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### **INFLATION REPORT**

This report analyzes the development of both inflation and the economy in Mexico, as well as different domestic economic indicators, in compliance with Article 51, last section, of Banco de México's Law.

### **FOREWARNING**

This text is provided for reader's convenience only. Discrepancies may possibly arise between the original document and its translation to English.

The original and unabridged Inflation Report in Spanish is the only official document.

Unless otherwise stated, this document has been prepared using data available as of August 13, 2012. Figures are preliminary and subject to changes.

### **CONTENTS**

1.	Introd	luction		1		
2.	Recei	Recent Developments of Inflation3				
	2.1.	Inflation	າ	3		
	2.2.	Wages		14		
3.	Econo	omic and	Financial Environment	16		
	3.1.	Internat	tional Environment	16		
			World Economic Activity			
		3.1.2.	International Financial Markets	19		
		3.1.3.	Commodity Prices	23		
		3.1.4.	World Inflation Trends	24		
	3.2.		pment of the Mexican Economy			
			Economic Activity			
		3.2.2.	Financial Saving and Financing in Mexico	31		
4.	Mone	tary Polic	cy and Inflation Determinants	39		
5.	Inflati	on Forec	asts and Balance of Risks	48		
ВС	X					
1.			s on the Impact of International Commodity Price Fluctuations on ces in Mexico	7		



### 1. Introduction

Global economic growth slowed down during the second quarter of the year, mainly driven by the problems in the Euro zone, a more modest than anticipated U.S. recovery, and a greater than expected slowdown in major emerging economies, except for Mexico. This deterioration of the external environment affected the Mexican economy by means of two shocks: lower external demand and increased risk premia associated with periods of great uncertainty in international financial markets.

The first shock relates to a U.S. GDP growth rate that was lower than expected by economic analysts, predominantly resulting from a less dynamic industrial production in recent months, weakness of the main aggregate demand components and the fact that the employment recovery lost momentum in this country. As to the second shock, growing uncertainty about the Euro zone problems led to an increase in risk premia during the reference quarter, especially in Spain where, despite the announcement of different measures aimed at addressing this country's problems, the referred premia have not decreased significantly. However, as a result of the steps taken by European authorities to strengthen financial and fiscal integration in the Euro zone, this uncertainty has partially reverted in recent weeks. Although these measures provided a temporary relief to financial markets, great uncertainty prevails regarding their implementation and effectiveness, such that a catastrophic event in Europe cannot be ruled out yet.

This environment of less dynamic economic activity and greater uncertainty in international financial markets had important effects on emerging economies. Even though their economic performance compares favorably to that of advanced economies, a substantial number of them, including China, India and Brazil, decelerated significantly. Additionally, capital flows towards emerging economies became more volatile, which was reflected in their financial markets. Given greater risk aversion, currencies depreciated in most of these economies during the second quarter of the year.

Growing concern regarding world growth prospects was also reflected in a considerable reduction in international commodity prices, with the exception of some grains due to climatic reasons, during the second quarter of 2012. In this regard the drop in energy prices is noteworthy.

In line with the slowdown of world economic growth and the concomitant decline in main international commodity prices, lower inflation levels in 2012 and 2013 than those in 2011 are anticipated in most countries, with very low levels in the case of advanced economies. Hence, in these economies and in a great number of emerging ones a monetary policy easing has taken place, reaching an unprecedented level of lassitude. It is even likely that in various advanced and emerging economies still more accommodative monetary stances are adopted in the following months.

The solid fundamentals of the Mexican economy have contributed to its favorable evolution in the second quarter of 2012, despite the deterioration of the external environment. Indeed, in this period the economic activity in Mexico



continued its positive trend, reflecting a dynamic expansion of the external sector and a persistent growth of domestic spending. In this context, the forecasts for the evolution of the Mexican economy remain unchanged with respect to the previous Inflation Report. Nevertheless, this Inflation Report recognizes that the balance of risks has worsened in relation to the growth of the economy, as a consequence of the above described international environment. Particularly, due to the slowdown demonstrated by some indicators of the U.S. economy and downward revisions in the growth prospects for the U.S. industrial production, the Mexican economy is more likely to be affected by the deepening of the negative demand shock.

During the second quarter of 2012, annual headline inflation was practically the same as in the previous quarter, locating in both quarters below the upper bound of the variability interval of plus/minus one percentage point around the 3 percent target. However, in June annual headline inflation rose and exceeded the referred bound. This was a result of changes in the relative price of a reduced number of agricultural products, whose production was affected by climatic factors, rather than a result of a widespread phenomenon of price increases of the CPI basket. Therefore, the increase in inflation is expected to be transitory. It stands out that so far no second round effects, derived from changes in relative prices registered in the economy, have been observed in the price formation process.

The inflation forecast, considering higher inflation in June 2012, estimates annual headline inflation to most likely locate between 3 and 4 percent in the forecast horizon that extends till the fourth quarter of 2013, with the exception of the third quarter of 2012. In the case of annual core inflation, it is expected to be close to 3 percent towards the end of 2012 and to fluctuate around this level in 2013. As regards the balance of risks for inflation, in the short run upward risks associated to the performance of agricultural products' prices have increased, in particular, given the recent outbreak of avian influenza in certain locations of the country and its possible effect on livestock production. Nevertheless, in the medium term downward risks are considered to have intensified inasmuch as a severe weakening of the world economy has become more likely.

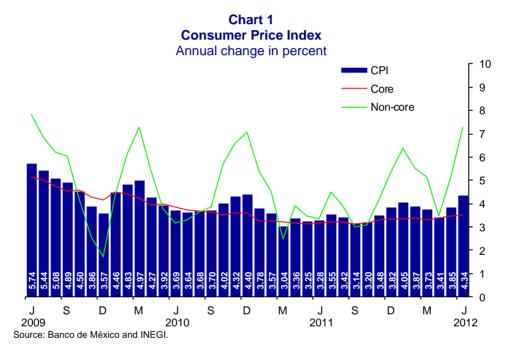
In light of the aforementioned, Banco de México's Board of Governors decided to maintain the Overnight Interbank Interest Rate unchanged during the period analyzed in this Inflation Report and considers the current monetary policy stance as conducive to reaching the 3 percent permanent inflation target. In the future, the Board will continue to monitor the evolution of all inflation determinants, given that their performance could make it advisable to adjust the monetary policy stance to make it more or less restrictive, depending on the given scenario, pursuing at all times the convergence of inflation to its 3 percent permanent target. Special attention will be paid to relative price changes, deriving from both agricultural products and exchange rate fluctuations, so that they do not generate second round effects on inflation dynamics.



### 2. Recent Developments of Inflation

### 2.1. Inflation

During the second quarter of 2012, average annual headline inflation was 3.87 percent, while in the previous one it was 3.88 percent, thus locating in both quarters within the variability interval of plus/minus one percentage point around the 3 percent inflation target (Chart 1 and Table 1). However, by the end of the second quarter annual headline inflation rebounded and even exceeded the upper bound of the referred interval. Higher annual headline inflation exhibited in June was mainly a result of a higher incidence of a reduced number of vegetables, whose relative price changed, rather than a result of a widespread phenomenon of price increases of the CPI basket. Therefore, the referred increase in annual inflation is expected to be transitory.



Average annual core inflation was considerably lower than average annual headline inflation, although it increased as compared to the previous quarter. In particular, during the second quarter of 2012, it was 3.46 percent, while in the first quarter it was 3.34 percent (Table 1 and Chart 2). Within this subindex, average annual services core inflation —which better reflects domestic inflation determinants— remained below 3 percent during the analyzed quarter, being 2.55 percent as compared to 2.28 percent in the previous quarter (Table 1 and Chart 3). This was mainly a result of the behavior of cellphone services, whose price index declined less than in the same period in 2011. Thus, the average annual change of cellphone prices went from -15.07 percent in the first quarter to -8.99 percent in the second one.

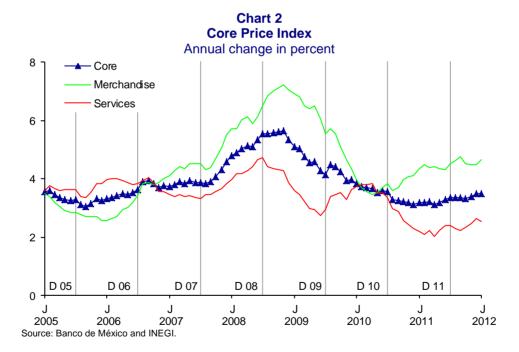


Table 1
Consumer Price Index and Components

Annual change in percent

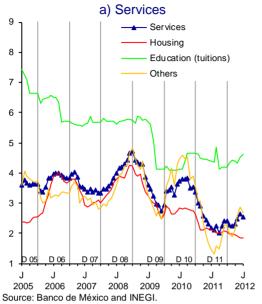
		Annual change					Average percent	
	January	February	March	April	May	June	Q-I	Q-II
	2012	2012	2012	2012	2012	2012	2012	2012
Pl	4.05	3.87	3.73	3.41	3.85	4.34	3.88	3.87
Core	3.34	3.37	3.31	3.39	3.48	3.50	3.34	3.46
Merchandise	4.64	4.75	4.51	4.48	4.50	4.66	4.63	4.55
Food, beverages and tobacco	7.18	7.30	6.63	6.42	6.32	6.43	7.03	6.39
Corn tortilla	18.79	18.22	14.16	12.45	11.82	12.12	17.01	12.13
Sugar	19.05	17.56	16.41	11.89	11.66	10.26	17.69	11.27
Pastries	11.22	11.73	11.98	11.71	10.00	7.79	11.64	9.81
Non-food merchandise	2.72	2.82	2.89	3.00	3.11	3.29	2.81	3.13
Services	2.28	2.23	2.32	2.48	2.63	2.54	2.28	2.55
Housing	1.99	1.98	1.94	1.90	1.86	1.85	1.97	1.87
Education (tuitions)	4.32	4.42	4.38	4.33	4.53	4.62	4.37	4.49
Other services	2.01	1.88	2.14	2.57	2.88	2.67	2.01	2.71
Cellphone services	-13.44	-15.77	-15.98	-8.26	-6.83	-11.87	-15.07	-8.99
Non-core	6.38	5.53	5.12	3.49	5.15	7.26	5.68	5.27
Agricultural	7.37	5.45	5.06	0.86	5.60	11.29	5.97	5.80
Fruit and vegetables	0.07	-4.40	-5.05	-13.50	-2.14	12.75	-3.10	-1.69
Livestock	12.71	12.54	12.12	11.58	10.79	10.37	12.46	10.91
Eggs	21.69	15.95	12.01	11.98	7.30	5.90	16.49	8.39
Chicken	9.66	11.63	11.05	9.04	8.63	6.91	10.78	8.19
Energy and government approved fares	5.82	5.58	5.16	5.00	4.89	5.02	5.52	4.97
Energy	7.98	8.00	7.65	7.52	7.65	7.87	7.88	7.68
Government approved fares	1.93	1.21	0.61	0.55	0.33	0.30	1.25	0.39
CPI excluding food (at home and away from home) and energy <sup>1</sup>	2.18	2.14	2.16	2.27	2.39	2.36	2.16	2.34

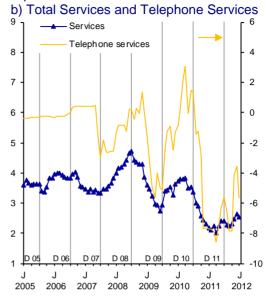
<sup>1/</sup> Excludes food at home (processed food, non-alcoholic beverages and agricultural products), food away from home and energy. Source: Banco de México and INEGI.











During the second quarter of 2012, average annual merchandise core inflation was still higher than that of services, although it declined as compared to the first quarter due to the lower growth pace of the food, beverages and tobacco group prices. Thus, in the reference quarter average annual merchandise core inflation was 4.55 percent, while in the previous quarter it was 4.63 percent (Table 1 and Chart 4). This is in line with the relative price changes previously anticipated by Banco de México, resulting from the exchange rate depreciation in the second part of 2011, as well as the increased international commodity prices in the first half of 2011 (see Box 1 for a more detailed analysis of the relation between international commodity prices and domestic prices). In this regard, it is noteworthy that the pass-through of the exchange rate depreciation to prices was limited, in line with the following:

- i. Even though economic activity maintained its dynamism, aggregate demand did not grow sufficiently enough to propitiate a greater pass-through of the exchange rate adjustment to prices.
- ii. Stability exhibited by inflation expectations.
- iii. Opinion of firms' executives recently surveyed by Banco de México regarding their price revision strategies in an environment of exchange rate volatility.<sup>1</sup>
- iv. Statistical evidence documented by Banco de México.<sup>2</sup>

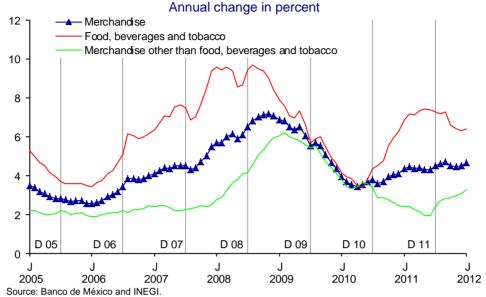
See Report on Regional Economies, January-March 2012.

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See Inflation Report, January-March 2011, Technical Chapter "Exchange Rate Pass-through to Prices", Banco de México, May 2011.







The performance of the CPI core component suggests the evolution of economy's price formation process to be in line with the convergence process of inflation to the 3 percent permanent target. This is further proven by considering the evolution of an inflation indicator, calculated as the CPI excluding food and energy —which are the expenditure groups exhibiting significant supply shocks since the beginning of last year. In this context, the average annual change of the mentioned index, coinciding with the definition of core inflation as used in different countries, including the U.S., was 2.34 percent in the second quarter of 2012 (in the previous quarter it was 2.16 percent, Table 1 and Chart 5).

Average annual non-core inflation declined during the first and the second quarter of 2012 from 5.68 to 5.27 percent (Table 1 and Chart 6). This reduction was driven by the slowdown in the price growth of the following goods and services' groups: livestock, and energy and fares determined at different government levels (Chart 7). However, the behavior of annual non-core inflation was characterized by a high degree of volatility and, by the end of the quarter, rebounded considerably, exceeding the 7 percent level. This was a consequence of the performance of some vegetable prices, such as tomato and tomatillo, whose annual change rates increased from -34.24 to 37.15 percent, and from 1.29 to 55.87 percent, respectively during March and June 2012.



# Box 1 Considerations on the Impact of International Commodity Price Fluctuations on Consumer Prices in Mexico

### Introduction

This box analyzes the impact of the increase in international energy and grain prices, exhibited since the middle of the previous decade, on consumer prices in Mexico. Two effects will be considered: direct and indirect. The first refers to the impact that foreign price quotes can have on domestic consumer prices of grain-derived products and on national energy products. The second effect considers the possible impact on the price formation process of the rest of goods and services of the CPI basket, which are not directly derived from or equivalent to the mentioned commodities, even if they may represent a fraction of their production costs, as in the case of energy.

The second effect is of special interest for the monetary authority, since the response of a central bank to inflationary pressures derived from commodity price increases is driven by the existence of these second round effects. In this regard, Banco de México states in the Monetary Policy Program for 2012 (p.4) that when inflationary pressures stem from a supply shock, in general it is not advisable for a central bank to counteract these pressures. Supply shocks correspond to relative price changes, which in principle propitiate a single increase in the CPI. Further, in the mentioned program, Banco de México points out that if in the case of an inflation increase due to supply disturbances, economic agents start revising their inflation expectations upwards, this would negatively affect the price formation process. These would be second round effects. In this context, inflation control would be at risk, so that the central bank would need to restrict the monetary policy stance.

The statistical analysis presented here is based on a vector autoregressive model (VAR), similar to the one presented in the Technical Chapter "Exchange Rate Pass-through to Prices" published in the Inflation Report, January-March 2011. This model distinguishes itself in two aspects: first, commodity types are specified in greater detail; and second, other price indices are considered. On the other hand, the analysis period encompasses from January 2002 to May 2012. This period has been chosen, since inflation represents a stationary process in this timespan.<sup>1</sup>

The results obtained from the statistical analysis show that, in general, there is no evidence regarding second round effects on the price formation process in Mexico associated with international commodity price quotes.

### 1. Evolution of International Commodity Prices

International energy and grain prices registered important increases in their level and volatility since the middle of the previous decade. The upward trend started to emerge in 2004 in the case of energy prices and in 2006 in the case of grains (Chart 1). This had a direct effect on inflation at both the international and domestic level: in the case of energy products, since they are part of the CPI basket, and in the case of grains due to their impact on the cost structure of processed foods that use grains as inputs.

Chart 1

International Energy and Grain Prices
Index base 2005 = 100

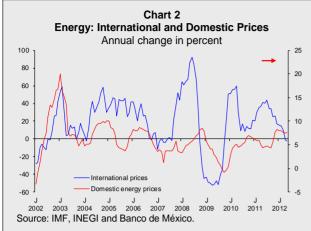
Compound com, wheat and soybean index
Energy index

In the case of consumer energy prices in Mexico, even though the policy of energy price increments established by the federal government isolated them from short-term fluctuations in international prices, the observed trend of the latter has been a determining factor of this policy in the medium term (Chart 2). In turn, in the case of grains, domestic consumer prices of derived goods reflected to a greater extent the short-term dynamics of international prices (Chart 3).

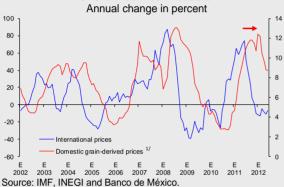
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For more information on the stationarity of the inflation process in Mexico, see Chiquiar, D., Noriega E. A. and M. Ramos Francia, (2010). Stationarity is a statistic property of a time series, implying that it is stable around a constant level and variance.



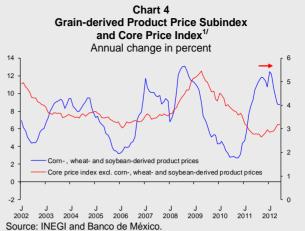


## Chart 3 International Grain Prices and Domestic Prices of Grain-derived Products<sup>1/</sup>



1/ Products derived from corn: corn tortilla, tostadas, corn dough and flour and corn (CPI weight 1.75 percent). Products derived from wheat: sweet bread, white bread, sliced bread, cakes, small cakes and packed and fresh bread, small cakes and cakes sold by weight, crackers, noodles, wheat flour tortillas, wheat flour and cereal flakes (CPI weight 1.80 percent). Products derived from soybean: edible vegetable oils and fats, mayonnaise and mustard, French fries and similar (CPI weights 0.40 percent).

Despite the aforementioned, the evolution of inflation in Mexico suggests that the international commodity price increase during the last years had a relatively limited effect on prices of consumer goods and services, which are not equivalent or derived from these commodities. Thus, by comparing the evolution of the annual consumer price changes of the grain-derived products and those corresponding to core inflation, excluding these goods, there is no clear correlation between them (Chart 4). Further, a similar comparison of annual changes of the energy price subindex with the complete core index, as it doesn't contain energy-derived products, does not show a clear relation between them either (Chart 5).



1/ It refers to core inflation excluding corn-, wheat- and soybeanderived products.
Chart 5

# Energy Price Index and Core Price Index Annual change in percent Energy price subindex Core price subindex 4 3 2002 2004 2006 2008 2010 2012

### 2. Estimation of the Pass-through of International Grain Prices to the CPI

Source: INFGI and Banco de México.

The statistical evaluation of the pass-through of international grain prices to prices in Mexico includes two types of exercises. First, the direct impact is estimated by means of an econometric model, which considers the effect of international grain prices on the consumer price indices of those goods that use grains as main input. Second, the second round effects on core inflation are calculated, i.e., the impact of international grain prices on domestic prices of consumer goods and services, which are not derived from grains. For a precise estimation of these impacts, both exercises control for macroeconomic variables.

The analysis is based on a recursive VAR model, which is a widely used tool to study the interaction of a set of variables in the case of shocks to some of them. The included variables are those typically used to model price-taking economies (i.e., small open economies). As mentioned before, the model is similar to the one presented in the Technical Chapter "Exchange Rate Pass-through to Prices" published by Banco de México in the Inflation Report, January-March 2011. However, it is different in two aspects:



first, commodity price indices are disaggregated at a higher level, since they distinguish among energy and grains; and second, price indices for domestic inflation are different, since in this case a core inflation index excluding grain-derived products, and for energy products, the core inflation are used.

Endogenous variables are the Global Economic Activity Indicator (IGAE, for its Spanish acronym), the interest rate of 91-day Treasury bonds, USD/MXN exchange rate, price indices of corn-, wheat-, soybean-derived products, and the CPI excluding grain-derived product prices. Additionally, exogenous variables, such as U.S. industrial production, federal funds rate, U.S. CPI and international corn, wheat and soybean prices, are included. Throughout the analysis exogenous variables are assumed to affect domestic variables, but not vice versa, given that the model considers the Mexican economy as price-taker at the global level.

As in the exchange rate pass-through model introduced in the Technical Chapter mentioned before, except for the interest rate and the federal funds rate, which are displayed in percentage points, the remaining variables are expressed as annual change in percent.<sup>2</sup> Data are monthly and comprise the period from January 2002 to May 2012 (the end of the period is defined according to availability of IGAE data).

The mechanism used to identify shocks to international commodity prices is recursive. The annual change of international commodity prices takes place first, then the price change of their derived domestic products, followed by the annual change of the CPI excluding grain-derived product prices. In the calculus of the second-round effects, the annual change of the core component excluding grain-derived products is included last (in this case the referred variable replaces the CPI that excludes the grain-derived products). This allows the immediate pass-through of commodity price shocks to domestic prices. The remaining variables are set like in the model in the mentioned Technical Chapter.

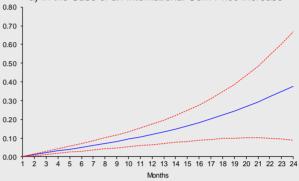
The obtained results show that, as expected, given the evidence in Chart 3, the fluctuations of international corn, wheat and soybean prices impact consumer prices of grain-derived products in Mexico. In particular, the exercise yields pass-through elasticities at a 24-month horizon of 0.38, 0.63 and 0.49 for corn, wheat and soybean, respectively (Chart 6).<sup>3</sup> Thus, for

$$PT = \frac{\Delta \% X_{t,t+\tau}}{\Delta \% Y_{t,t+\tau}}$$

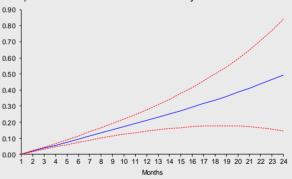
corn this implies that a one percentage point increase in the international corn price leads to a 0.38 percentage point increase in the Mexican corn price after two years. This implies that the price pass-through is partial, of low magnitude and lagged, which is in line with the results shown in Chart 3.

# Chart 6 First Round Effect on Accumulated Inflation of Grain-derived Products in the Case of an International Grain Price Increase<sup>1/</sup>

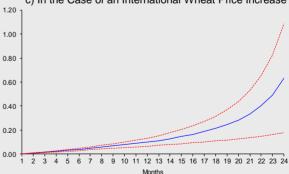
Pass-through elasticity
a) In the Case of an International Corn Price Increase



b) In the Case of an International Soybean Price Increase



c) In the Case of an International Wheat Price Increase



Source: Calculated by Banco de México with data from different sources.

1/ Red dotted lines represent a 95% confidence interval around the estimated elasticities.

Choudhri et al. (2005) and Capistrán et al. (2011), just like in the present exercise, express the variables used in their models as annual changes, except for the interest rates.

 $<sup>^3</sup>$   $\,$  Accumulated pass-through elasticity (PT) in period  $\tau$  is defined as:

where  $\Delta \% X_{t,t+\tau}$  is the percentage change in the level of variable X  $\tau$  periods after the shock occurred, and  $\Delta \% Y_{t,t+\tau}$  is the percentage change in the level of variable Y in the same period.



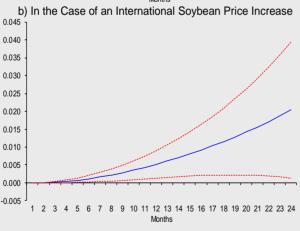
In the analysis of second round effects a recursive VAR is estimated like the one mentioned above. replacing the CPI without grain-derived products prices with a core price index, which excludes grain-derived products. The results suggest that, in general, second round effects are practically zero. In fact, in the case of corn- and wheat-derived products, the mentioned second round effect is not statistically different from zero. On the other hand, in the case of soybeanderived products, the pass-through is very low, since the elasticity after 24 months is 0.02 (Chart 7). This means that, in the case of a one percentage point increase, the second round effect on core inflation, which excludes grain-derived products, would be 0.02 percentage point after two years. The absence of considerable second round effects is associated with an environment of low and stable inflation, where economic agents can adequately differentiate between different shocks that affect the economy.

# Chart 7 Second Round Effect on Accumulated Core Inflation (Excluding Grain-derived Products) in the Case of an International Grain Price Increase 1/

Pass-through elasticity
a) In the Case of an International Corn Price Increase

0.01
0.00
-0.01
-0.02
-0.03
-0.04
-0.05
-0.06
-0.07
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

Months





Source: Calculated by Banco de México with data from different sources.

1/ Red dotted lines represent a 95% confidence interval around the estimated elasticities.

### 3. Estimation of the Pass-through of International Energy Prices on Core Inflation

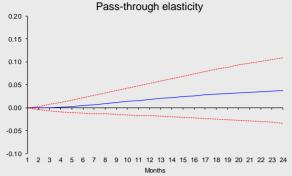
In the case of energy products, the domestic price evolution is determined by the policy of energy price increments established by the federal government. Thus, as mentioned, in the short term, fluctuations of international prices do not have a direct relation with domestic price quotes. However, the trend of international energy prices is a determining factor of the domestic policy of price increments, due to the fiscal costs implied by implicit subsidies (Chart 2).

Thus, the statistical exercise relevant for the case of energy products only considers the impact of domestic energy price variations on core inflation, i.e., whether they cause second round effects. To this end, a recursive VAR, like the one mentioned before, is estimated considering the energy price index, the core price index and the same control variables. In this case, the annual change of energy prices is placed before the price change of the core price index.

The results of this analysis show that the second round effects of the energy price variations on the core price index are not statistically different from zero (Chart 8). This is in line with the situation where the occurrence of relative price changes does not affect the price formation process or inflation expectations. This possibly occurs as a result of the credibility of central bank's commitment to price stability.



# Chart 8 Second Round Effect of an Energy Price Increase on Accumulated Core Inflation 1/



Source: Calculated by Banco de México with data from different sources.

1/ Red dotted lines represent a 95% confidence interval around the estimated elasticities.

### 4. Final Remarks

The increase exhibited by international commodity prices since the middle of the previous decade affected inflation in Mexico and worldwide. However, statistical evidence obtained for Mexico suggests that this direct impact has only affected equivalent goods in the CPI basket or goods and services derived from these commodities, and that, in general, no considerable second round effects on the price formation process were observed. This proves the effectiveness of the monetary policy in Mexico under

an inflation-targeting scheme, together with a prudent fiscal policy, to maintain an environment of low and stable inflation. All this because these conditions allowed economic agents an adequate identification of shocks that might affect the economy and contributed to maintaining inflation expectations anchored, even in an environment of considerable price adjustments in some relative prices in the economy.

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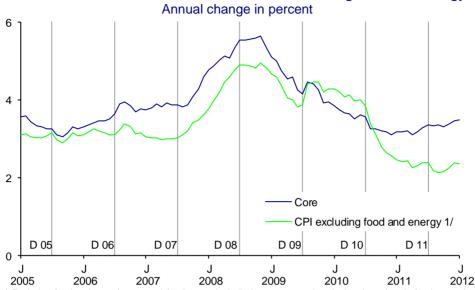
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1/ Excludes food at home (processed food, non-alcoholic beverages and agricultural products), food away from home and energy.

Source: Banco de México and INEGI.

The energy and government approved fares' subindex registered an average annual change rate of 4.97 percent during the second quarter of 2012, while in the first quarter it was 5.52 percent (Table 1 and Chart 7). This result was mainly due to a reduced incidence of the government approved fares' group. Lower average annual growth rates of vehicle procedures stand out in the second quarter of 2012 as compared to the previous one, since vehicle maintenance fees were eliminated (changing from 43.20 to -68.54 percent), taxi services declined from 5.52 to 3.79 percent, and water supply fees dropped from 4.26 to 2.99 percent.



Chart 6
Non-core Price Index
Annual change in percent

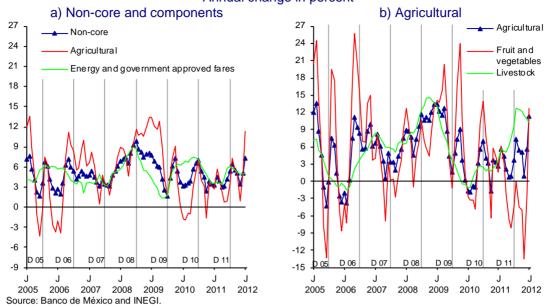
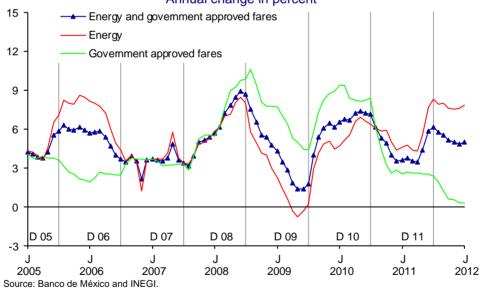


Chart 7
Non-core Price Index: Energy and Government Approved Fares
Annual change in percent



In general, given the presented evidence, it can be concluded that inflation during recent months has been affected by external shocks, not originated exclusively in Mexico. Even though the monetary policy should not automatically respond to these relative price changes, it is important for the Board of Governors to remain attentive in order to prevent these shocks from affecting inflation dynamics in the future.

Regarding the Producer Price Index (PPI) of final merchandise and services, excluding oil, its average annual change during the second quarter of



2012 was 5.16 percent (in the previous quarter it was 5.14 percent, Chart 8). Merchandise and services subindices of this indicator performed similarly to their CPI counterparts. The average annual growth rate of the merchandise PPI was 6.07 percent, as compared to 6.14 percent in the previous quarter, while the services PPI registered a rate of 4.30 percent (in the first quarter it was 4.18 percent).

**Producer Price Index Excluding Oil** Annual change in percent 11 PPI: final merchandise and services 10 PPI: final merchandise 9 PPI: final services 8 7 6 3 Ш IV Ш Ш IV Ш Ш IV Ш Ш IV Ш 2008 2009 2010 2011 2012 Source: Banco de México and INEGI.

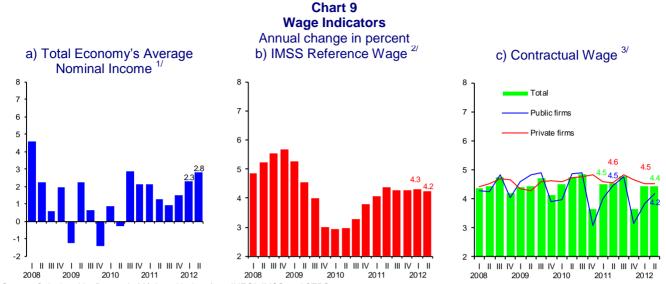
**Chart 8** 

### 2.2. Wages

The recent performance of different wage indicators suggests that labor costs, in general, still do not represent a factor generating inflationary pressures. Thus, in the second quarter of 2012, the annual change of the average nominal income of total economy's workers was 2.8 percent, as compared to 2.3 percent in the previous quarter (Chart 9a). Regarding IMSS-insured workers' remuneration, the IMSS reference wage (*Salario Base de Cotización*) registered an annual change rate of 4.2 percent in the second quarter of 2012, while in the previous quarter it was 4.3 percent (Chart 9b). Further, contractual wages negotiated by firms under federal jurisdiction increased by 4.4 percent in annual terms in the second quarter of 2012, as compared to 4.5 percent in the first quarter (Chart 9c).<sup>3</sup>

The IMSS reference wage (Salario base de cotización, SBC) considers the daily average earnings of IMSS-insured workers during a certain period and some fringe benefits (e.g., end-of-year bonuses, vacation bonuses and commissions), while contractual wages include only direct increases in the reference wage rate negotiated by workers of firms under federal jurisdiction that will be in effect for the following 12 months. It is noteworthy that the monthly composition of this indicator is based on information from firms that were engaged in wage settlements, usually during the same period of the year. For this reason, it follows a seasonal pattern. As a result, when analyzing the reference wage it is preferable to compare successive time periods, while in the case of contractual wages the relevant comparison is interannual.





Source: Calculated by Banco de México with data from INEGI, IMSS and STPS.

<sup>1/</sup> The average monthly income is calculated based on the hourly wage and the number of hours worked in the given period. The data from 2011 are preliminary and are based on INEGI demopraphic projections.

2/ During the second quarter of 2012 an average of 15.7 million contributors were registered in the abovementioned institute.

<sup>3/</sup>The number of workers in firms under federal jurisdiction that annually report their wage increases to the Secretary of Labor and Social Welfare (Secretaría del Trabajo y Previsión Social (STPS)) equals approximately 2 million.



### 3. Economic and Financial Environment

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2011

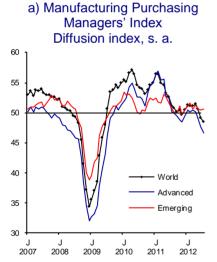
Source: Blue Chip.

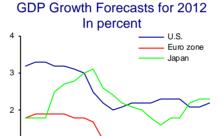
### 3.1. International Environment

### 3.1.1. World Economic Activity

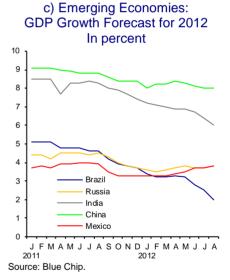
After stabilizing in the first quarter of 2012, world economic growth slowed down in the second quarter, while downward risks increased notably. Among the factors contributing to the deterioration in the world economic outlook stand out the following: i) the deepening of sovereign debt and banking system problems of some Euro zone countries, as well as sluggish economic activity in major countries of the region; ii) a U.S. recovery more moderate than anticipated; and iii) a greater than expected slowdown in the economic activity in major emerging economies. In this context, leading indicators point to a less dynamic world economic activity in the following months. Given this, the main economies' growth expectations for the whole year declined, although there where some exceptions, with Mexico standing out among them (Chart 10).

Chart 10 Indicators of Advanced and Emerging Economies





b) Advanced Economies:



s. a. / Seasonally adjusted figures.

Source: Elaborated by Banco de México with data from IMF, ISM and Markit.

In the U.S., economic activity was less dynamic than until recently anticipated. Its quarterly annualized GDP growth rate was 1.5 percent in the second quarter of the year, as compared to 2.0 percent in the first one. Industrial production growth and, particularly, that of the manufacturing sector has moderated, partly reflecting lower impulse of external demand (Chart 11a). Furthermore, employment growth, that showed signs of recovery in the first months of the year, lost momentum. Although non-farm jobs increased by 163 thousand in July, which was above the average of 73 thousand jobs registered in the second quarter, this figure is still well below the average of 226 thousand jobs

ASONDJFMAMJJA

2012

<sup>&</sup>lt;sup>4</sup> According to the advance report of Bureau of Economic Analysis (BEA).

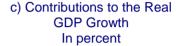


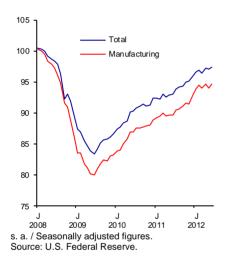
in the first quarter of the year (Chart 11b). In turn, the unemployment rate shifted from 8.1 percent in April to 8.3 percent in July.

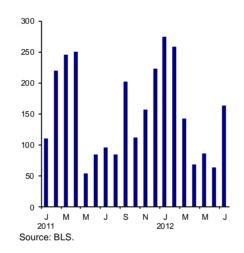
Major aggregate demand components in the U.S. also registered lower growth. Even though consumption expenditure demonstrated strength in the first months of the year, in the second quarter its expansion slowed down, reason for which its contribution to GDP growth dropped from 1.7 to 1.1 percentage points (Chart 11c). The less vigorous consumption reflected the recent weakness of the referred employment recovery and the somewhat deteriorated confidence of households, which are still in the process of reducing their indebtedness.

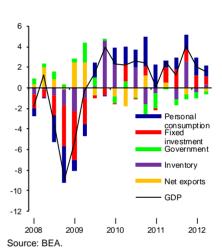
a) Industrial and Manufacturing Production Index 2007=100, s. a.

Chart 11
U.S. Economic Activity
b) Non-farm Payroll Monthly Change
In thousands of jobs









Despite considerable liquid funds at U.S. firms' disposal, non-residential fixed investment just grew 5.3 percent in quarterly annualized terms in the second quarter of the year, below the rate of 7.5 percent in the first quarter. This possibly reflected both uncertainty regarding the fiscal consolidation process in this country, and world economic growth prospects. Reduced investment also possibly reflects lower growth of external demand. Particularly, the growth rate of U.S. exports to Asia, especially China, and to Europe decreased considerably.

In the Euro zone, available indicators suggest a GDP contraction in the second quarter, spreading to some of the main economies in the region. In this regard, a drop in German industrial production stands out, which contracted in the second quarter at an annualized rate of 1.8 percent as compared to the first one. Economic activity in the region was affected by deteriorated consumer confidence (Chart 12a), by less bank credit due to additional capital requirements (Chart 12b) and, in general, by the deleveraging process households, firms and governments are going through. As a consequence, the unemployment rate kept growing in most countries of the region (Chart 12c).

In sum, the deleveraging process, together with the absence of a definite solution to fiscal and banking problems in the Euro zone, further



undermined economic activity. Thus, a negative feedback loop among the low economic growth, banks' vulnerability and problems to sustain the sovereign debt in various countries in the Euro zone has accentuated.

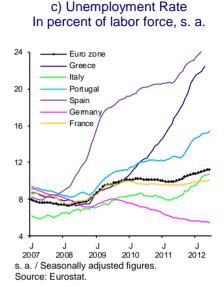
a) Consumer Confidence Diffusion index, s. a. 20 0 -20 -40 -60 Euro zone Greece -80 Portugal Spain Germany -100 France 2009 2010 s. a. / Seasonally adjusted figures.

Source: European Commission.

**Euro Zone Economic Indicators** b) Credit of Financial Institutions to Private Sector Annual change in percent 16 Non-financial corporations Households 12 Total 8 4 0 2007 2008 2009 2012

Source: ECB.

Chart 12



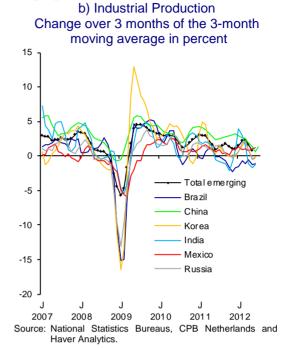
The growth rate of major emerging economies also fell in the second quarter of the year, reflecting in some cases certain weakness of domestic demand, as well as lower demand for their exports (Chart 13a). In particular, economic activity in China kept decelerating more than expected. Its GDP expanded at an annual rate of 7.6 percent in the second quarter, its lowest value in more than three years. The measures of monetary and credit tightening adopted in the past, which, as mentioned below, started to be offset, contributed to the weakening of domestic demand, at the same time as lower external demand, especially from Europe, negatively affected this country's exports. Similarly, in other emerging economies, such as India, Brazil, Korea and Russia, economic activity slowed down considerably in the second quarter of the year (Chart 13b).



Chart 13
Economic Activity in Emerging Countries

Change over 3 months of the 3-month moving average in percent 15 10 5 n -5 Total emerging -10 Latin America Asia -15 Europe -20 2007 2008 2009 2010 2011 2012 Source: CPB Netherlands.

a) Exports



### 3.1.2. International Financial Markets

The favorable effects of the measures adopted by the Euro zone authorities to tackle the crisis at the end of last year and during the first months of this year, particularly the implementation of long-term refinancing operations (LTROs) by the European Central Bank (ECB), faded during the second quarter. Thus, conditions in international financial markets deteriorated, registering high volatility given intensified difficulties to refinance sovereign debt as well as difficulties in the banking system in various Euro zone countries. This was also a result of a weaker than anticipated recovery in the U.S. and investors' concern over the degree of fiscal adjustment that could be applied in 2013, its possible effect on this economy's dynamism, as well as prospects of lower growth in emerging economies in general.

Deteriorated conditions in financial markets during the second quarter were influenced, among other factors, by the results of Greek elections in May, which required a second round and intensified uncertainty regarding this country's disposition to remain firm in its commitments with the International Monetary Fund (IMF) and the European Union (EU) agreed upon in March.<sup>6</sup> With the results of the elections in June, these fears subsided at least temporarily, and this contributed to easing tensions in financial markets.<sup>7</sup> In turn, the difficulties to maintain confidence in the solvency of the Spanish financial system in light of

In addition to LTROs, the measures also included the Treaty on Stability, Coordination and Governance, aimed at strengthening fiscal discipline and improving the monitoring within the Euro zone, the approval of a second bailout program for Greece of EUR 130 billion, as well as the agreement to combine the European Stability Mechanism (ESM) with the European Financial Stability Fund (EFSF) in order to increase the emergency lending capacity in the Euro zone from EUR 500 billion to EUR 700 billion.

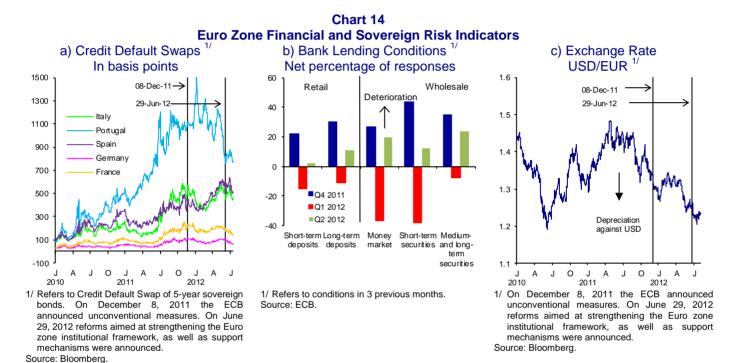
See Inflation Report January-March 2012, Banco de México, May 2012.

The first round of elections was carried out on May 6, 2012. The second round took place on June 17, 2012.



problems to recapitalize banks and to reach fiscal consolidation targets, also contributed to intensified uncertainty in financial markets. In this regard, it is noteworthy that at the end of June Moody's downgraded the credit rating of 28 Spanish banks between 1 and 4 levels, which also exacerbated uncertainty regarding this country's banking situation.<sup>8</sup>

In this environment, a substantial increase in credit default swaps, higher pressures on bank funding conditions and a strong depreciation of the EUR against major currencies, in particular, against the USD, were observed (Chart 14). A greater feedback loop among weakened economic activity, banks' vulnerability and the difficulty of some governments of the region to access sovereign debt markets intensified the risk of a greater contagion to international financial markets.



To face this situation, at the beginning of June the European authorities announced a set of measures that allowed certain recovery of financial markets. Among them stand out the following:

a. The credit application of up to EUR 100 billion by the government of Spain by means of mechanisms of regional support (EFSF and ESM), in order to recapitalize this country's banks.<sup>9</sup>

Another element that contributed to the deterioration of conditions in financial markets was the fact that Cyprus, in light of its high exposure to the Greek banking system, applied for financial assistance from EFSF/ESM, in order to meet its fiscal targets and those of bank recapitalization. This was announced after the rating agency Fitch joined Moody's and Standard & Poor's, and downgraded this country's credit rating below investment grade.

The approval of this financing by the European authorities, announced on July, 20, establishes that the Spanish government will continue being responsible for this financing and will sign the so-called Memorandum of Understanding and the Financial Assistance Facility Agreement. The specified amount of credit will be determined based on the analysis of capital requirements of each bank envolved. The loans will have average maturities of up to 12.5 years and a maximum duration of 15 years. At the



- b. The Spanish government commissioned to external evaluators a diagnostic exercise regarding the possible capital needs of this country's financial institutions.<sup>10</sup>
- C. The reduction of the minimum rating for asset-backed securities, accepted as collateral by the ECB to encourage credit to the nonfinancial private sector.

Additionally, G20 leaders, at their Summit held in mid-June in Los Cabos agreed to extend credits worth USD 456 billion, apart from those provided by the IMF, to prevent and resolve the crisis and to address potential financial needs of all its member countries, and not just of one particular region.

The referred steps could not lower uncertainty over the situation of the Spanish sovereign debt and banks' solvency, as they presupposed major public indebtedness and as EFSF and ESM financial support maintained the preferred creditor status. In this context, at the end of June the European authorities agreed on new measures, a set of actions to strengthen financial and fiscal integration, as well as the effectiveness of regional mechanisms, among them:

- The direct capitalization of banks by means of regional support mechanisms (EFSF/ESM), once the unified banking supervision scheme of the ECB for the Euro zone comes into force possibly at the end of the year.
- ii. The elimination of the preferred creditor status in credits from EFSF/ESM.
- iii. The reaffirmation of the European authorities' willingness to consider the sovereign bonds purchase in the secondary debt markets by means of regional support mechanisms, although without expanding their current lending capacity.

Additionally, given the aggravation of the economic situation in Spain, at the beginning of July the European authorities agreed on easing Spanish fiscal deficit targets from 5.3 to 6.3 percent of GDP for 2012, from 3.0 to 4.5 percent of GDP in 2013 and from 2.2 to 2.8 percent of GDP in 2014, as well as a banks' recapitalization scheme. In this context, the Spanish government announced fiscal consolidation measures for EUR 65 billion for the next two and a half years, in order to meet the new established goals.<sup>11</sup>

In turn, the ECB in its monetary policy meeting at the beginning of August mentioned a series of measures to improve the functioning of sovereign

beginning of the process of financial assistance, the EFSF will establish a contingency reserve of EUR 30 billion.

21

The evaluation results placed the recapitalization needs between EUR 16 to 26 billion in a basis scenario. This scenario considers a GDP drop of 1.7 percent in 2012 and of 0.3 percent in 2013, together with a decrease in house prices of 5.6 percent this year and of 2.8 percent in 2013. On the other hand, under a scenario of higher stress, with a GDP fall of 4.1 and 1.6 percent in 2012 and 2013, respectively, as well as a decrease in house prices of 20 and 3.6 percent in 2012 and 2013, respectively, Spanish banks' recapitalization needs will be between EUR 51 to 62 billion.

<sup>11</sup> The referred measures finally approved by the Spanish parliament on July 20, 2012 include: cuts to unemployment benefits after 6 months, an increase of 3 percentage points in VAT and cuts in public sector wages, transfers to local governments and subsidies.

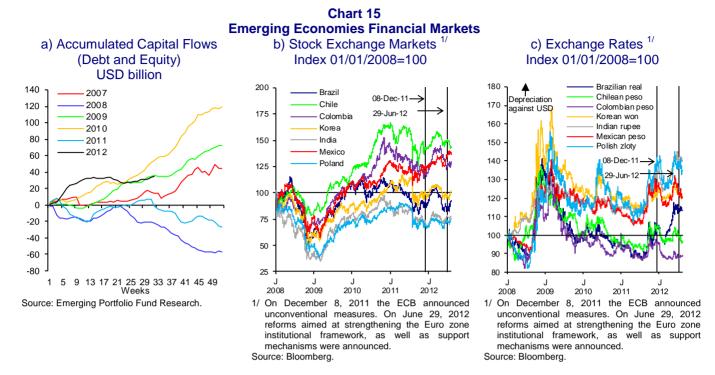


debt markets in the Euro zone countries, given that their high debt margins and financial fragmentation in the region affected the transmission mechanism of the monetary policy. Among the referred measures the following stand out: i) the governments will have to apply for the activation of the regional support mechanisms (EFSF/ESM), taking into account conditionality related to them; ii) the central bank will carry out open market operations for an amount considered as appropriate given the conditions prevailing in the markets, and iii) the ECB will consider the advisability of implementing additional unconventional monetary policy measures. Financial markets anticipate the details of these measures to be defined in the following weeks.

In sum, the set of measures, announced from the end of June onwards, provided a temporary relief to financial markets, but they are still considered insufficient by the markets that require more solid progress towards fiscal integration and a banking union in the Euro zone. Additionally, the authorities faced more considerable challenges to implement the referred measures, among which the following are noteworthy: a) the ESM has not been ratified by all member countries; b) there is a risk of delays in establishing the unified banking supervision mechanism, which is a requirement to convert the bailout loan to the Spanish banks into direct capital injections for financial institutions; and c) various of the announced measures will require a unanimous support of the Euro group ministers. In addition to the above, the EFSF/ESM funds might turn out insufficient to support both banks recapitalization in some Euro zone countries and, if necessary, sovereign debt markets, especially those of Spain and Italy. Thus, the possibility of a new catastrophic event in Europe cannot be ruled out yet.

Higher volatility in international financial markets deeply affected the global risk perception, which again increased demand for low-risk assets, such as government bonds of the U.S, Japan and Germany, among them. The above, together with the deterioration of the world growth outlook, induced further reductions in these assets' yields during the period covered in this Inflation Report, especially in recent months. Besides, it provoked an appreciation of the USD and the JPY against the EUR. In this context, despite a more favorable performance of emerging economies in relation to that of advanced ones, the former faced volatility in their capital flows, declines in their stock markets and, in general, a depreciation of their currencies against the USD (Chart 15).





### 3.1.3. Commodity Prices

International commodity prices, with the exception of grains, fell significantly in the second quarter, mainly as a result of the deceleration of the world economy and the deterioration of its prospects. Particularly, international oil prices showed a pronounced downward trend from March on (Chart 16a), as a reflection of lower growth expectations for the world economy and increased OPEC production (Organization of the Petroleum Exporting Countries), leading to higher inventories. Nevertheless, in July and so far in August, part of this decline was offset, to a large extent, due to intensified geopolitical risks in the Middle East. In turn, grain prices, after showing certain volatility in the first quarter, rose from the end of the second quarter onwards due to climatic reasons affecting their production (Chart 16c).

Corn

Wheat

10

Я

6

3



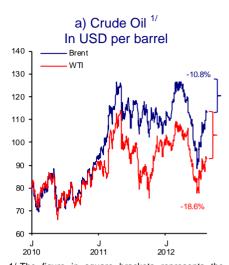
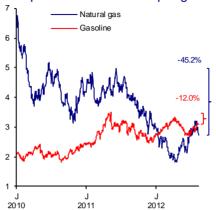
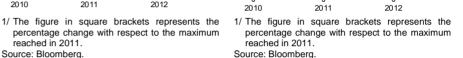


Chart 16 **International Commodity Prices** 

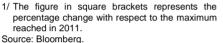
b) Natural Gas and Gasoline 1/ USD per MMBtu and USD per gallon





c) Corn and Wheat 1/

In USD per bushel



#### World Inflation Trends 3.1.4.

reached in 2011.

Source: Bloomberg

In an environment characterized by diminished growth rates of economic activity worldwide and lower international prices of most commodities, with the exception of some grains, inflation in the majority of countries is anticipated to remain moderate in the second half of 2012. In this context, main advanced economies and a great number of emerging ones experienced a monetary policy easing and are expected to adopt even more accommodative monetary policy stances in the second half of the year.

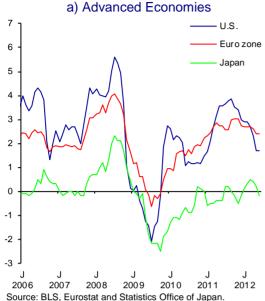
Annual headline inflation in the U.S. continued its downward trend in the second quarter, locating at 1.7 percent in June, a considerably lower level than 2.7 percent at the end of the first one (Chart 17a), which to a large extent, was due to a decrease in oil and gasoline prices. In turn, core inflation shifted form 2.3 percent in March to 2.2 percent in June, and is anticipated to continue declining as a result of ample slack in the use of productive factors prevailing in the U.S. economy.

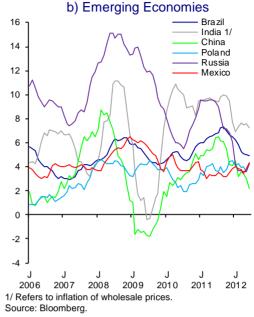
Under this scenario, in the second quarter and in the third so far the U.S. Federal Reserve maintained its target range for the federal funds rate unchanged at 0 to 0.25 percent, given low resource utilization and absence of medium-term inflationary pressures. 12 Besides, in its meeting in August, in accordance with the previous announcement in June, it decided to continue till December 2012 (originally it concluded in June 2012) with the program of extending the average maturity of securities' holdings. The U.S. Federal Reserve also agreed to maintain its policy of reinvesting principal payments of agencies' debt at maturity and mortgage-backed securities, as well as its policy of Treasury bond reinvestment.

<sup>&</sup>lt;sup>12</sup> In its monetary policy meeting in January, the U.S. Federal Reserve extended its proposition to maintain the reference rate at exceptionally low levels from mid-2013 until at least the end of 2014.









In the Euro zone, annual headline inflation registered a downward trend in the last months, although remaining above the ECB inflation target (below but close to 2 percent), diminishing from 2.7 percent in March to 2.4 percent in June. In its June meeting, the ECB decided to extend the conduction of its regular refinancing operations (including 3-month operations) as fixed-rate tender with full allotment for as long as it is required and at least until January 15, 2013. Subsequently, in its August meeting, the ECB left its policy rates unchanged, after reducing them in July by 25 basis points, leaving their interest rates applicable to main refinancing operations, marginal lending facility and the deposit facility at levels of 0.75, 1.50 and 0.00 percent, respectively. In its press release, the ECB pointed out that inflationary pressures had declined and that downward risks to the economic outlook persisted and had partly materialized.

In most emerging countries inflation was moderate in the second quarter of the year and is anticipated to diminish further, given the slowdown of world economic activity. Annual consumer price inflation in China shifted from 3.6 percent in March to 2.2 percent in June, the lowest figure in the last 29 months (Chart 17b). The People's Bank of China reduced its lending rate by 25 basis points in June and again by 31 basis points in July, to place it at 6.0 percent, all this in addition to three decreases in bank reserve requirements last December, February and May. In turn, annual inflation in Brazil maintained its downward trend, reaching 4.9 percent in June. This allowed the Central Bank of Brazil to lower its policy rate by 50 basis points in its May and July meetings, locating it at 8.0 percent, accumulating a reduction of 450 basis points since August 2011.

<sup>&</sup>lt;sup>13</sup> In its reunion in October 2011, the ECB decided to extend these refinancing operations till July 10, 2012.



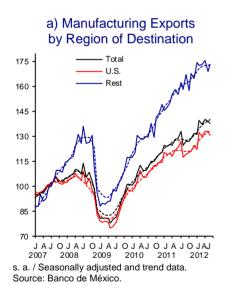
### 3.2. Development of the Mexican Economy

### 3.2.1. Economic Activity

During the second quarter of 2012, the Mexican economy demonstrated resilience to the high volatility and uncertainty prevailing in international financial markets derived from the difficulties in the Euro zone and to the world economic slowdown, particularly, to the lower economic growth in the U.S. Thus, despite adverse worldwide economic conditions, the Mexican economy still seems to be generally unaffected by the referred negative environment. Indeed, most recent indicators suggest that Mexican economic activity maintained its positive trend during the reported period. This performance reflected both the impulse of the external demand to manufacturing production and the persistent dynamism of domestic demand.

In particular, during the second quarter of the year, manufacturing exports registered an upward trend, reflecting growing demand from the U.S. and other countries (Chart 18a), largely as a result of the depreciation of the real exchange rate, as compared to that of the first half of 2011. It is noteworthy that the increase in manufacturing exports to the U.S. and other markets derived from automobile industry exports', as well as from a rebound in other manufacturing exports (Chart 18b and Chart 18c).

Chart 18 Indicators of Manufacturing Exports Index 2007=100, s. a.





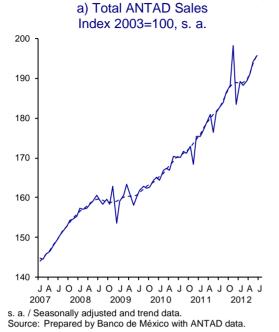


In turn, recent indicators of domestic spending suggest that it continued expanding in the second quarter of the year, although at a relatively more moderate pace as compared to that of external demand. In particular:

i. Available information indicates that private consumption continued exhibiting a positive trend. Indeed, both ANTAD sales and commercial establishments' retail sales increased in the second quarter of the year, while wholesale sales dropped (Chart 19a and Chart 19b).







b) Commercial Establishment Sales Index 2008=100, s. a.



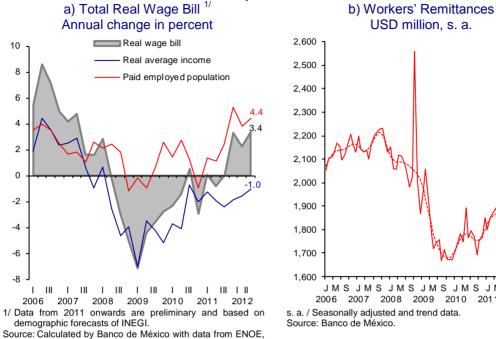
s. a. / Seasonally adjusted and trend data.

Source: Prepared by Banco de México with data from the Monthly Survey of Commercial Establishments (Encuesta Mensual sobre Establecimientos Comerciales). INEGI.

- ii. In this context, some determinants of consumption continued demonstrating certain weakness during the quarter, such as the real average income of workers, whose negative changes kept affecting the real wage bill (Chart 20a), and workers' remittances, which remained at levels lower than those registered before the crisis (Chart 20b). Nevertheless, other determinants, such as credit to consumption performed more favorably (see Section 3.2.2).
- iii. In turn, gross fixed investment continued its recovery, observed since the previous quarter (Chart 21a), to a large extent reflecting the dynamism of investment in imported machinery and equipment (Chart 21b). In this context, the higher growth rate of investment would seem to be partly driven by continuously increasing utilization of installed capacity, in recent months reaching levels comparable with the precrisis ones (Chart 21c).

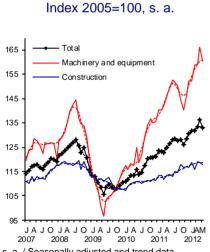


Chart 20 **Consumption Determinants** 



JMS JMS JMS JMS JMS JMS JMJ 2006 2007 2008 2009 2010 2011 2012 s. a. / Seasonally adjusted and trend data.

Chart 21 **Indicators of Investment and Capacity Utilization** b) National and Imported Machinery

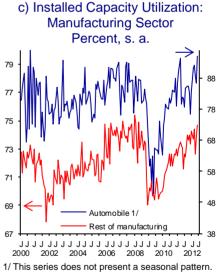


a) Investment and its Components

s. a. / Seasonally adjusted and trend data. Source: Prepared by Banco de México with data from Mexico's System of National Accounts, INEGI.



s. a. / Seasonally adjusted and trend data. Source: Prepared by Banco de México with data from Mexico's System of National Accounts, INEGI.



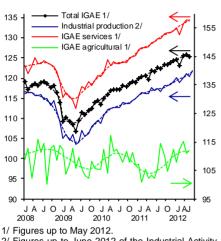
s. a. / Seasonally adjusted figures. Source: Monthly Manufacturing **Business** Tendency Survey (Encuesta Mensual de Coyuntura en el Sector Manufacturero), Banco de México.

As a result of the above described evolution of both external and domestic demand, the main productive activity components further expanded in the second quarter of 2012 (Chart 22a). Particularly, IGAE growth in this period reflected the dynamism of industrial activity, especially of the manufacturing sector (Chart 22b and Chart 22c), as well as that of the services sector. In contrast, the agricultural sector maintained a slight upward trend.



It is noteworthy that the dynamism of the services sector is a consequence, above all, of an increase in external demand-related activities, given that, although they also expanded, domestic demand-related services observed a lower growth rate than in the previous quarters and than other services.

a) Economic Activity Indicators Index 2003=100, s. a.



- 2/ Figures up to June 2012 of the Industrial Activity Indicator.
- s. a. / Seasonally adjusted and trend data.

  Source: Mexico's System of National Accounts,
  INEGI.

# Chart 22 Economic Activity Indicators b) Manufacturing Production Index 2003=100, s. a.



INFGI

c) Production and Exports of Light Vehicles Thousands of units, annualized, s. a.

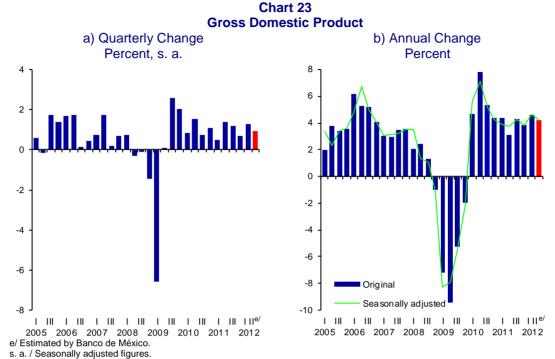


 a. / Seasonally adjusted and trend data.
 Source: Prepared by Banco de México with data from the Mexican Automotive Industry Association (AMIA).

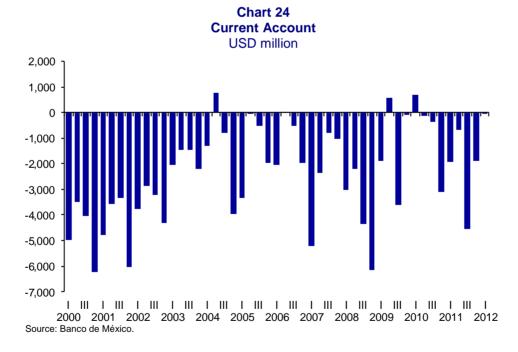
Based on the abovesaid, in the second quarter of 2012 GDP is estimated to have registered a quarterly seasonally adjusted growth rate of 0.9 percent. In annual terms, GDP is expected to have grown 4.2 percent (Chart 23).

In turn, available data suggest that the current account deficit located at moderate levels in the reported quarter (Chart 24) and that the economy kept receiving resources that allowed easy financing of the referred deficit. In this context, international reserves increased by USD 7,073.2 million during the period April-June of 2012, reaching a total of USD 157,337.3 million at the end of the quarter.





Source: Mexico's System of National Accounts, INEGI. Seasonal adjustment up to the second quarter of 2012 by Banco de México.



Finally, it should be pointed out that, given the deteriorated international environment, some leading indicators, such as Mexico's leading indicator, suggest a risk of possibly more moderate growth rates in the following months (Chart 25a). Likewise, although the consumer confidence index improved recently, it still remains below pre-crisis levels (Chart 25b). In turn, the producer confidence index maintains its negative trend, locating in recent months at levels below those at the end of 2010 (Chart 25c).



a) Mexico's Leading Indicator Index 2003=100, s. a.

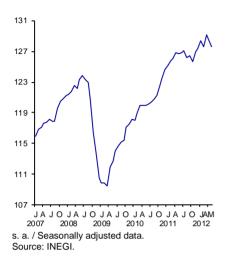
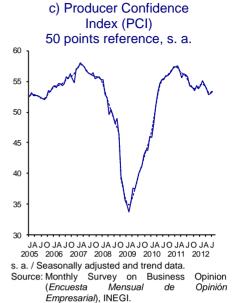


Chart 25
Leading Indicators
b) Consumer Confidence





#### 3.2.2. Financial Saving and Financing in Mexico

During the second quarter of 2012, Mexico's financial resources continued growing, despite the prevailing uncertainty in international markets. Financing to the non-financial private sector, in particular to households, maintained its upward trend, which continued supporting the evolution of economic activity.

The sources of financial funds continued presenting high annual growth rates (Table 2). In the first quarter of 2012, the annual flow of total sources of financial funds was 10.6 percent of GDP, while in the previous quarter it was 9.8 percent of GDP. This meant that for the seventh consecutive month this flow was above 9 percent of GDP. Domestic sources of financing recovered with respect to previous quarters. During the first quarter of the year, its annual flow surpassed that of external sources of funds, which had experienced a moderation since the third quarter of 2011 due to increasingly uncertain global financial conditions.

31

<sup>&</sup>lt;sup>14</sup> The information of annual flows of sources and uses of financial resources is available up to the first quarter of 2012.



Table 2
Total Funding for the Mexican Economy (Sources and Uses)

Percentage of GDP

	Annual flows						Stock 2012 I	
	2010 IV	2011 I	2011 II	2011 III	2011 IV	2012 I	% GDP	Est. %
Total sources	9.8	9.5	10.0	9.6	9.8	10.6	82.9	100.0
Domestic sourcess 1/	4.2	4.1	4.1	4.5	5.7	6.4	56.2	67.8
Foreign sources <sup>2/</sup>	5.6	5.5	5.9	5.1	4.1	4.3	26.7	32.2
Total uses	9.8	9.5	10.0	9.6	9.8	10.6	82.9	100.0
Public sector	3.9	3.6	3.4	3.2	3.0	3.4	39.9	48.1
Public sector (PSBR) 3/	3.5	3.3	3.3	3.1	2.7	3.1	37.3	45.0
States and municipalities	0.4	0.3	0.1	0.2	0.3	0.3	2.6	3.1
International reserves 4/	2.2	2.5	2.5	2.6	2.5	2.4	13.1	15.8
Private sector	2.9	3.2	3.5	3.4	3.2	3.2	32.3	39.0
Households	0.9	1.1	1.3	1.5	1.5	1.6	14.1	17.0
Consumption	0.2	0.3	0.4	0.6	0.7	0.7	4.2	5.0
Housing 5/	0.8	8.0	0.9	0.9	0.8	8.0	9.9	12.0
Firms	2.0	2.0	2.1	1.9	1.7	1.7	18.2	22.0
Domestic <sup>6/</sup>	1.1	1.2	1.3	1.3	1.3	1.3	11.1	13.4
Foreign	0.9	8.0	8.0	0.7	0.4	0.4	7.1	8.6
Commercial banks' foreign assets 7/	0.5	0.3	0.4	-0.1	-0.4	-0.3	1.4	1.7
Other <sup>8/</sup>	0.3	-0.1	0.2	0.5	1.5	1.9	-3.8	-4.6

Source: Banco de México.

Note: Figures may not add up due to rounding. Preliminary figures expressed as a percentage of average GDP of the last four quarters. The information on (revalued) flows is stripped from the effect of exchange rate fluctuations.

The information available as of the second quarter of 2012 indicates that the sources of financial funds continued increasing. Between April and June 2012, the real stock of financial saving in the economy –defined as the aggregate M4 minus the stock of banknotes and coins held by the public– maintained its upward trend, driven by both non-resident and resident financial saving (Chart 26c).

Despite the deterioration of international financial market conditions in the second quarter, the stock of non-resident financial saving expanded, as a result of continued growth of medium- and long-term government securities' holdings. These movements reflect investor confidence in the strength of the country's macroeconomic framework vis-à-vis that of other economies. In this sense, the impact of the international environment on non-resident financial saving was more moderate than that observed in previous episodes of high volatility, such as September 2011 (Chart 26b).

Resident financial saving also continued its positive trend (Chart 26c). During the period April-June 2012, increased compulsory financial saving was supported by higher formal sector employment. In addition, greater economic activity allowed voluntary financial saving to continue rising.

<sup>1/</sup>It includes the monetary aggregate M4 held by residents. Annual revalued flows of domestic sources exclude the effect of the reform to the ISSSTE Law on the monetary aggregate M4. Information on the stock of domestic sources includes the effect of this reform.

<sup>2/</sup>It includes the monetary aggregate M4 held by non-residents, foreign financing for the federal government, public institutions and entities, and foreign financed investment projects (PIDIREGAS), commercial banks' foreign liabilities and financing to the non-financial private sector.

<sup>3/</sup> Public Sector Borrowing Requirements (Requerimientos Financieros del Sector Público, RFSP or PSBR, for its acronym in English) and historical stock of Public Sector Borrowing Requirements (HSPSBR or SHRFSP, for its acronym in Spanish) as reported by the Ministry of Finance (SHCP). Figures of revalued flows exclude the impact of the reform to the ISSSTE Law on PSBR. Information on HSPSBR does include the effect of this reform on the public debt

<sup>4/</sup> As defined by Banco de México's Law.

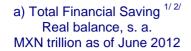
<sup>5/</sup>Total portfolio of financial intermediaries and of the National Housing Fund (*Instituto del Fondo Nacional de la Vivienda para los Trabajadores*, Infonavit), and of the ISSSTE Housing Fund (*Fondo de la Vivienda del ISSSTE*, Fovissste). It includes debt-restructuring programs.

<sup>6/</sup>Total portfolio of financial intermediaries. It includes debt-restructuring programs.

<sup>7/</sup> It includes assets from abroad and foreign financing.

<sup>8/</sup>It includes capital accounts and results and other assets and liabilities of commercial and development banks, Banco de México, non-bank financial intermediaries and INFONAVIT, as well as non-monetary liabilities from IPAB, among others.





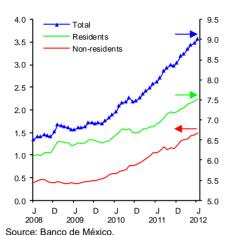
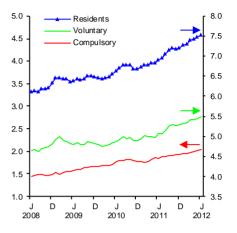


Chart 26
Financial Saving

b) Financial Saving and Non-resident Government Securities Holdings



c) Resident Financial Saving 1/2/ Real balance, s. a. MXN trillion as of June 2012



- s. a. / Seasonally adjusted figures.
- 1/ Defined as monetary aggregate M4 minus the stock of banknotes and coins held by the public.
- 2/ Figures are adjusted to exclude the impact of the reform to the ISSSTE Law.
- 3/ Holdings of government securities expressed in nominal value.

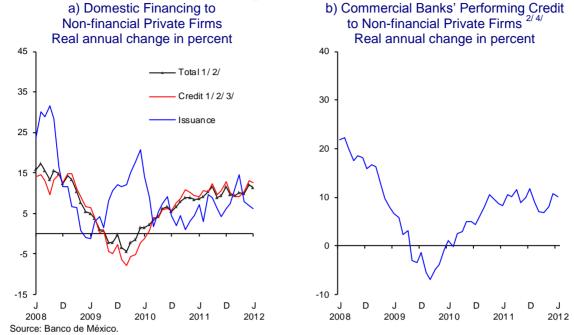
Regarding the use of financial funds, the annual flow of international reserves accumulation was 2.4 percent of GDP, while in the previous quarter it was 2.5 percent of GDP. The annual flow of financing to the private sector was 3.2 percent of GDP in annual terms, similar to that in the last quarter. At the same time, the annual flow of funds received by the public sector was 3.4 percent of GDP in annual terms, representing an increase with respect to the 3.0 percent figure registered in the fourth quarter of 2011 (Table 2)<sup>15</sup>. As regards this last point, the greater use of funds by the public sector reflects efforts by federal government to improve the exercise of budgetary spending with respect to the established schedule.

Financing to the non-financial private sector continued its growth in the second quarter of 2012. Domestic financing to non-financial private firms kept growing, displaying a similar dynamism to that registered in previous months (Chart 27a). Such growth was mainly derived by the positive performance of the credit sector, and in particular, of higher credit granted by commercial banks. Indeed, the stock of commercial banks' performing credit to firms kept growing at a rate of approximately 10 percent in real annual terms, similar to its performance since the beginning of 2011 (Chart 27b). In fact, the growth rate of this portfolio accelerated somewhat in the second quarter of 2012. Despite this expansion, the sector has not shown any signs of overheating, as interest rates of loans granted by commercial banks remain stable and delinquency rates continue at low levels and without registering any significant changes (Chart 28a and Chart 28b).

<sup>&</sup>lt;sup>15</sup> The information of annual flows of sources and uses of financial resources is available up to the first quarter of 2012.



Chart 27
Domestic Financing to Non-financial Private Firms



- 1/These figures are affected by the disappearance of some non-banking financial intermediaries and their conversion to non-regulated Sofom.
- 2/From February 2009 onwards, figures are affected by the reclassification of credit granted to small- and medium-size firms (PyMES, for its acronym in Spanish) from consumer credit to credit granted to non-financial firms.
- 3/It refers to the performing and non-performing portfolio, and includes credit from commercial and development banks, as well as non-bank financial intermediaries.
- 4/Between January and December 2007, figures are adjusted to avoid distortion by the reclassification of bridging loans for housing construction of the enterprises' sector.

In spite of the uncertain international financial environment, the national debt market operated normally, as firms continued issuing debt under favorable conditions. It is important to note that the net issuance of medium-term securities shows some volatility, since only a reduced number of firms participate in the private debt market. Thus, although the issuance of private medium-term securities in April was lower by MXN 10.5 billion than those expired, when excluding anticipated debt amortizations, the placement was lower than expirations by MXN 3.9 billion. These anticipated payments can be interpreted as a sign of favorable conditions in the financing structure of those firms that carried them out. In turn, in May and June respectively the net placement was positive and accumulated MXN 7.9 billion (Chart 29a). At the same time, the average term of net medium-term placements remained high in the quarter, exceeding six years. An additional element supporting the perception that there were no pressures on the market is that interest rates of medium-term issuances fell for the fourth consecutive month. In turn, the short-term private debt market did not register considerable movements either in debt placements, or in placements' interest rates (Chart 29b). In this way, no signs of deterioration in the mediumand short-term private debt markets have been observed.

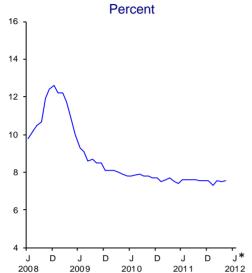
Household credit continued increasing at a similar pace to that observed in previous quarters (Chart 30). This growth is mainly accounted for by the 14.9 percent expansion of consumer credit in real annual terms recorded until June 2012. The growth in mortgage loans also contributed to the growth in household credit, as they grew at a real annual rate of 3.4 percent in the same month.



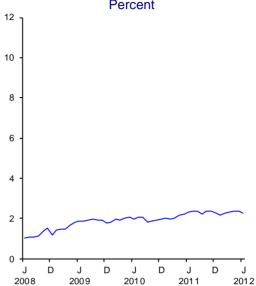
#### Chart 28

## Delinquency Rate and Interest Rate of Commercial Banks' Credit to Non-financial Private Firms

a) Interest Rate of New Credits Granted by Commercial Banks to Non-financial Private Firms 1/2/



b) Delinguency Rate of Commercial Banks' Credit to Non-financial Private Firms 3 Percent



Source: Banco de México.

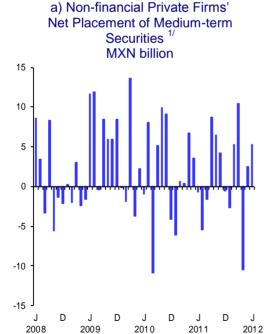
\*/ Figures as of April 2012.

1/It refers to the interest rates of new credits granted by commercial banks to non-financial private firms, weighted by the associated stock of performing credit and for all credit terms requested.

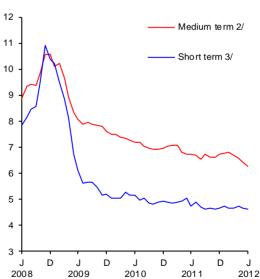
2/From February 2009 onwards, figures are affected by the reclassification of credit granted to small- and medium-size firms (PyMES, for its acronym in Spanish) from consumer credit to credit granted to non-financial firms.

3/The delinquency rate (*Índice de Morosidad*, IMOR) is defined as non-performing portfolio divided by total loan portfolio.

Chart 29 **Non-financial Private Firms' Securities** 



b) Securities Rates of Non-financial **Private Firms** Annual percent



Source: Banco de México, with data from Valmer and Indeval.

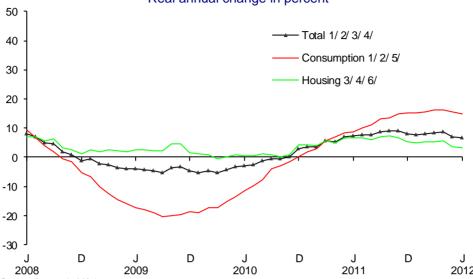
1/ Placements less amortizations in each month (securities and prepayments).

2/ Placements with longer than one year term.

3/ Placements of up to one year.







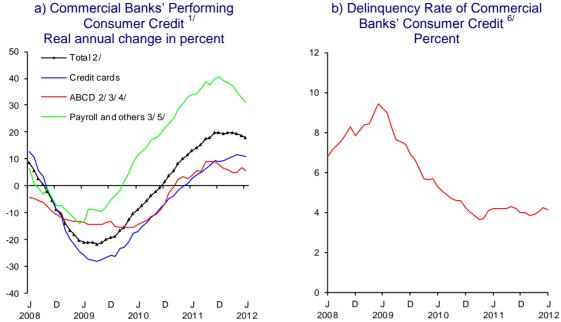
Source: Banco de México.

- 1/From February 2009 onwards, figures are affected by the reclassification of credit granted to small- and medium size firms (PyMES, for its acronym in Spanish) from consumer credit to credit granted to non-financial firms.
- 2/ Figures as of March 2008 include total consumer credit portfolio of commercial banks' subsidiaries Sofom E.R.
  3/ Between January and December 2007, figures are adjusted in order to avoid distortions due to the reclassification of credit granted to business sector for housing construction.
- 4/Figures are adjusted in order to avoid distortions due to the inclusion of ISSSTE Housing Fund (Fondo de la Vivienda del ISSSTE, Fovissste) statistics in December 2007.
- 5/It refers to the performing and non-performing portfolio, and includes credit from commercial and development banks, as well as non-bank financial intermediaries.
- 6/It refers to the performing and non-performing portfolio, and includes credit from commercial and development banks, National Housing Fund (*Instituto del Fondo Nacional de la Vivienda para los Trabajadores*, Infonavit), ISSSTE Housing Fund (*Fondo de la Vivienda del ISSSTE*, Fovissste) and other non-bank financial intermediaries.

During the second quarter of 2012, consumer credit continued growing vigorously. This was mainly as a result of the dynamism shown by the two most important segments of this portfolio: credit cards, and payroll and other credits. In particular, the latter continued expanding at significantly higher rates than other components of the consumer credit portfolio, although in recent months its growth rate has shown moderatiion (Chart 31a). The quality of this portfolio remains adequate and has not shown any signs of deterioration, as suggested by its low and stable delinquency rates (Chart 31b).







Source: Banco de México.

- 1/It includes credit portfolio of credit-card regulated SOFOM: Tarjetas BANAMEX, Santander Consumo, Ixe Tarjetas and Sociedad Financiera Inbursa. From February 2009 onwards, figures are affected by the reclassification of credit granted to small- and medium-size firms (PyMES) from consumer credit to credit granted to non-financial firms.
- 2/Between June 2010 and May 2011, figures are adjusted in order to avoid distortions due to the purchase of one banking institution's automobile loan portfolio.
- 3/From July 2011 onwards, figures are adjusted in order to avoid distortions due to the reclassification from durable goods (ABCD) to other consumption credits by one banking institution.
- 4/ It includes credit for property acquisition and automobile credit.
- 5/ "Others" refers to personal credits, credit for payable leasing operations and other consumption credits.
- 6/The delinquency rate (*Indice de Morosidad*, IMOR) is defined as non-performing portfolio divided by total loan portfolio.

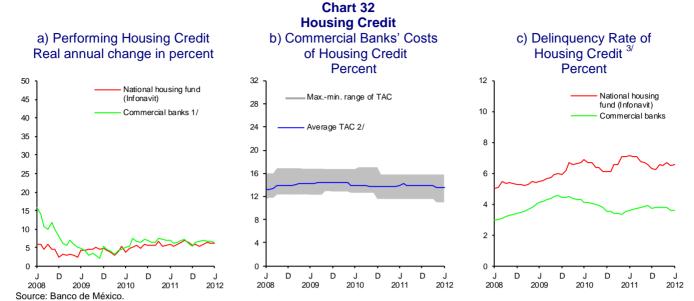
and by other non-bank financial intermediaries (3.5 percent).

Mortgage loans continued growing as a result of increased resources granted by the National Housing Fund (*Instituto del Fondo Nacional de la Vivienda para los Trabajadores*, Infonavit) and commercial banks (Chart 32a)<sup>16</sup>. The National Housing Fund expanded its performing portfolio at an average monthly rate of 6.3 percent in real annual terms during the period April-June 2012. In addition, commercial banks increased their performing credit stock by 6.6 percent in the same period. At the same time, both the interest rates prevailing in the market and the corresponding delinquency rates remained at low and stable levels. Thus, in this context of sustained housing credit growth, the indicators of mortgage credit costs and of portfolio quality do not seem to suggest an overheating of the sector (Chart 32b and Chart 32c).

37

<sup>&</sup>lt;sup>16</sup> The National Housing Fund (Instituto del Fondo Nacional de la Vivienda para los Trabajadores, Infonavit) and commercial banks are the main providers of credit for housing acquisition with the corresponding shares of 56.7 and 29.9 percent of the total housing loan portfolio in June 2012. The rest of these credits are granted by the ISSSTE Housing Fund (Fondo de la Vivienda del ISSSTE, Fovissste) (9.9 percent)





1/Between January and December 2007, figures are adjusted to avoid distortions by the reclassification of bridging loans for housing construction to the enterprises' sector. Likewise, they are adjusted in order to avoid distortions by the pass-through effect of UDIS trust portfolio to the balance sheet of commercial banks and by the reclassification of credit in direct portfolio to ADES.

2/Indicator's simple average resuming the total annual cost (TAC) for a standard mortgage product. TAC information is obtained from Banco de México simulator.

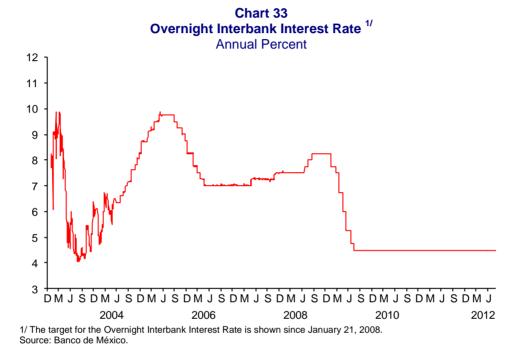
3/The delinquency rate (Indice de Morosidad, IMOR) is defined as non-performing portfolio divided by total loan portfolio.

To sum up, it can be concluded that the national financial system continues supporting economic growth, but thanks to its capitalization and strength (reflected, among other factors, by a low delinquency rate), there is still room for growth without significant repercussions on interest rates.



# Monetary Policy and Inflation Determinants

During the period analyzed in this Inflation Report, the monetary policy stance remained in line with the convergence process of inflation to the 3 percent permanent target, considering the variability interval of plus/minus one percentage point around this objective. Thus, Banco de México's Board of Governors decided to maintain its objective for the Overnight Interbank Interest Rate unchanged at 4.5 percent during the reported period (Chart 33).



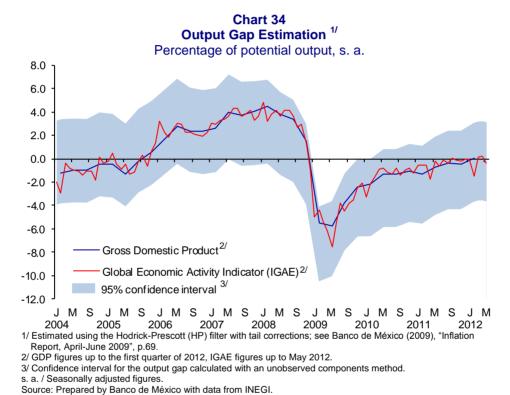
Among the elements considered for the conduction of the monetary policy, the following stand out:

- i. The fact that economic activity continues its positive trend, despite an adverse international environment.
- ii. The fact that, as expected, a further increase in the relative price of merchandise as compared to services is observed, in line with the exchange rate adjustments, which have taken place in response to the deterioration of the international environment. Their impact on inflation has been moderate and is expected to be temporary.
- iii. The fact that the non-core inflation rebound is expected to be temporary, since, as mentioned before, it was associated with the increase in some agricultural products' prices (mainly vegetables, such as tomato and tomatillo) due to climatic conditions, and recently with the detection of the avian influenza on farms in Jalisco, which will limit egg production.
- iv. The fact that the referred relative price adjustments continue without generating second round effects on the economy's price formation process, given the low pass-through of non-core to core inflation, and of



exchange rate movements to prices. In this context, it is noteworthy that private sector analysts' inflation expectations remain anchored within the plus/minus one percentage point variability interval around the 3 percent permanent target.

In line with the economy's performance described in the previous section, during the second quarter of 2012, the output gap practically closed, locating at levels close to zero (Chart 34). However, the evolution of diverse indicators related to the use of productive resources suggests the absence of pressures on prices in the input markets, such as the labor or credit market, while no demand-related pressures are observed on the country's external accounts or economy's prices. In particular:



a) As regards the labor market, although the number of IMSS-insured workers continued its positive trend (Chart 35a), unemployment, informal sector employment and underemployment rates remain at higher than pre-crisis levels and do not show a clear downward trend (Chart 35b). Further, despite the fact that job destruction indicators, as well as those related to the employment duration, registered certain improvement, they are still at elevated levels (Chart 35c and Chart 35d).

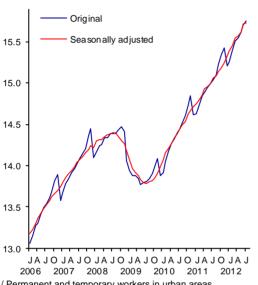
b) As previously mentioned, the wage bill continued being affected by negative annual changes of workers' real income. Indeed, economy's main wage indicators report still moderate change rates. This, in addition to increasing average labor productivity, led unit labor costs to continue their downward trend in the reported quarter, implying the absence of inflationary pressures derived from the behavior of these costs (Chart 36).



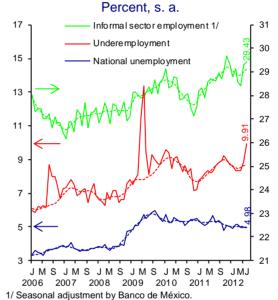
- c) The evolution of non-financial private sector financing suggests the absence of signs of overheating, which might have given rise to pressures on interest rates in this market.
- d) As mentioned before, the current account is expected to have presented a moderate deficit, which was fully financed in the second quarter. Thus, no demand-related pressures on the country's external accounts were observed.

Chart 35 **Labor Market Indicators** 

a) IMSS-insured Workers Millions of persons



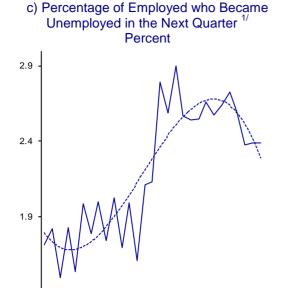
1/ Permanent and temporary workers in urban areas. Source: IMSS. Seasonal adjustment by Banco de México. b) Unemployment and Underemployment Rates and Informal Sector's **Employment Rate** 



s. a. / Seasonally adjusted and trend data.

Source: National Employment Survey (Encuesta Nacional de Ocupación y Empleo), INEGI.



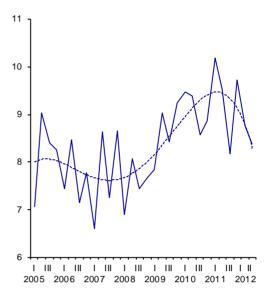


II IV II IV II IV II IV II IV II IV II

2005 2006 2007 2008 2009 2010 2011 2012

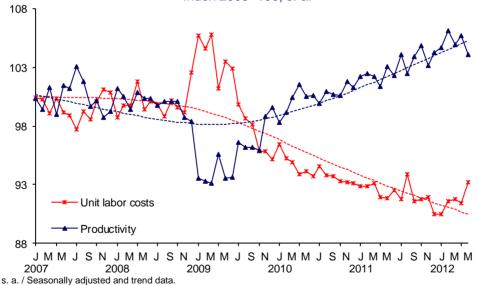
II IV

## d) Unemployment Duration Average weeks of job search



1/ Only the employed with a valid interview in the next quarter.
Source: Prepared by Banco de México with data from the National Employment Survey (Encuesta Nacional de Ocupación y Empleo), INEGI.

Chart 36
Productivity and Unit Labor Costs in the Manufacturing Sector Index 2008=100, s. a.

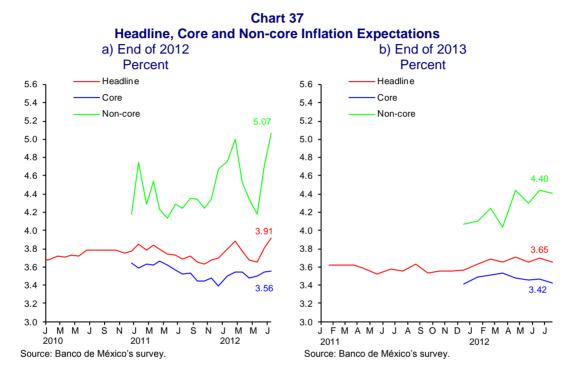


Source: Prepared by Banco de México with seasonally adjusted data from the Monthly Manufacturing Business Survey (Encuesta Mensual de la Industria Manufacturera), INEGI.

In turn, inflation expectations have remained anchored within the plus/minus one percentage point variability interval around the 3 percent permanent target. However, short-term inflation expectations rebounded by the end of the reported period, which was associated with the relative price adjustments mentioned before, in particular those of agricultural products' prices. Thus, according to the survey realized by Banco de México, the average of headline inflation expectations for the end of 2012 increased from 3.68 percent in



the April survey to 3.91 percent in the July survey of 2012 (Chart 37a).<sup>17</sup> This was mainly due to the increase in the implicit expectation for the non-core component, which went from 4.34 percent in April to 5.07 percent in July. In turn, the average of core inflation expectations presented a minor adjustment, changing from 3.48 to 3.56 percent in the same period. According to this survey, the average headline inflation expectations for the end of 2013 remained close to 3.65 percent during the reference period.<sup>18</sup> In turn, the average core inflation expectation remained around 3.45 percent, while that corresponding to the non-core component maintained a level close to 4.40 percent (Chart 37b).



As concerns medium- and long-term inflation expectations, they have remained relatively stable in the last months. Thus, according to the survey realized by Banco de México, the average inflation expectations for the next 4 years persisted around 3.6 percent between April and July, while the average expectations for the next 5 to 8 years stayed at a level around 3.5 percent in the same period (Chart 38a).

Complementing the information from the surveys, the evolution of long-term interest rates allows calculating the break-even inflation and inflation risk (difference between the 10-year bond nominal yield and the real yield associated with inflation-indexed debt instruments of the same term). In a context of increased volatility in international financial markets, in the last weeks this indicator offset part of the increase registered at the beginning of the second quarter of the year, locating close to 3.85 percent. Considering the positive value

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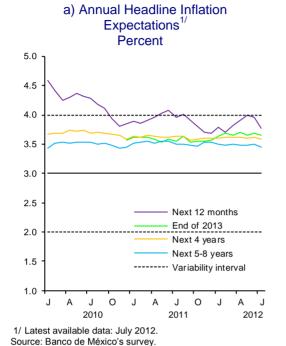
According to the Banamex Survey of Financial Market Analysts' Expectations of March 29, 2012, average expectations for the end of 2012 located at 3.73 percent, while in accordance with the survey of August 6, 2012, the average located at 3.99 percent. Core inflation expectations reached 3.56 percent in the March 29, 2012 survey, as compared to 3.63 percent in the August 6, 2012 survey. In turn, implicit non-core expectations went from 4.29 percent to 5.18 percent in the referred period.

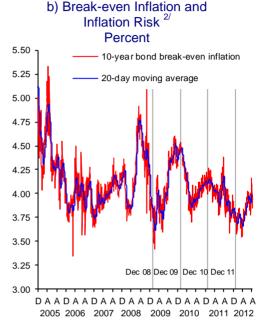
According to the Banamex Survey of Financial Market Analysts' Expectations of August 6, 2012, average headline inflation expectations for 2013 were 3.69 percent, for core inflation they were 3.49 percent, and for the implicit non-core inflation expectations, 4.35 percent.



of the inflation risk premium, inflation expectations implicit in long-term interest rates are below that level (Chart 38b).

Chart 38
Annual Headline Inflation Expectations and Break-even Inflation and Inflation Risk in Long-term Bonds





2/ The break-even inflation and inflation risk implicit in 10year bonds is calculated based on nominal and real interest rates of the secondary market.

Source: Banco de México estimate with data from Bloomberg.

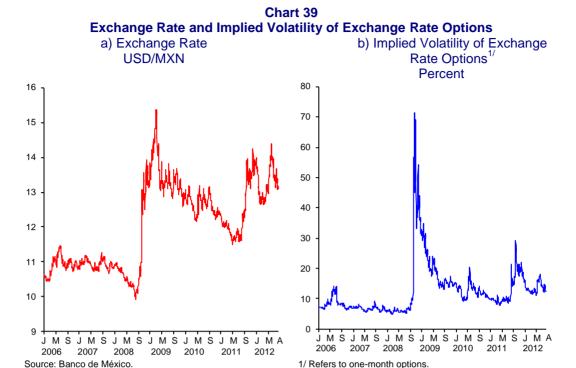
As shown above, in light of the absence of definite solutions to the fiscal and financial problems in the Euro zone, a new increase in uncertainty in international financial markets was observed during the second quarter. In this context, investments were massively reassigned into safe haven assets, thereby affecting domestic exchange and financial markets of emerging economies.

Similar to the case of other emerging economies' currencies, the Mexican currency also experienced an important depreciation and increased volatility during April and May, reaching higher levels than those in the second half of 2011 (Chart 39a). In this environment of elevated exchange rate volatility, according to the mechanisms authorized by the Exchange Commission, during the period analyzed in this Inflation Report USD auctions at a minimum price for a total amount of USD 646 million were carried out. <sup>19,20</sup> It is noteworthy that the foreign exchange market has presented an orderly functioning. Thus, despite the environment of uncertainty in the global economy, implied volatility of exchangerate options did not reach the levels registered in mid-2011 (Chart 39b).

<sup>19</sup> See Press Release of the Exchange Commission of November 29, 2011.

Specifically, auctions are realized on May 23, 2012 (USD 258 million), May 31, 2012 (USD 107 million), and July 23, 2012 (USD 281 million).



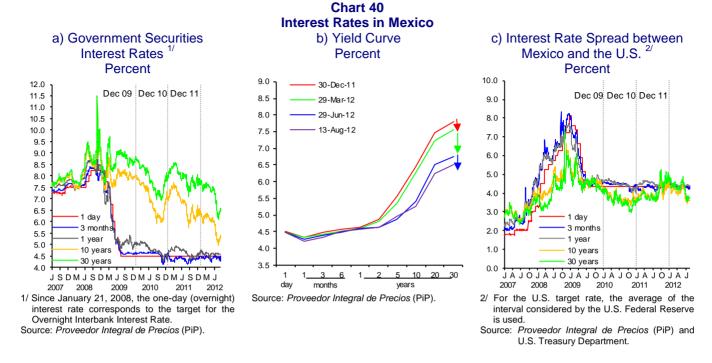


The nominal exchange rate adjustment, together with the evolution of inflation and its expectations, has led to a real exchange rate depreciation, which has weakened the negative impact of the adverse external environment on the Mexican economy. Hence, the flexible exchange rate regimen has established itself as an important element of the macroeconomic policy framework in Mexico, allowing to partially absorb effects of external shocks affecting the domestic economy.

The strength of the economic fundamentals in Mexico has generated an environment of confidence in the national financial markets, which, together with the improved conditions in financial markets derived from the announcement of certain measures by the European authorities, contributed to the fact that the MXN registered an appreciation trend since June, although with certain volatility, thereby partially reverting the adjustment presented at the beginning of the second quarter.

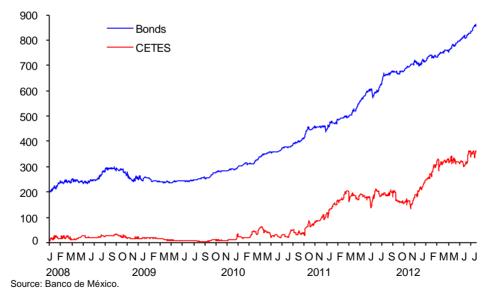
Regarding domestic interest rates, during the period analyzed in this Inflation Report, they performed favorably. On the one hand, as a result of the monetary policy decisions, the short-term interest rates remained stable around 4.5 percent (Chart 40a). On the other hand, despite uncertainty prevailing in international financial markets, longer-term interest rates continued their downward trend, although with certain volatility, propitiating the flattening of the yield curve during the reference period (Chart 40b). Additionally, even though longer-term interest rates in Mexico presented a considerable decline, reaching historically low levels, it is important to point out that the spread between long-term interest rates in Mexico and the U.S. maintained higher levels than those registered before the second half of 2011 (Chart 40c).





In the analyzed period, holdings of medium- and long-term government securities by foreign investors increased (Chart 41), confirming the confidence in the Mexican economy and, thus, the continued attractiveness of these financial assets by foreign investors.

Chart 41
Government Securities' Holdings by Foreign Investors
MXN billion



Based on the analysis of inflation determinants, no widespread pressures on prices are observed in the economy. In particular, as expected, the change in relative prices of merchandise as compared to services, has not affected goods' and services' prices that are not directly related to this process, i.e., the price formation process has not been contaminated and this situation is

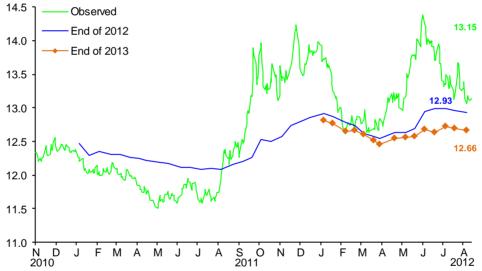


expected to remain so in the future. This forecast is mainly based on the following factors:

- i. Market analysts' expectations that the nominal exchange rate will continue during the remainder of 2012, offsetting part of the depreciation registered at the beginning of the year (Chart 42).
- ii. Absence of generalized price adjustments by firms in response to the exchange rate variations, given that, in the opinion of firms' executives surveyed by Banco de México, they are currently facing increased market competition and could lose market shares.
- iii. Empirical evidence of a low pass-through of exchange rate movements to prices in Mexico, confirmed by recent data.

In sum, and in line with the previous considerations, inflation expectations of private sector economic analysts remain anchored within the variability interval of plus/minus one percentage point around the 3 percent target.

Chart 42
Exchange Rate and its Expectations for the End of 2012 and 2013 <sup>1/</sup>
USD/MXN



<sup>1/</sup> The observed exchange rate is the monthly average of the FIX exchange rate. The latest data of the observed exchange rate correspond to August 13, 2012. For its expectations, the latest data are as of August 6, 2012. Source: Banco de México and Banamex expectations survey (*Encuesta de Expectativas Banamex*).



## 5. Inflation Forecasts and Balance of Risks

In an environment of greater uncertainty about the world economy, U.S. growth expectations were revised downwards with respect to the previous Inflation Report, highlighting the perception that the growth of this country will be below its historical trend in the following years.<sup>21</sup> In particular:

- a) U.S. GDP is expected to increase at a rate of 2.2 percent in 2012, figure below 2.3 percent presented in the previous Inflation Report. Similarly, the corresponding expectation for 2013 was revised from 2.5 percent in the previous Inflation Report to 2.1 percent in the current one.
- b) The forecast for the growth rate for 2012 U.S. industrial production was modified from 4.2 percent in the Inflation Report of the first quarter of the year to 4.1 percent in the present one. For 2013 the expected growth rate of this indicator was revised downwards from 3.3 percent in the last Inflation Report to 2.8 percent.

**Growth of the Mexican Economy:** Taking into account the recent evolution of the Mexican economic indicators, described in this Inflation Report, as well as the growth expectations for U.S. industrial production, the forecast for the GDP growth rate in Mexico for both 2012 and 2013 remains unchanged with respect to that in the previous Inflation Report. However, as will be described below, the balance of risks associated to this scenario has deteriorated. Hence, for 2012 annual GDP growth rate in Mexico is expected to lie between 3.25 and 4.25 percent, while for 2013 the growth rate of the Mexican economy is forecast to be between 3.0 and 4.0 percent (Chart 43a).

**Employment:** Accordingly, the expectations regarding the number of IMSS-insured workers in 2012 and 2013 also remain unchanged with respect to the previous Inflation Report. Particularly, an increase of between 540 and 640 thousand insured workers is expected for 2012, and of between 500 and 600 thousand, for 2013.

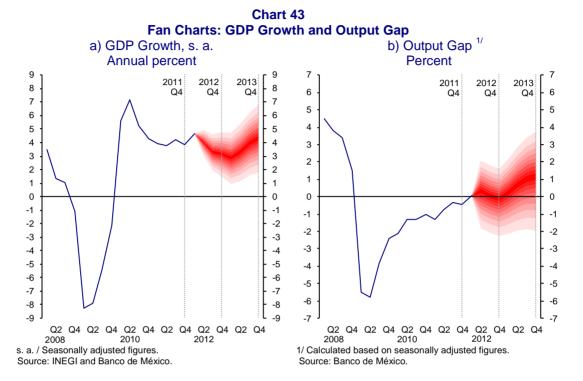
**Current Account:** For 2012, deficits of USD 3.1 billion for the trade balance (0.3 percent of GDP) and of USD 10.5 billion for the current account (0.9 percent of GDP) are estimated. The moderate current account deficit expected for 2012, together with the measures taken by the Mexican federal government to finance its external debt liabilities for this year, suggest that financing these deficits will not pose a problem and that there will be no pressures on the exchange rate arising from this source during the reference period. For 2013, deficits of USD 7.5 billion and USD 18.0 billion are expected for the trade balance and the current account, respectively, corresponding to 0.6 and 1.4 percent of GDP, in the same order.

Given the forecast of moderate growth for the Mexican economy, the output gap is anticipated to remain at levels close to zero, although with a slight upward trend (Chart 43b). In this way, no aggregate demand-related pressures on

<sup>&</sup>lt;sup>21</sup> Expectations for the U.S. economy are based on the consensus of analysts surveyed by Blue Chip in August 2012.



inflation are expected in the forecast horizon. Indeed, as indicated in this Inflation Report, no pressures are perceived either on prices in the input markets, such as both the labor and credit markets, or on the external accounts.



It should be noted that, even though the Mexican economy has remained resilient to the current international environment, adverse global economic conditions have led to a deterioration of the balance of risks of the Mexican economy as compared to the previous Inflation Report. In particular, the difficulties to definitely solve the problems in the Euro zone have increased uncertainty and volatility in financial markets, U.S. fiscal adjustment has remained undefined, and economic activity in the main emerging economies has slowed down. As mentioned above, this situation worsened world growth expectations. Therefore, the following downward risks persist:

- i. A weaker evolution of the U.S. economy would generate a less favorable environment for economic growth in Mexico. Short-term growth might be affected by the possibility of a fiscal consolidation greater than expected by U.S. economic analysts. It is noteworthy that uncertainty in that matter could in general negatively impact U.S. consumer and producer confidence and distort investment decisions.
- ii. Besides, growth of the U.S., just like of other economies, could deteriorate as a consequence of a further increase in uncertainty and financial volatility derived from the fiscal and financial difficulties in the Euro zone. Possible transmission channels through which the situation in Europe could affect the U.S. economy include a contagion of the U.S. financial system, as well as a decline in global demand.



- iii. Additionally, the situation in Europe could boost investors' search for safe haven assets, reducing capital flows to economies like the Mexican.
- iv. The slowdown of emerging economies, like China, India and Brazil, which just until recently supported part of the world economic growth, could further limit global demand.
- v. Finally, according to economic specialists surveyed by Banco de México, public insecurity and absence of structural changes are still factors which, together with the problems in the global economy and international financial instability, could hamper Mexican growth.

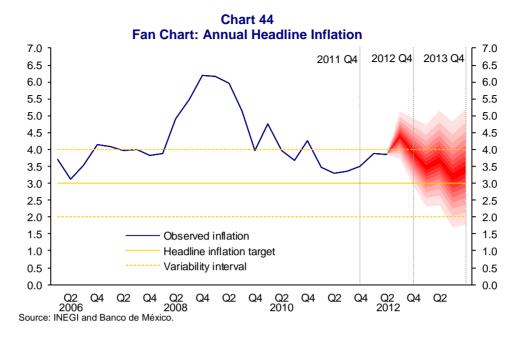
Inflation: The inflation forecasts for the rest of 2012 and 2013 are in line with the convergence process of inflation towards the 3 percent permanent target. This is mainly the result of a monetary policy aimed at pursuing this objective. Thus, in the mentioned horizon, annual headline inflation will most likely be between 3 and 4 percent (Chart 44). However, the expected behavior of the noncore component is estimated to be possibly affected by some vegetable price quotes, as well as by the detection of the avian influenza on some farms in Jalisco that will limit the production of eggs. As a consequence of the referred behavior, the described forecast for annual headline inflation excludes the third quarter of 2012, in which it will possibly locate above the upper bound of the mentioned interval.

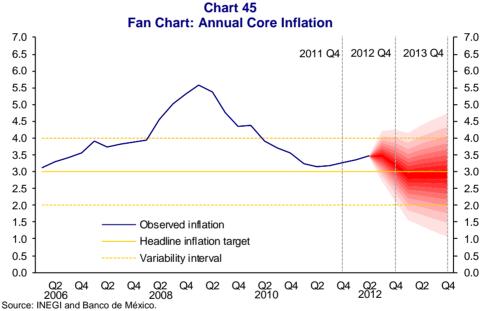
Annual core inflation is anticipated to approach 3 percent by the end of 2012 and to fluctuate around this level in 2013 (Chart 45). Its average is estimated to be lower in 2013, given that the effects associated with the price increases in some food items driven by higher international grain prices are expected to vanish that year.

In addition to the monetary policy stance, the foreseen environment of low inflation will be influenced by four main factors:

- I. Relatively weak global growth, a forecast which became more pronounced throughout 2012.
- II. Even though labor market slackness has gradually narrowed, no considerable demand pressures on the Mexican economy are expected.
- III. Intensified competition in some sectors, such as the telecommunication industry.
- IV. Vanishing of disturbances associated with the surge in commodity prices during the first half of 2011.







The risks to the inflation forecast changed during the last quarter. Among the upward risks, the following must be highlighted:

- In the short term, climatic conditions, which have been unfavorable for the production of some vegetables, and the effect of the avian influenza on livestock production in Mexico. Downward revisions of global production estimates for corn and other grains are also a matter of concern.
- The possibility of increased instability in financial markets that could induce exchange rate volatility.

Among the downward risks are:



- In the medium term, both external and domestic demand has further weakened.
- The recent exchange rate appreciation could contribute to reducing inflation pressures.

In accordance with the abovesaid in this Inflation Report and taking into account the forecasts for inflation and the balance of risks, Banco de México's Board of Governors considers the current monetary policy stance as congruent with the convergence process of inflation to the 3 percent permanent target. Nevertheless, it is noteworthy that the Board will remain very attentive in order to take action in a timely manner, to restrict or to relax the monetary policy stance as necessary according to the circumstances. Even though inflation is expected to be above 4 percent in the short term, the fact that the Central Institute has not modified the monetary policy stance should not be interpreted as a sign of indifference regarding the inflation increase. The shift of inflation above 4 percent is due to transitory and reversible factors, so it is expected to return to levels below 4 percent in a couple of months and, thus, to continue its convergence process to the 3 percent permanent target. Therefore, restricting the monetary policy stance has not been regarded as convenient.

Finally, it must be pointed out that the solid macroeconomic fundamentals of the Mexican economy have been defining factors in keeping up a sustainable growth pace, even in an adverse international environment. Indeed, the referred stability has been crucial for the Mexican economy to be resilient in an environment of volatility and uncertainty in international financial markets.

However, as highlighted in previous Inflation Reports, these fundamentals are a necessary, but not a sufficient, condition to attain the growth rate Mexico requires to reach significantly higher development levels. To promote higher growth rates, it is essential to strengthen domestic sources of growth also from a microeconomic perspective, which is particularly important in light of an unfavorable external environment. For that, it is crucial to bring forward structural reforms that promote flexibility in the allocation of the resources of the country to their most productive uses, in a way that increases competition, and that ensure an incentive structure leading to increased productivity.

Among other aspects, it is important to enhance the institutional framework in order to provide legal security and certainty for economic agents, to reduce transaction costs and to stimulate more productive investment. Likewise, it is necessary to increase competition, thereby reducing prices and improving the provision of inputs of general use in the economy. Similarly, it is essential to promote a more flexible labor market that shifts labor to its most productive uses, that facilitates the adjustment of firms and workers to new production cycles and that favors job creation. Additionally, it is necessary to encourage reforms that increase human capital, facilitate training and boost labor productivity and employment quality.

These structural reforms would not only lead to a more vigorous growth of the economy, but would also help maintaining a low and stable inflation environment. Indeed, increased market competition would lead to lower consumer prices, thereby enhancing the welfare of the population. Moreover, increased productivity would also allow satisfying higher growth rates of aggregate demand without generating pressures on prices.

