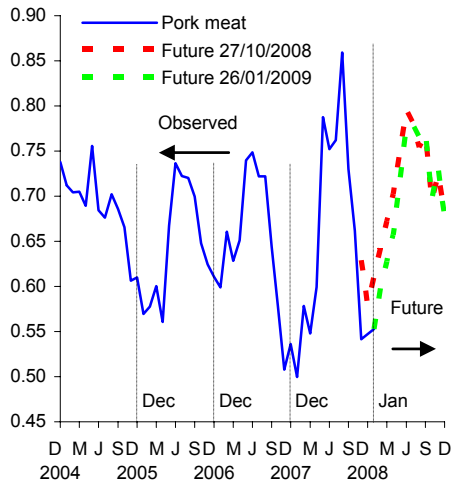
In general, futures markets consider that the prices of several agricultural products have already reached bottom and will begin to slightly adjust upwards due to a quite non-elastic demand (despite the crisis in world economies), a lower-than-expected production in some countries, weather risks, credit restrictions for producers, and possible increases in oil prices.

Graph 28
Observed and Futures Prices of Meat [1/]

a) Beef



b) Pork



1/USD per lb.
Source: United States Department of Agriculture (USDA).
Chicago Mercantile Exchange (CME).

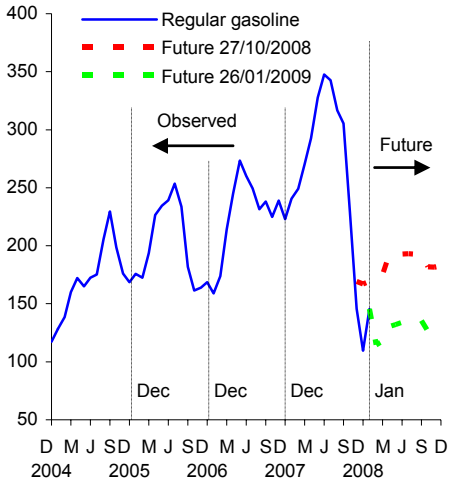
3.2.3. Energy Commodities

International prices of fuel commodities declined significantly during the fourth quarter of 2008. Between September and December, gasoline, LP gas, natural gas and WTI oil prices grew -64.16, -60.39, -21.63 and -60.13 percent, respectively (Graph 29). This negative growth is due mainly to the fall in global demand for these products generated by the ongoing world economic slowdown (Table 4). In light of the possibility of a small growth in demand, the Organization of the Petroleum Exporting Countries (OPEC) announced on December 17 a daily reduction of 2.2 million petroleum-produced barrels as of January 2009, that add up to the previously agreed cuts of 0.5 and 1.5 million daily barrels of September and October, respectively. This measure, together with fears of the Palestine-Israel conflict spreading to Middle East producing countries and the interruption of Russia's natural gas deliveries, led to the price increases of January 2009. Despite the aforementioned, since oil inventories are high because global demand is stagnant, no additional pressures on prices generated by fundamental factors are thus expected during the first months.

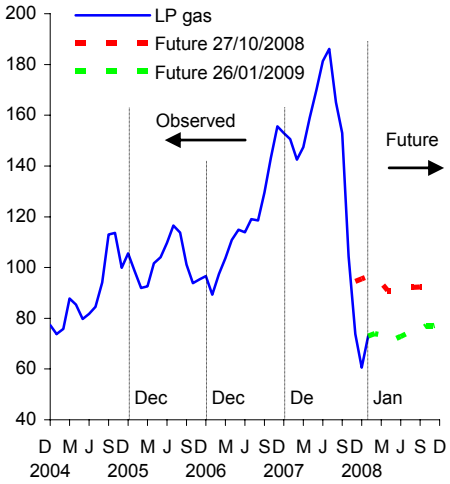
The outlook for fuel markets in 2009 points to significantly lower prices as compared to those of the first nine months of 2008 due to the expected contraction of demand originated by the strong slowdown of the main world economies. However, considering the high volatility of fuels international references in the last few years, price increases cannot be ruled out.

Graph 29
Observed and Futures Prices of Energy

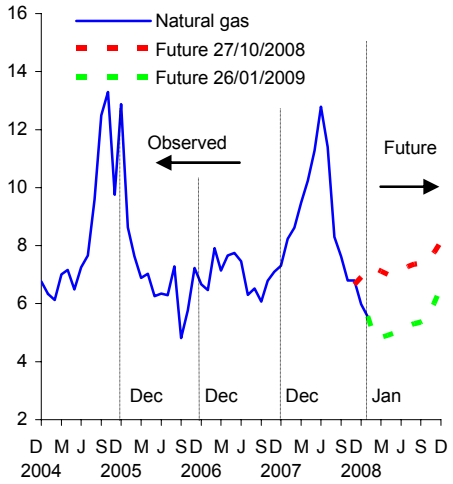
a) Regular Gas[1/]



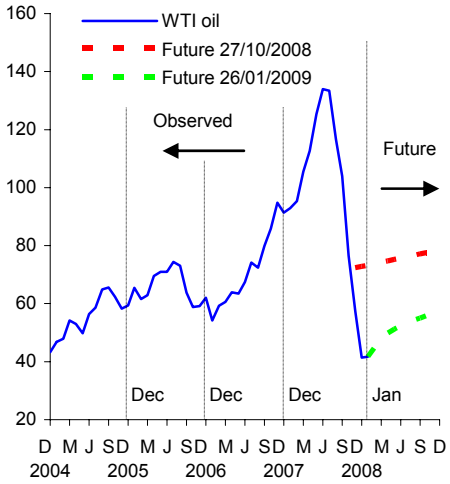
b) LP Gas[2/]



c) Natural Gas[3/]



d) WTI Oil[4/]



1/ Texas, US cents per gallon.
2/ Mont Belvieu. Tex. US cents per gallon.
3/ TETCO. Tex. USD per MMBtu.
4/ USD per barrel.
Source: Bloomberg, NewYork Mercantile Exchange (NYM), and Energy Information Administration (EIA).

Table 4
World Supply and Demand for Crude Oil
Million barrels a day

	2008 p/	2009 1/	2010 2/
Demand			
OECD	47.7	46.4	46.4
U.S.	19.8	19.4	19.5
Europe	15.2	14.7	14.7
Remaining countries	12.7	12.4	12.2
Non-OECD member countries	38.2	38.7	39.6
China	8.0	8.3	8.5
Total	**85.9**	**85.1**	**86.0**
Supply			
Non-OPEC member countries 3/	49.7	49.9	50.0
Former Soviet Union	12.5	12.6	12.8
OPEC 4/	35.8	35.0	36.6
Crude oil	31.3	30.0	30.7
Other liquids	4.5	5.1	5.9
Total	**85.5**	**84.9**	**86.6**
OPEC demand for crude oil 5/	**36.2**	**35.2**	**36.0**
Inventory accumulation 6/	**-0.5**	**-0.2**	**0.6**

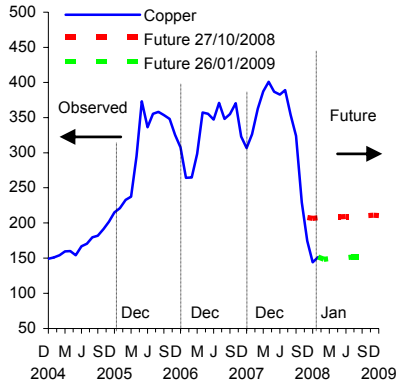
1/ Estimates.
2/ Forecasts.
3/ Figures exclude Angola and Ecuador and include Indonesia.
4/ Figures include Angola and Ecuador and exclude Indonesia.
5/ Equivalent to world demand for crude oil less supply from non-OPEP members (excluding Angola and Ecuador and including Indonesia).
6/ A negative sign equals a decline. Includes adjustments for other items.
p/ Preliminary.
Source: International Energy Agency, Short-Term Energy Outlook, January 2009.

3.2.4. Metal Commodities

During the last quarter of 2008, copper and steel international prices followed the same upward trend observed since mid-year. In the case of copper, in December 2008, its price reached lows unseen since the end of 2004. Between September and December 2008, copper prices grew -55.50 percent (Graph 30). The growth difference between observed prices in December and those forecasted for that month in September 30, 2008 is -49.92 percent. Steel prices grew -45.70 percent between September and December. In December, they returned to the levels recorded at the beginning of 2008.

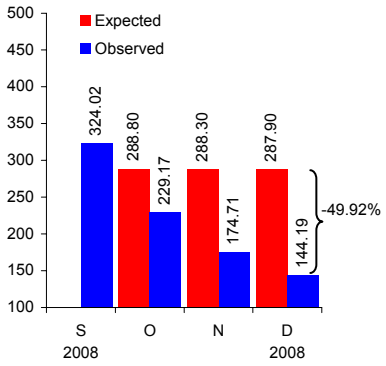
Graph 30
Copper and Steel Prices

a) International Prices of Copper [1/]



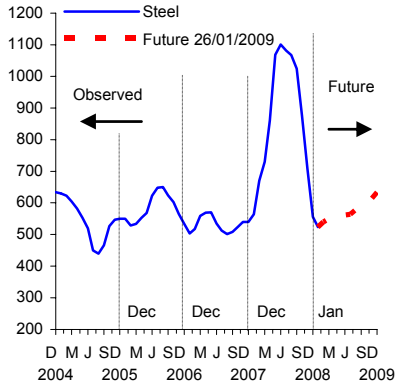
1/ US cents per pound.
Source: Metal Bulletin, Commodity Exchange Inc. (CMX).

b) International Prices of Copper [2/] (Observed and Expected)[3/]



2/ US cents per pound.
3/ Information corresponding to futures of September 30, 2008.
Source: Metal Bulletin, Commodity Exchange Inc. (CMX).

c) International Prices of Steel [4/]



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

3.3. Developments in the Mexican Economy

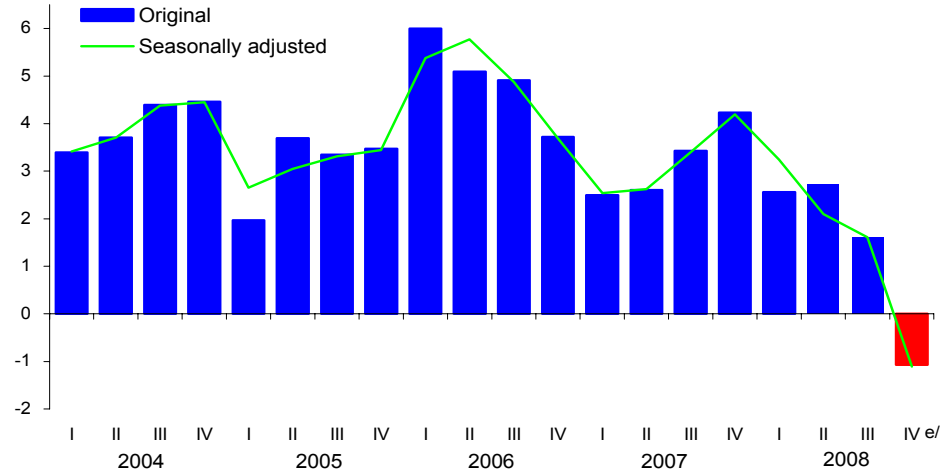
3.3.1. Economic Activity

Mexican economic activity continued weakening during the fourth quarter of 2008. This situation was mainly determined by an adverse foreign environment. During the fourth quarter, lower growth, mainly in advanced economies, and especially in the U.S., led to a contraction of Mexican manufacturing exports, the automobile industry, and of other products, as well as to lesser revenues from workers' remittances and international travelers, all within a context of lesser foreign capital inflows. The weakening of the world economy also prompted the decline of international commodity prices, including oil. The significant fall in oil prices deteriorated Mexico's terms of trade.

The decelerating trend that thus prevailed during the three first quarters of 2008 intensified in the fourth quarter. Most indicators weakened: domestic and foreign demand; production in different sectors; and, the labor market. During this period, both confidence and business climate indicators deteriorated. According to available information, during the fourth quarter, GDP is expected to have contracted around one percent in annual terms (Graph 31), after having grown 2.3 percent in annual terms during the first three quarters. For the entire 2008, GDP is expected to have grown 1.5 percent.

The slowdown of domestic demand during the fourth quarter affected its two components: consumption and investment. Private consumption grew at a small annual rate. After having grown significantly in annual terms during the second and third quarters, investment lost momentum during the fourth quarter. In fact, measured in constant prices and with seasonally adjusted data, investment levels decreased during the reference quarter. As for foreign demand, that from the U.S. contracted in annual terms while that from non-U.S. countries slowed down dramatically.

Graph 31
Gross Domestic Product[1/]
Annual change (percent)



e/ estimated.
1/ Calculations based on the National Accounts base year 2003.
Source: INEGI. Seasonal adjustments up to the fourth quarter of 2008 by Banco de México.

3.3.1.1. Production by Sector

From a sectorial point of view, the fall in GDP in annual terms during the fourth quarter of 2008 was due to the following factors: a considerable growth of agricultural GDP, thus accumulating three consecutive quarters with annual positive growth;[32] an annual growth of the services sector close to zero -which would reflect the strongest slowdown of private consumption- as well as a fall in foreign-trade services; and, a sharp contraction of the industrial sector (Graph 32a), which grew negatively for two consecutive quarters. The latter results would imply a decline in industrial GDP in 2008, after having grown positively for four consecutive years.

The weak performance of industrial production during the fourth quarter was reflected in negative growth in annual terms in three out of the four sectors that comprise it: mining, manufacturing and construction; while the growth rate of electricity, water, and pipeline gas supply was close to zero in annual terms (Graph 32b).[33] In the case of mining, at the end of 2008 it accumulated nine consecutive quarters of negative annual growth. These developments resulted from modest increases in non-oil mining production and a strong fall in oil mining production, in response to lesser crude oil extraction (Graph 32c and Graph 33). It is worth noting that oil mining accounted for 86 percent of the added value produced by Mexico's mining industry in 2007. As for non-oil mining, despite being a sector that has generated relevant investment projects over the last years, it

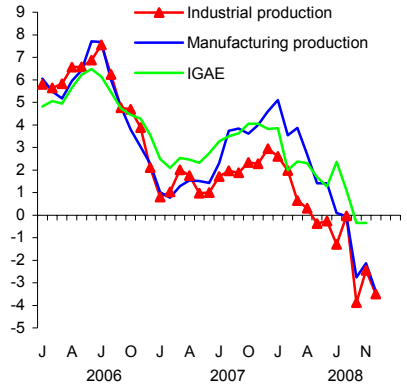
[32] During 2008, agricultural and fishing production benefited from favorable weather conditions (adequate rain and humidity in farming lands) and from a significant increase in their exports value, measured in current US dollars, of 12.8 percent.

[33] During the October-November 2008 period, industrial production measured in constant prices fell at an annual rate of 3.8 percent, thus accumulating seven consecutive months with negative growth. During this period, three out of the four sectors that comprise it fell in annual terms: mining (4.7 percent), construction (3.4 percent), and manufacturing (4 percent), while electricity, water and pipeline gas supply grew slightly 0.5 percent in annual terms. As for the decline in manufacturing production, it responded to annual falls of 7.6 percent in the transport equipment subsector (which includes mainly vehicle and auto parts production), and of 3.1 percent in the manufacturing industry excluding transport equipment.

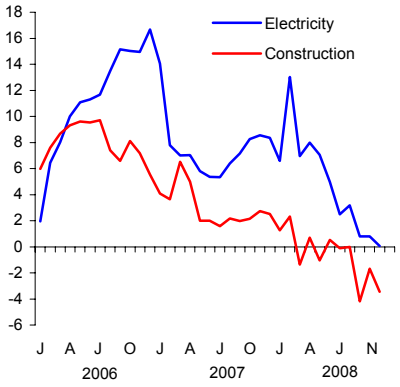
was affected by both labor problems which reduced its rate of production and, more recently, the decline of non-oil mining prices in international markets.

Graph 32
Production Indicators
Annual change (percent) of seasonally-adjusted data and 2-month moving average, except in 2008

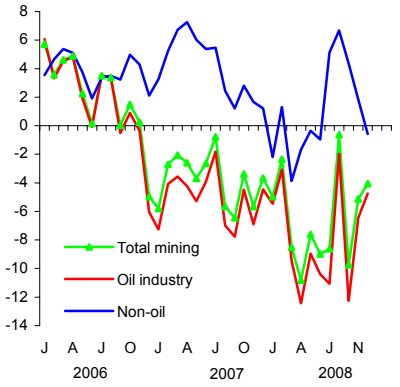
a) IGAE, Industrial and Manufacturing Production



b) Electricity and Construction



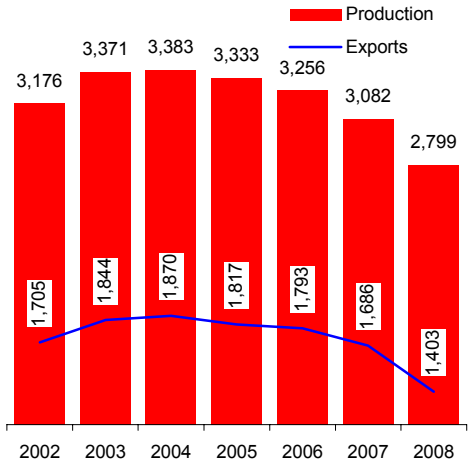
c) Mining



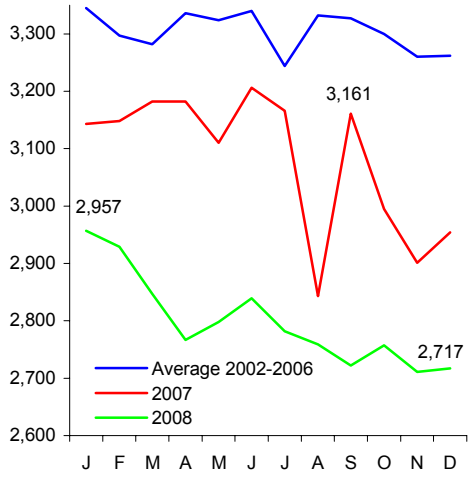
Source: INEGI.

Graph 33
Crude Oil: Production and Exports
Thousand barrels a day

a) Crude Oil Production and Exports
Average during the year



b) Crude Oil Production
Average during the month



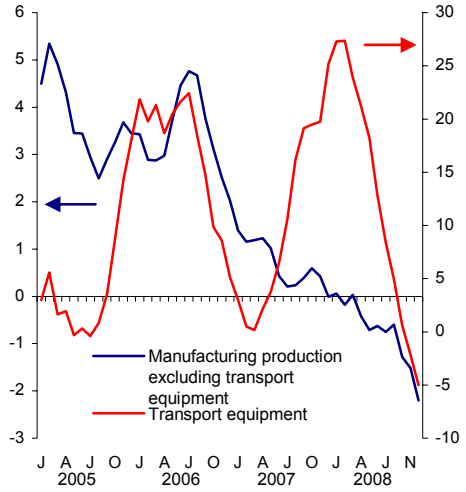
Source: PEMEX.

The annual contraction of manufacturing production during the fourth quarter of 2008 (Graph 34) was mainly determined by falling exports, together with a stronger slowdown of domestic demand for manufactures. Regarding manufacturing exports to the U.S. market, which accounted for 80.4 percent of total exports in 2008, these fell during the last quarter, both automotive and the remaining manufactures. On the other hand, manufacturing exports to the non-U.S. market continued to grow at positive annual rates. However, the level of these exports, using seasonally-adjusted figures, decreased for all sectors, including the automotive one.

The automotive industry is very important for the Mexican economy, due to its share in Mexico's manufacturing sector, the employment it creates, its exports value, and the total surplus of its trade balance.[34] During the fourth quarter of 2008, automotive production contracted in annual terms, as a result of a fall in both vehicle and auto parts production, due to a weaker foreign demand (Graph 35). In this regard, the value of auto parts exports for the referred quarter, measured in current dollars, fell 22.5 percent in annual terms. As for vehicle production, it was also affected during the fourth quarter by a sharp decline in domestic car sales (18.1 percent).

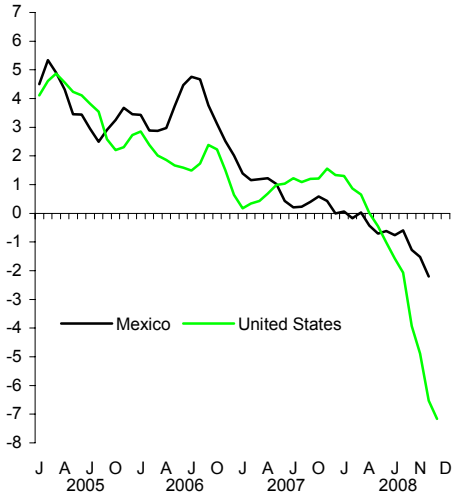
Graph 34
Manufacturing Production
Annual change (percent) of seasonally adjusted data[1/]

a) Production of Transport Equipment and Remaining Manufactures



Source: INEGI.
1/ Three-month moving average.

b) Manufacturing Production in Mexico and the U.S.[2/]



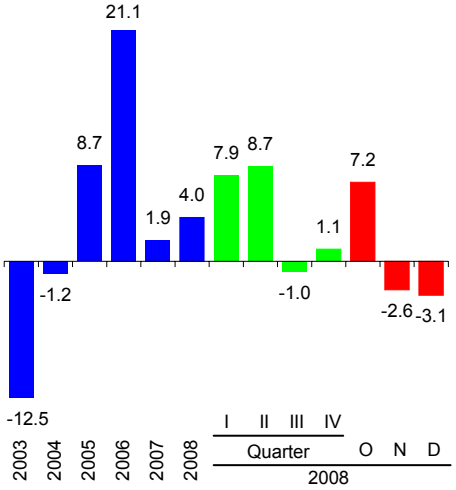
Source: INEGI and U.S. Federal Reserve.
2/ The series for Mexico excludes transport and that for the U.S. excludes both the automotive industry and high technology.

The services sector decelerated considerably during the fourth quarter of 2008, mainly due to a fall in trade, as a result of the smaller growth of private consumption and the contraction of foreign trade. Transport activities for the referred quarter declined in annual terms, especially those related to air and land freight, clearly reflecting the lesser industrial activity. Other services sectors that also slowed down were temporary lodging and restaurants, and professional and recreational services.

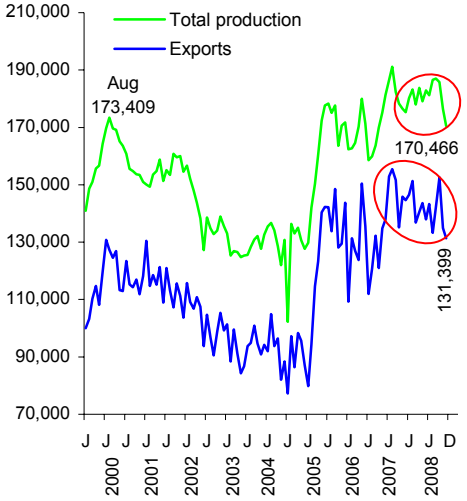
[34] In the first eleven months of 2008, the production value of the transport equipment subsector accounted for 23 percent of Mexico's manufacturing production. In 2008, automotive exports totaled 55.681 billion US dollars, figure higher than that of total oil-product exports (50.639 billion). In that year, the automotive trade balance surplus reached 21.324 billion US dollars, figure far higher than the oil trade balance surplus (14.368 billion).

Graph 35
Automotive Industry

a) Automotive Industry Production
Annual change (percent) of number of units



b) Vehicle Production and Exports
Monthly units, seasonally adjusted data



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

3.3.1.2. Aggregate Demand

During the fourth quarter of 2008, aggregate demand decelerated more than during the first three quarters, meaning that, on the one hand, the two components of domestic demand –consumption and investment- grew considerably less in annual terms, and, on the other, that foreign demand (for both merchandise and services) contracted.

Most private consumption indicators show that the decelerating pattern observed throughout 2008 intensified in the last year's months. Thus, ANTAD sales for the fourth quarter (Graph 36a), measured in real terms and using seasonally adjusted figures, grew 2.7 percent in annual terms, the lowest rate observed in 25 quarters. In fact, in seasonal terms, these sales fell at an annual rate of 1.3 percent in December (4.5 percent with original data). During the first, second, and third quarters of the year, these sales grew 8.3, 7.7, and 4.9 percent, respectively.[35] The loss of dynamism of ANTAD sales comprised all products (Graph 36b), including groceries, but was much more evident in apparel, footwear and durable goods (major appliances, electronic goods, video and mobile phones, domestic appliances, and furniture). Other private consumption indicators such as consumer good imports or the previously referred domestic car sales also weakened (Graph 37a). As for consumer goods imports (Graph 37b), these fell 8 percent (15 percent excluding gasoline imports and 12.2 percent excluding gasoline and vehicle imports) in annual terms, measured in current dollars, during the fourth quarter, the first megatime annual rate in 22 quarters. As for the

[35] In 2008, ANTAD (*Asociación Nacional de Tiendas de Autoservicio y Departamentales*) sales, measured in real terms, grew 5.6 percent, the lowest rate in six years. This result stemmed from sale increases in supermarket stores (6.3 percent), in specialized stores (6.7 percent), and in departmental stores (1.9 percent and the lowest rate in twelve years). In 2008, ANTAD sales accounted for approximately 30 percent of total retail sales in Mexico, reaching 43 percent excluding retail, vehicle, and fuel sales.

variables that enabled private consumption spending to slow down, the following deserve mentioning:

I. Wage bill indicators in real terms contracted in annual terms during the fourth quarter of 2008, in both the total economy and in the formal economy. These results reflect the lesser job creation and annual falls in average earnings indicators in real terms (Graph 38).[36]

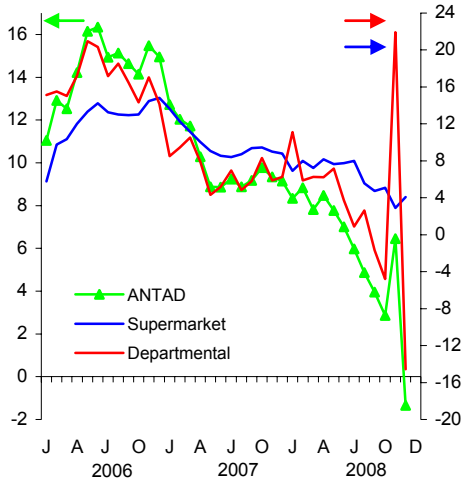
II. Other determinants of private consumer spending that had been slowing down, such as credit for private consumption and for housing, did so but more markedly during the fourth quarter.

III. Private consumption spending was also affected during 2008 by the increase in several food product prices.

IV. Last, the Consumer Confidence Index recorded historically low levels during the fourth quarter and the component associated with probable purchases of consumer durable goods weakened dramatically. Private consumption expenditure might have also been affected by a more cautious behavior of people due to the higher uncertainty about preserving current jobs, in an environment of weaker demand for jobs.

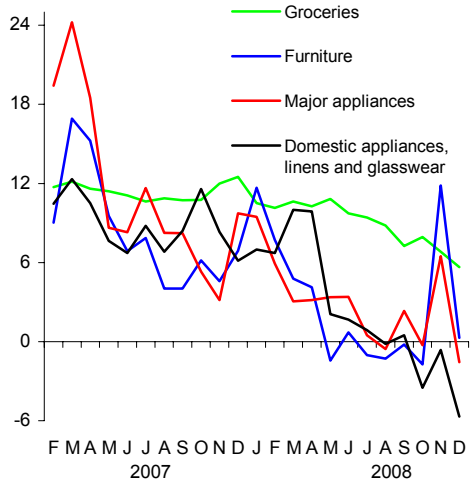
Graph 36
Domestic Demand: Consumption

a) ANTAD, Supermarket and Department Store Sales in Real Terms
Annual change (percent)
of seasonally adjusted data 1/



Source: ANTAD.
1/ Seasonal adjustments by Banco de México; 2-month moving average except for 2008.

b) ANTAD Sales of Different Products
Annual change (percent)
of seasonally adjusted data 2/

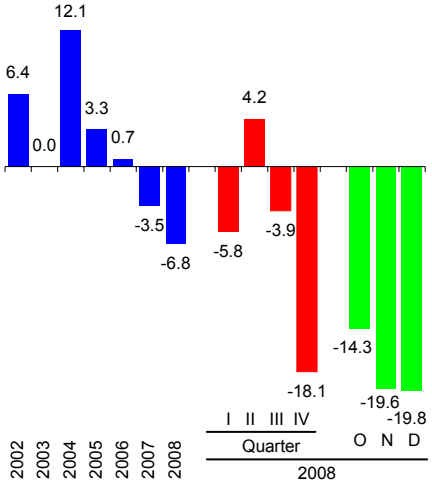


Source: ANTAD.
2/ Seasonal adjustments by Banco de México; 2-month moving average.

[36] In December 2008, the wage bill in the formal sector fell at an annual rate of 1.1 percent, originated by a 0.3 percent reduction in annual terms in the number of IMSS-insured workers and of 0.8 percent in the average reference wage in real terms. On another front, the indicator for the real wage bill prepared using data from INEGI's National Occupation and Employment Survey (*Encuesta Nacional de Ocupación y Empleo,* ENOE*)* fell at an annual rate of 3.5 percent as a result of both an increase in remunerated workers (1.8 percent) and a decline in real average earnings (5.2 percent).

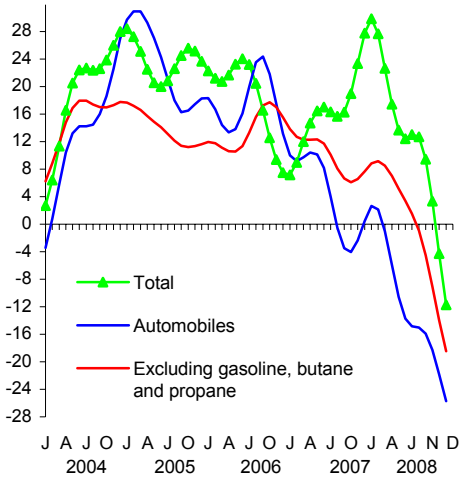
Graph 37
Domestic Demand: Consumption
Annual change (percent)

a) Domestic Retail Sales of New Vehicles



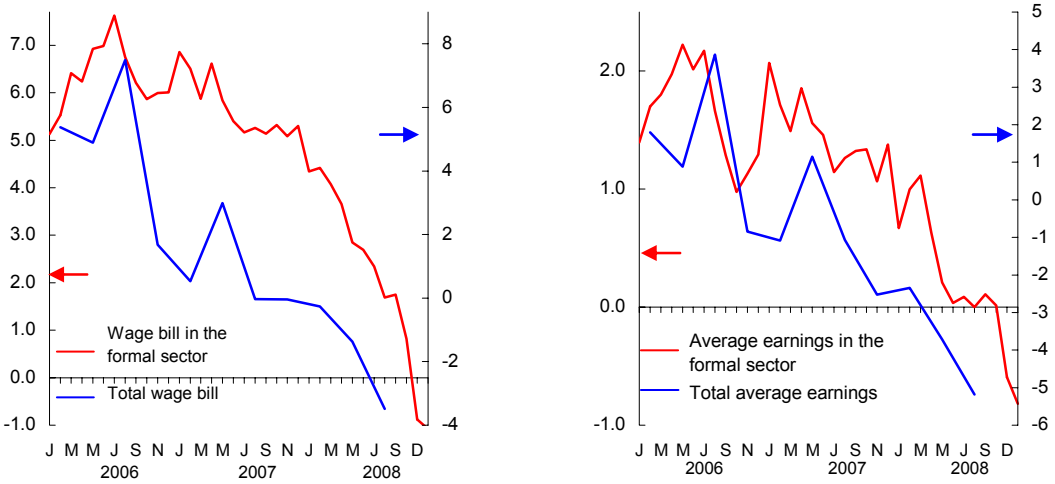
Source: AMIA.

b) Consumer Goods Imports
Trend data



Source: Banco de México.

Graph 38
Total Wage Bill and Average Earnings in Real Terms
Annual change (percent)



Source: Prepared with data from IMSS (average reference wage and number of workers insured) and INEGI (monthly income and paid workers from the *Occupation and Employment Survey*-Encuesta Nacional de Ocupación y Empleo, ENOE).

During the second and third quarter of 2008 investment grew significantly in annual terms; however, during the fourth quarter of the year it decelerated considerably (Graph 39).[37] During the second and third quarters, this type of expenditure grew mainly due to higher capital goods imports made by some firms that were working in investment projects for specific sectors, while capital goods imports made by the remaining firms weakened. However, during

[37] During the period October-November 2008, gross capital formation in Mexico is expected to have grown at an annual rate of only 0.3 percent, after having grown 8.2 and 7.8 percent during the second and third quarters.

the fourth quarter of the year, even capital goods imports associated with those projects lost momentum (Graph 40). When evaluating the factors that might have contributed to the slowdown of investment during the last months of 2008, the following are worth considering:

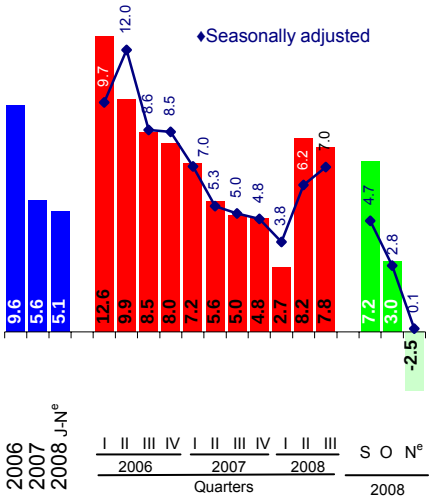
i) When facing a weaker demand for their products and uncertainty about its duration, firms tend to postpone or reconsider their investments. This expenditure might have also been affected by the sharp deterioration of both confidence and business climate indicators and by an adverse external environment, especially in the United States.

ii) Several indicators show that firms' profits diminished during 2008, making it less attractive to invest, and lesser resources were also available for investment projects. This is the case of non-financial issuers listed in the Mexican Stock Exchange. Profit results were attributed to lesser sales and even falls in several activities, and to escalating sales and operational expenses. In addition to firms' weak sales during the fourth quarter, exchange rate losses associated with firms' foreign-denominated liabilities were also observed.

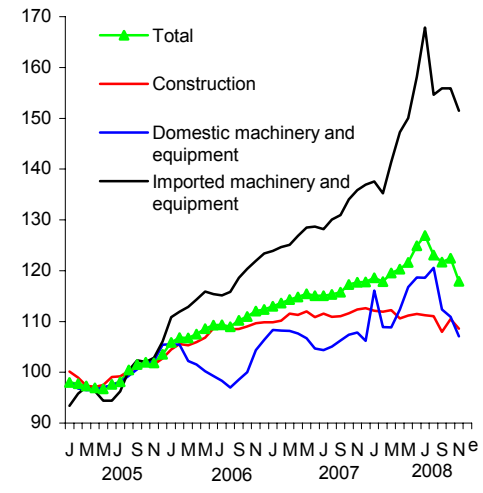
iii) During the fourth quarter, domestic financing granted to firms continued growing at positive annual rates, but with a clear decelerating trend, in addition to a greater astringency in foreign financing. Under conditions of high uncertainty, firms' preference for liquidity increases, therefore affecting negatively investment.

Graph 39
Domestic Demand: Investment [1/]

a) Gross Fixed Investment
Annual change (percent)



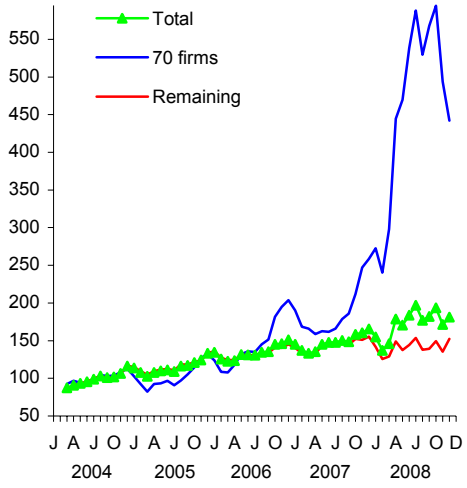
b) Gross Fixed Investment and Components
2005=100, seasonally adjusted series and
3-month moving average, except in 2008



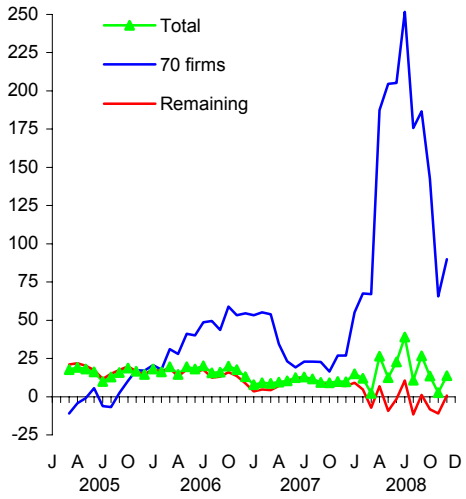
e/ Estimated.
Source: INEGI.
1/ Data for November 2008 and seasonally adjusted series are estimated by Banco de México.

Graph 40
Imports of Capital Goods: 70 Firms Recovering in 2008 and Remaining Firms
Three month moving average, except in 2008

a) 2004=100



b) Annual change (percent)



Source: Banco de México.

Public spending in real terms grew significantly at an annual rate during the October-November 2008 period, therefore contributing positively to GDP growth during this period, the same way as in the first three quarters of the year (Box 8).

Although aggregate demand decelerated markedly and GDP contracted significantly in annual terms during the fourth quarter of 2008, both aggregate demand and economic activity were not a source of pressures for the country's production capacity and, therefore, for domestic prices. In this context, the following deserves mentioning:

a) Under the referred quarter, several indicators revealed that GDP was below potential and, therefore, that the output gap was negative.

b) Regarding manufacturing, indicators on the use of installed capacity show that it weakened during the second half of the year. Several indicators prepared by Banco de México also show that during 2008 manufacturing did not face a shortage of skilled labor that could entail wage pressures (Graph 41). In fact, as it is detailed in the next section (3.3.1.3), the demand for jobs weakened significantly in the last months of 2008.

c) Last, although the current account deficit of the balance of payments rose during the fourth quarter of the year, it did not reflect demand-related pressures because it responded to both the seasonality of the referred balance and to the oil trade balance's weakness.

Box 8

Fiscal Measures in Mexico to Face the Crisis

As a result of the deepening of the international financial crisis that has taken place in the last few months, the advanced economies, particularly the U.S., have fallen into recession, and high uncertainty prevails about its depth and duration. Growth prospects for emerging economies have also deteriorated as a result, among other factors, of lower external demand for their products, lower revenues from remittances, falls in commodity prices, and weakening of domestic demand.

Under this setting, Mexican economic activity and its growth outlook for 2009 deteriorated markedly, especially as of the fourth quarter of 2008. In Mexico as in other countries (see Box 5 of this Report), the federal government announced a series of fiscal incentives in order to soften the effects of a slower rate of growth of demand on output and national employment.

First, on October 8, 2008, the Program to Foster Growth and Employment (*Programa para Impulsar el Crecimiento y el Empleo*, PICE) was announced. This program was made up of a group of fiscal measures to foster the economy in 2009 (via additional spending of public investment in infrastructure for 65.1 thousand million pesos) and of higher direct financing as well as induced financing from development banks (Table 1). These public finance measures were included in the economic package for 2009 approved by Congress. For the incorporation of these measures, the public sector deficit was modified from zero to 227.5 thousand million pesos and the deficit ceiling for financial intermediation of official financial intermediaries was raised by 22.2 thousand million pesos.[1] To finance the deficit implied by these measures, a ceiling of 380 thousand million pesos was set for the federal government's net domestic debt acquisition, and 5,000 million dollars in net foreign financing were authorized.

Table 1
PICE's Investment in Infrastructure

Items	tmp	% structure
Total	**65.1**	**100.0**
Energy sector	22.0	33.8
Refining	12.0	18.4
Other	10.0	15.4
Transport sector	13.1	20.1
Highways	10.7	16.4
Other	2.4	3.7
Social sector	12.5	19.2
Education	6.0	9.2
Health	4.5	6.9
Other	2.0	3.1
Agricultural sector	8.8	13.4
Employment and PyMEs	2.8	4.2
Other	6.0	9.2

Source: Program to Foster Growth and Employment, Ministry of Finance (SHCP).

Later, on January 7, 2009, as the international financial crisis intensified, the President announced the National Agreement to Support Households' Income and Employment (*Acuerdo Nacional en Favor de la Economía Familiar y el Empleo*, ANEFE), a joint agreement between the government and the public, private, and social sectors to broaden and strengthen the measures taken to soften the effects of this crisis on the Mexican economy. With this agreement, the federal government commits to implement 25 actions to boost the domestic market via higher public spending and raising households' and firms' disposable income. These measures are classified into 5 large groups:

i) Employment. These measures are aimed at increasing and preserving the existing sources of employment and protecting those individuals who lose their jobs. Among these measures, the following deserve mention: an increase in the Temporary Employment Program budget; support for exporting firms that go into temporary shutdown to prevent their workers from being fired; the increase in the allowed amount of withdrawals from pension (SAR) individual accounts in case of unemployment; and the extension from two to six months of IMSS medical and maternity coverage for workers who lose their job.

ii) Households' income. Includes actions aimed at preventing the deterioration of family income, and providing support for the acquisition of housing by low-income families. As for administered prices, a freeze on gas prices and a 10% reduction on LP gas prices were set. Regarding home acquisition, direct federal supports to be granted as well as an increase in the financing volume of Infonavit, Fovissste, and the Federal Mortgage Society. Finally, direct resources and credits will be granted to low-income families to substitute their domestic appliances for more efficient ones in terms of energy consumption.

iii) Fostering firms' and small- and medium-enterprises' (PyMEs, for its acronym in Spanish) competitiveness. These measures aim at reducing firms' production costs, boosting small and medium enterprises development, and increasing development bank financing. In regard to electricity fees, a reduction in industrial fees (20% for high tension, 17% for medium tension, and 9% for commercial and low tension) was determined and firms that consume medium-tension electricity have the option to pay annual fixed charges (as is the case of those that consume high tension electricity). As for credit, direct and induced financing from Nacional Financiera, Bancomext, Financiera Rural, and FIRA was widened. Finally, at least 20% of the federal government purchases are expected to be carried out in favor of small and medium enterprises.

iv) Investment in infrastructure. These actions are intended to boost the country's competitiveness and to promote employment. Hence, the National Infrastructure Program will be exercised more rapidly and additional resources to the 31 thousand million pesos resources approved for 2009 will be programmed. These resources will be invested in Pemex infrastructure and in Mexico's states (the source of these funds is excess-revenues from 2008).

v) Transparency, efficiency, and opportunity of public spending. The new Law on Government Accounts will be applied to the three levels of government. The public spending approved for 2009 will be exercised on a timely fashion (by starting immediately public tender processes, publishing all operating rules of the federal spending programs and signing collaboration agreements with state governments to dynamically exert the corresponding federal expenditure).

According to available information published on January 7, 2008 during the presentation of the National Agreement to Support Households' Income and Employment, federal government measures will affect domestic aggregate demand in 2009 by

[1] The 227.5 thousand million pesos deficit consists of: i) higher spending in infrastructure for 65.1 thousand million pesos; ii) the reclassification of PEMEX investment through the Pidiregas scheme for 149.2 thousand million pesos; and, iii) other adjustments for 13.2 thousand million pesos. For the approval of the public deficit, the Federal Law on Financial Budget and Fiscal Responsibility (Ley Federal de Presupuesto y Responsabilidad Hacendaria) was modified. Hence, since 2009, PEMEX investment shall not be considered for the target deficit established by this law. For this reason, the approved deficit amount would be equal to PEMEX investment.

118.2 thousand million pesos (Table 2). From this amount, 57.7 thousand million pesos account for public spending that the federal government will inject to the economy (an amount equivalent to around 0.4 percent of the nominal GDP expected for 2009). The remaining 60.5 thousand million correspond to the boost in aggregate demand resulting from the growth in disposable income from families and firms (which stems from the freezing and reduction of fuel prices) and the effect on consumption of higher withdrawals from the pension personal accounts due to unemployment.

Table 2
ANEFE's Impact on Aggregate Demand

Measures	tmp
Total	**118.2**
1. To support employment	21.6
1.a Programs for employment and social security coverage for the unemployed	6.6
1.b Increase in the savings withdrawal amount in case of unemployment	15.0
2. To support households' income	53.7
2.a Subsidies to buy state-sponsored homes and to renovate household electric appliances	8.2
2.b Freeze on gasoline prices and reduction on LP gas prices	45.5
3.Competitiveness of firms and PyMEs	12.0
4. Investment in infrastructure	31.0
5. Public expenditure transparency, efficiency and timeliness	0.0
Memo	
Measures representing public sector expenditure (1.a+2.a+3+4)	57.7
Measures representing families and firms' spending (1.b+2.b)	60.5

Source: President's announcement of the National Agreement to Foster Households' Income and Employment (*Acuerdo Nacional en Favor de la Economía Familiar y el Empleo*) of January 7, 2009.

According to the Ministry of Finance, the public expenditure mentioned in the agreement does not imply a budgetary deficit higher than that approved by Congress for 2009. The sources to finance this expenditure consist of the excess-revenues of 2008, savings and cuts to be obtained from the approved public expenditure and from excess-revenues in some income items in 2009 (non-fiscal and oil-related due to the exchange rate depreciation).

It is important to point out that as long as the health of public finances is not at risk, and restrictions to finance the economy are respected, the fiscal counter-cyclical measures herein described are expected to have a favorable effect on economic activity.

Besides, the freeze and reduction on fuel prices diminished inflationary pressures, making it possible for monetary policy to have maneuvering margins to contribute, marginally, to boost aggregate demand without putting at risk the convergence of inflation to its target.

Graph 41
Labor Shortage in the Manufacturing Sector
Two month moving average of balance of responses

Source: Results from Banco de México's Monthly Survey on Manufacturing Activity. Balance of responses refers to the weighted percentage of companies mentioning having faced difficulties to hire labor (or companies mentioning greater competition among firms to hire skilled labor), minus those mentioning having faced less difficulties to hire labor.

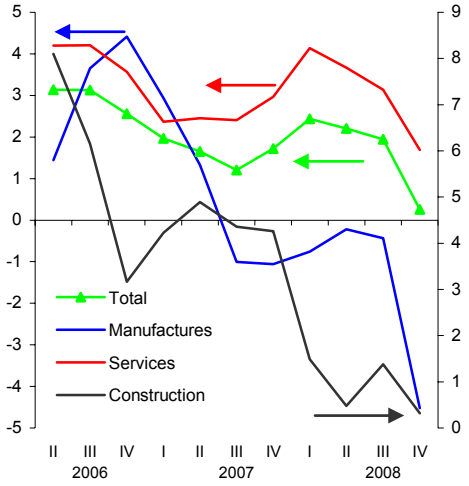
3.3.1.3. Employment and Productivity

Several job market indicators such as employment, unemployment, real earnings, and the wage bill clearly revealed the weakening of economic activity and, consequently, of the demand for jobs, during the fourth quarter. On the one hand, Banco de México's estimates on the results of the Occupation and Employment Survey (*Encuesta Nacional de Ocupación y Empleo*, ENOE) conducted by INEGI, which includes Mexico's total job market, show a reduction in annual terms of Mexico's employed population during the analyzed quarter

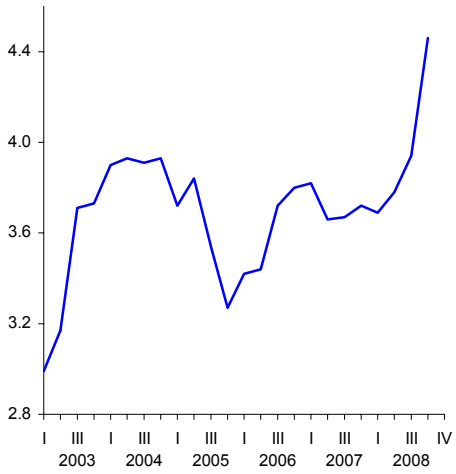
(Graph 42a), together with a fall in real earnings and in the wage bill. On another front, at the end of the fourth quarter, formal employment, which considers the number of IMSS-insured workers, contracted in annual terms while the IMSS average reference wage and the wage bill also declined in real terms. These results led to an increase in the unemployment rate in the country. Using seasonally-adjusted figures, the ENOE results for December show that the upward pattern followed by the national unemployment rate during 2008 escalated in the last months of the year (Graph 42b).

Graph 42
Total Employed Population and National Unemployment Rate

a) Employed Population
Annual change (percent) and 2-quarter moving average[1/]



b) National Unemployment Rate
Percent and seasonally adjusted data



Source: INEGI.
1/The employed population series are obtained from INEGI's Occupation and Employment Survey (*Encuesta Nacional de Ocupación y Empleo*, ENOE) and include the three sectors: primary, secondary, and services. Figures for employed population of the fourth quarter of 2008 are estimated by Banco de México.

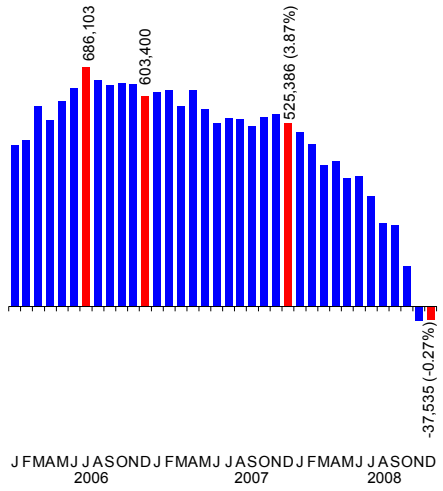
The decline in formal employment growth in 2008 in Mexico was clearly reflected in the annual growth figures for the number of IMSS-insured workers at the end of the first, second, third, and fourth quarter of the year: 405,082, 372,855, 233,085 and -37,535 workers (2.93, 2.66, 1.64, and -0.27 percent), respectively (Graph 43a). At the end of December 2008, the referred number of workers fell in annual terms as a result of both a reduction of 59,324 workers in permanent jobs (-0.47 percent) and an increase of 21,789 workers in temporary jobs in urban areas (Graph 43b).

Formal employment weakened more in the industrial sector, particularly in the manufacturing and construction industries (Graph 44a). At the end of December 2008, formal employment in the construction industry declined by -3.7 percent in annual terms (reduction of 42 thousand workers) and in the manufacturing sector, -6.7 percent (reduction of 257.7 thousand workers). In the manufacturing sector, formal employment grew at negative annual rates during the entire 2008. In the tertiary sector, the number of insured workers continued to grow at positive annual rates during the fourth quarter, but with a clear decelerating trend. Lesser formal job creation was observed in all regions of the country, but more in the north region, where the number of insured workers contracted in annual terms at the end of December. These results show that in

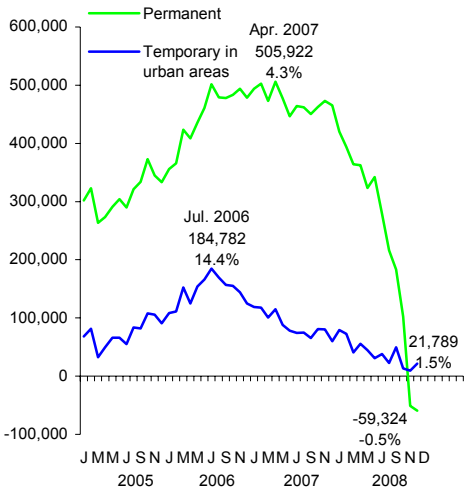
Mexico's northern states the industrial sector, especially the export manufacturing sector, has a greater share in total employment (Graph 44b).

Graph 43
IMSS-insured Workers

a) Number of Workers
Annual change (percent) of original data



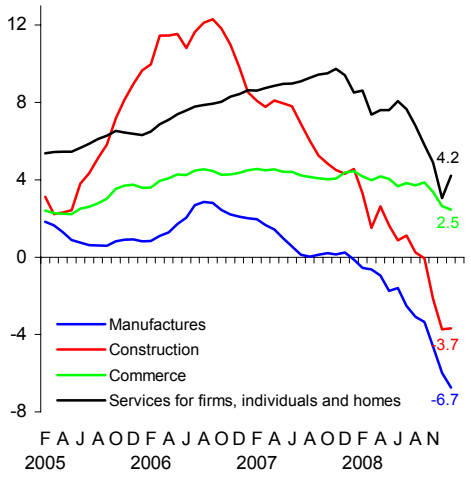
b) Permanent and Temporary Workers in Urban Areas
Annual change in absolute terms



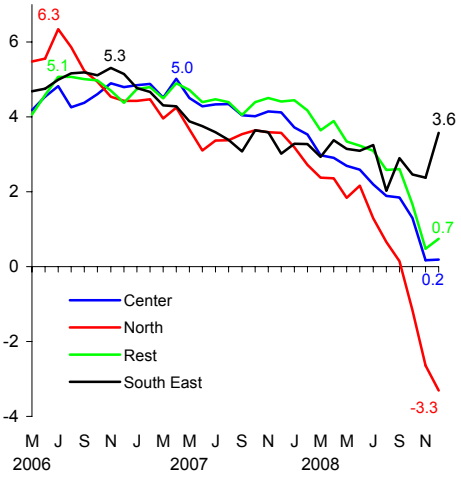
Source: IMSS.

Graph 44
Formal Employment

a) Insured Workers by Sector[1/]
Annual change (percent)



b) Insured Workers by Region
Annual change (percent)



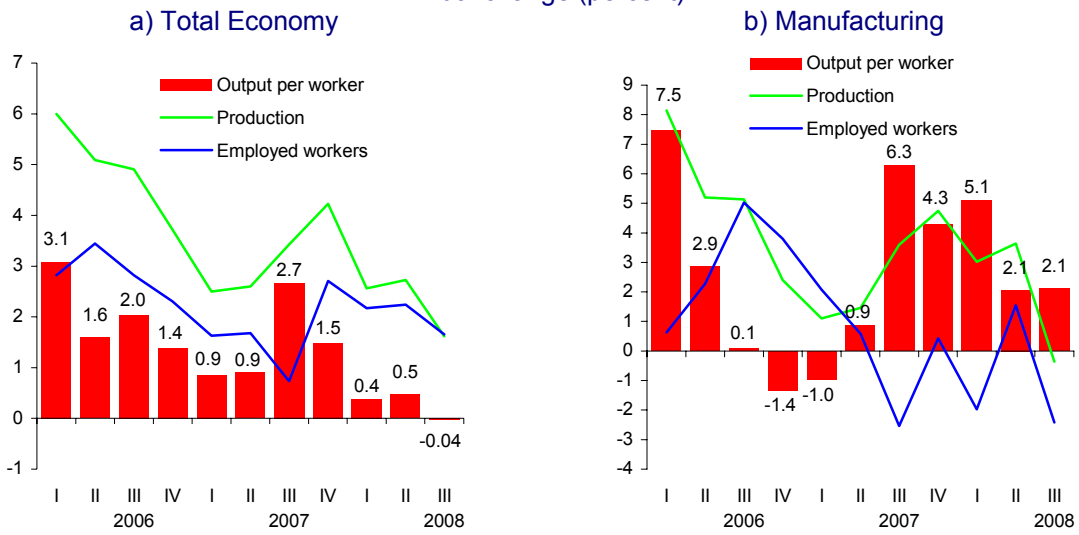
Source: IMSS. Calculations by Banco de México.
1/ 3-month moving average, except in 2008.

During the fourth quarter of 2008, the national unemployment rate increased further. Using seasonally-adjusted data, during the first, second, and third quarters it reached 3.69, 3.78, and 3.94 percent, respectively. However, in the fourth quarter, it rose to 4.46 percent (Graph 42b).

Regarding output per worker for the total economy, this indicator, estimated with information from the ENOE and from Mexico's National Accounts

System, recorded a negative rate of -0.04 percent during the third quarter of 2008, figure below the 0.5 percent recorded during the previous quarter. In the manufacturing sector, this indicator grew 2.1 percent, the same figure as in the second quarter of 2008 (Graph 45).

Graph 45
Output per Worker: Total Economy and Manufacturing Industry[1/]
Annual change (percent)



1/ To calculate the average output per worker, data on production from the National Accounts and Employed Workers from the ENOE is considered.

3.3.1.4. External Sector

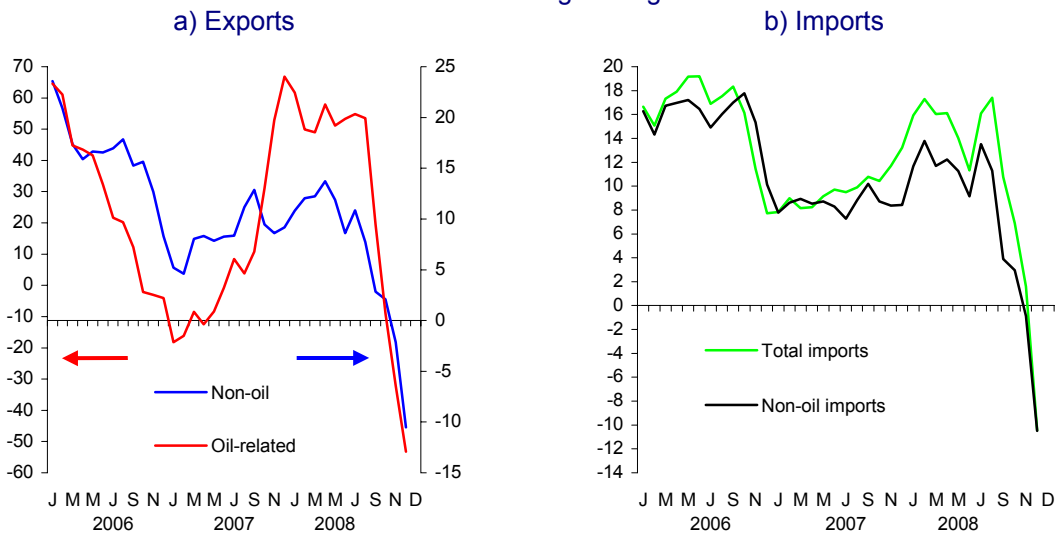
The financial crisis that affected most of the main industrialized countries during the fourth quarter of 2008 and the recession that followed, especially in the U.S., had a negative impact on the Mexican economy, as confirmed by its external accounts. Such an environment had the following effects: a contraction in non-oil exports; a deterioration of the terms of trade as the price of oil dropped sharply in international markets;[38] smaller revenues from workers' remittances and international travelers; and, more restrictive access to foreign financing, for both lending and investment purposes. In fact, during the fourth quarter, outflows from portfolio investment in both securities and money markets were observed. In this context, the main aspects characterizing the external accounts during the fourth quarter of 2008 were the following:

a) After having grown 15.2 percent during the January-September period, total exports fell 13.8 percent in annual terms. This result stemmed from a decline of 42.3 percent in oil exports (as compared with a 43.1 percent increase during the January-September period) and of 7.8 percent in non-oil exports (as compared with a 10.1 percent increase during the first nine months of the year; Graph 46a).[39]

[38] During the present year, the impact of the decline in international oil prices will be partially offset by revenues from the crude oil price hedging implemented by the federal government in international financial markets. However, international oil prices are expected to remain weak in 2010.

[39] In 2008, total exports grew 7.3 percent in annual terms, as a result of an increase of 17.7 percent in oil exports and of 5.4 percent in non-oil exports.

Graph 46
Merchandise Exports and Imports
Annual change (percent)
of seasonally adjusted data and
2-month moving average



Source: Banco de México.

b) The significant reduction in oil export value during the last quarter of 2008 reflected both the marked fall in the Mexican crude oil export mix average price and in the volume of oil exports. Hence, during the aforementioned period the Mexican crude oil export mix price was 45.61 dollars per barrel (as compared with 77.33 dollars during the same period of 2007), while the volume of oil exports fell 12.4 percent in annual terms. On the contrary, during this quarter oil product imports grew 2.7 percent in annual terms. During the second half of 2008, the surplus of the oil trade balance shrank rapidly, hence becoming a deficit in the last quarter. During this last period, the oil trade balance was negative by 372 million dollars, as compared with the 6.184 and 3.225 billion US dollar surplus recorded during the second and third quarters, respectively (Box 9).[40]

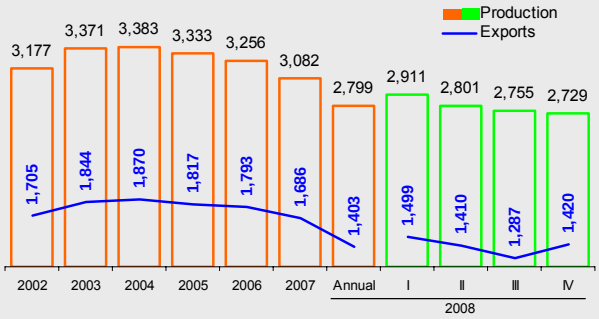
c) The fall in non-oil exports during the fourth quarter of 2008 reflected reductions in both the automobile industry and in exports of the remaining non-oil products (Graph 47). Automobile exports fell 10.3 percent in annual terms during said quarter (as compared with -7.1 percent during the previous quarter) while the remaining non-oil exports fell 6.9 percent after having grown 13.3 percent during the third quarter (Table 5).

[40] During 2008, the value of oil exports amounted to 50.639 billion dollars, 7.621 billion dollars more as compared to the 43.018 billion of 2007. In 2008, the average Mexican crude oil export mix price was 84.35 dollars per barrel, as compared with 61.64 dollars in 2007. During the reference year, the value of oil product imports rose 41.3 percent, a higher increase than that of oil exports (17.7 percent).

Box 9
The Oil Trade Balance

The Mexican oil industry has changed significantly over the last years, affecting its external accounts and therefore the oil trade balance. The main aspects characterizing the oil industry and its external accounts in recent years are: a) crude oil extraction fell considerably from 2006 to 2008; b) diminished oil extraction led to a decline in crude oil exports; c) the value of crude oil exports followed an upward trend during the 2004-2008 period, mirroring the price increases of Mexico's crude oil export mix (this trend continued until July 2008, but afterwards reverted rapidly); and, d) the value of oil imports has grown considerably in the last years, which in turn led to a reduction in the surplus of the oil trade balance. In fact, during the fourth quarter of 2008, the oil trade balance recorded deficit.

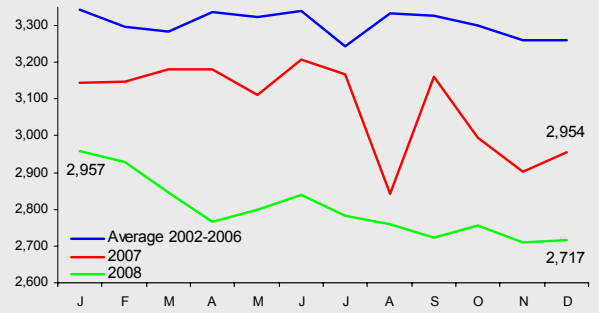
Graph 1
Crude Oil Production and Exports
Thousand barrels a day; average during the period



Source: PEMEX.

Crude oil production in Mexico has fallen significantly in the last three years. In 2008 it averaged 2799 million barrels a day (mbd), 16.6 percent less than during the 2004-2005 period (3358 mbd) (Graphs 1 and 2). These results reflected mainly the sharp decline in extracted volume from the Cantarell oil field, the country's most important oil production field.

Graph 2
Crude Oil Production
Thousand barrels a day; average during the month

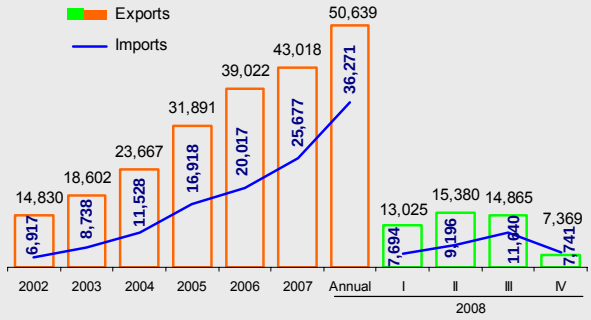


Source: PEMEX.

The growth in domestic consumption of oil products together with a lower pace of extraction prompted the volume of oil exports to decline more rapidly than that of oil production. In fact, during 2008, the crude oil export platform was, on average, of 1403 mbd (1454 and 1353 mbd in the first and second half of that year, respectively), after having reached a maximum level of 1870 mbd in 2004 (Graph 1).

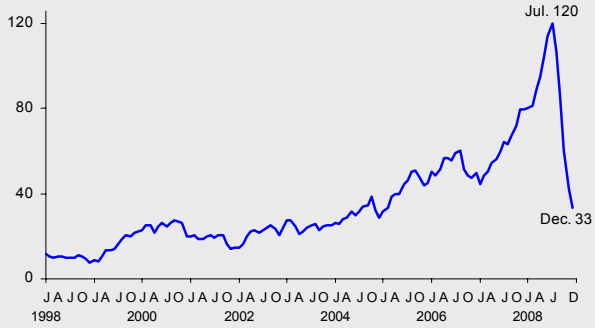
The value of oil exports has followed an upward trend since 2002 (Graph 3). These developments reflected, up to 2004, increases in both the exported volume and the price of the Mexican crude oil export mix. This upward trend continued until July 2008 (Graph 4), but then decreased significantly when world economic activity, and thus, the demand for crude oil, weakened.

Graph 3
Value of Oil Product Exports and Imports
Million USD



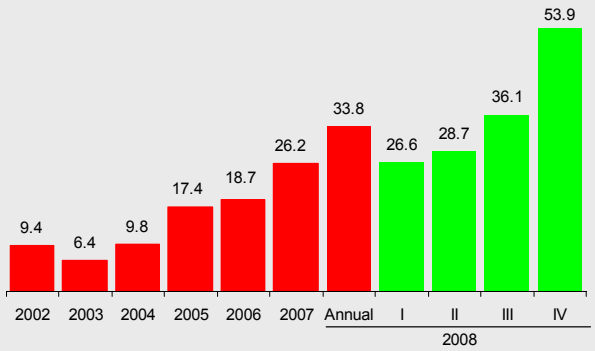
Source: Banco de México.

Graph 4
Price of Mexican Crude Oil Export Mix
USD per barrel; average during the month



Source: PEMEX.

Graph 5
Gasoline Imports as a Proportion of Crude Oil Exports Value
Percent



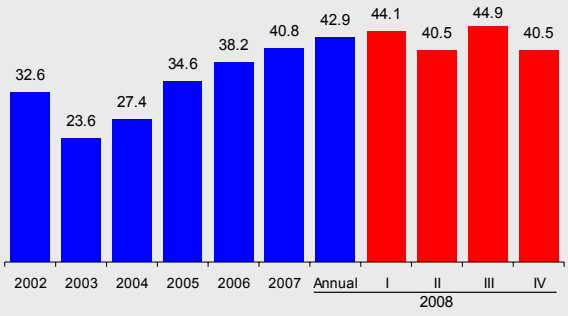
Source: Banco de México.

In the last years, the value of oil-related imports has grown substantially. This pattern reflects, on the one hand, price increases in oil-related products and, on the other, increases in import volumes, particularly of gasoline. In 2008, gasoline

imports equaled 33.8 percent of the value of crude oil exports, and during the fourth quarter of 2008, 53.9 percent. These figures compare with the 9.8 percent in 2004, 18.7 percent in 2006, and 26.2 percent in 2007 (Graph 5). It is thus clear that the dependence on gasoline imports for domestic consumption has increased in recent years. In 2008, these imports accounted for 42.9 percent of gasoline domestic consumption (Graph 6).

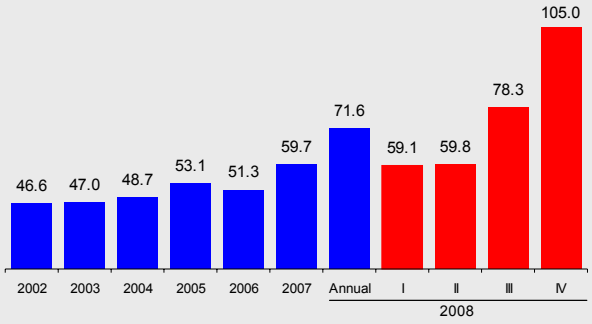
The ratio oil imports to oil exports has risen gradually in recent years. After having been 46.6 percent in 2002, 53.1 percent in 2005, and 59.7 percent in 2007, in 2008 it turned out to be 71.6 percent. During the fourh quarter of 2008 it was 105.0 percent.

Graph 6
Share of Gasoline Imports in Domestic Gasoline Consumption
Percent



Source: PEMEX.

Graph 7
Ratio Oil Product Imports to Oil Product Exports
Percent



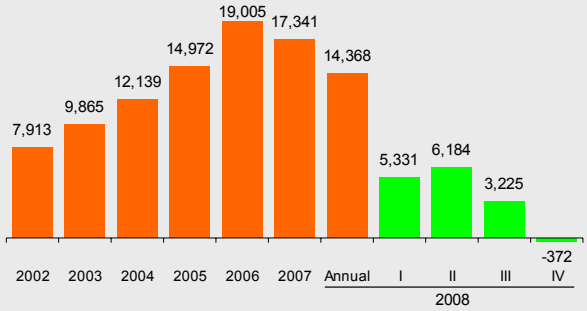
Source: Banco de México.

The sharp upward pattern followed by oil imports implied that from 2006 to 2008 the oil trade balance surplus declined considerably, despite that during such period the price of the Mexican crude oil export mix was high. In 2006, this surplus recorded 19,005 million USD (Graph 8). However, it declined to 17,341 million in 2007 and to 14,368 million in 2008. During 2008, this surplus fell significantly when the Mexican crude oil export mix price started to decline in July. The surplus fell from 6,184 million USD during the second quarter of 2008 to 3,225 million during the third, and then changed to a 372 million USD deficit during the fourth quarter.

Table 1
Oil Trade Balance
Million USD

	2007	2008				
	Annual	I	II	III	IV	Annual
Balance	**17,341**	**5,331**	**6,184**	**3,225**	**-372**	**14,368**
Exports	43,018	13,025	15,380	14,865	7,369	50,639
Imports	25,677	7,694	9,196	11,640	7,741	36,271

Graph 8
Stock of Oil Trade Balance
Million USD

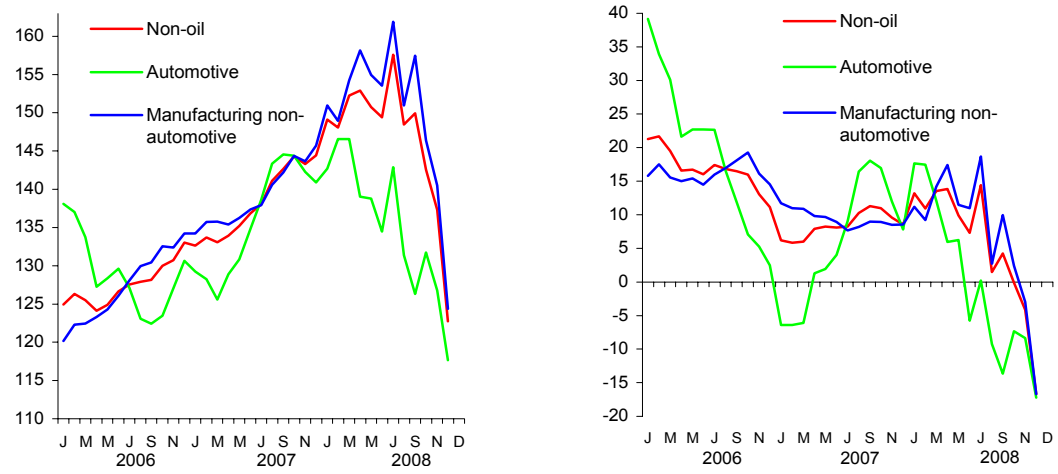


Source: Banco de México.

The development of the Mexican oil sector in recent years and, particularly, the oil trade balance deficit during the fourth quarter of 2008 brings to the fore the relevance of fully implementing the energy reform approved in October 2008 by Congress, as well as any additional measures needed to strengthen the country's oil industry.

d) From a regional perspective, the fall in annual terms of non-oil exports during the last quarter of 2008 responded to a contraction in exports to the U.S. together with a significant slowdown of those channeled to the rest of the world (Table 5). The decline in exports to the U.S. market reflected reductions in both the automobile and non-automobile sectors. Non-oil exports to the remaining countries (non-U.S. market) increased slightly in annual terms. However, the level of the latter measured in current dollars and using seasonally adjusted figures contracted during the fourth quarter of 2008 (Graphs 48c and 48d), after exhibiting a significant dynamism during the first three quarters of the year.

Graph 47
Merchandise Exports
Three-month moving average, except in 2008
a) 2004=100 and seasonally adjusted data b) Annual change (percent)



Source: Banco de México.

Table 5
Growth of Non-oil Exports to Different Markets
Percent

	Share			Annual change					
					2008				
	2004	2007	2008	2007	I-Q	II-Q	III-Q	IV-Q	Annual
Total	**100.00**	**100.00**	**100.00**	**8.51**	**10.73**	**11.61**	**8.19**	**-7.75**	**5.38**
U.S.	**88.65**	**82.54**	**79.87**	**4.83**	**7.69**	**6.57**	**4.32**	**-9.73**	**1.96**
Automotive	22.95	20.40	18.53	-0.15	8.11	-2.08	-10.68	-11.01	-4.32
Other	65.70	62.14	61.34	6.57	7.55	9.53	9.35	-9.33	4.03
Rest of the world	**11.35**	**17.46**	**20.13**	**30.16**	**25.88**	**36.88**	**25.94**	**1.03**	**21.53**
Automotive	2.08	4.12	4.56	48.89	38.25	38.22	9.28	-7.28	16.78
Other	9.27	13.34	15.57	25.30	22.39	36.50	31.59	3.71	22.99
Memo:									
Total automotive	**25.02**	**24.52**	**23.09**	**5.70**	**12.75**	**3.85**	**-7.08**	**-10.31**	**-0.78**
Other total	**74.98**	**75.48**	**76.91**	**9.46**	**10.09**	**14.18**	**13.32**	**-6.93**	**7.38**

Source: Banco de México

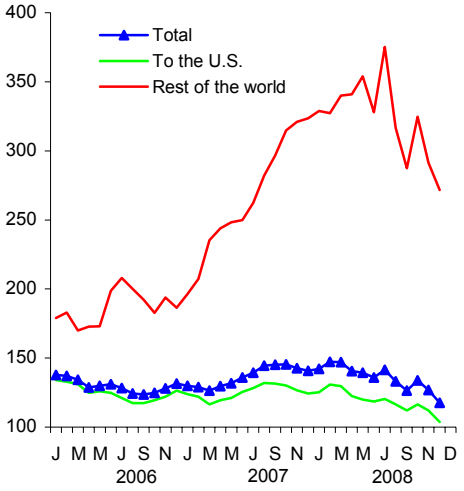
e) During the reported quarter, merchandise imports fell 6.4 percent in annual terms (as compared with a 15.4 percent increase during the January-September period). During the reference quarter, oil product imports rose 2.7 percent while the remaining imports fell 7.4 percent. These results reflect, on the one hand, the annual fall in domestic production and, on the other, the strong slowdown of aggregate demand (including the fall in foreign demand). During the reference quarter, intemediate and consumer good imports, excluding oil product imports, fell at an annual rate, while capital goods imports grew at a significantly slower rate.[41]

[41] During 2008, non-oil imports grew 6.3 percent in annual terms as a result of increases of 5.6 percent in non-oil intermediate goods imports and of 16.4 percent in capital goods imports. As for non-oil consumer goods, they increased only 0.04 percent.

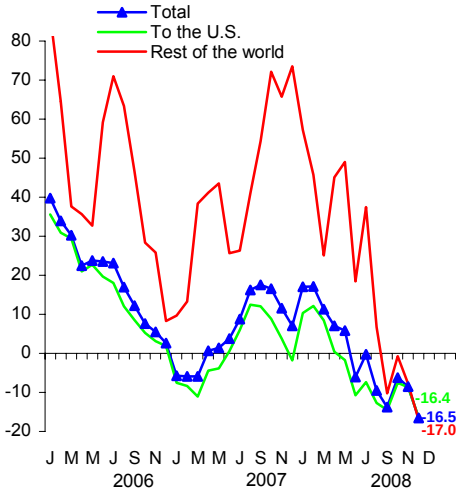
Graph 48
Manufacturing Exports to Different Markets
Annual change (percent) of seasonally adjusted data and 3-month moving average, except in 2008

Automotive

a) 2004=100

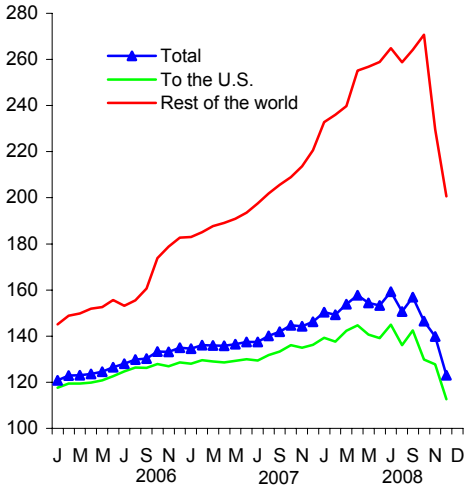


b) Annual change (percent)

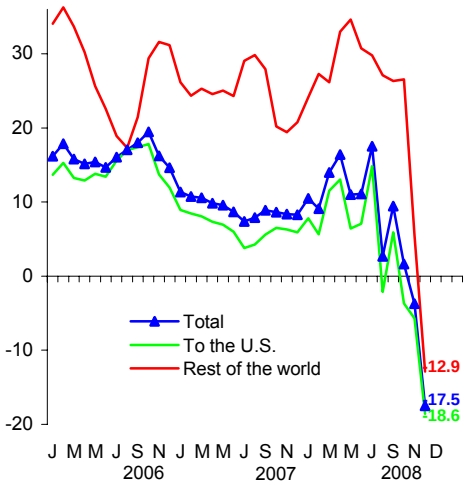


Non-automotive

c) 2004=100



d) Annual change (percent)



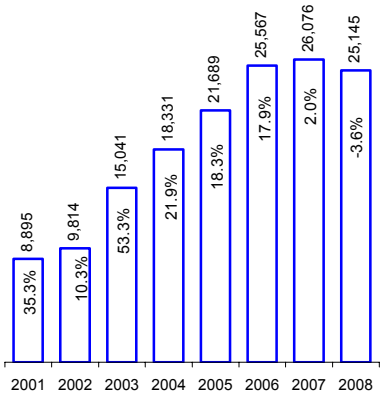
Source: Banco de México.

During the fourth quarter of 2008, revenues from workers' remittances continued to decline. During that period, remittances totaled 6.160 billion dollars, a 2.1 percent reduction after recording falls of 2.6, 1.1, and 8.2 percent during the first three quarters, respectively. It should be noted that, in October, revenues from workers' remittances grew significantly 11.4 percent in annual terms. However, this result reflects a temporary phenomenon in response to the significant depreciation of the peso vs. the US dollar. Thus, in 2008, remittances totaled 25.145 billion dollars (Graph 49), representing a fall of 3.6 percent in

annual terms.[42] The performance of remittances can be attributed to several factors which have already been analyzed in previous Inflation Reports.[43]

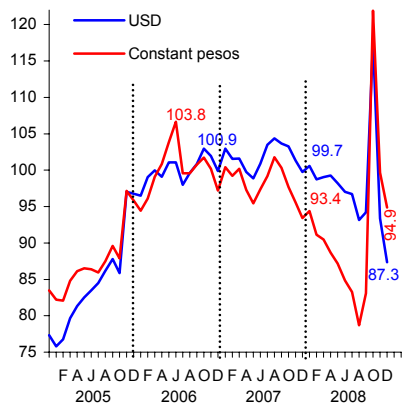
Graph 49
Workers' Remittances

a) Million USD and annual change (percent)

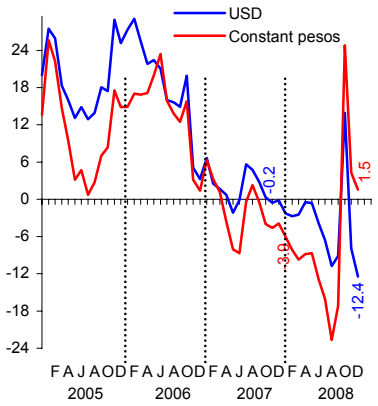


Million USD and million constant pesos; Seasonally-adjusted data

b) 2006=100



c) Annual change (percent)



Source: Banco de México and Bureau of Labor Statistics (BLS).

Based on the aforementioned information and together with that available from other external accounts items, the balance of payments current account is expected to have recorded a deficit of 6.5 billion dollars during the fourth quarter of 2008, thus implying that during the entire year the current account deficit would have been 15.8 billion US dollars, equivalent to 1.4 percent of GDP. During the same period, the capital account (including errors and omissions) is expected to have recorded a surplus of approximately 8.6 billion dollars. This balance would be the net result of the following: revenues from foreign direct investment and from financing of Pidiregas projects, and, outlays related to the reduction of public sector's foreign debt and to foreign portfolio investment in both securities and money markets. Finally, during the fourth quarter, Banco de México's net international reserves rose by 2.129 billion dollars, thus ending 2008 at 85.441 billion dollars.

[42] The referred amount was revised upwards. The revision included figures from the last years, and considered additional resources from remittances stemming from participation of new intermediaries, and from other adjustments to these statistics. It should be noted that this revision did not modify the weak trend followed by revenues from remittances throughout 2008.

[43] See page 56 of the Inflation Report of July-September 2008 and Box 3 "Recent Developments in revenues from Workers' Remittances" (p.32) from the Inflation Report January-March of that same year.

Table 6
Balance of Payments
Million US dollars

	2007					2008				
	Q-I	Q-II	Q-III	Q-IV	Annual	Q-I	Q-II	Q-III	Q-IV	Annual
Current account	**-5,114**	**-1,836**	**-373**	**-779**	**-8,102**	**-2,320**	**-2,147**	**-4,831**	**-6,487**[e]	**-15,785**[e]
Trade balance	-2,454	-2,308	-2,395	-2,918	-10,075	-1,500	-767	-6,414	-8,157	-16,838
Exports	60,269	67,656	70,269	73,681	271,875	70,258	79,514	78,482	63,552	291,806
Imports	62,723	69,964	72,664	76,599	281,950	71,758	80,281	84,896	71,709	308,644
Non-factor services	-525	-1,909	-2,266	-1,559	-6,259	-772	-1,944	-2,411	-1,629	-6,756
Factor services	-8,154	-4,612	-2,752	-2,673	-18,191	-5,907	-6,377	-2,506	-2,963	-17,753
Transfers	6,019	6,993	7,040	6,371	26,423	5,859	6,941	6,500	6,262	25,562
Workers' remittances	5,916	6,898	6,967	6,295	26,076	5,763	6,824	6,398	6,160	25,145
Capital account	**6,751**	**2,408**	**2,984**	**8,518**	**20,660**	**6,971**	**2,368**	**2,666**	**8,616**[e]	**20,621**[e]
Errors and omissions	**-125**	**174**	**662**	**-2,983**	**-2,272**	**1,389**	**1,408**	**-187**	**0**	**2,610**
Change in net international reserves	**1,516**	**744**	**3,285**	**4,767**	**10,312**	**6,051**	**1,629**	**-2,359**	**2,129**	**7,450**
Valuation adjustments	**-4**	**2**	**-12**	**-11**	**-25**	**-11**	**0**	**7**	**0**	**-4**

e/ Estimated figures.
Note: The capital account of the fourth quarter of 2008 includes errors and omissions.
Source: Banco de México.

3.3.2. Financial Savings and Financing

3.3.2.1. Monetary Base, Net Domestic Credit, and International Assets

During the fourth quarter of 2008, the monetary base grew at an average annual nominal rate of 15.9 percent, thus recording during 2008, an average annual percentage change of 12.7 percent, figure similar to the 12.7 percent observed in 2007.[44,45] Among the possible factors that contributed to this dynamism were, on the one hand, a change in portfolio structure between cash and bank deposits as a result of the coming into effect of the Tax on Cash Deposits (*Impuesto a los Depósitos en Efectivo*, IDE) since July 1; and, on the other hand, the significant flow of remittances recorded in October. Thus, at the end of December 2008, the monetary base stock amounted to 577,543 million pesos, 82,799 million pesos higher than in December 2007.

As previously mentioned, in December 2008, Banco de México's international reserves amounted to 85,441 million dollars, 7,450 million more than in the same month of the previous year. As for net international assets, they rose by 7,997 million dollars during the reference period, amounting to 95,232 million dollars in December 2008. Despite the increase in international assets, the growth of the monetary base led to an increase of 616 million pesos in Banco de México's net domestic credit (Table 7).

[44] Variations calculated on the basis of the quarterly average of daily stocks.
[45] During the fourth quarter of 2008, the stock of bills and coins held by the public grew 14.3 percent in annual terms while banks window did so 27.8 percent.

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

	Stock		Annual change (percent)	Flows in 2008				
				Quarter				Accumulated at
	At 31 Dec. 2007	At 31 Dec. 2008	At 31 Dec. 2008	I	II	III	IV	31 Dec. 2008
(A) Monetary base (Pesos)	494,743	577,543	16.7	-47,032	-97	11,001	118,927	82,799
(B) Net international assets (Pesos) [1/ 2/]	952,227	1,317,292	38.3	42,576	29,824	49,219	-39,436	82,183
Net international assets (USD) [2/]	87,235	95,232	9.2	3,931	2,911	4,811	-3,656	7,997
(C) Net domestic credit (Pesos) [(A)-(B)] [1/]	-457,484	-739,750	61.7	-89,608	-29,921	-38,218	158,363	616
(D) Gross reserves (USD)	87,211	95,302	9.3	3,923	2,912	4,818	-3,562	8,091
Pemex				4,962	5,830	8,598	3,364	22,754
Federal government				-2,732	-650	-3,269	1,878	-4,772
Sale of USD to commercial banks [3/]				-936	-1,760	-800	-15,178	-18,674
Other [4/]				2,628	-508	289	6,374	8,783
(E) Liabilities with less than six months to maturity (USD)	9,220	9,861	6.9	-2,128	1,282	7,177	-5,690	640
(F) International reserves (USD) [(D)-(E)] [5/]	77,991	85,441	9.6	6,051	1,629	-2,359	2,129	7,450

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/ Corresponds to the sale of US dollars according to: a) the mechanism to reduce the pace of international reserve accumulation (up to July 31); and, b) daily auction sales since October 9; and, c) extraordinary auctions carried out in October (see Foreign Exchange Commission's Press Release of March 20, 2003; July 25, 2008; and, October 8, 2008).
4/ Includes yields on net international assets and other transactions.
5/ As defined by the Law governing Banco de México.

3.3.2.2. Measures to Preserve the Proper Functioning of Financial Markets in Mexico

Until the end of the third quarter of 2008, the international financial turmoil had mostly affected developed economies; though the prices of assets issued by most emerging economies and their stock indexes had shown some deterioration, and access to international financing had tightened. However, as previously mentioned, since mid-September 2008, the international financial crisis escalated and its effects spread globally. The extreme risk aversion that prevailed under this highly-uncertain environment has led investors to search for safer financial assets, consequently depleting liquidity in practically all financial markets worldwide, while financing costs have escalated and tighter credit restrictions have been adopted in some financial markets. This deterioration of financial conditions led Banco de México, jointly with the Ministry of Finance, to adopt a series of actions focused on providing liquidity to Mexico's financial markets (see Box 4 of the Inflation Report of July-September 2008).

Regarding exchange market liquidity, two main actions were announced during the fourth quarter of 2008. First, in October, liquidity problems struck the exchange market as a result of the demand for dollars in search of safer assets as observed in a large number of emerging economies, and by the high demand of dollars from some companies to cover positions in derivative instruments denominated in this currency. The Foreign Exchange Commission decided to intervene in the exchange market. These interventions are intended to ensure the proper functioning of the exchange market by providing the required liquidity. Interventions in this market have been carried out through two types of auctions. On the one hand, since October 9 and until further notice, the former dollar sales mechanism through daily auctions was again implemented.[46] Banco de México has tendered 400 million dollars daily through auctions at a minimum exchange

[46] See Foreign Exchange Commission's press release of October 8, 2008.

rate of 2 percent above the immediate previous working day exchange rate.[47] Allocations through this auction mechanism totaled 4,178 million dollars by the end of 2008 and 4,844 million dollars by January 21, 2009, in a total of 15 auctions. In addition, in October, extraordinary currency auctions were carried out to face the unusual demand previously mentioned. During the referred month, five extraordinary dollar auctions took place for a total of 11,000 million dollars.[48] The total amount of dollars sold through these auctions amounted to 15,178 million dollars at the end of December 2008 and 15,844 million at January 21, 2009.

Second, in October 29, 2008 Banco de México established a foreign currency exchange swap line with the U.S. Federal Reserve for up to 30 billion dollars and valid until April 30, 2009.[49] These resources could be used to provide dollar liquidity to financial institutions in Mexico. The Federal Reserve has established similar mechanisms with central banks from several countries to improve global liquidity conditions in international financial markets and to mitigate the difficulties that well-managed and sound economies were confronting to access financing in U.S. dollars. It should be noted that Banco de México's international reserves remain high and that this mechanism has not been used. Nevertheless, these swap lines contribute to improve the risk perception of the Mexican economy and increase the central bank's margin of maneuver.

As for domestic liquidity, on October 2008, Banco de México decided to establish, as a preventive measure, additional temporary liquidity facilities for banks based on the experience of other countries which have recently experienced situations where banks faced difficulties to access funding in the money market. These facilities are additional to the traditional operational facilities through which banks obtain credit from Banco de México.[50]

On another front, uncertainty in financial markets, led to a higher preference for shorter term financial instruments and a reduction in the demand and market liquidity in the mid and long-term debt markets. For this reason, Banco de México and the Ministry of Finance announced several actions to mitigate liquidity problems and thus reestablish the orderly functioning of domestic financial markets.[51]

First, the federal government and the Institute for the Protection of Bank Savings (*Instituto Bancario de Protección al Ahorro Bancario*, IPAB) modified their primary placement securities program for the fourth quarter of 2008, by increasing the amount of short-term securities placements and reducing the issuance of mid and long- term securities.

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[47] The daily auction mechanism for 400 million US dollars is similar to the one implemented by Banco de México on February 19, 1997 and July 2, 2001 (see Newsletter-Telefax 10/97 and Newsletter-Telefax 18/2001).

[48] Extraordinary auctions of US dollars were carried out October 8 (998 million US dollars), October 9 (1,502 million US dollars), October 10 (6,000 million US dollars), October 16 (1,500 million US dollars), and October 23, 2008 (1,000 million US dollars). .

[49] See Banco de México's press release of October 29, 2008.

[50] Liquidity facilities are regulated by Banco de México's Circulars 48/2008 and 49/2008 released on October 13 and 17, 2008, respectively. The conditions for financing through these liquidity conditions valid today are mentioned in Circulars 61/2008 and 63/2008, published on December 8 and 18, respectively.

[51] See joint press release of Banco de México and the Ministry of Finance of October 27, 2008 and Ministry of Finance's press release of October 30, 2008.

Second, Banco de México implemented an auction program to purchase bonds issued by IPAB for up to 150,000 million pesos. This program ended in November 18, 2008 for a total purchase in three auctions of 146,702 million pesos in IPAB securities. These transactions increased the holding of securities in Banco de México's balance sheet, and implied, as a counterpart, a reduction in credit to financial intermediaries.[52]

Third, Banco de México conducted auctions for interest rate swaps, in order for participants to reduce their portfolio sensitivity to fluctuations in the yield curve.[53] Out of the 50,000 million pesos auctioned by this program, 4,400 million pesos were allocated.

In addition, on October 30, 2008, the federal government announced its intention to repurchase M-bonds and Udibonos for up to 40,000 million pesos.[54] These auctions were carried out in December through Banco de México. As for the purchase of M-bonds, two auctions were carried out for a total of 33,000 million pesos, with an allocation of 4,342.1 million pesos. The auction to purchase Udibonos was for 1,680 million UDIs, with an allocation of 712.6 million UDIs.

As an additional measure, temporary regulatory facilities for investment funds were introduced giving them more flexibility to restructure their portfolios.[55] The National Banking and Securities Commission (*Comisión Nacional Bancaria y de Valores,* CNBV) issued regulations to allow financial institutions to temporarily (six months starting October 30, 2008) purchase and sell government securities with investment funds owned by the same financial group.[56]

Last, as for the private debt market, in order to contribute to the proper functioning of the domestic debt market and to support the roll-over of bonds issued in this market, the National Development Banking Institution (*Nacional Financiera*, Nafin) and the Foreign Trade Bank (*Banco Nacional de Comercio Exterior*, Bancomext) implemented, in October 29, 2008, a refinancing program for private sector's commercial paper. This program consists in the selective granting of guarantees to issue short-term debt instruments for up to 50 percent of the amount issued and the program totals up to 50,000 million pesos.[57] Until January 23, short-term issues done under this program amounted 11,943 million pesos. These issues account for 12.9 percent of the total amount issued in the short-term non-bank private securities market since the program was implemented.

3.3.2.3. Financial Saving

During the last months of 2008, the slowdown of economic activity affected firms and households' savings, thus reducing domestic financing sources. On another front, given the higher uncertainty and risk aversion prevailing in financial markets, there was a recomposition of asset portfolios toward assets with higher quality and safer yields.

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[52] See Banco de México's Balance Sheet weekly bulletin of November 25, 2008.
[53] In these auctions, Banco de México offered as a floating rate the 28-day interbank equilibrium interest rate (*tasa de interés interbancaria de equilibrio*, TIIE) while tenders determined the fixed interest rate they were willing to pay.
[54] See Ministry of Finance's press release of October 30, 2008.
[55] See Banco de México and Ministry of Finance's joint press release of October 27, 2008.
[56] See Official Gazette of October 30, 2008.
[57] See Nacional Financiera's press release of October 22, 2008.

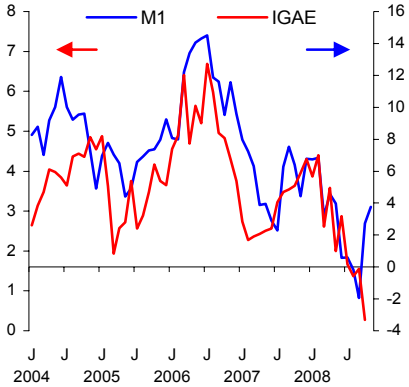
As a consequence of this portfolio restructuring, during the October-November 2008 period, the growth of liquid financial assets recovered (included in the narrow monetary aggregates). During this period, the monetary aggregate M1 grew at a real annual rate of 3.3 percent, figure higher than the -0.5 percent in real terms of the third quarter (Graph 50a).[58]

Savings in fixed term financial assets continued exhibiting a trend of slower real growth. Residents' holdings of domestic term assets (the difference between M2 and M1) grew at a real annual rate of 3.7 percent during the October-November period, figure below the 4.9 percent recorded during the third quarter (Graph 50b).[59] Within this aggregate, the structure of residents' assets portfolio changed in favor of bank deposits, and their holding of securities decreased. Particularly, in October 2008, the monthly flow of bank term deposits amounted to 143.2 thousand million pesos, while holdings of public and private securities declined by 127.3 thousand million pesos.[60]

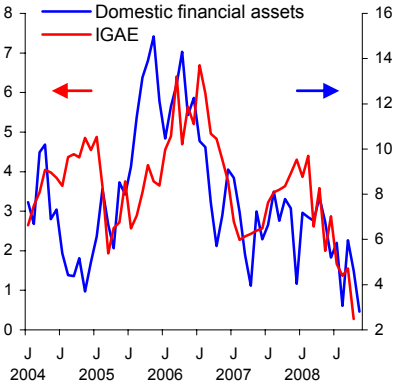
Despite wide differentials between the interest rates in Mexico and the U.S., investor's higher risk aversion reduced non-residents' demand for domestic financial assets. During the October-November 2008 period, holdings of financial assets by non-residents recorded a negative flow of 56.5 thousand million pesos, which implied a reduction in their average annual real growth from 52.7 percent during the third quarter to 22.2 percent during the October-November period (Graph 50c). As a consequence, the annual average real growth rate of the broader monetary aggregate M4 declined from 5.9 percent during the third quarter to 4.6 percent during the October-November period (Graph 50c).[61]

Graph 50
Financial Saving and Economic Activity

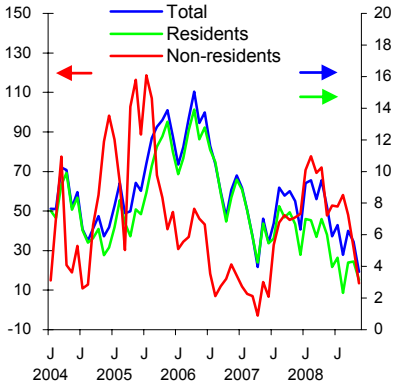
a) M1 and IGAE [1/]
Real annual change (percent)



b) Term Financial Assets held by Residents (M2-M1) and IGAE [1/]
Real annual change (percent)



c) M4: Residents and Non-residents
Real annual change (percent)



1/ IGAE: 3-month moving average.

[58] The monetary aggregate M1 includes bills and coins held by the public, checking accounts, and current account deposits held by country's residents.

[59] Domestic term financial assets held by country's residents (M2-M1) include term deposits in banks and in savings and loans associations, public and private securities (including Siefores portfolio of these securities), housing funds, and retirement saving funds excluding Siefores.

[60] The decline in public securities is partly due to a fall in the market value certain instruments, particularly medium and long-term securities.

[61] The monetary aggregate M4 includes financial domestic assets (liquid and term) and deposits of branches and agencies of Mexican banks abroad, held by residents and non-residents.

3.3.2.4. Financing

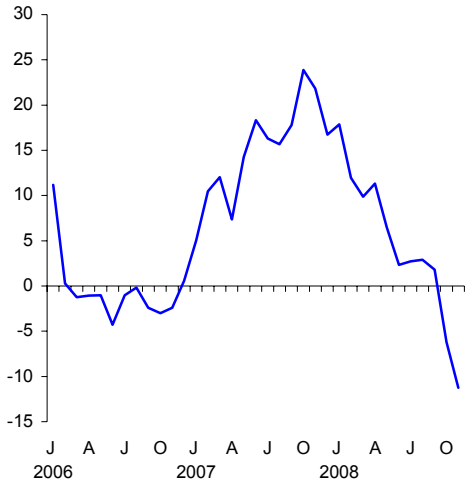
The intensification of the global financial crisis, characterized by extreme risk aversion and a significant liquidity reduction in all financial markets, has reduced financing resources for the economy, raised financial costs and tightened access to some financial markets. Under these conditions, the financial system loses capability to mitigate the slowdown of economic activity through the granting of credit, and could even be generating a negative feedback in the deterioration of the real economy. As in many other countries, the financial authorities' challenge is to break the feedback channels between restrictive credit conditions and lesser economic activity.

During the fourth quarter of 2008, financing to the private sector (both foreign and domestic financing through securities and granted by bank) grew at a slower rate and its cost rose.

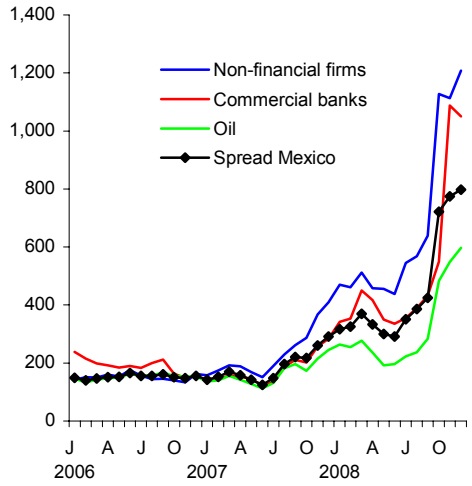
Since the beginning of 2008, the conditions prevailing in international financial markets have restricted firms' access to debt financing in these markets and significantly increased its cost. The access to this type of financing deteriorated even further in the last quarter of the year. In November 2008, the amount outstanding of issued corporate debt fell in annual terms by 11.3 percent, while in September it grew 1.8 percent (Graph 51a). As for the cost of this financing, since October, there has been a significant widening of interest rate spreads on Mexican corporate bonds and the risk-free interest rates (Graph 51b). As for non-financial firms, spreads widened around 570 basis points. For these reasons, in the near future, international debt markets are not expected to be a significant source of financing for private firms residing in Mexico.

Graph 51
Private Debt Issue in International Markets and Interest Rate Spread on Corporate Securities Abroad

a) Foreign Financing Securities Issued by Non-financial Resident Private Firms
Annual change (percent)
in USD



b) Interest Rate Spread on Resident Firms' Corporate Debt Instruments Abroad by Sector 1/
Basis points



1/ Spread in relation to the risk-free rate on 5-year Treasury bonds.
Source: Prepared by Banco de México with data from Bloomberg.

During the first three quarters of 2008, as Mexican firms' access to international financing tightened considerably, the private-debt domestic market was widely used by non-financial firms. Nevertheless, the reduced liquidity conditions and the higher risk aversion that prevailed in the last quarter of 2008 led to a reduction in financing and to higher financial costs in this market. Thus, in December 2008, the total amount of private debt securities grew at a real annual rate of 6.2 percent, figure below the 26.4 percent observed in September.

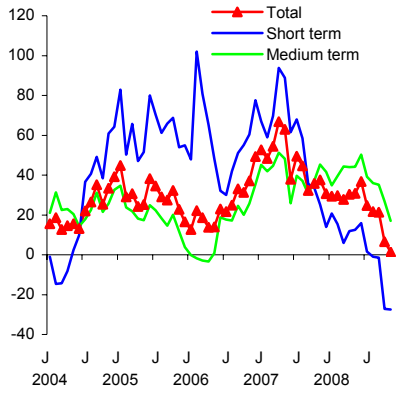
The private sector debt market includes financial non-bank sector issues, with a share of 38.9 percent in this market in December 2008, and of non-financial private firms, whose debt stock accounted for 61.1 percent of the total. As for securities issued by the non-bank financial sector, they have been showing decreasing growth rates since mid-2007, mainly due to the sharp reduction in financing through short-term instruments (Graph 52a). During the fourth quarter of 2008, this market grew at an even slower rate. In December 2008, the stock of non-financial private firms' securities decreased 0.4 percent in real annual terms, as compared with a 21.4 percent increase in September. From all components, short-term securities deteriorated the most by growing at a negative real annual rate of 32.6 percent (in September, they grew 1.4 percent in real annual terms). As for mid-term securities, they grew 16.4 percent in real annual terms in December 2008 (as compared with 35.1 percent in September).

As mentioned, non-financial private firms began to use more the debt market to obtain both short-term and mid-tem funding. The average annual real growth during the first three quarters of 2008 was 12.4, 17.2 and 28.3 percent, respectively. However, the deterioration of financial conditions during the fourth quarter restricted considerably the use of this market for firms' financing. Particularly, under the prevailing conditions of reduced liquidity and uncertainty, the possibilities for issuing mid-term debt were small. The annual real growth of total debt financing for non-financial private firms in this market dropped from 29.9 percent in September 2008 to 10.8 percent in December (Graph 52b). In December, mid-term debt financing grew at an annual rate of 0.7 percent in real terms against 21.1 percent in September. Short-term issues, which had deteriorated markedly in October and November, recovered partially in December 2008 and during the first weeks of January 2009.

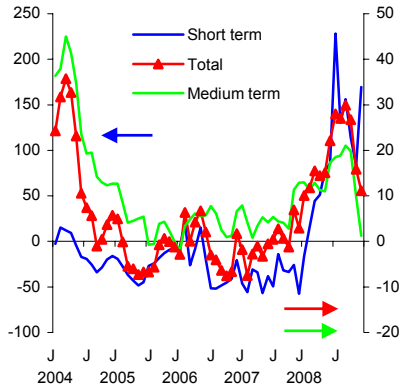
During the fourth quarter of 2008, interest rates in the private debt market reflected the more astringent and less liquid conditions that prevailed in all financial markets. Both short-term and mid-term interest rates rose. In December 2008, short-term new issues were placed at a weighted average rate of 10.7 percent (10.4 percent by non-financial firms and 11.2 percent by financial firms), representing an increase of 197 basis points as compared with September's average rate (Graph 52c). According to information on the yield to maturity in the secondary market, the weighted average of interest rates on mid-term debt was 10.9 percent in December 2008 (10.6 percent for non-financial firms and 11.4 percent for non-bank financial firms), as compared with 9.5 percent in September.

Graph 52
Private Debt Domestic Market

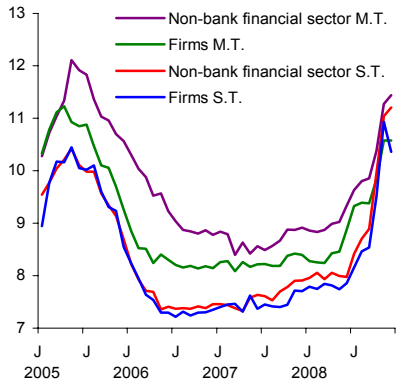
a) Non-bank Financial Firms' Instruments
Real annual change (percent)



b) Non-financial Firms' Instruments
Annual change (percent)



c) Weighted Average Interest Rate of Private Debt Instruments
Percent



The deterioration of financial conditions restricts access to market financing, mainly through mid and long-term securities. Under these circumstances, the functioning of the short-term market gains relevance as it allows firms to refinance their previous liabilities.

During October 2008, the short-term private debt market contracted considerably regarding both amount and term of new issues. Thus, while during the January-September period the average amount of new issues placed weekly was 8,155 million pesos for an average term of 69 days, in October it declined to 4,000 million pesos for an average term of 34 days. However, during November and December this market improved slightly, possibly due to Nafin and Bancomext guarantees program. During the November-December period, the average amount placed was 6,568 million pesos for an average term of 51 days (Graph 53a and Graph 53b).[62]

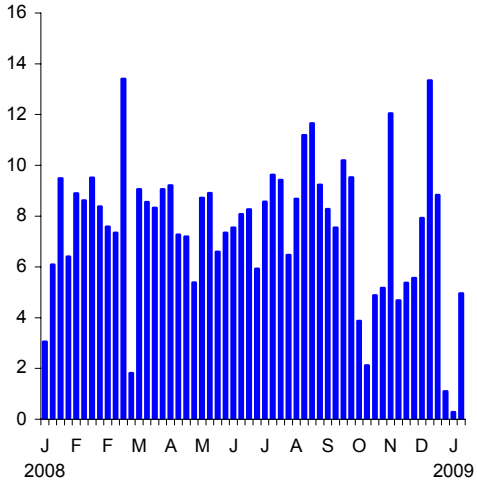
Commercial banks' credit granted to the non-financial private sector has continued to show lesser dynamism, higher credit costs, and a deterioration of the quality of credit portfolio, particularly of consumer credit. In an environment of a strong slowdown of economic activity and a deterioration of its outlook, the demand for credit diminishes. As for supply, it has been affected by the reduced liquidity and the larger restrictions for financing that prevail in financial markets, as well as by the higher risk perception of credit portfolio, particularly, of consumer credit.

During the October-November 2008 period, commercial banks' direct performing credit to the non-financial private sector grew at a real average annual rate of 9.7 percent, figure below the 12.6 percent recorded during the third quarter of the year (Graph 54a). As for the quality of commercial banks' credit portfolio to the private sector, both delinquency indicators increased in November. The delinquency rate reached 3.9 percent, while the adjusted delinquency rate rose to 7.5 percent (Graph 54b).[63]

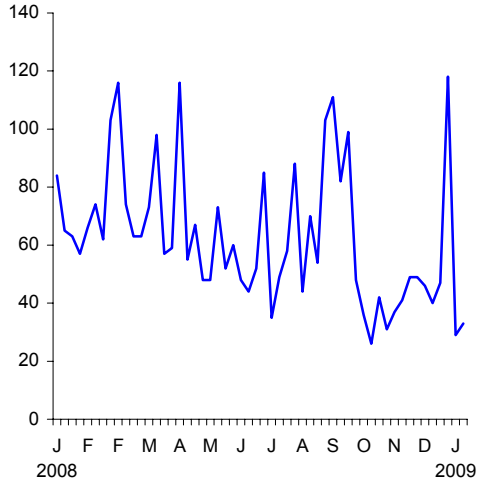
[62] The last two weeks of December are atypical due to lesser seasonal placements at the end of the year.
[63] The delinquency rate is the ratio of non-performing portfolio to total loan portfolio. However, since this indicator is affected by banks' decisions on sales and penalties for this portfolio, a more accurate

Graph 53
Short-term Private Securities

a) Weekly Placement of Short-term Private Securities
Thousand million pesos

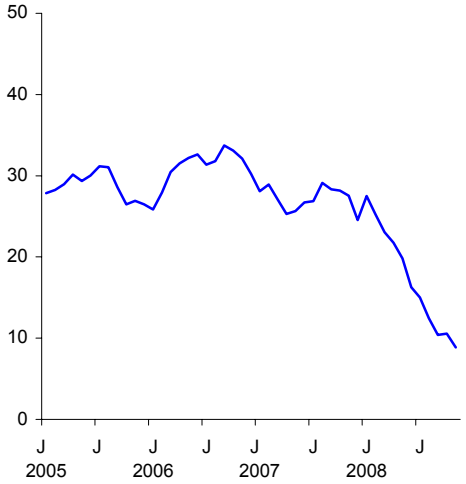


b) Average Placement Term of Short-term Private Securities
Days

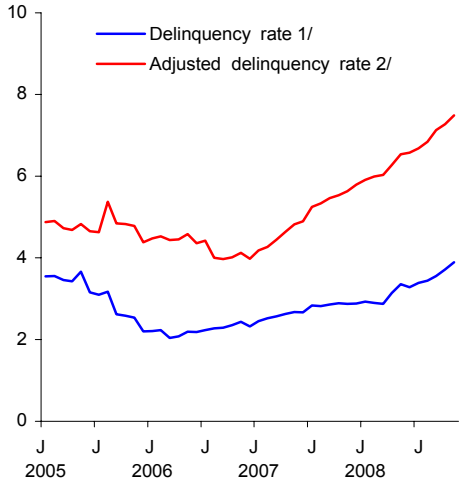


Graph 54
Commercial Banks' Performing Credit to the Private Sector and Delinquency Rates

a) Commercial Banks' Performing Credit to the Non-financial Private Sector
Real annual change (percent)



b) Delinquency Rate and Adjusted Delinquency Rate of Credit to the Non-financial Private Sector
Annual percent



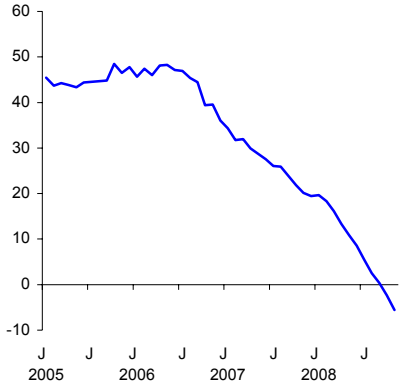
1/ The delinquency rate is defined as non-performing portfolio divided by the total loan portfolio. Figures from March 2008 include consumer credit granted by commercial banks' subsidiaries Sofomes E.R. Source: CNBV.
2/ The adjusted delinquency rate is defined as the sum of non-performing loans plus any write-offs or losses recognized by banks during the twelve previous months divided by total loan portfolio plus the abovementioned write-offs or losses. Figures from March 2008 include consumer credit granted by commercial banks' subsidiaries Sofomes E.R. Source: Banco de México and CNBV.

indicator of debtors' liabilities going into default is used: the adjusted delinquency rate. The adjusted delinquency rate is defined as the stock of non-performing loans plus charges or losses acknowledged by banks during the twelve previous months divided by the sum of total loans plus charges or losses aforementioned (See Financial System Report 2007, p.51, Box 21). For more information on how to use and interpret these indicators, see Inflation Report July-September 2008.

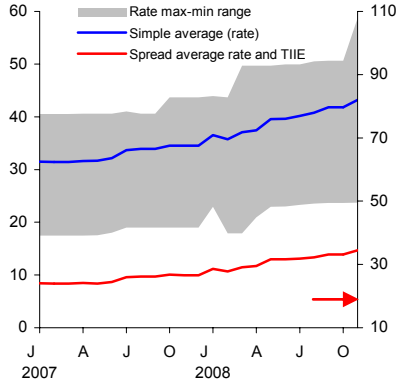
Regarding the recent development of commercial banks' consumer credit, it is the segment of credit to private sector which has shown the most severe deceleration. On the one hand, the demand for credit has declined due to both a reduction in the total wage bill and the deterioration of consumer confidence. On the other hand, more astringent financial conditions coupled with continuous deterioration of consumer credit portfolio, have restricted its lending conditions. During the October-November 2008 period, direct performing consumer credit declined on average 3.9 percent in annual real terms, as compared with the 2.8 percent increase during the third quarter (Graph 55a). As for credit card interest rates, they have risen.[64] During the October–November 2008 period, this indicator averaged 42.5 percent as compared with 40.9 percent during the third quarter (Graph 55b).

Graph 55
Commercial Banks' Performing Consumer Credit, Credit Card Interest Rates, and Delinquency Rates

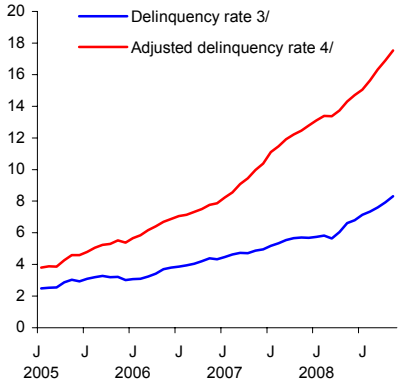
a) Consumer Credit 1/
Real annual change (percent)



b) Credit Card Interest Rate and TIIE Differential 2/
Annual percent



c) Delinquency Rate and Adjusted Delinquency Rate of Consumer Credit
Percent



1/ Figures from March 2008 include consumer credit granted by commercial banks' subsidiaries Sofomes E.R.
2/ Information referring to the annual interest rates on credit cards used to calculate the simple average and the min-max range corresponds to the interest rates of a group of credit cards reported 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 (max-min range) is defined using in each point the maximum and minimum levels reported for this group of credit cards. The differential is calculated using both the mentioned average of interest rates and the 28-days TIIE.
3/ The delinquency rate is defined as non-performing portfolio divided by the total loan portfolio. Figures from March 2008 include consumer credit granted by commercial banks' subsidiaries Sofomes E.R. Source: CNBV.
4/ The adjusted delinquency rate is defined as the sum of non-performing loans plus any write-offs or losses recognized by banks during the twelve previous months divided by total loan portfolio plus the abovementioned write-offs or losses. Figures from March 2008 include consumer credit granted by commercial banks' subsidiaries Sofomes E.R. Source: Banco de México and CNBV.1

The quality of commercial banks' consumer credit portfolio has continued to deteriorate significantly. In November 2008, the delinquency rate recorded 8.3 percent and the adjusted delinquency rate, 17.5 percent (Graph 55c). In August 2008, the National Banking and Securities Commission (*Comisión Nacional Bancaria y de Valores*, CNBV) modified the percentage of preventive reserves applicable to consumer credit portfolio so they reflect properly its behavior and level of risk.[65] Starting October 2008, this regulation obliges banking

[64] Information on interest rates on credit cards corresponds to interest rates of a set of credit cards reported by the National Commission for the Defense of Financial Institutions' Users (*Comisión Nacional para la Defensa de los Usuarios de las Instituciones Financieras*, Condusef).

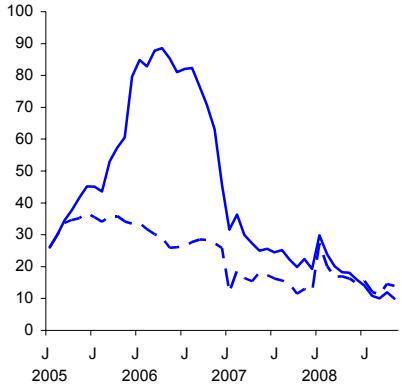
[65] According to the CNBV resolution which modifies the regulations on credit institutions, published on the Official Gazette of August 22, 2008, institutions must adjust to the new table on consumer credit portfolio previsions, described in Article 91 of that resolution, no later than at the end of October 2008.

institutions to increase preventive reserves in their balance sheets and reduce the time to achieve 100 percent of credit reserves from nine to seven months of default.

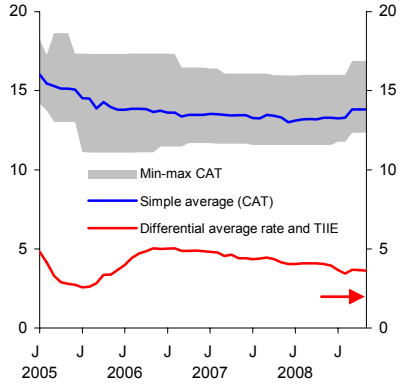
Commercial banks' mortgage credit grew more moderately while its annual percentage rate of charge (APCR or CAT, for its acronym in Spanish) increased slightly. During the October-November 2008 period, direct performing mortgage credit grew at a real average annual rate of 10.9 percent, as compared with 11.6 percent during the third quarter (Graph 56a). As for the cost indicators for housing credit, measured using the CAT of a standardized banking product, since September, the average CAT rose and its range of dispersion shifted upwards. In September, certain banks stopped offering some of their low-cost products.[66] During the October-November 2008 period, the average CAT was 13.8 percent (Graph 56b), as compared with 13.4 percent during the third quarter. In November, the delinquency rate and the adjusted delinquency rate for commercial banks' mortgage credit recorded 3.3 percent and 5.1 percent, respectively (Graph 56c).

Graph 56
Commercial Banks' Performing Credit for Housing, Housing Credit CAT, and Delinquency Rates

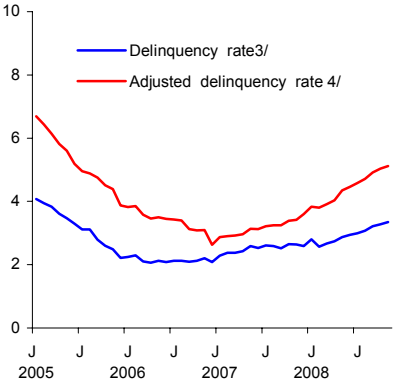
a) Housing Credit [1/]
Real annual change (percent)



b) Housing Credit Annual Percentage Rate of Charge (CAT) and Differential between Housing Credit Interest Rates and TIIE [2/ 3/]
Annual percent



c) Delinquency Rate and Adjusted Delinquency Rate of Housing Credit
Percent



1/ The dotted line excludes the purchasing of portfolio from mortgage Sofoles by commercial banks.
2/ Simple average, which summarizes the annual percentage rate of charge (APCR or 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. . The differential is defined using both the simple average of interest rates of mortgage credits (standardized product) granted by commercial banks' and the 28-days TIIE.
3/ The delinquency rate is defined as non-performing portfolio divided by the total loan portfolio.. Source: Banco de México.
4/ The adjusted delinquency rate is defined as the sum of non-performing loans plus any write-offs or losses recognized by banks during the twelve previous months divided by total loan portfolio plus the abovementioned write-offs or losses. Source: Banco de México and CNBV.

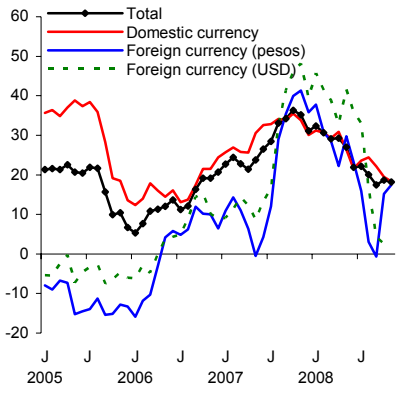
Commercial banks' credit to non-financial private firms has also grown at a slower rate, although at steadily high levels. During the October-November 2008 period, commercial banks' direct performing credit to non-financial firms grew on average 18.4 percent, figure below the 19.9 percent of the third quarter of

[66] In this case, the simple average of the CAT for mortgage credit for a standard product is presented and not the weighted average, because no information is available on credit stocks for each product.

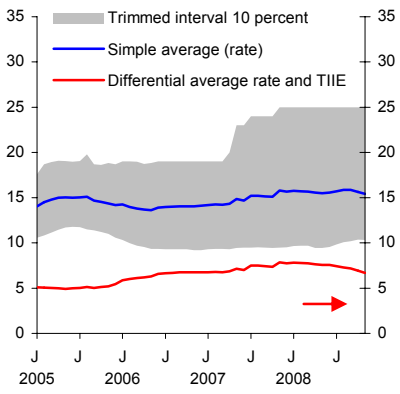
2008 (Graph 57a). It is worth noting that during the fourth quarter of 2008, the real annual growth of this type of credit reflects, together with the financing granted, the effects of the depreciation of the exchange rate on the foreign currency credit portfolio. During the October-November period, the credit portfolio to firms in domestic currency grew at a real annual rate of 18.9 percent. Although the portfolio of credit to firms in foreign currency grew at a real annual rate of 16.3 percent, after considering its annual growth in dollars, it did so at 2.3 percent (Graph 57a).[67] As for interest rates associated with this type of credit, they have not shown any significant change. During the October-November 2008 period, the simple average of interest rates on credit to firms was 15.5 percent (Graph 57b). Although delinquency rates of this type of portfolio have remained low, at the margin, they have slightly deteriorated. In November 2008, the delinquency rate recorded 1.5 percent and the adjusted delinquency rate, 1.9 percent (Graph 57c).

Graph 57
Commercial Banks' Performing Credit to Firms, Interest Rate of Credit to Firms, and Adjusted Delinquency Rates

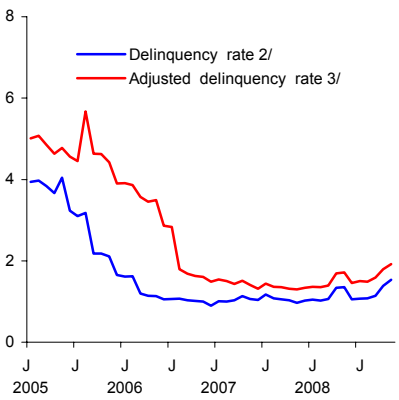
a) Credit to Firms
Real annual change (percent)



b) Interest Rates of Credit to Firms and their Differential to TIIE 1/
Annual percent



c) Delinquency Rate and Adjusted Delinquency Rate of Credit to Firms
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 period. The interval is therefore defined by excluding the 10 percent of the extreme observations of the distribution (the lowest and the highest). The interest rates in the extreme sides of the distribution are therefore excluded. The differential is calculated using both the mentioned simple average of interest rates and the 28-days TIIE.
2/ The delinquency rate is defined as non-performing portfolio divided by the total loan portfolio. Source: Banco de México.
3/ The adjusted delinquency rate is defined as the sum of non-performing loans plus any write-offs or losses recognized by banks during the twelve previous months divided by total loan portfolio plus the abovementioned write-offs or losses. Source: Banco de México and CNBV.

Finally, despite the magnitude of the shocks that have affected Mexico's financial sector and those of the rest of the world, financial markets in our country have come off relatively well. They continue operating orderly and the Mexican banking system has preserved adequate capitalization levels, above those required by regulation.

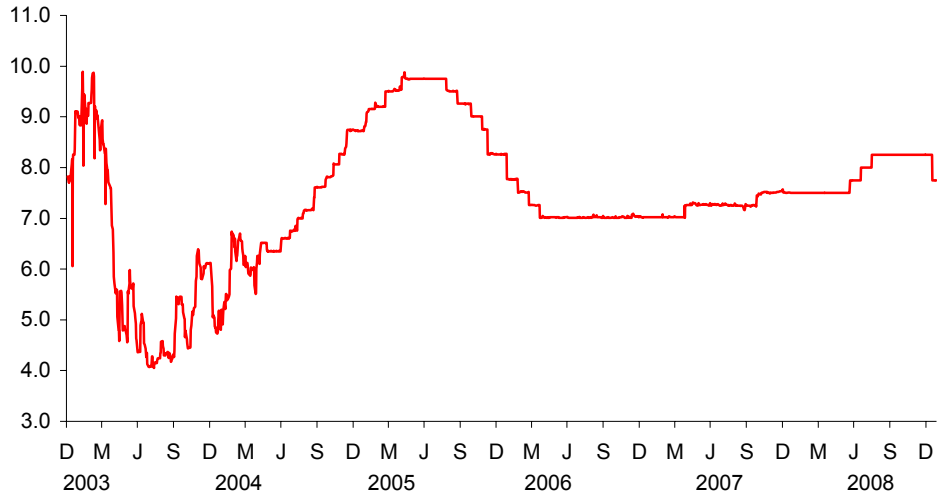
[67] During the third quarter of 2008, prior to the exchange rate depreciation, on average, 18.8 percent of commercial banks' portfolio of credit to non-financial firms was denominated in foreign currency.

4. Monetary Policy

Considering that the proper functioning of a financial system is a necessary condition for growth and also contributes favorably to a price stability environment, during the fourth quarter of 2008, Banco de México, together with the Ministry of Finance, implemented several actions to preserve the adequate functioning of domestic capital markets (refer to section 3.3.2.2). If these actions had not been taken, effects on domestic economic activity would have been very disruptive.

Regarding monetary policy, in January 16, 2009, Banco de México's Board of Governors decided to cut the interbank interest rate target from 8.25 percent to 7.75 percent (Graph 58). This decision responded to an important change in the balance of risks, as those related with economic activity have deteriorated more than those related with inflation.

Graph 58
Overnight Interbank Interest Rate [1/]
Annual percent



1/ The target for the overnight interbank interest rate is shown since January 21, 2008.

Monetary policy actions by a central bank affect the economy, and especially prices, with some lag. Thus, in order to reach the inflation target, monetary authorities usually take decisions based on a detailed assessment of the current economic conditions, and on their previsions about the future developments of inflation and the balance of risks for inflation.

As for the factors that have recently affected inflation, several related to supply stand out: i) the increase in international commodity prices during the first half of 2008 did not affect domestic prices immediately, and even though these international references started to decline during the third quarter of last year, its effects on consumer inflation remained upwards (see Boxes 1 and 2 of this Report); ii) the federal government policy on prices of some public goods and services. Particularly, the freeze in energy prices during the last quarter of 2007,

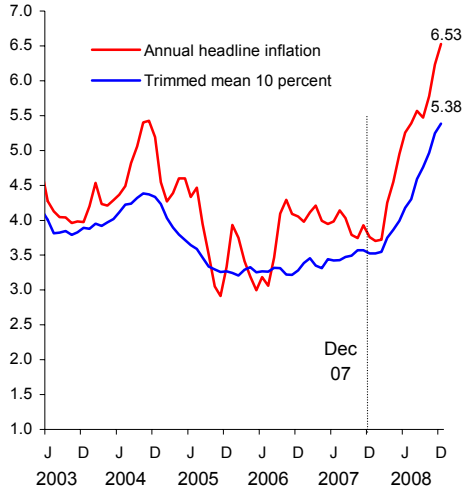
together with the price increase of fuels during the last quarter of 2008, led to a sharp rise in annual terms in the referred prices during the last months of 2008; and, iii) the probable pass-through effects from the exchange rate to consumer prices. It is important to mention that due to their nature, these factors have important effects on firms' costs and, therefore, on economic agents' outlook for inflation.

Unlike the development of consumer inflation in most developed and other emerging economies, the effect of these factors in Mexico prompted inflation to continue shifting upwards during the fourth quarter of 2008. In particular, Graph 59a shows that the trimmed mean of headline inflation continued following an upward pattern during the last quarter of 2008.[68] Graph 59b shows that the proportion of CPI basket items with annual price variations of 4 percent or higher continued to increase during the last quarter of 2008 (grey shaded area).[69]

Graph 59
Inflation Indicators

a) Headline Inflation and Inflation excluding the Contribution of Extreme Upper and Lower Price Variations at 10 Percent[1/]

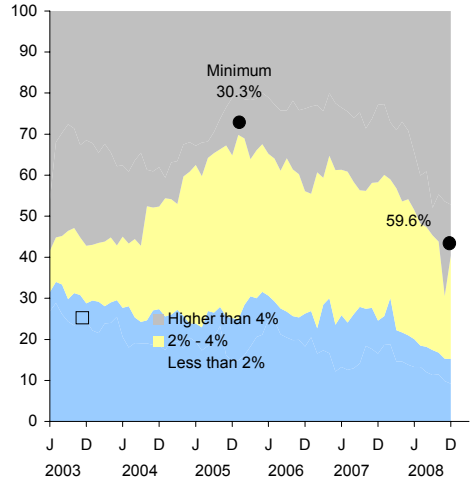
Percent



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 price variations 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.

b) Share of CPI Items with Annual Price Variations within the Interval[1/]

Percent



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.

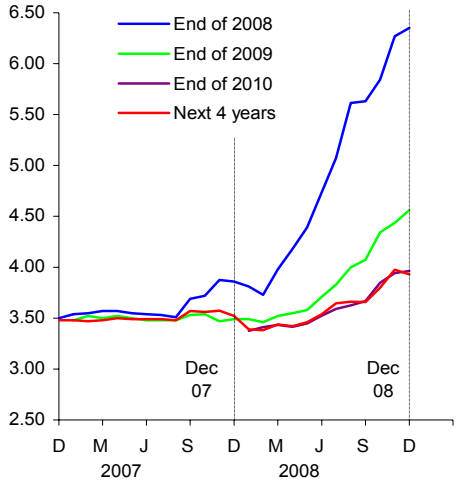
[68] Among the items that recorded significant price increases but remained in the center of the distribution, are those from the administered and regulated price subindex (minibus, urban transportation, and electricity, among others), from the food price subindex (soft drinks, corn dough and flour, and individually packaged corn tortillas, among others); and those from the non-food merchandise price subindex (tires, blenders, and irons, among others).

[69] Among the items that contributed to such an increase are soft drinks, and corn dough and flour, from the food price subindex; and, journals, magazines, stoves, washing machines, irons, and different household furniture, from the merchandise price subindex. Part of the increase in this indicator (grey-shaded area) from October to November -and which later reverted in December- was due to the development of the item own housing. This item's price rose in annual terms from 3.95 percent in October to 4.08 percent in November and then to 3.92 in December. This item accounts for 11.97 percent of the CPI basket.

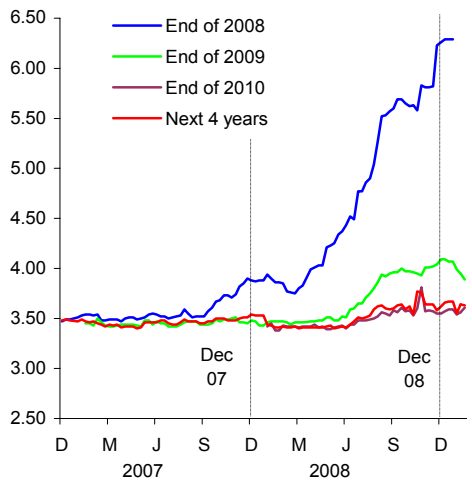
As for inflation expectations, Graph 3 shows that in those obtained from private sector analysts' surveys, the supply factors mentioned before affected them in such a way that during the fourth quarter of 2008 they were revised upwards. In the surveys from both Banco de México (Graph 60a) and Infosel (Graph 60b), average inflation expectations for the end of 2009 and 2010 as well as for the next 4 years (up to December 2008) were revised upwards.

Graph 60
Expectations for Annual Headline Inflation

a) Banco de México Survey [1/]
Annual percent



b) Infosel Survey [2/]
Annual percent



1/ Banco de México's survey is published on a monthly basis.

2/ Infosel survey is published on a weekly basis.

Nevertheless, in the wake of the latest events, previsions for inflation in Mexico and, particularly, the balance of risks for inflation, have changed significantly.

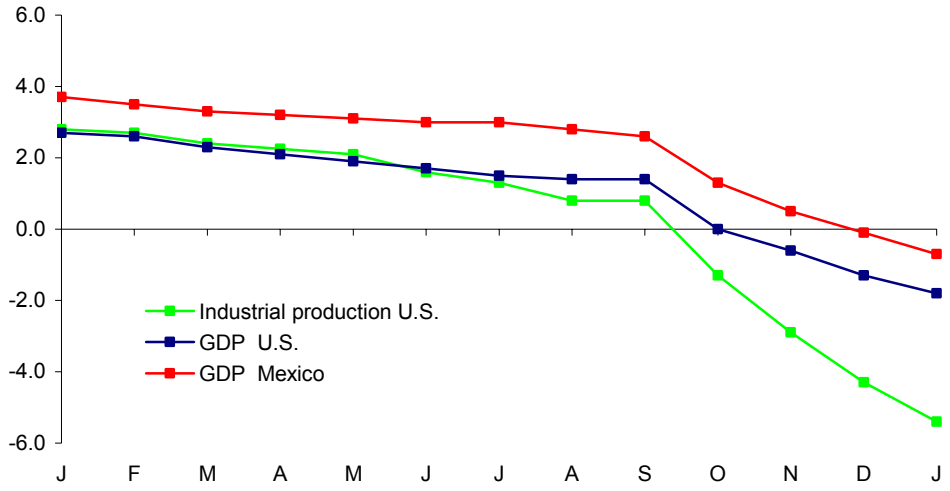
On the one hand, the prospects for economic activity in Mexico have deteriorated considerably. Graph 61 shows that expectations for economic activity, in both the United States and Mexico, have been revised continuously downwards, especially during the last quarter of 2008.

Growth perspectives in the United States have deteriorated due to several factors. First, many analysts estimate financial institutions' losses in the U.S. to be greater than those so far acknowledged. The adjustment in the housing sector seems to have not concluded as well. Consumers are also still far from completely rebuilding their savings. A very uncertain environment has affected firms' investment perspectives. Under this context, the deterioration of growth expectations in that country very unlikely has concluded. It is worth noting that the U.S. government will announce shortly an important incentive package for its economy.

The aforementioned considerations are especially relevant for Mexico, due to the financial and commercial integration of our economy with the U.S. Of special concern is the adjustment of both countries' industrial sector. It is well known that manufacturing employment in both economies has contracted sharply. Similarly, as detailed in other sections of this Report, all expenditures in our country have either slowed down or fallen. On another front, practically all

confidence and business climate indicators continuously reviewed by Banco de México have deteriorated significantly.

Graph 61
Expectations for Economic Growth in Mexico and the U.S. for 2009
Annual percent



Source: Consensus Forecasts.

As an adverse scenario for spending in Mexico materializes, it will likely lead to lesser wide-scale pressures on prices. It is important to stress that it takes time for recessive conditions in an economy to be reflected in inflation, but if the outlook for economic activity deteriorates further, demand conditions will be mainly reflected in lesser pressures to consumer prices' growth rate.

In addition to the described outlook for inflation associated with demand, inflationary pressures from the supply side have also been diminished in the last weeks. On the one hand, the freeze in gasoline prices and the reduction of LP gas and electricity prices announced by the federal government in January 7 will have direct implications on inflation, and is also expected to contribute to reduce firms' costs and, therefore, the indirect effects of the referred policies on inflation. On the other hand, insofar as the pass-through of the increases in international commodity prices (observed during the first part of 2008) to consumer prices in Mexico has gradually completed, the recent decline in those international references (Graph 10, section 3.1.2) should imply the decline of firms' costs in the coming months, which is also expected to contribute to reduce inflation.

Despite the aforementioned, the recent exchange rate depreciation still represents an important upward risk for inflation. Even though the recent nominal exchange rate depreciation seems to be reflecting a depreciation of the real exchange rate, it is difficult to estimate the effects it will have on inflation. Under this context, insofar as economic agents perceive that the recent exchange rate fluctuations will be permanent, the pass-through to prices will likely be larger. Under this environment, Banco de México will very closely monitor this inflation risk.

According to Infosel's surveys conducted during the first weeks of January 2009, inflation expectations -which already incorporate information on the

change in public prices' policy and considerable downward revisions on growth prospects for the Mexican economy as compared with those released a few months ago from economic agents are starting to be revised downwards due to the current environment. Graph 60b shows that average expectations for headline inflation for the end of 2009 were revised from 4.07 percent in December 19 to 3.89 percent in January 23. As for average expectations for the end of 2010, they were also revised from 3.59 a 3.61 percent, and those for the next 4 years, from 3.67 to 3.63 percent during the same period.

Summing up, the aforementioned factors allow for anticipating that both inflation and its expectations have reached an inflection point in December, and that they should follow a downward trend during 2009.

The development of economic agents' expectations in relation to economic activity and inflation, and also Banco de México's monetary policy actions, were reflected in Mexico's yield curve. During the first weeks of the fourth quarter of 2008, in an environment of significantly high risk aversion in international markets and where many investors liquidated positions in emerging markets, longer term yields in Mexico increased considerably under a highly volatile environment. Such an increase caused the referred curve to follow a sharp "steepening" (Graph 62).

Later on, other factors contributed to revert the yield curve's "steepening slope". First, the measures implemented by several world financial authorities to stabilize their markets began to work out, thus mitigating global financial volatility and partially reverting the sharp increase in risk aversion observed in markets. This aversion, nevertheless, is still at levels far above those observed prior to the outbreak of the crisis. This made longer term interest rates in Mexico reach an inflection point at the end of October, after the yield on 10-year government bonds had reached 11.3 percent on October 24.

To the fall in longer-term interest rates in Mexico also contributed, among other factors: i) the actions adopted by the Mexican financial authorities to preserve adequate operations in domestic financial markets; ii) the sharp deterioration of prospects for economic activity; and, iii) expectations of a decline in short-term interest rates in Mexico.

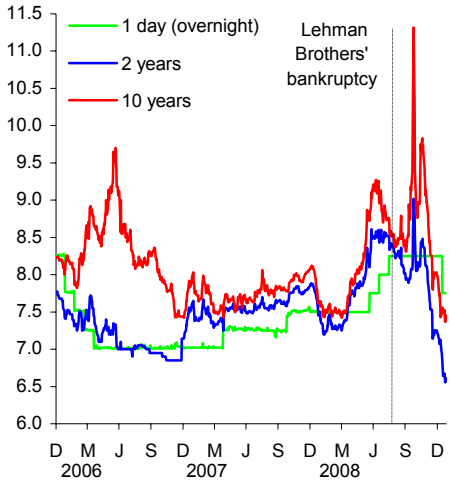
In addition to the aforementioned, within the last weeks, long-term interest rates in Mexico might have also been affected by a slight downward revision in inflation expectations. As a result, the interest rate on 10-year bonds fell to around 7.5 percent. Finally, it is appropriate to point out that due to Banco de México Board of Governors' decision to cut the overnight interbank interest rate target by 50 basis points in January 16, the short part of the yield curve decreased to around 7.75 percent.

As for interest rate spreads on government bonds between Mexico and the U.S., as shown in Graph 63, increases in longer term interest rates in Mexico together with the observed reduction in U.S. interest rates, widened significantly the spreads on interest rates during the first three weeks of October. Thus, mid-term spreads (2 years) reached around 725 basis points and long-term spreads (10 years), 750 basis points. Once interest rates in Mexico began to decline, the referred increase reverted. However, given that U.S. interest rates fell sharply during the fourth quarter of 2008 and during the first weeks of January, the

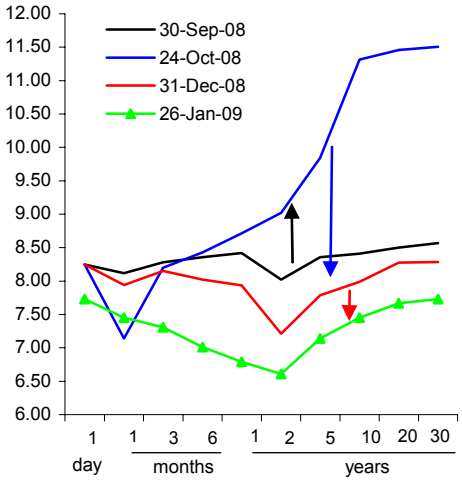
previously referred spreads are still at levels around 580 and 470 basis points, respectively, figures higher than those recorded during the third quarter of 2008.

Graph 62
Interest Rates in Mexico

a) Interest Rates
Annual percent 1/

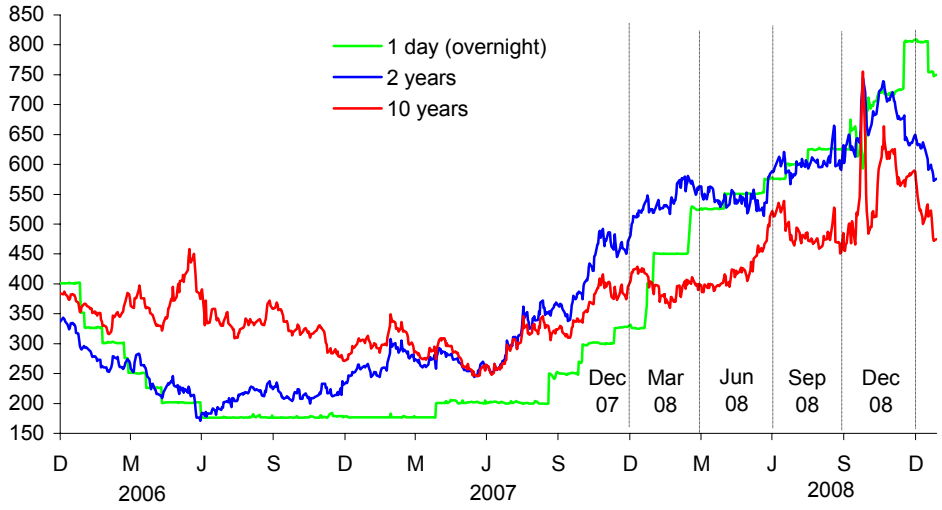


b) Yield Curve
Annual percent



1/ The target for the overnight interbank interest rate is shown since January 21, 2008.

Graph 63
Spread between Mexico and U.S. Interest Rates
Basis points



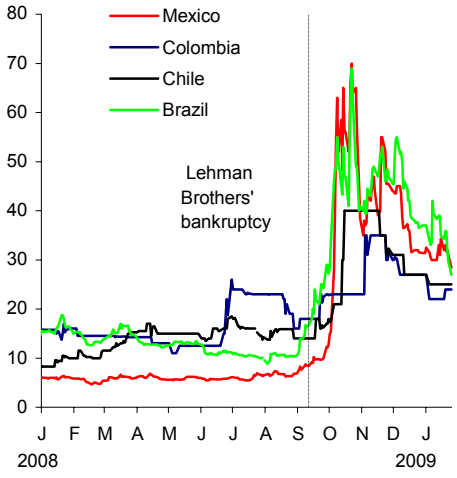
Finally, it is important to mention that in an environment of higher risk aversion, where many investors liquidated positions in emerging markets, where the sharp slowdown of developed economies affected emerging economies' economic activity, where international commodity prices continued to decline, and where financial market astringency rose, the currencies of most emerging economies depreciated significantly (Graph 20, section 3.1.3). It is worth

mentioning that those economies with greater needs for foreign financing have been the most affected.

Volatility in emerging economies' foreign exchange markets rose sharply during the fourth quarter of the year (Graph 64). As for Mexico (and other economies such as Korea and Brazil), since October the foreign exchange market has occasionally been subject to low liquidity. In some cases, this has been the result of an extraordinary demand from firms holding foreign exchange positions through derivatives and which experienced significant losses. Under this context, the Foreign Exchange Commission decided to use part of the international reserves to provide liquidity to the foreign exchange market and, thus, ensure its proper functioning (Section 3.3.2.2). This measure prevented these events from affecting the financial markets stability and thus the high costs involved in terms of economic activity and price determination in the economy.

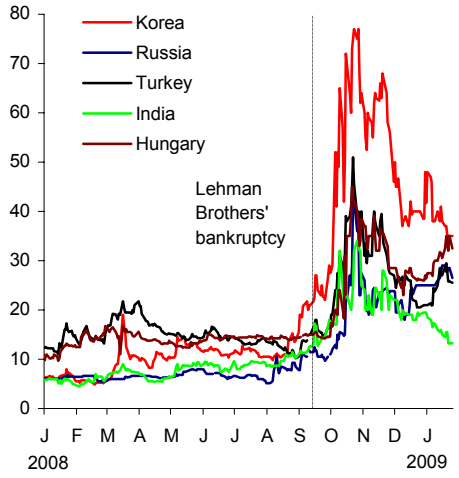
Graph 64
Volatility Implicit in 1-month Exchange Rate Options

a) Latin American Economies



Source: UBS.

b) Other Emerging Economies



Source: UBS.

5. Prospects for Inflation and Balance of Risks

Banco de México's macroeconomic scenario is based on the following external considerations:

I. Prospects for growth in the U.S. have deteriorated significantly. In particular, the U.S. economy is expected to undergo a long period of adjustment while consumer spending returns to sustainable levels in the mid term. Industrial production in the U.S. fell 1.7 percent in 2008 and, currently, analyst expectations' consensus on GDP growth for that year is 1.3 percent. Projections for economic activity in 2009 have been adjusted continuously and significantly downwards. The U.S. economy is expected to contract during the first half of the year, and then recover gradually in the following months. Currently, forecasts for GDP growth are –1.6 percent and for industrial production growth, –4.9 percent. These last figures are considerably below those projected during the previous quarter (0.5 and -0.5 percent, respectively) and the possibility of new downward revisions cannot be discarded.

II. While operations in some financial market segments improved during the fourth quarter of 2008, uncertainty in those markets prevails. As a result, credit conditions in international markets have deteriorated due to an adverse environment from both the supply and demand side. In the case of Mexico, sovereign risk spreads remain high and credit conditions in domestic markets have tightened further. Difficulties to obtain financing in international markets are expected to continue in the next months.

Based on the analyzed information of this Report, Banco de México has forecasted the following scenario for the Mexican economy:

GDP Growth: GDP measured in constant pesos is expected to have grown 1.5 percent in 2008. After having grown during the seven previous years, in 2009 GDP is expected to fall between 0.8 percent and 1.8 percent. The wider forecast range (of 1 percentage point) reflects the higher uncertainty about the economy's performance.

Employment: By the end of 2008, 37,500 jobs in the formal sector (number of workers with social security) were lost. By the end of 2009, this amount could escalate from 160,000 to 340,000 workers in annual terms.

Current Account: The current account deficit is expected to have been 1.4 percent of GDP in 2008. For 2009 it is forecasted to represent between 2.6 and 2.8 percent of GDP. Despite the astringency that prevails in international financial markets, no difficulties in financing such deficit are foreseen as revenues from the oil price swaps contracts are expected.

This scenario reflects, on the one hand, the significant deterioration of growth prospects for the Mexican economy during the last few months and, on the other, the expected positive effect of the policies to foster aggregate demand on economic activity. The downward adjustment in the outlook for the Mexican

economy growth is mainly due to the severe deterioration of the external environment. This environment, characterized by a severe financial crisis and by recession in the main industrialized economies, particularly in the U.S., is expected to continue to adversely affect the Mexican economy, through various channels:

i) Manufacturing exports (both automotive and the remaining) are expected to contract in 2009. The sharp weakening of external demand at first included only that from the U.S.; however, today it includes the rest of the world.

ii) Lesser revenues from international travelers and from workers' remittances are expected. Regarding the latter, the weakening of economic activity in the U.S. implies lesser opportunities for Mexican immigrants in that country. In fact, there is a higher relative presence of these workers in the most affected sectors by the recession. A greater reduction in revenues from remittances would thus continue to negatively affect private consumption expenditure in Mexico.

iii) Lower economic growth worldwide has led to a lesser demand for fuel and, thus, to a sharp fall in the Mexican crude oil export mix price. These developments have led to a reduction in revenues from net oil exports (exports less oil-product imports), in a context where the level of the crude oil export platform has declined.

iv) Greater astringency and lower liquidity in international financial markets imply both lesser availability for and higher costs of foreign financing, and tighter domestic financial conditions as well.

Inflation: Although headline inflation during the fourth quarter of 2008 rose more than anticipated, inflation is expected to start to decline since the first quarter of 2009 and then follow a downward path for the next two years (Graph 65). Annual headline inflation is forecasted to be below 4.0% in December 2009. This estimated path is based on the following factors:

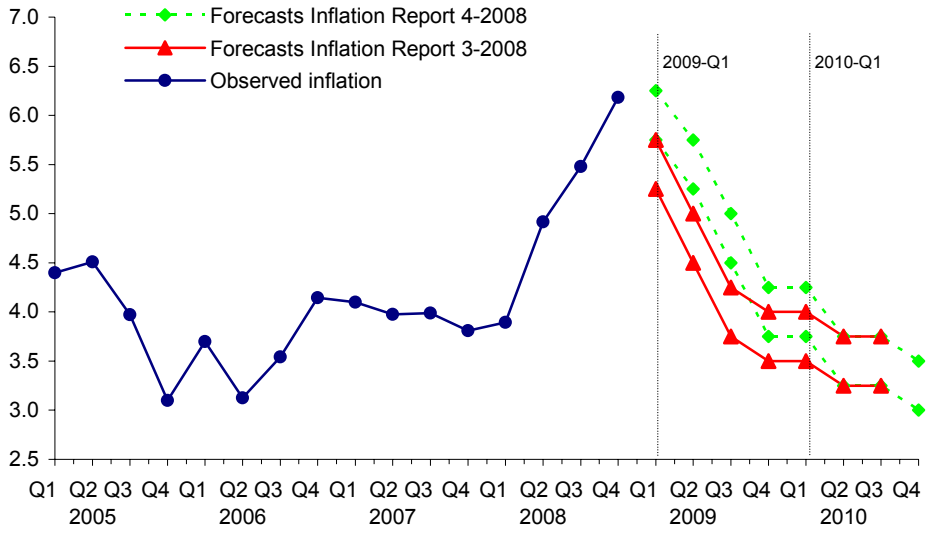
a) The world recession is still expected to continue (at least during the first semester of 2009). In the case of Mexico, the growth scenario for 2009 is not positive. The aforementioned scenario will imply lesser demand-related pressures on inflation.

b) International prices of agricultural commodities and fuels have plummeted as compared with the maximum levels reached in mid-2008, returning to the levels observed at the beginning of that year. Although this decline in prices has not been fully reflected in domestic consumer quotes it is foreseeable that as long as these prices continue falling, the pass-through will happen eventually.

c) The federal government’s decision to freeze gasoline prices, to reduce LP gas prices by 10 percent, and low-tension electricity tariffs by 9 percent. Given the information extracted from futures markets, these prices are not expected to increase in 2010.

d) The federal government's announcement to reduce import duties should help inflation decline, considering that it includes both final and intermediate goods imports.

Graph 65
Annual Headline Inflation and Forecast for Base Scenario
Quarterly change (percent)



Despite these factors, the rate of inflation of some CPI price subindices at the end of 2008 indicates that inflation will be above the figures forecasted in the Inflation Report of July–September 2008 (Table 8). In this regard, it is worth mentioning that inflationary pressures over merchandise and cattle products, originated by the pass-through from cost-related pressures to prices recorded last year, as well as the recent exchange rate adjustment, could prevail for some months in 2009. If the price increases observed previously do not revert, this situation will have a 12-month incidence on the annual inflation rate. The decline in inflation of the aforementioned products would materialize gradually if prices adjust upwardly less than during the previous year. As in other economies, as long as domestic prices respond more rapidly to external conditions, inflation will decline more rapidly.

Table 8
Base Scenario for Annual Headline Inflation
Quarterly average (percent)

Quarter	Forecast Inflation Report IV-2008	Forecast Inflation Report I-2009
2008-IV	5.50 - 6.00	6.18[1/]
2009-I	5.25 - 5.75	5.75 - 6.25
2009-II	4.50 - 5.00	5.25 - 5.75
2009-III	3.75 - 4.25	4.50 - 5.00
2009-IV	3.50 4.00	3.75 - 4.25
2010-I	3.50 4.00	3.75 - 4.25
2010-II	3.25 3.75	3.25 - 3.75
2010-III	3.25 3.75	3.25 - 3.75
2010-IV	----------	3.00 - 3.50

1/ Observed figure.

The achievement of the inflation rate previously forecasted depends on several upward and downward risks, such as:

1. The stage of the economic cycle. As the economy slows more sharply than expected, inflation could decline further and more rapidly.

2. A high degree of uncertainty prevails about the path that the international prices of food commodities will follow. On the one hand, lower world growth would affect demand, which would contribute to ease these pressures. On the other hand, prices might rise once more in response to the low elasticity of demand for this type of products, combined with a contraction in production generated by the recent downward decline in prices and by the greater astringency of financing for producers.

3. The behavior of domestic grain prices in Mexico does not necessarily correspond to their international benchmarks, as observed recently. This is due to a series of market distortions that create certain downward rigidities for domestic prices. As long as the expected adjustments in prices do not take place, prices of processed foods that use these grains as inputs could continue to be subject to pressures.

4. The path that energy prices could follow depends on the performance of the global economy and on production cuts caused by geopolitical problems or weather events. Oil futures suggest that oil prices could increase moderately during this year. Despite this situation, the expected price level implies a reduction in its annual average growth rate.

5. The exchange rate has depreciated significantly, in a context where economic activity has slowed down considerably, which implies higher

uncertainty about the probable pass-through effect of the exchange rate depreciation to consumer prices. [70]

Under the present situation, Banco de México will continue to closely monitor the balance of risks. Monetary policy measures decided by the Board of Governors will be conditioned to attaining the 3 percent inflation target at the end of 2010. Since domestic financial markets' proper functioning is essential to achieve macroeconomic stability, the Board of Governors will remain alert to ensure an adequate operation of these markets.

In a context in which global economic activity is undergoing the lowest stage of the cycle and, thus, Mexico's current levels of external demand are expected to drop substantially, fiscal policy is naturally anticipated to become more expansionary and monetary policy to loosen -depending on the development of inflation- in order to boost aggregate demand. These measures are intended to partially soften the effect of the described environment on domestic productive activity.

Because of the current conditions, this type of policies can be applied with a wider margin of maneuvering. The expected decline of aggregate demand, together with the lower prices of LP gas and electricity -and the freeze on gasoline prices- ease inflationary pressures. This allows fiscal policy to become more expansionary and gives monetary policy a greater margin to loosen, without putting at risk the convergence of inflation to its target. Under the current setting, these types of policies could have had a wider margin of maneuver if greater resources from the oil fund would have accumulated, when oil prices were at their highest levels. As an example, countries like Norway and Chile, whose fiscal revenues also depend to a great extent on the sale of certain commodities (oil in the former case and copper in the latter), currently have higher margins of maneuver to implement fiscal economic policies that foster productive activity, having saved a considerable part of their higher revenues through the sale of these goods in recent years.

However, it is important to emphasize that policies that foster aggregate demand must never jeopardize the health of public finances and also adjust to the current credit restrictions. For example, in the case of fiscal policy, its margin of maneuver can eventually be small if the economy starts to face greater financing restrictions. In this case, increasing public expenditure could only be crowding out private expenditure via higher interest and inflation rates.

For Mexico, the outlook regarding its sources of financing for the next few years portrays a complicated scenario. First, insofar as the recession in the U.S. deepens further and lasts longer both exports and remittances will continue to grow at slower rates. Second, as mentioned all along this Report, the Mexican oil trade balance has deteriorated significantly, in such a way that during the fourth quarter of 2008 it turned negative. This deterioration did not start recently, but some years ago. Finally, the critical situation of financial institutions worldwide

[70] Many econometric and statistical studies by Banco de México (and others) suggest that the exchange rate pass-through to consumer prices has declined significantly over recent years. Nevertheless, these studies use as a sample the most recent decade, in which the exchange rate remained very stable most of the period. It is clear that is difficult to extrapolate the results of these studies to the current environment. The exchange rate has recently fluctuated considerably and thus the little information available does not allow for carrying out new statistical studies with robust results.

suggests much more astringent conditions for financing in both international and domestic capital markets.

In the current environment, the different monetary transmission channels might operate with less efficiency for two reasons. First, the world financial astringency, together with the market structure that seems to characterize the domestic financial sector, undermines the stimulus to credit supply associated with reference rate cuts. And second, the demand for credit could also be affected due to the worsening outlook for growth and employment.

Summing up, it must be emphasized that the effects of macroeconomic policies that foster aggregate demand on the economy are constrained and thus they are not likely to permanently boost GDP growth.

However, nowadays Mexico is in a better position to face the current international crisis. Macroeconomic stability has consolidated gradually as a result of several years of sound public finances and monetary policy focused on abating inflation. In particular, the institutional setting under which macroeconomic policies are implemented has changed in the last few years into a stability-centered one. Today Mexico has the lowest inflation levels in decades, balanced public finances, a smaller ratio public debt to GDP for many years, a better public debt maturity profile, a reduced deficit in its external accounts that has been financed without problems, high amounts of foreign direct investment, and record levels of international reserves (Box 10). This environment of stability offers a great opportunity to implement policies that will lead to sustained growth by decisively reforming the economy's legal structure and regulatory framework.

Box 10

Institutional Framework for Mexico's Macroeconomic Policy

This box describes the changes over the last years in the institutional framework under which macroeconomic policy operates. This description reveals that, at present, both authorities and economic agents' have more degrees of freedom to face an adverse economic environment than during previous crisis episodes.

Regarding fiscal policy, the responsible management of public finances has allowed the public sector fiscal deficit to be reduced considerably, from levels of over 10 percent of GDP in 1982 to close to zero in the last years (Table 1). As a result, the public sector debt has also decreased significantly, from 77 percent of GDP in 1986, to close to 14 percent today.[1] The debt profile has improved as well. The external debt as a percentage of the total debt declined and its terms have increased, thus reducing public finances' vulnerability in an environment of tighter financial conditions in international markets.

Table 1
Economic Indicators of the Mexican Economy*

	1982 T2	1986 T1	1994 T3	2008 T3
Public sector balance				
Flow in the last four quarters (% of GDP)	-11.50	-7.21	-0.19	0.05
Public debt				
Total (% of GDP)	47.5	77.2	19.9	13.6
Domestic (% of GDP)	16.2	18.0	3.0	10.9
Foreign (% of GDP)	31.3	59.1	16.9	2.7
Foreign (% of total debt)	65.9	76.6	85.1	19.8
Inflation				
End of quarter (annual %)	49.4	67.6	6.7	5.5
Financial intermediation				
M4 (% of GDP)	29.9	29.3	42.5	51.1
Net international reserves				
Thousand million USD (tmd)	2.0	5.8	16.1	83.3
Current account				
Total last 4 quarters (tmd)	-16.4	0.2	-27.6	-11.8
% of GDP	-6.7	0.1	-6.0	-1.0

Source: Banco de México and INEGI.
* Dates reported in the economic indicators correspond to the previous quarter at the beginning of the episodes of economic crisis that took place in Mexico over the last decades.

Another aspect related to fiscal policy that has improved significantly is the enforcement in 2006 of the Federal Law on Budget and Fiscal Responsibility. This law provides, among others, rules to prepare the budget, to define the fiscal deficit target and, when applicable, to distribute surplus or to apply cuts on spending. Nowadays, information on public finances is published on the basis of a previously defined calendar. The rules and the transparency that characterize today's fiscal policy are elements that strengthen economic agents' confidence in the Mexican economy.

As for monetary policy, since 1994, Mexico's central bank is autonomous and, according to the law, has as its main goal to secure the stability of the Mexican currency's purchasing power. The law governing Banco de México prohibits granting financing to the federal government. In practice, Banco de México conducts monetary policy through an inflation-targeting framework with an annual inflation target set at 3 percent. Monetary policy decisions are announced via press releases and according to previously established dates. These announcements include the rationale behind the decisions. This institutional framework, together with a responsible management of public finances, serves as an anchor for inflation expectations, fostering a stable macroeconomic environment that contributes to promote sustained growth.

As a result, both the level and volatility of inflation in Mexico have decreased in the last ten years, hence improving the nominal operating system and allowing resources to be allocated more efficiently. As it is well known, inflation in Mexico reached three digit figures at the end of the eighties. Nevertheless, after gradually declining since the end of the nineties, it has remained at levels slightly over the 3 percent target since 2003, except for the significant upturn in 2008, which is expected to be temporary.

The decline in inflation has also contributed to the development and deepening of Mexico's financial system. The broad monetary aggregate (M4) has increased from levels close to 30 percent of GDP in 1982 to levels of 51 percent nowadays (Table1). Due to the stable macroeconomic environment, both public and private agents have been able to issue debt for longer terms and denominated in domestic currency, becoming less vulnerable to exchange rate fluctuations. A factor that has contributed importantly to the development of debt markets has been the privately-managed pensions' funds as a stable saving source oriented towards long-term instruments. Due to an adequate regulation and supervision environment, bank credits for households and firms have also increased considerably. This means that, today, economic agents have more tools to smooth their spending and, hence, to partly ease the effects of changes in their income throughout the business cycle. Due to an adequate regulation, Mexican banks' exposure to low-quality assets and exchange rate risk is minimal and, despite the current conditions, most banks have not registered considerable looses for these reasons. Thus, generally speaking, the different sectors of the economy have a more solid financial position as compared with previous crisis episodes when their exposure to credit and exchange rate risk compromised the authorities' flexibility to face these crises.

An additional element that has contributed to strengthen the institutional framework of macroeconomic policy in the last few years is the exchange rate policy. Since 1995, the Foreign Exchange Commission decided to keep a floating regime for the peso, as compared with the predetermined exchange rate scheme that prevailed before. The floating regime, together with a set of rules defined by this Commission in relation to international reserve accumulation, contributed to the deepening of this market.

As a result, international reserves have accumulated significantly in the last few years, reaching 83.3 billion US dollars in the third quarter of 2008 (Table 1).[2]

Because of the floating regime, Mexico's external accounts today are not vulnerable, as compared with previous crisis episodes.

[1] The definition for public debt used is equivalent to that for the Net Broad Economic Debt (*Deuda Económica Amplia Neta*, DEAN) estimated by Banco de México (the only measurement available since 1980). This definition comprises net liabilities from the federal government, the non-financial public sector, development banks, and development trusts. The Ministry of Finance prepares a broadest definition of public debt, the Historical Balance of the Public Sector Borrowing Requirements (*Saldo Histórico de los Requerimientos Financieros del Sector Público*, SHRFSP), which is available since 1990. The main methodological differences between both are, on the one hand, the handling of financial intermediation (the second measurement does not consider credit granted by development banks and private sector trusts as public sector assets) and, on the other, that the second measurement does not include additional liabilities: Pidiregas, IPAB, Farac, and debtor-support and UDI-restructuring programs. At the third quarter of 2008, the Historical Balance of the Public Sector Financial Requirements accounted for 29 percent of GDP.

While the current account deficit rose to 6 percent of GDP in 1982 and 1994, until the third quarter of 2008 it remained at levels of around one percent (Table 1). Despite the deterioration of the external accounts during the last quarter of last year and those forecasted for 2009 (See Section Prospects and Balance of Risks of this Report), no problems for their financing are expected.

The floating regime and the rules defined by the Foreign Exchange Commission regarding Banco de México's intervention in the exchange rate market have also fostered the development of the hedge market. This has led, in general, to lower exchange rate risk exposure from the different economic agents. Nevertheless, due to the increase in risk aversion in international markets, since the fourth quarter of 2008, liquidity in Mexico and in all emerging economies' exchange markets has decreased considerably.

In this context, and following the Foreign Exchange Commission's decisions, Banco de México's interventions in this market as of October 2008 aim at providing liquidity to this market after it shrank considerably as a result of the extraordinary demand from certain firms which incurred in significant losses in foreign currency due to operations with derivatives.

Summing up, the changes undergone by the institutional framework under which macroeconomic policy has been implemented for the last decades in Mexico have given more flexibility to the authorities to face the current economic situation. As a result of the policies adopted in the last few years, economic agents in Mexico now have more and better instruments to face an international economic environment characterized by recession and tighter conditions in financial markets.

[2] In January 23, 2009, international reserves amounted to 84.0 billion US dollars.

Monetary Program for 2009

Article 51 of Banco de México´s Law establishes that every January the Central Bank must send to both the President and Congress a statement on the monetary policy program to be followed that year.[71] In compliance with these regulations, following are the principles and guidelines under which monetary policy will be conducted in 2009.

As in previous years, in 2009, monetary policy in Mexico will be conducted under an inflation-targeting framework characterized by: 1) an announcement of an explicit multi-annual inflation goal; 2) a systematic analysis of both current economic conditions and inflation pressures; 3) a description of the central bank instruments used to attain its goal; and, 4) a communication policy to foster monetary policy's transparency, credibility, and effectiveness.[72]

1. Monetary Policy Objectives

Banco de México's monetary policy goal is to attain an annual CPI inflation of 3 percent and to remain around that level permanently. Nonetheless, although monetary policy is designed to achieve this goal, it is subject to a certain degree of uncertainty due to the multiple shocks the economy might face, and to the fact that the relation between monetary policy actions and its results regarding inflation is inaccurate.

For this reason, a variability interval of plus/minus one percentage point has been set around the 3 percent inflation target. The referred interval around the inflation target was not set as a margin of indifference or tolerance by the monetary authority. It only represents explicitly the inaccuracy that relentlessly surrounds the achievement of the inflation target due to the different shocks and deviations that may affect CPI inflation. It is important to emphasize that Banco de Mexico's monetary policy actions will focus on achieving and preserving a 3 percent inflation target. Nonetheless, due to the volatility of CPI inflation, in the short term, these actions could deviate temporarily from the target.

2. Monetary Policy Decisions

Central bank's monetary policy actions have a lagged effect on the economy, and especially, on the price level. For this reason, and in order to reach the inflation target, the monetary authority must base its decisions on a careful assessment of both the current economic conditions and the outlook for inflation.

Under an inflation targeting regime, when inflation pressures come from the demand side, it is recommended that the monetary authority should tighten the monetary policy stance in order to promptly contain these pressures from becoming widespread and therefore prevent a permanent rebound of inflation.

[71] See Article 51 of the Banco de México´s Law.

[72] The Monetary Program for 2001 includes some considerations on the decision for choosing inflation targeting as a framework for monetary policy.

On the contrary, when inflation pressures originate from the supply side, they usually reflect changes in relative prices, which affect inflation temporarily. In this case, the recommendation is that the monetary authority should not try to counter such pressures, as these only have a temporary effect on inflation. However, if the central bank considers that there is a high risk of these pressures contaminating inflation expectations and the determination of other prices, or of the balance of risks deteriorating significantly, it should thus tighten its monetary policy stance.

Identifying accurately the origin of inflation pressures and its possible effects on economic agents' expectations is therefore crucial for monetary policy decisions. Banco de México's monetary policy decisions are based on a systematic assessment of the current economic conditions and of the inflationary pressures originated by these conditions, using a wide range of variables and indicators, as well as different economic and statistical models.[73] This analysis allows for identifying those factors that affect the expected development of inflation in order to assess their impact on economic agents' inflation expectations and on the price determination process, which are key elements to determine the monetary policy stance.

3. Monetary Policy Implementation

Central banks have different instruments to conduct monetary policy, which are used to affect monetary conditions so that the stance of monetary policy is consistent with the attainment of the inflation target. Central banks usually have an operational target to guide monetary policy implementation.

Since January 21 2008, Banco de México adopted as an operational target the level of the overnight interbank interest rate (*tasa de fondeo bancario*). By functioning as a guide for monetary policy implementation, this instrument allows the central bank to inform on its monetary policy stance.

4. Communication Policy

In order to attain price stability through an inflation targeting framework, the central bank must clearly communicate to the public its objectives, strategy, and instruments. The announcement of inflation targets is important as it facilitates the convergence of economic agents' expectations to the central bank's goals. This measure responds to the central bank's commitment to take the necessary actions to attain the inflation target. Transparency in monetary policy decisions has allowed Banco de México's Board of Governors to explain the rationale behind its actions. Transparency generates more certainty among the public and fosters the attainment of the central bank's goals. Greater transparency, together with the communication policy, has also contributed to improve the central bank's accountability.

Among the main documents supporting Banco de México's communication strategy are the Monetary Program and the Inflation Reports. Since 2003, Banco de México has been announcing on pre-established dates its

[73] The forecast for the monetary base for 2009, which can serve as a reference to monitor the current economic conditions, can be consulted at Banco de México's web page (www.banxico.org.mx).

monetary policy decisions, together with a press release explaining the Board of Governors' decisions regarding the monetary policy stance.[74]

The proper functioning of the financial system is necessary for the sound performance of the economy and because it fosters the proper environment to achieve price stability. Under the current environment of international financial turbulence, Banco de México's actions will continue to pursue the assurance of the orderly functioning of financial markets in Mexico.

[74] These dates are published in the Inflation Report of the third quarter of the previous year.