BANCO DE MÉXICO

Inflation Report

October – December 2012

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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 February 11, 2013. Figures are preliminary and subject to changes.

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BOXES

1. Introduction

During 2012, Mexico's economic growth led the activity levels to continue converging in an orderly manner towards the productive potential of the country, in a context in which no demand-related inflationary pressures were observed and in which inflation resumed its downward trend, once the effects of the temporary shocks affecting it dissipated. The balance between productive factors income and the absorption in the economy, reflected in the country's external accounts, allowed these to persist at reduced and fully fundable levels. The national financial system has supported the economic growth in a sound manner, i.e., without accumulating imbalances in the referred sector. This favorable performance is largely due to an adequate macroeconomic policy stance. Particularly, the strengthening of public finances and the monetary policy aimed at reaching the 3 percent permanent inflation target are noteworthy.

The fact that the abovementioned economic phenomena took place in an adverse international environment emphasizes the benefits of maintaining a strong macroeconomic framework in Mexico. Indeed, the world economy kept showing signs of weakness in the fourth quarter of 2012. According to preliminary data, U.S. GDP growth contracted slightly, primarily due to a decrease in public spending and in net exports. Available indicators suggest that the Euro zone's GDP contracted again in the referred period, while that of Japan remained practically stagnated. Emerging economies continued expanding slowly and in many of them the industrial production growth rate decelerated. Thus, the growth prospects for 2013 in advanced and emerging economies continued to decrease, although in January they seem to have stabilized, albeit at low levels. In sum, significant downward risks for the world economy prevail, although at the margin these risks diminished. In particular, the probability of a systemic adverse event in Europe seems to have decreased.

International prices of the main commodities followed a downward trend during the last three months of 2012, though with certain volatility. This was in line with the weak world economic environment and was reflected in lower inflation levels in advanced economies, whereas in some of the main emerging economies inflation stabilized after having observed an increase in the previous quarter. In most countries inflation is expected to register a downward trend during 2013.

In this environment, the monetary policy stance of the main advanced economies, as well as most of the emerging ones, remained accommodative in the fourth quarter of 2012 even showing, in some cases, additional easing. Further monetary stimulus, together with measures aimed at allowing the functioning of the sovereign debt and interbank markets in the Euro zone, the agreements reached to strengthen the institutional framework and governance of the region, and the reduced probability of a severe and abrupt fiscal adjustment in the U.S. in the short term, all contributed to an improvement in the financial markets. In particular, a renewed demand for higher-risk assets was observed, which was reflected in their prices. Nonetheless, new episodes of volatility cannot be ruled out, given the difficult situation prevailing in the Euro zone, where the financial markets continue depending on the extraordinary official support and the persisting uncertainty concerning the fiscal situation in the U.S.

During the last quarter of 2012, the Mexican economy grew at a lower rate than it did on average in the first half of the year, primarily due to the lower dynamism of the world economy, which led to a deceleration in external and some components of domestic demand. Although this downturn affected Mexico's industrial activity, it has not been fully reflected in the performance of the services sector, which kept exhibiting greater dynamism with respect to the industrial sector. Considering all of the above, as well as the expectations of the U.S. industrial production growth, the forecasts for Mexico's economic activity evolution announced in the last Inflation Report remain unchanged. In 2013, the economy is anticipated to present a lower dynamism, as compared to the previous year. Particularly, Mexico's GDP growth rate is expected to lie between 3 and 4 percent in 2013, and in 2014 it is anticipated to grow between 3.2 and 4.2 percent. Therefore, major slackness indicators are projected to continue showing no aggregate-demand related pressures on inflation, reflected in the expectation that the output gap will remain at levels close to zero throughout the forecast horizon, although with a slight upward trend. Furthermore, the prevailing uncertainty regarding the world economic activity, especially in the U.S., implies that the principal risks for growth remain downward. However, it is noteworthy that, insofar as there is progress in the process of structural reforms, a more favorable environment for the Mexico's economic growth in the medium term is expected.

Inflation in Mexico converged to low and stable levels over a decade ago. In recent years, annual headline inflation has been converging towards the 3 percent target with the variability interval of plus/minus one percentage point, established by Banco de México. This process has been more pronounced since mid-2011, and despite annual headline inflation being affected by transitory shocks for various months in 2012, the indicators of its medium-term trend do not signal any contamination of the process of price determination in the economy by the referred shocks. Indeed, in the fourth quarter of 2012, these shocks began dissipating and headline inflation resumed its downward trend, declining considerably by the end of the year and the beginning of 2013. Thus, after a span of several months, when annual headline inflation persisted above the upper bound of the variability interval of plus/minus one percentage point around the 3 percent permanent target, at the end of the year it returned to this interval, just as foreseen by Banco de México. On the other hand, annual core inflation, which has remained below headline inflation, kept decreasing during the reference quarter, so as to locate at a level below the 3 percent mark in December 2012 and in January 2013.

Annual headline inflation is forecast to locate at levels below those of 2012 in the following 2 years. The forecast trend considers that, during most of 2013 and 2014, annual headline inflation will locate at levels close to the 3 percent inflation target, although, as expected, certain volatility due to temporary and comparison based factors may be observed. Particularly, given its performance last year, annual headline inflation is anticipated to register a temporary increase by the end of the first and the beginning of the second quarter of 2013, although it is expected to revert in the subsequent months. In that regard, it should be noted that, despite the above, the underlying dynamics of the headline inflation convergence to its 3 percent target is not expected to be affected. Thus, annual core inflation is forecast to be below 3 percent in practically all the months of the referred time period. The balance of risks to the inflation forecast has been improving: although upward risks persist, most of them have been contained.

Considering that the inflation increase between May and September of 2012 was primarily due to transitory shocks, that there was no evidence of generalized prices increases, that no new shocks emerged and that changes in the evolution of headline and core inflation, which had been forecast, were confirmed, Banco de México's Board of Governors decided to maintain the target for the Overnight Interbank Interest Rate unchanged during the fourth quarter of 2012.

Later in January 2013, taking into account that inflation continued its downward trend and that the economic activity kept transiting in an orderly fashion towards lower growth rates, the Board of Governors decided to maintain the reference rate unchanged. Nevertheless, it mentioned that if this environment is consolidated, it could be advisable to adjust the target for the Overnight Interbank Interest Rate downwards so as to facilitate the economy's adjustment towards a situation of lower growth and lower inflation. In any event, the Board clarified that it would monitor the evolution of all inflation determinants, in order to reach the permanent 3 percent inflation target.

During recent years, the strengthening of the framework for the macroeconomic policy conduction and the concurrent improvement in Mexico's economic fundamentals have made the national economy more resistant to adverse scenarios. In this sense, once the shocks that had recently affected inflation started dissipating, achievements in curbing it became more evident. Indeed, a monetary policy focused for many years on preserving stability of the national currency purchasing power, and in particular on the convergence of inflation to its target, has allowed a considerable reduction in the level, volatility and persistence of inflation. This has generated an environment of greater certainty, giving rise, among other benefits, to a reduction in risk premia, in particular those associated with inflation risk and, consequently, with a decline in interest rates. The international juncture, characterized by considerable lassitude of the monetary policy in the main advanced economies, while propitiating considerable capital flows to the emerging ones, also contributed to the referred interest rates' decline. Both elements strengthened and resulted in a downward shift of the yield curve. Given the prospects for the Mexican economy and the environment in the next years, this shift in the yield curve, in line with lower interest rates' levels, is considered to be, for the most part, sustainable. It is clear that, at some point, the interest rates of the main advanced economies will begin a normalization process towards higher levels. However, achievements in controlling inflation, reflected in its evolution and in the different aspects characterizing it, are also estimated not to revert in the future.

Under these circumstances, it should be pointed out that an eventual decrease in the monetary policy reference rate, if the environment observed so far is consolidated, would be aimed at acknowledging the described situation. Particularly, the progress in controlling inflation and the consequent greater stability in the Mexican economy could make the convergence of inflation towards the 3 percent permanent target possible at a lower reference rate. Finally, and probably more important, a target for the reference rate of the monetary policy lower than the present one is considered to be compatible with the growth rate of the economy's spending in line with its potential growth, i.e., congruent with the 3 percent inflation target and reduced and fully fundable current account deficits.

2. Recent Developments of Inflation

2.1. Inflation

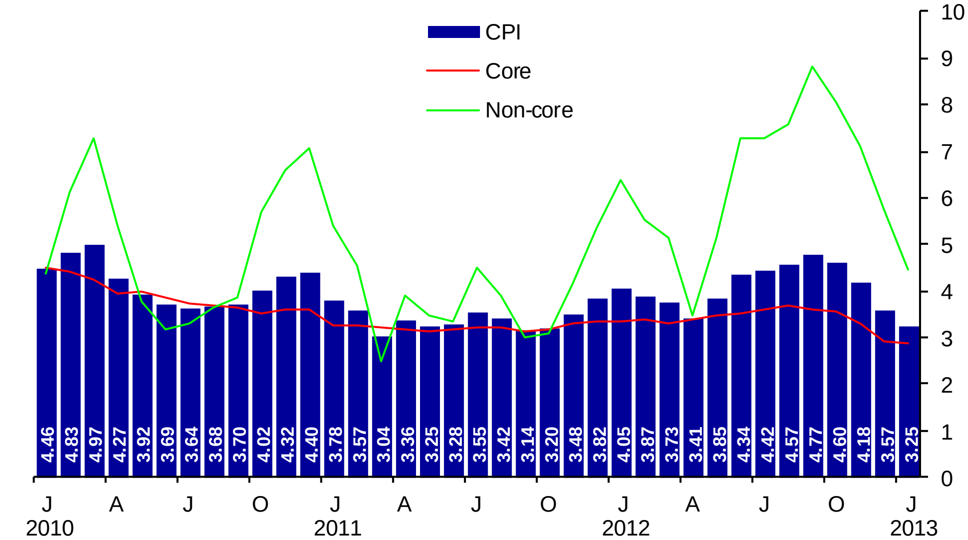
During the last decade the price formation process in Mexico has been converging to the established target for annual headline inflation of 3 percent, with the variability interval of plus/minus one percentage point.[1] This process became more pronounced since mid-2011, and even though between May and September 2012 annual headline inflation increased and observed levels over 4 percent -upon being affected by temporary shocks- other indicators of its medium-term trend keep showing a favorable evolution. In the fourth quarter of 2012 the effects of the referred shocks began fading and headline inflation resumed its downside trend.

Inflationary pressured faced by the Mexican economy diminished considerably in the reference quarter. Thus, annual headline inflation dropped significantly with respect to the level observed in the third quarter and, just as foreseen by Banco de México, at the end of the year it located within the variability interval of plus/minus one percentage point around the 3 percent inflation target. Particularly, it decreased from 4.77 to 3.57 percent from September to December 2012 (Chart 1 and Table 1), which confirmed the transitory character of the inflation rebound registered in the third quarter of 2012, in line with Banco de México's forecast. Moreover, the downward trend of annual headline inflation continued throughout January 2013 to locate at 3.25 percent (Chart 1 and Table 1).

Annual core inflation, which represents the most reliable indicator of the medium-term inflation trend, remained considerably below annual headline inflation during the episode when the latter rebounded. The lower relative level of annual core inflation was due to the fact that most changes in the relative prices due to the adverse shocks affected the non-core CPI component. In the fourth quarter, it stands out that annual core inflation declined and continued below the level of annual headline inflation. Thus, in December 2012 it located at 2.90 percent, therefore representing a considerable drop with respect to 3.61 percent observed in September 2012 (Chart 1 and Table 1). Just as in the case of annual headline inflation, this trajectory persisted during January 2012, locating at 2.88 percent. It should be noted that such performance of annual core inflation in this period was due to lower incidences of both merchandise and services prices subindices –confirming that the lower levels reached by annual core inflation correspond to the widespread performance of the price formation process in the economy.

[1] Evidence on statistical features of the price formation process in Mexico can be seen in the Technical Chapter "Features of the Price Formation Process in Mexico: Evidence from CPI Micro Data", published by Banco de México in the Inflation Report, October-December 2011.

Chart 1
Consumer Price Index
Annual change in percent



Source: Banco de México and INEGI.

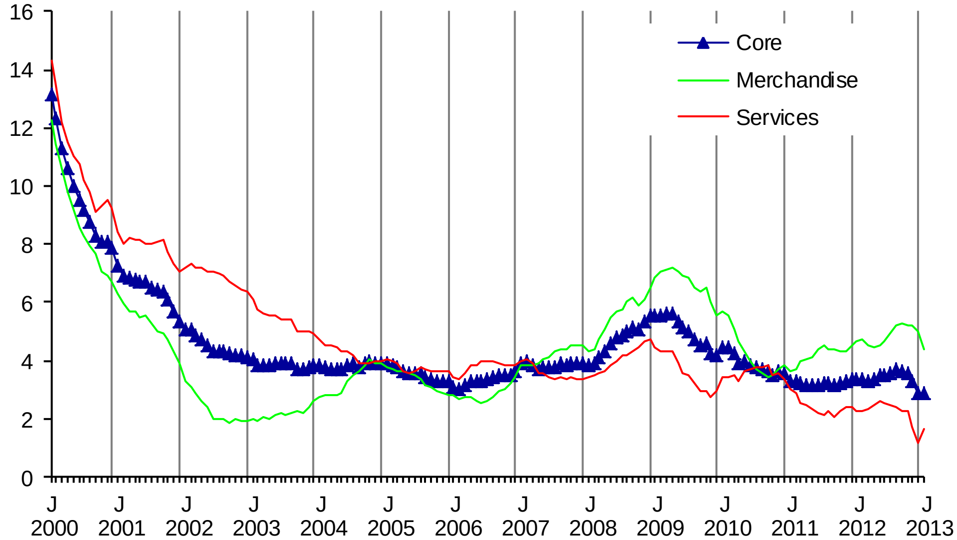
Table 1
Consumer Price Index and Components
Annual change in percent

	Annual change							Average percent	
	July 2012	August 2012	September 2012	October 2012	November 2012	December 2012	January 2013	Q III 2012	Q IV 2012
CPI	**4.42**	**4.57**	**4.77**	**4.60**	**4.18**	**3.57**	**3.25**	**4.59**	**4.11**
Core	**3.59**	**3.70**	**3.61**	**3.58**	**3.30**	**2.90**	**2.88**	**3.63**	**3.26**
Merchandise	**4.91**	**5.23**	**5.24**	**5.17**	**5.22**	**5.00**	**4.37**	**5.13**	**5.13**
Food, beverages and tobacco	6.61	6.81	6.91	6.68	6.67	6.11	5.23	6.77	6.49
Non-food merchandise	3.60	4.01	3.96	4.00	4.10	4.13	3.69	3.85	4.08
Services	**2.50**	**2.43**	**2.25**	**2.25**	**1.70**	**1.15**	**1.62**	**2.39**	**1.70**
Housing	1.91	1.95	1.98	2.00	2.03	2.05	2.07	1.95	2.03
Education (tuitions)	4.63	4.23	4.52	4.47	4.47	4.48	4.55	4.46	4.47
Other services	2.51	2.42	1.87	1.87	0.56	-0.72	0.33	2.27	0.56
Non-core	**7.30**	**7.58**	**8.81**	**8.07**	**7.09**	**5.74**	**4.47**	**7.90**	**6.95**
Agricultural	**11.27**	**11.76**	**16.02**	**15.60**	**13.02**	**9.18**	**5.51**	**13.01**	**12.54**
Fruit and vegetables	8.95	8.77	13.36	13.41	9.34	2.90	-2.21	10.34	8.40
Livestock	12.81	13.69	17.70	16.95	15.30	13.22	10.52	14.75	15.13
Energy and government approved fares	**5.02**	**5.19**	**4.73**	**3.93**	**3.94**	**3.84**	**3.89**	**4.98**	**3.90**
Energy	8.01	8.33	7.49	6.02	5.75	5.62	5.60	7.95	5.79
Government approved fares	0.07	-0.03	0.10	0.24	0.51	0.45	0.62	0.05	0.40
CPI excluding food (at home and away from home) and energy [1/]	**2.41**	**2.49**	**2.33**	**2.34**	**2.03**	**1.69**	**1.86**	**2.41**	**2.02**

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 annual change of the services core subindex, whose evolution reflects to a greater extent the domestic conditions affecting inflation, has maintained a downward tendency in the last decade, locating from February 2011 onwards below the 3 percent level, and from November 2012 at a level below 2 percent (Table 1 and Chart 2). This performance of services core inflation, from a medium-term perspective, indicates the process of inflation convergence in Mexico to significantly lower levels as compared to last decade.

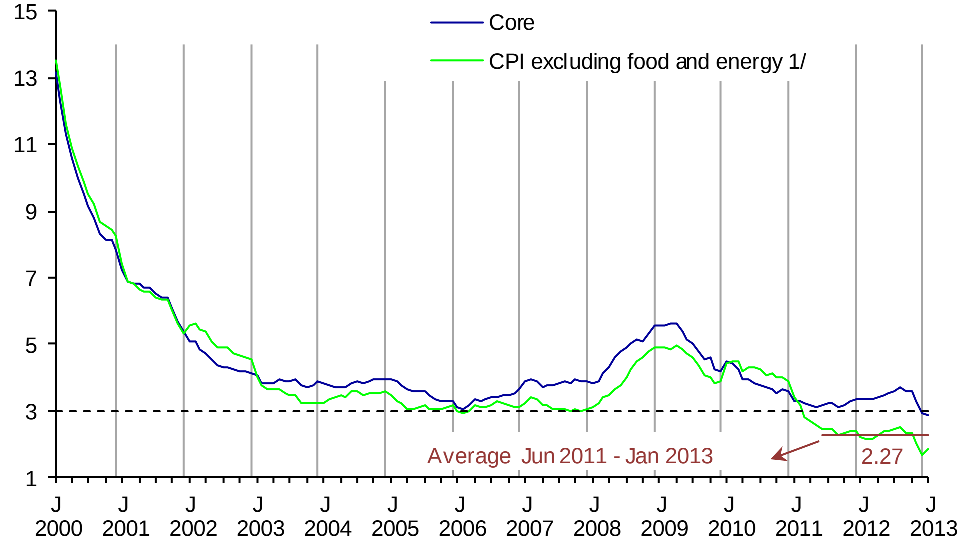
Chart 2
Core Price Index
Annual change in percent



Source: Banco de México and INEGI.

The above described scenario was also reflected by the performance of an indicator of consumer inflation that excludes food and energy items from the general calculus –index, coinciding with the definition of core inflation used in various countries, the U.S. among them. By virtue of the fact that by excluding the items that have registered significant relative price changes worldwide in recent years, this indicator can show more clearly the downward trend of the inflation. In that regard, the annual change in the period from June 2011 to January 2013 was on average 2.27 percent (the same average for annual headline inflation was 3.82 percent). Also, the referred variable reached lower levels in the fourth quarter of 2012 and at the beginning of 2013, shifting from 2.33 to 1.69 percent from September to December 2012, to be located at 1.86 percent in January 2013 (Table 1 and Chart 3).

Chart 3
Core Price Index and CPI Excluding Food and Energy
Annual change in percent



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.

Annual services core inflation maintained low levels in the reference period. Thus, it declined from 2.25 to 1.15 percent from September to December 2012, and in January 2013 it located at 1.62 percent (Table 1 and Chart 4a). The recent dynamics of this indicator were influenced by the performance of the prices of services, excluding housing and education, whose annual growth rate diminished from 1.87 to -0.72 percent from September to December 2012, a fall which partially reverted in January 2013, when it located at 0.33 percent. This group's behavior has been largely influenced by the evolution of telecommunications services' prices (Chart 5a and Box 1). However, it was also influenced by the prices of other services, such as medical care, motor vehicle maintenance, recreation and personal services, among others (Chart 5b). On the other hand, the annual change rates of the housing and education subindices shifted from 1.98 and 4.52 percent to 2.05 and 4.48 percent, respectively, during the reference period, while in January 2013 they reached levels of 2.07 and 4.55 percent (Table 1 and Chart 4a).

Box 1
Recent Evolution of Telecommunications Services Prices in Mexico

Introduction

In 2012 consumer prices of telecommunications services in Mexico declined considerably, which is in line with what been happening in other countries for various years. The referred price drop at the global level was mainly prompted by the technological progress in this industry. Furthermore, in the particular case of Mexico, this process was supported by legal resolutions, which strengthened previous decisions of the sectoral authority. Both the technological progress and the strengthening of the authorities' decisions intensified market competition, which has resulted in both higher quality of telecommunications services and lower service fees. Nonetheless, the stronger competition has also entailed higher price volatility in this sector, in particular given the increasing frequency and magnitude of offers from the market participants. This can be seen in the considerable increases of mobile phone prices registered in the second fortnight of January 2013.

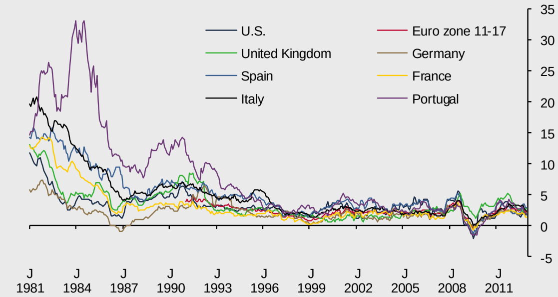
The Box is organized in the following manner: First, the performance of telecommunications price indices in Mexico is compared with those observed at the international level. Second, technological improvements in the industry and progress in the infrastructure development are analyzed. Third, regulatory decisions in Mexico are detailed. Fourth, the recent evolution of telecommunications fees in the country is explained. In the last section, some final considerations are presented.

1. International Experience

Generally stable and relatively low inflation levels have been observed worldwide for the last two decades (Charts 1a and 1b). Different factors contributed to this, standing out among them the generalized decrease in merchandise prices, as a consequence of further trade integration in the world.[1] Likewise, throughout this period inflation of services prices declined (Charts 2a and 2b).

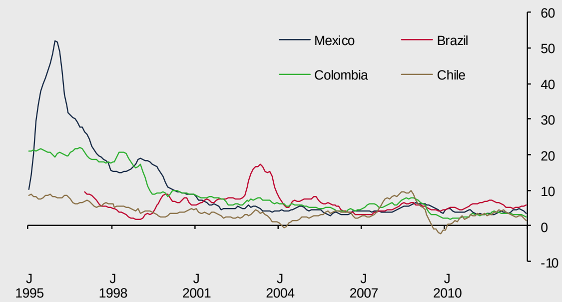
Another factor was the systematic worldwide reduction in the prices of telecommunications services at least for the last 15 years that contributed to the described trend. This can be seen in Table 1, which presents the accumulated percentage change, from 1999 onwards, of the national indices of prices for communication services in different countries. It can be observed how from 1999 to 2012 advanced countries, unlike Mexico, registered significant price decreases in the referred services. However, from 2011 onwards, Mexico also joined this trend. It should be pointed out that, in emerging Latin American countries the performance is not homogeneous and observed price decreases were lower than in the advanced ones (Table 2).

Chart 1
a) Consumer Price Index: Advanced Economies
Annual change in percent



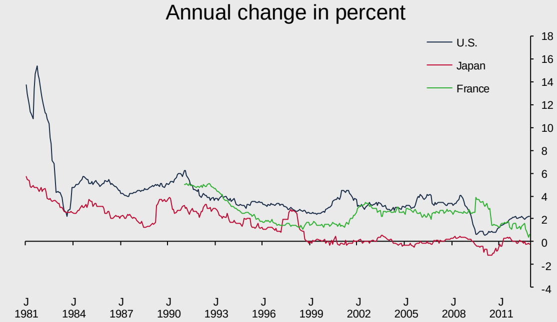
Source: National Statistics Bureaus.

b) Consumer Price Index: Emerging Economies, Latin America 1/
Annual change in percent



Source: National Statistics Bureaus.
1/ The sample of the national price indices of emerging countries is smaller than that of advanced countries due to data availability.

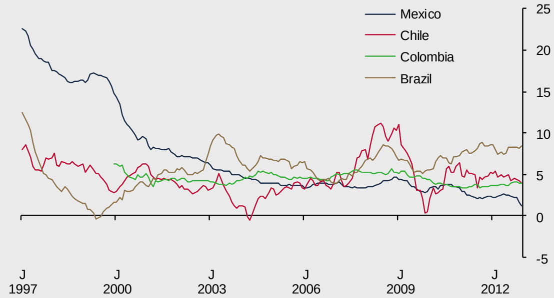
Chart 2
a) Consumer Price Index of Services: Advanced Economies
Annual change in percent



Source: National Statistics Bureaus.

[1] See Box "Considerations on the Evolution of Merchandise Core Inflation", published in the Inflation Report, July-September 2011, p. 7.

b) Consumer Price Index of Services: Emerging Economies, Latin America 1/
Annual change in percent



Source: National Statistics Bureaus.
1/ The sample of the national price indices of emerging countries is smaller than that of advanced countries due to data availability.

Table 1
Telecommunications Price Index: Mexico and Advanced Economies
Accumulated change in percent

	Jan1999 to Dec 2010	Jan 2011 to Dec 2012
Mexico	14.16	-23.07
U.S.	-13.76	-1.54
Japan	-23.82	-2.02
United Kingdom	-17.17	6.14
Euro zone	-20.58	-5.74
Germany	-26.98	-3.46
Spain	-17.53	-4.22
France	-16.10	-16.70
Italy	-15.50	1.96
Portugal	-15.03	-0.20

Source: National Statistics Bureaus.

Table 2
Telecommunications Price Index: Emerging Economies, Latin America 1/
Accumulated change in percent

	Jan 2009 to Dec 2010	Jan 2011 to Dec 2012
Mexico	-3.18	-23.07
Brazil	1.89	1.98
Colombia	0.41	4.30
Chile	-9.83	-2.17
Uruguay	-4.12	-0.24

Source: National Statistics Bureaus.
1/ The sample of the national price indices of emerging countries is smaller than that of advanced countries due to data availability.

2. Technological progress

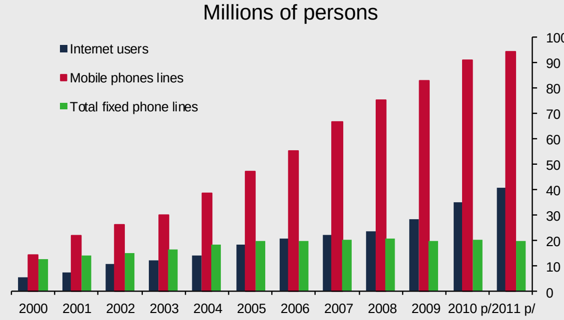
In recent years considerable technological progress has been registered worldwide, in the infrastructure as well as in personal telecommunications services and applications. In particular, greater access to broad band services stands out.

A remarkable innovation with respect to the '90s, when most of connections were through telephone lines, and reached a maximum speed of 56 kbps, has been the use of optical fiber networks, coaxial cable and digital lines (xDSL), which allow speeds of over 20 Mbps.

Besides these faster fixed internet connections, mobile broadband, i.e. internet access through mobile devices, has developed considerably in the last few years. This has propitiated the introduction and fast expansion of smartphones, which encouraged the development of such applications as "WhatsApp", "BlackBerry Messenger" and "Skype", all of which allow new modes of communication, alternative to the voice service. The referred competition has been a considerable factor for inducing firms to reduce the price of the voice service.

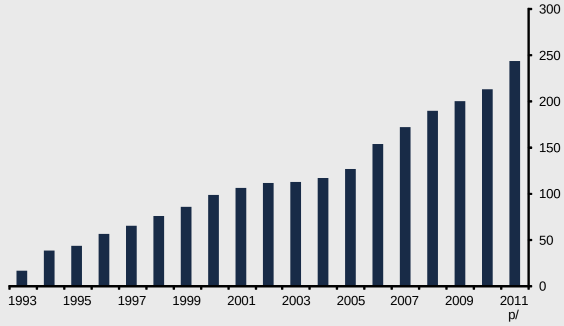
In Mexico, as far as the infrastructure is concerned, the expansion of high speed networks is noteworthy. Thus, the amount of internet users grew 702.9 percent between 2000 and 2011, and the number of mobile phone lines, 571.7 percent. Furthermore, the number of internet access accounts that use Dial-up connections has dropped, giving way to high-speed connections (xDSL and Coaxial cable). This increase in the services supplied and in the connection speed has been possible in part due to the expansion in the interconnection infrastructure, e.g. optical fiber networks, whose extension grew 147.7 percent from 2000 to 2011 (Charts 4, 5 and 6).

Chart 4
Subscribers by Type of Service in Mexico
Millions of persons



Source: Department of Statistical Information on Markets (*Dirección de Información Estadística de Mercados*), COFETEL, System of Statistical Data on Telecommunications Market (*Sistema de Información Estadística de Mercados de Telecomunicaciones*, (SIEMT).
p/ Preliminary data.

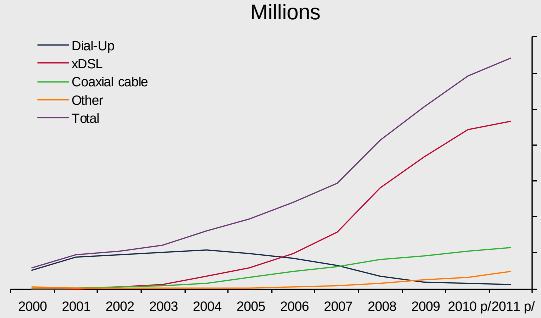
Chart 5
Extension of Optical Fiber Network in Mexico
Thousands of kilometers



Source: COFETEL (SIEMT).
p/ Preliminary data.

This progress in Mexico, just as in the rest of the world, has generated a possibility for telecommunications companies to integrate packages of services that used to be sold separately, given that nowadays several of them can be provided using the same infrastructure and technology. This has propitiated the introduction of new packages of services, such as those referred to as "triple play", where the same provider offers the fixed phone service, TV and internet for a single price, thereby increasing competition among providers who used to address different markets before.

Chart 6
Access Accounts by Technology in Mexico
Millions



Source: COFETEL (SIEMT).
p/ Preliminary data.

3. Regulatory Decisions

The regulatory policy of telecommunications in Mexico aims at ensuring the access of the public to telecommunications services in an environment of sound competition favoring the infrastructure development, efficiency in providing the services and the introduction of new technologies. Fulfilling this objective, in light of this sector's dynamism, has implied a constant revision of the applicable rules.

Thus, from 2008 onwards, certain resolutions have been adopted by authorities regarding the telecommunications interconnection, with the purpose of obtaining a more efficient rate structure of telephone services.

These resolutions have encouraged competition among mobile phone service providers and have contributed to lower fees paid by customers, particularly from mid-2011 when the Supreme Court of Justice of the Nation determined that interconnection charges set by COFETEL, which have been refuted by providers, should not be suspended. In May 2011, in compliance with the referred resolution Telcel accepted the COFETEL interconnection fee, which reduced the tariff charged by all providers for 2011 to 39 cents. Thus, the decrease was over 60 percent for some providers.

This transition to more efficient rates was supported by the Federal Competition Commission (COFECO, for its acronym in Spanish). The sanctions imposed by COFECO stemmed from an agreement which granted further certainty to the permanent reduction in the interconnection tariffs.[2]

These decisions contributed to an enhanced competition among providers, since they reduced the advantage given by a greater market share to attract users with differentiated rates, within and beyond their own network. This generated lower mobile phone rates of all providers.

4. Recent Evolution of Telecommunications Tariffs in Mexico

The CPI indices of some telecommunications services prices decreased throughout 2012. Thus, in December 2012, the annual changes of mobile phone, fixed phone and internet prices were -46.13, -8.01 and -9.08 percent, respectively (Chart 7). Nonetheless, in the second fortnight of January 2013, the mobile phone rates increased, so that the annual change of this service's price was -23.7 percent in this period.

- The referred decrease in the mobile phone services index is associated both with lower registered fares per minute of voice calls in pre-paid plans, and with additional call minutes and data downloading in post-paid plans of the largest companies in the market. Thus, in pre-paid plans decreases of up to 76 percent, in the case of the most relevant companies in the market, were observed. On the other hand, in post-paid plans new packages for similar amounts and fixed rates increased up to 300 percent the number of voice minutes included and granted additional megabytes of data download, not included in the previous plans. In this context, the higher observed price of this service in the second fortnight of January 2013 is a consequence of the

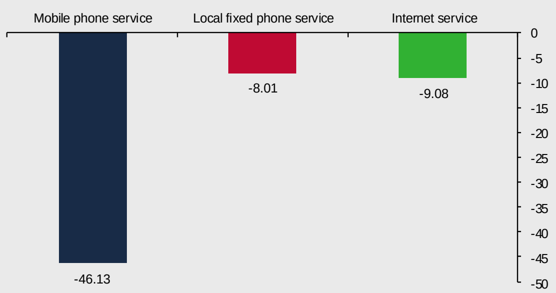
[2] See COFECO's announcement CFC-10-2012.

withdrawal of some offers in voice and data services.

- The reduction observed in the annual change of the fixed phone services' index is mainly associated with the lower effective cost of voice calls from fixed lines to mobile phones.

- Lower internet services' price stems from increases in connection speed, offered by the principal providers of this service.

Chart 7
Indices of Telecommunications Services Prices: December 2012
Annual change in percent

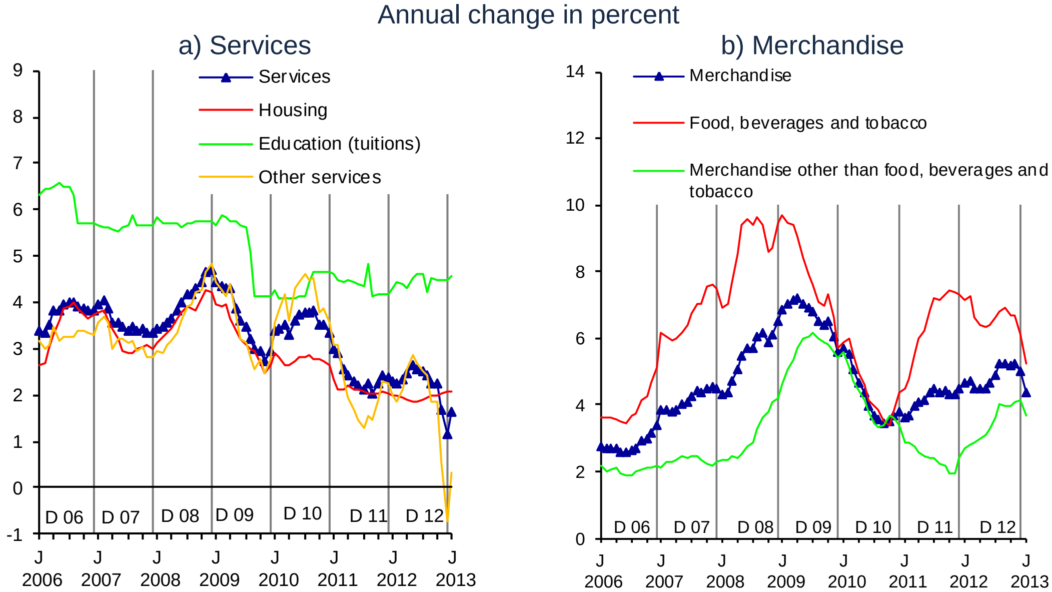


Source: INEGI.

5. Final Remarks

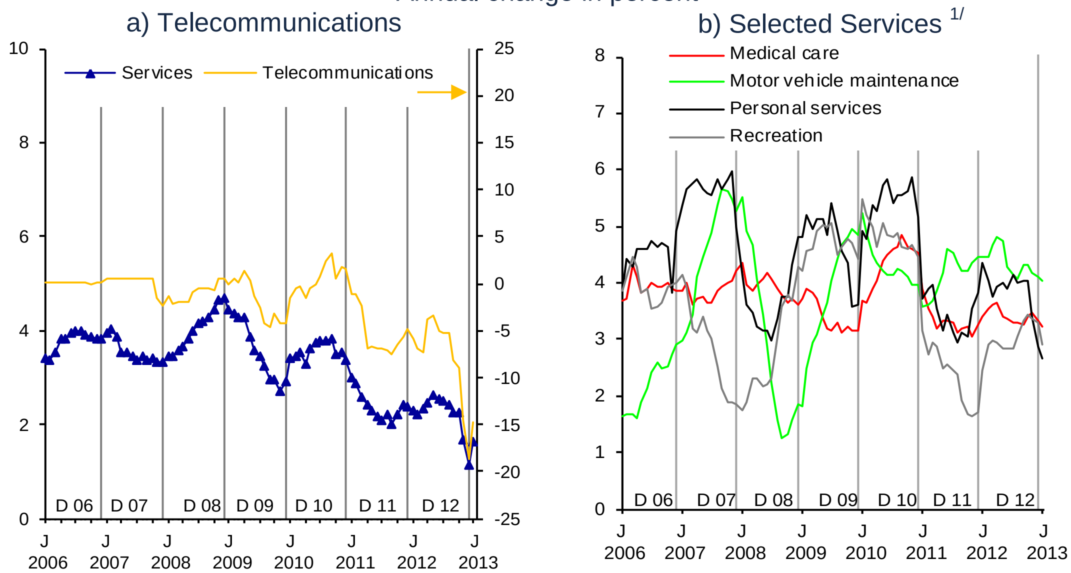
The recent evolution of the telecommunications services index in Mexico has taken place in an international environment in which the reduction of prices for these services has been observed for various years. This evolution has been supported by an intensified competition among different providers, emerged as a result of significant worldwide technological progress and the strengthening of the legal framework in Mexico. By virtue of the fact that the rapid technological evolution in the reference sector is anticipated to persist in the coming years, the quality of this industry's services is expected to continue improving. This, together with the legal frameworks encouraging competition, will generate the necessary conditions for these services' prices to maintain a downward trend, although with greater price volatility, as a reflection of higher competition in the sector.

Chart 4
Core Price Index: Services and Merchandise
Annual change in percent



Source: Banco de México and INEGI.

Chart 5
Core Price Index: Services
Annual change in percent



1/ The items included in Medical care are: medical and dental visits, general hospital services, surgery, medical care during childbirth, laboratory exams, labor hospitalization and clinical laboratory tests. Motor vehicle maintenance includes: motor vehicle insurance, motor vehicle maintenance, repair, car wash and servicing. Personal services consist of: laundry and dry cleaning services. And Recreation includes: nightclubs, sport clubs, sporting events and other activities.
Source: Banco de México and INEGI.

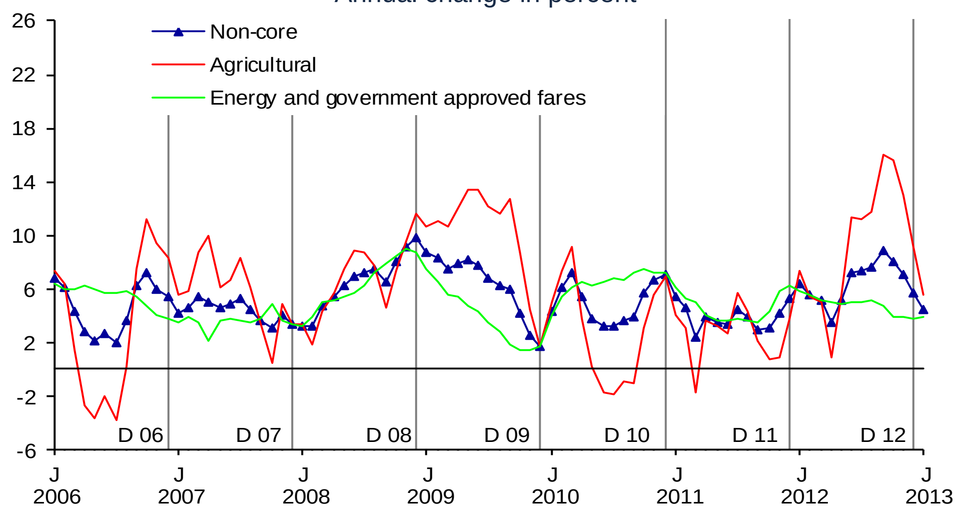
In turn, the merchandise core subindex, corresponding to the part of the CPI core basket that was most seriously affected by external shocks, started to contribute to lower annual headline inflation during the analyzed quarter. Therefore, the annual change of this subindex shifted from 5.24 percent in September 2012 to 5 percent in December, decreasing further in January 2013 and locating at 4.37 percent (Table 1 and Chart 4b).

The decline of the merchandise core inflation in the reference period was mainly determined by the lower growth rate of processed food prices, in a context in which the international commodity prices generally observed a downward trend and in which the exchange rate appreciated. In this regard, the annual change of the food, beverages and tobacco group declined from 6.91 to 6.11 percent from September to December 2012, and diminished even more in January reaching 5.23 percent (Table 1 and Chart 4b). This was the result of the performance of different food prices, among which the prices of grains, meat products, oil, juice, soft drinks, cheese and sugar stand out. On the other hand, the annual change of the non-food merchandise prices, which presented an upward trend till August 2012, stabilized from September onwards, and recently presented a slight reduction. Thus, between September 2012 and January 2013 it dropped from 3.96 to 3.69 percent, locating at a significantly lower level with respect to the food, beverages and tobacco group (Table 1 and Chart 4b).

Annual non-core inflation also reduced during the fourth quarter of 2012 and continued this downward trend at the beginning of 2013. Particularly, from September to December 2012 it shifted from 8.81 to 5.74 percent, while in January 2013 it located at 4.47 percent (Table 1 and Chart 6). This decrease was driven both by the performance of the agricultural goods' subindex and the subindex of energy and government approved fares. In particular, these subindices' annual changes decreased between September and December 2012 from 16.02 and 4.73 percent to 9.18 and 3.84 percent, respectively, and located in January at 5.51 and 3.89 percent (Table 1 and Chart 7).

- The decrease in the agricultural products' prices was affected by the partial fading of the adverse shocks, which was reflected in lower annual growth rates of many foods' prices. The ones corresponding to the following fruit and vegetables: bean, tomato, papaya, potato, zucchini, orange and onion, and the following livestock products: beef, pork and chicken, fish and egg, are particularly relevant. In the case of the last group, it was associated to a slight production normalization following the impact produced in the third quarter of 2012 by the avian flu outbreak in many municipalities of the state of Jalisco.[2]
- On the other hand, the dynamics observed in the annual growth rate of the subindex of prices of energy and government approved fares were affected by decreases registered in electricity tariffs (Chart 7b).

Chart 6
Non-core Price Index
Annual change in percent

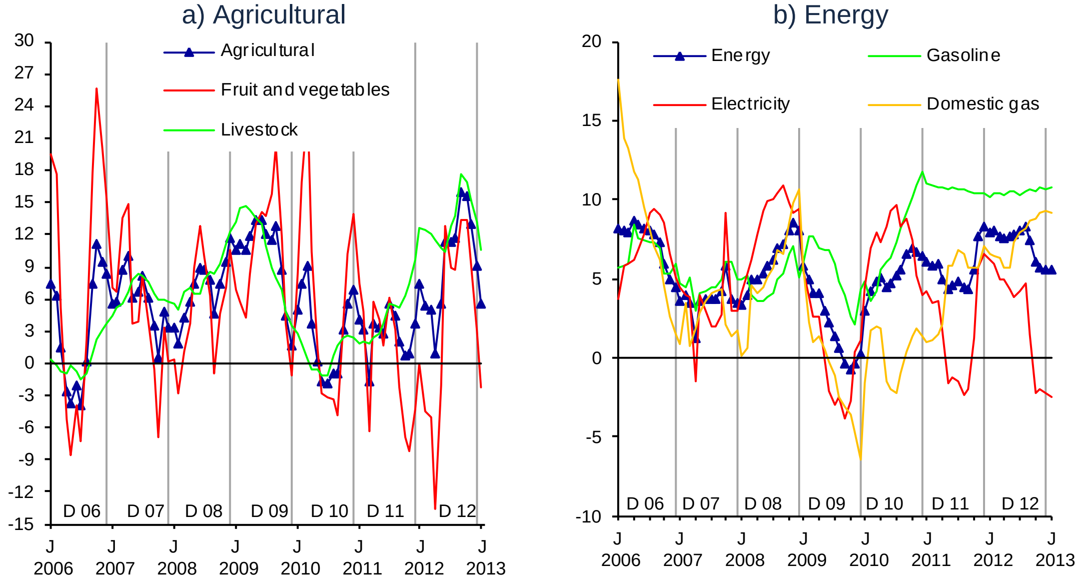


Source: Banco de México and INEGI.

The Producer Price Index (PPI) of finished merchandise and services, excluding crude oil, registered a significant decrease in the fourth quarter of 2012, and its change rate located at a considerably lower level as compared to annual headline inflation of the CPI. Thus, the annual inflation of this index shifted from 3.89 to 1.54 percent between September and December 2012, while in January 2013 it located at 1.58 percent (Chart 8). This was determined by the performance of both merchandise' and services' producer prices. The annual change of the former dropped from 3.57 to 0.94 percent between September and December 2012 (in January 2013 it was 0.06 percent), while the annual change of the services PPI subindex shifted from 4.47 to 2.31 percent in the same time span (in January 2013 it was 3.43 percent).

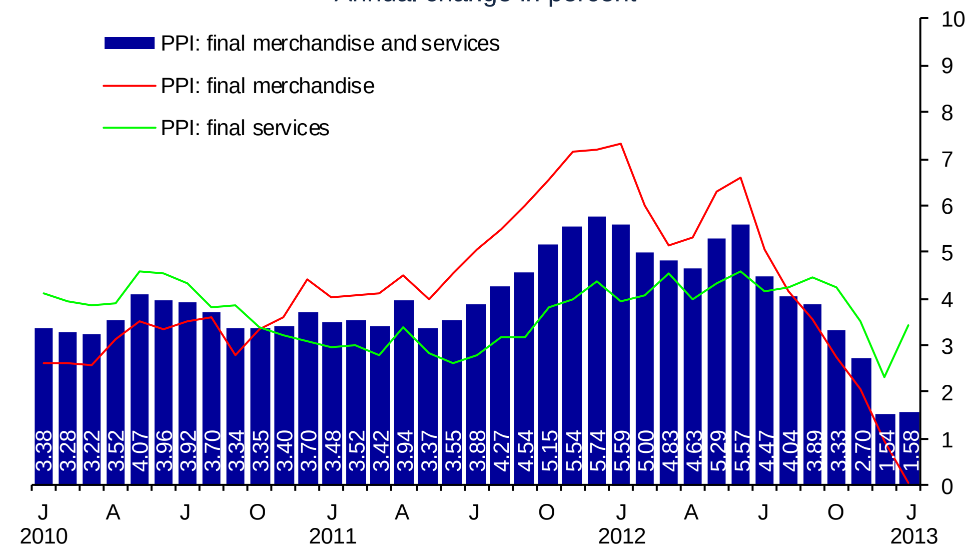
[2] Regarding the impact of the avian flu on egg production and prices in the third quarter of 2012, see the Box "Impact of the Avian Influenza Outbreak on Egg Production and Prices", published by Banco de México, in the Inflation Report, July-September 2012.

Chart 7
Non-core Price Index
Annual change in percent



Source: Banco de México and INEGI.

Chart 8
Producer Price Index
Annual change in percent



Source: Banco de México and INEGI.

2.2. Wages

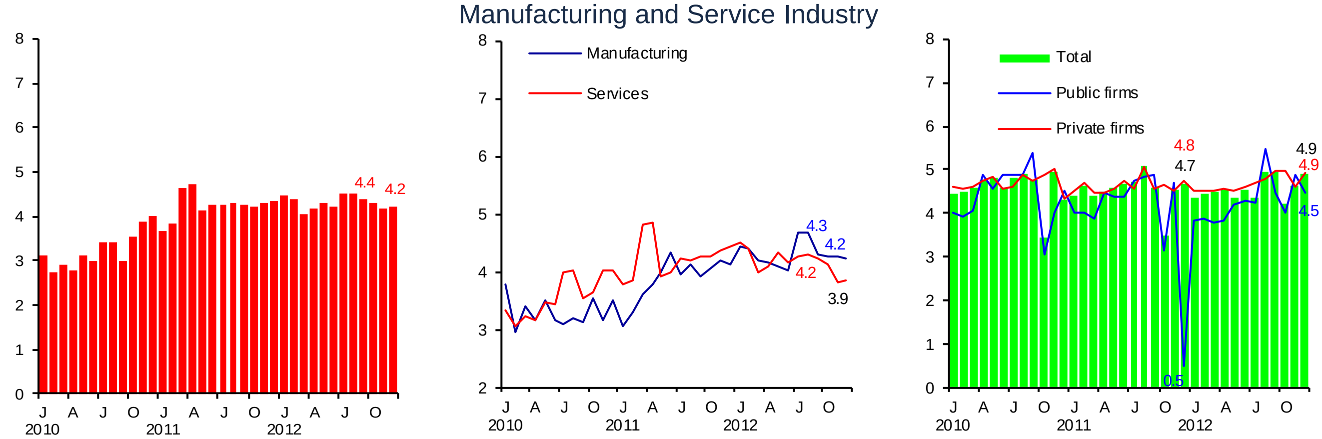
The recent evolution of wage indicators suggests that, generally, labor costs still do not represent an element generating inflationary pressures. Thus, the slight rebound observed in the annual change of the reference wage of IMSS-insured workers in the third quarter reverted during the fourth one. Particularly, this annual change rate reduced between September and December 2012 from 4.4 to 4.2

percent (Chart 9a), affected by the performance of salaries both in the manufacturing industry and in the services sector. In this regard, from September to December 2012 the annual change of the reference wage of IMSS-insured workers in these industries shifted from 4.3 and 4.2 percent to 4.2 and 3.9 percent, respectively (Chart 9b).

In turn, the contractual wage negotiated by firms under federal jurisdiction increased from 4.2 percent in October 2012, as compared to the growth of 3.5 percent observed in the same month of the previous year. This difference, to a large extent, was determined by the wage increase granted by IMSS to its workers (4 percent with respect to 3 percent in 2011). In the subsequent months after November and December, although the differences in the contractual wage increases granted in 2012 and 2011 persisted, they were of a lower magnitude; therefore, those observed in the referred months of 2012 were 4.6 and 4.9 percent, as compared to 4.5 and 4.7 percent in the same months of 2011 (Chart 9c).

Chart 9
Wage Indicators
Annual change in percent

a) IMSS Reference Wage [1/] | b) IMSS Reference Wage: Manufacturing and Service Industry | c) Contractual Wage [2/]



Source: Calculated by Banco de México with data from IMSS and STPS.
1/ During December 2012 an average of 16 million contributors were registered in IMSS.
2/ The contractual wage increase is an average weighted by the number of involved workers. 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

3.1. International Environment

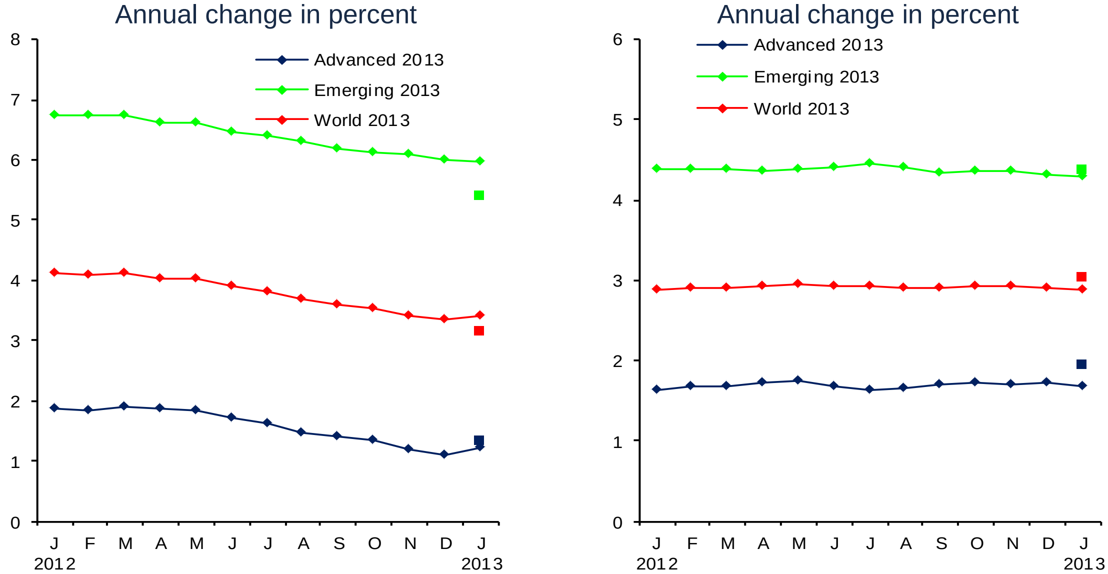
3.1.1. World Economic Activity

The world economic activity remained weak in the reference quarter. Particularly, in the last months of 2012 lower growth expectations for 2013 were registered, both for advanced and for emerging economies, even if in January they seem to have stabilized, although at low levels (Chart 10a). International financial conditions improved as a result of the announcement last September of a new program of sovereign bond purchases by the European Central Bank (ECB), as well as the agreement reached to reduce the magnitude of the fiscal adjustment in the U.S. in 2013. Nonetheless, the possibility of future episodes of volatility in the financial markets cannot be ruled out, given the difficult situation prevailing in the Euro zone and the persisting uncertainty concerning the fiscal situation in the U.S. Finally, both advanced and emerging economies anticipate in 2013 lower inflation levels than those of 2012 (Chart 10b). In this environment, the central banks are expected to retain an important role in supporting economic activity levels and in maintaining financial stability in international markets.

Chart 10
Evolution of Growth Expectations for GDP and Inflation in 2013 [1/]

a) GDP Growth
Annual change in percent

b) Inflation
Annual change in percent



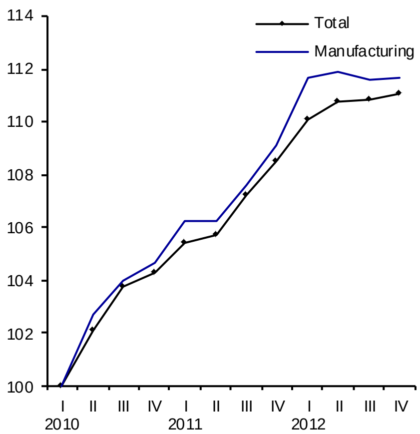
1/ The weighted average is calculated by region, using the share of each country's GDP as a weight, based on the purchasing power parity with respect to the total world GDP in the corresponding year. Advanced economies represent approximately 46% of the world GDP and the emerging ones, around 36% of the world GDP. The sum of these two groups stands for approximately 82% of the total world GDP.
Note: The square marker refers to the expectations for 2012.
Source: Prepared by Banco de México with data from the International Monetary Fund and from Consensus Forecasts.

Preliminary data indicate a slight contraction in the U.S. economy in the fourth quarter of 2012. Indeed, the GDP growth shifted from 3.1 percent at an annualized quarterly rate in the third quarter to -0.1 percent in the fourth one.[3] The contraction in this period was principally due to a lower inventory accumulation and to a negative contribution to growth by government spending and net exports. After contributing with 1.9 percentage points to the GDP growth in the third quarter, the referred components subtracted 2.9 percentage points in the last quarter of that year.

The U.S. industrial production, particularly its manufacturing component, observed virtually no expansion during the fourth quarter of 2012 (Chart 11a). Furthermore, the prospective indicators suggest lower growth of the manufacturing production in the coming quarters. On the other hand, the recovery of employment has not fully consolidated yet. Non-farm employment growth increased from a monthly average of 152 thousand jobs in the third quarter of 2012 to 201 thousand jobs in the fourth one, and later dropped to 157 thousand jobs in January 2013. The unemployment rate rebounded slightly in recent months, settling at 7.9 percent in January 2013, after having registered a downward trend till the third quarter of 2013. However, greater stability in the labor participation rate should be pointed out (Chart 11b).

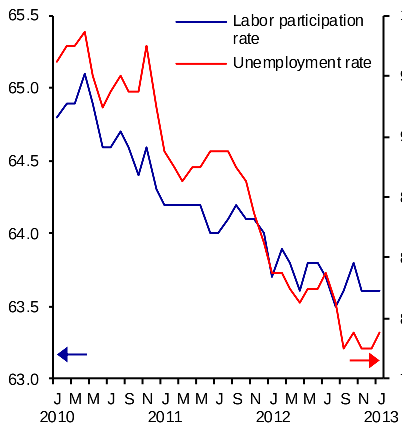
Chart 11
U.S. Economic Activity

a) Industrial and Manufacturing Production
Index I 2010=100, s. a.



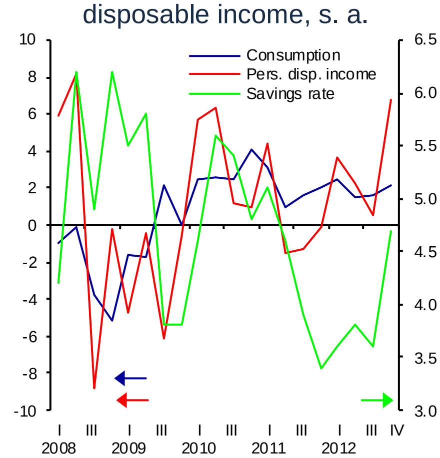
s. a. / Seasonally adjusted figures.
Source: U.S. Federal Reserve.

b) Unemployment Rate and Labor Participation Rate
In percent of labor force and population, s. a.



s. a. / Seasonally adjusted figures.
Source: BLS.

c) Private Consumption Spending, Real Personal Disposable Income and Savings Rate
Annualized change over 3 months in percent and in percent of personal disposable income, s. a.



s. a. / Seasonally adjusted figures.
Source: BEA.

Private consumption expenditure in the U.S. continued its moderate expansion in the fourth quarter of 2012, mainly as a result from the increased savings rate and the still insufficient growth of personal disposable income (Chart 11c), so it grew 2.2 percent at an annualized quarter rate in the reference period, as compared to 1.6 percent in the third quarter. Given that the labor market is the main source of income for most households, a sustainable recovery of spending on consumption will require a significant improvement in the situation of this market. On the other hand, the persisting high level of households' indebtedness remains a factor

[3] According to the Advance Report by Bureau of Economic Analysis (BEA) on the GDP performance.

restricting the demand for credit and therefore limiting the recovery in consumption spending.

Conditions in the U.S. real estate market continued improving in the fourth quarter of 2012. Housing start-ups and building permits kept expanding and home builders' confidence index reached its maximum level since the beginning of the recovery. Therefore, the expansion rate of residential construction kept increasing, although it remains at reduced levels with respect to other recoveries. Growth of spending on residential investment shifted from 13.5 percent at an annualized quarterly rate in the third quarter to 15.3 percent in the fourth one. Investment in equipment and software rebounded in the fourth quarter, following a contraction in the previous one. Capital expenditure rose 12.4 percent in the last quarter of 2012, after contracting 2.6 percent in the third one. This recovery was driven by reduced fears of a possible aggravation of the financial crisis in the Euro zone and a significant slowdown of China's economic activity during this quarter.

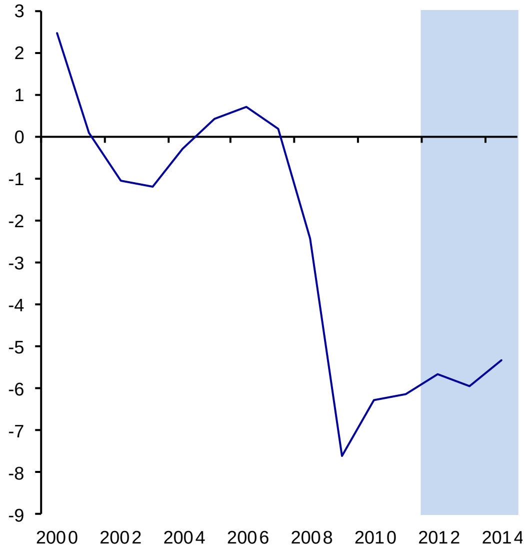
Regarding fiscal policy, the U.S. Congress reached an agreement to avoid a severe fiscal adjustment in the short term, which would occur in 2013, due to the expiration of various tax incentives and the entry into force of the automatic spending cuts, decreed by the Budget Control Act of August 2011. Even though this adjustment was considered unlikely by the analysts, if it had taken place, it would have resulted in a significant contraction of production and employment.[4] The compromise reached by the U.S. Congress under the American Taxpayer Relief Act of 2012, includes increased tax liability for high-income families and an increase in the payroll tax from 4.5 to 6.5 percent. Likewise, the current unemployment benefits were extended for one year longer. In this way, the foreseen fiscal adjustment for 2013 under the new legislation is similar to the scenario anticipated by the consensus of analysts. However, no agreement has been reached so far with respect to the automatic cuts in federal spending, which could lead to a greater fiscal adjustment than presently anticipated. Additionally, even though the U.S. Congress passed a draft law, which suspends the debt ceiling till May 19, 2013, uncertainty regarding the fiscal package negotiation, about to take place in the coming months, persists. Given the abovementioned factors, the downside risks associated to the U.S. economic expansion for 2013 prevail.

The extraordinary lassitude of the monetary policy stance in the U.S. has taken place in an environment of considerable slackness in productive capacity (Chart 12a). With monetary policy interest rates close to zero, the U.S. Federal Reserve, just as other central banks of the main advanced economies, resorted to additional unconventional monetary policy measures in the last months of 2012 (see Section 3.1.3. for a description) so as to support the recovery of the economy and employment. Particularly, based on the labor market evolution, a new criterion to guide the expectations of the trend of the monetary policy rate was established. Additionally, the U.S. Federal Reserve decided to increase the amount of assets to be purchased in order to contribute to the reduction in the long-term interest rates. This turned out of fundamental importance to support the recovery of mortgage loans and residential investment.

[4] In accordance with the Congressional Budget Office (CBO), the adjustment would contribute to a GDP contraction of 0.5 percent in 2013 (as measured by the change from the fourth quarter of 2012 to the fourth quarter of 2013) and the unemployment rate would rise to 9.1 percent.

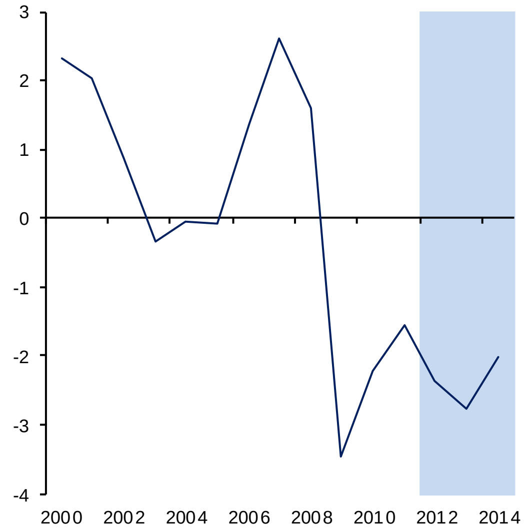
Chart 12
Output Gap Estimation in Advanced Economies

a) U.S.
Percentage of potential output



Note: The shaded area represents forecasts for 2012-2014.
Source: CBO.

b) Euro Zone
Percentage of potential output



Note: The shaded area represents forecasts for 2012-2014.
Source: European Commission.

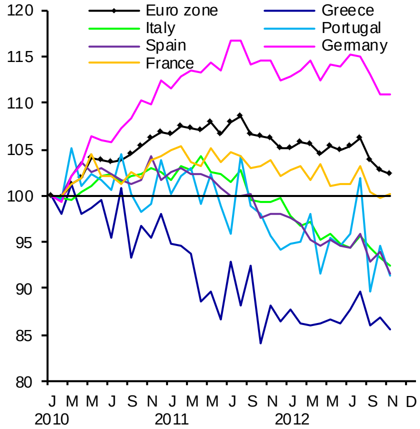
In the Euro zone, available indicators suggest a new GDP drop in the fourth quarter of 2012. In particular, industrial production growth registered a strong reversal in the last quarter of 2012 (Chart 13a). Likewise, consumer spending has shown signs of weakness in most countries of the region. In this context, the performance of consumption was affected by the deteriorated consumer confidence, which, in turn, mainly results from the weak labor market (Chart 13b). Finally, the unemployment rate reached 11.7 percent in December 2012, with respect to 11.6 percent registered in September.

The weakness of the Euro zone's economic situation is expected to expand in 2013, and, therefore, a high degree of slack in the economy is anticipated to prevail (Chart 12b). This reflects the necessity to continue with the process of fiscal consolidation, the adverse shock of weak households' and firms' confidence on the private domestic spending, and the slow recovery of external demand. Besides, bank credit in the area, in particular to non-financial firms, has remained stagnant, mainly due to the adverse growth prospects in the area and the weakness of numerous financial institutions in the region (Chart 13c).

Available data indicate that GDP in Japan has remained practically stagnant during the fourth quarter of 2012, given the persisting weakness of both domestic and external demand, even though some temporary factors behind this seem to begin vanishing. Industrial production contracted 6.0 percent at an annualized rate in the fourth quarter with respect to the previous one, after having decreased 15.3 percent in the third quarter. Besides, exports remained affected by the territorial disputes with China. Expenditure on private consumption seems to be recovering after being affected by a fall in automobile sales once the eco-friendly car subsidy program came to an end. Prospects for 2013 are slightly better due to the fiscal stimulus announced by the new government and the authorities' decision to combat deflation (see Section 3.1.3.).

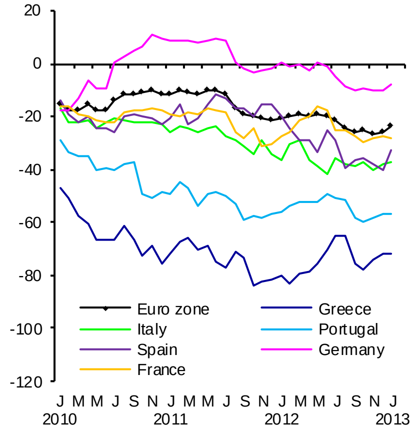
Chart 13
Euro Zone Economic Indicators

a) Industrial Production
Index January 2010=100, s. a.



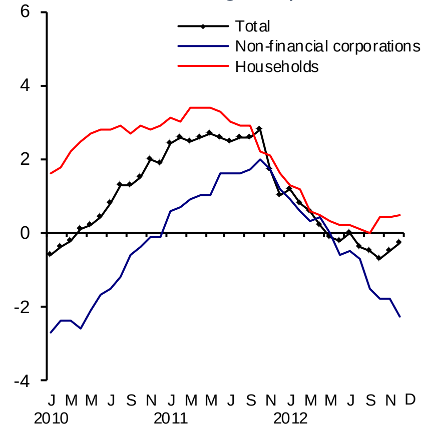
s. a. / Seasonally adjusted figures.
Source: Eurostat.

b) Consumer Confidence
Diffusion index, s. a.



s. a. / Seasonally adjusted figures.
Source: European Commission.

c) Financial Institutions' Credit to the
Non-financial Private Sector
Annual change in percent

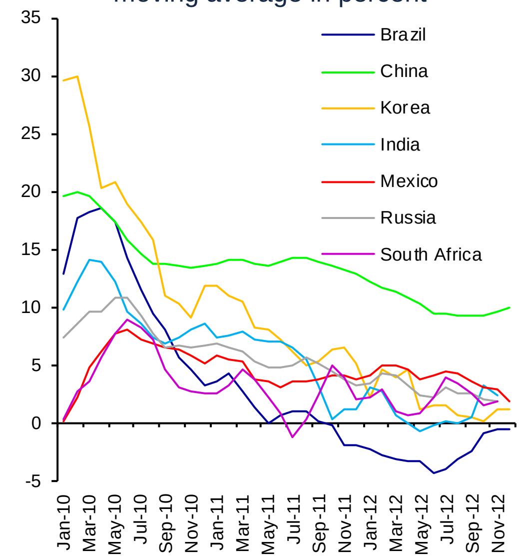


Source: ECB.

Most of the principal emerging economies continued showing lower dynamism in the fourth quarter of 2012. It stands out that industrial production growth rate in many of them has noticeably diminished (Chart 14a). To a large extent, this reflects the contagion of the growth slowdown in advanced economies, which in turn adversely affected emerging countries' exports (Chart 14b).

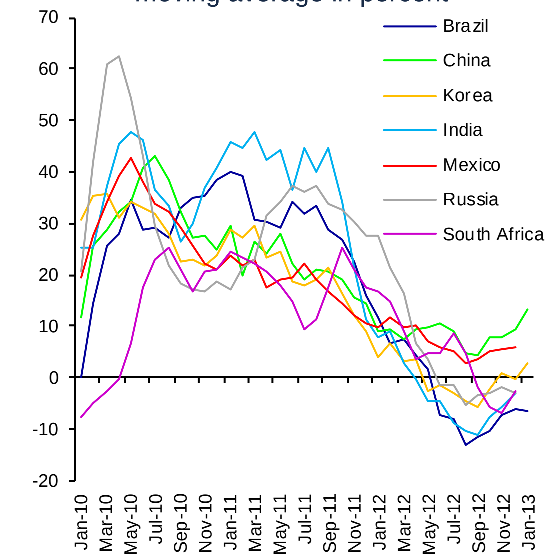
Chart 14
Emerging Economies' Economic Activity

a) Industrial Production
Annual change of the 3-month
moving average in percent



Source: Haver Analytics.

b) Exports
Annual change of the 3-month
moving average in percent



Source: Bloomberg and Haver Analytics.

3.1.2. Commodity Prices

After the increase in the third quarter, international commodity prices observed a downward trend in the fourth quarter of 2012, although with certain volatility (Chart 15a). Oil prices decreased in line with the downward revision of its demand, given the weak world economy (Chart 15b). However, in January 2013 these prices were affected by the decline in the supply of crude oil from the North Sea, due to the maintenance operations and cuts in oil production in Saudi Arabia.

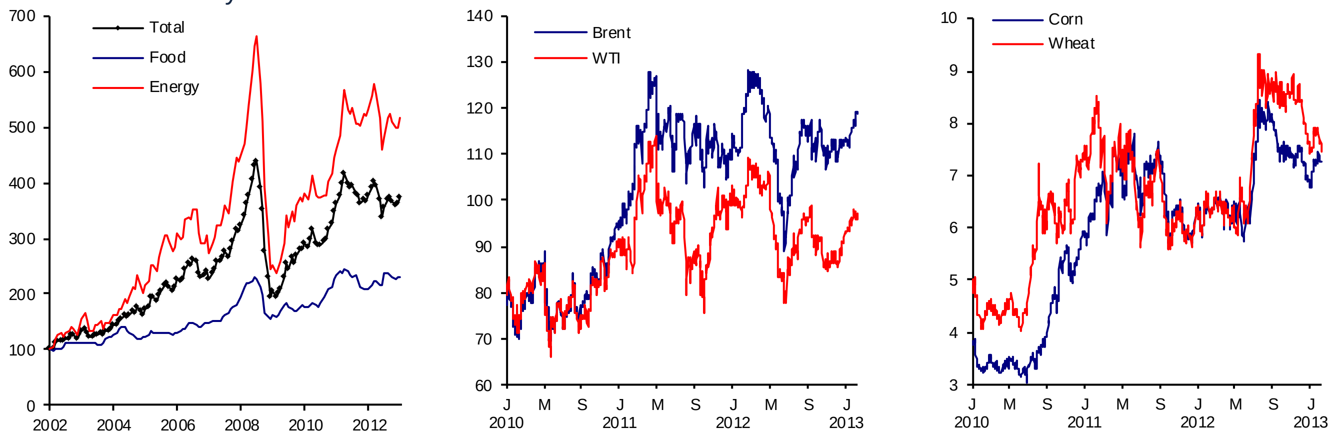
On the other hand, reduced grain prices, particularly those of wheat and corn, reflect an environment of lower economic dynamism and better supply conditions, mainly in South America (Chart 15c). Additionally, the U.S. Department of Agriculture (USDA) in its Report of December 2012 carried out an upward adjustment with respect to its November estimate of the forecast for the world production of wheat and corn for the agricultural cycle 2012-13.

Chart 15
International Commodity Prices

a) Total Commodities, Food and Energy
Index January 2002=100

b) Crude Oil [1/]
USD per barrel

c) Corn and Wheat [1/]
USD per bushel



Source: International Monetary Fund.

1/ Spot prices.
Source: Bloomberg.

1/ Spot prices.
Source: Bloomberg.

3.1.3. World Inflation Trends

During the last months of 2012, inflation in advanced countries observed a downward trend, while in some of the main emerging ones it stabilized (Chart 16a). Due to the lower expected growth rate of the world economy and the downward trend of international commodity prices, inflation in most countries is anticipated to decline in 2013. In this environment, the accommodative monetary policy in the main advanced and most emerging economies prevailed in the fourth quarter of 2012, and even in some cases an additional monetary policy easing took place.

As stated before, in the particular case of advanced economies, the evolution of different indicators points to the persisting slack in resource utilization. Therefore, the current accommodative monetary policy is forecast to persist for a long period in these economies.

In the U.S., annual headline inflation decreased from 2.0 percent in September to 1.7 percent in December 2012. After an increase in August and September, energy prices dropped significantly in the last quarter of 2012, which contributed to maintaining inflation at low levels. In turn, in a context of an increased slack in the economy, core inflation shifted from 2.0 to 1.9 percent in the same period. Thus, the U.S. Federal Reserved in its monetary policy meeting in December maintained unchanged the target range for its federal fund rate of 0 to 0.25 percent and implemented a new strategy to support the U.S. economy. Particularly, it announced its intention to keep its benchmark interest rate at exceptionally low levels, while the unemployment rate persists above 6.5 percent, the inflation forecast is equal to or less than 2.5 percent in the period of 1 to 2 years, and longer-term inflation expectations remain stable. Similarly, to support a more solid employment recovery, the U.S. Federal Reserve reported that it would continue with a monthly purchase of mortgage-backed securities for USD 40 billion, and that from January 2013 onwards, once the program of the average maturity extension of its securities' holdings (Operation Twist) was concluded, it would purchase long-term Treasury securities at a pace of USD 45 billion per month. In its January meeting, the U.S. Federal Reserve ratified its new strategy outlined in December, including the amount of the operations of the securities' purchase.

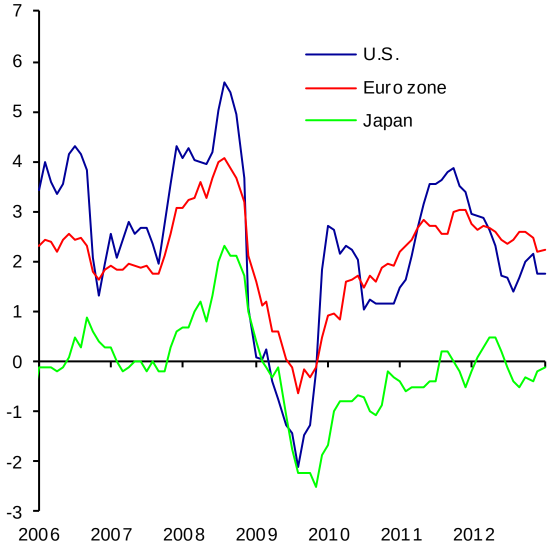
In the Euro zone, annual headline inflation located at 2.2 percent in December 2012, below 2.6 percent observed in September, mainly due to lower energy prices. Core inflation persisted at 1.5 percent in the same period. High inflation spreads prevailed in the area, mainly as a result of the changes observed in some of the region's countries in the value added tax and in regulated prices. In its meeting of December, the ECB announced its decision to continue conducting its main refinancing operations (MROs) for as long as necessary and at least until July 2013. Besides, it maintained its benchmark interest rates unchanged, decision which it later endorsed in its January meeting of 2013.

In Japan, headline inflation shifted from -0.3 percent in September to -0.1 percent in December, partly due to the depreciation of the national currency. On the other hand, core inflation excluding food and energy persisted at -0.6 percent in the same time span. In recent months, the Bank of Japan carried out significant modifications in its monetary policy, including an increase in its inflation target. On the one hand, in its monetary policy meetings of October and December it expanded its asset-purchase program by JPY 11,000 and 10,000 billion, respectively, setting it at JPY 101,000 billion and establishing its maturity at the end of 2013. Furthermore, in its meeting of January 2013, the Bank of Japan established an inflation target at 2 percent and pointed out that from January 2014 onwards it would introduce a new program with no definite deadline.

Following an increase in the third quarter of 2012, driven by lower commodity prices, headline inflation in some of the main emerging economies stabilized in the last months of the year (Chart 16b).

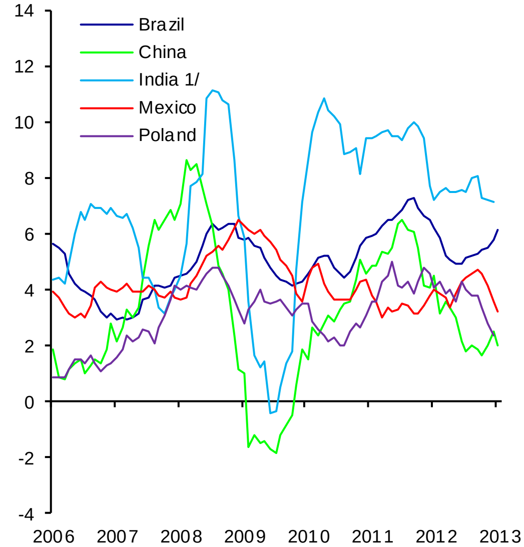
Chart 16
Headline Inflation in Advanced and Emerging Economies

a) Advanced Economies
Annual change in percent



Source: BLS, Eurostat and Japan Statistics Bureau.

b) Emerging economies
Annual change in percent



1/ It refers to inflation of wholesale prices.
Source: National Statistics Bureaus.

3.1.4. International Financial Markets

In an environment of persisting weakness of the world economy and inflation, which began its downward trend, measures taken by the central banks worldwide contributed to an improvement in international financial markets. In this sense, a determining factor in supporting international financial markets during the last quarter of 2012 and in January 2013 was the ECB's announcement last September of its new program of sovereign bond purchases (Outright Monetary Transactions, OMTs).[5] The possibility for the member countries to request the activation of the program has produced a favorable impact on investors' confidence, by considerably reducing fears of the Euro redenomination. In this environment, a significant reduction in the sovereign bond spreads of some countries at the periphery of the Euro zone, such as Spain and Italy, was observed recently (Chart 17a). This, despite a considerable increase in the debt issuance by the referred countries, particularly last December and January. Likewise, the risk indicators and the short-term funding conditions of the main banks in the region improved (Chart 17b and Chart 17c).

In the fourth quarter of 2012, agreements were reached to strengthen the institutional framework and governance in the Euro zone, including progress in establishing a banking union. Particularly, in its meeting in mid-October the European Council established a goal of reaching an agreement on the legislative SSM framework (Single Supervisory Mechanism), including the ECB's direct supervision of the major banks in the Euro zone.[6,7] This measure will contribute to

[5] The ECB's program contemplates the discretional purchase of between one to three year sovereign bonds in the secondary market, without predetermined limits. The intervention of the ECB can only be carried out, once the country applies for it, the financial assistance by the regional support mechanism is approved, and the applying country abides by an economic adjustment program.

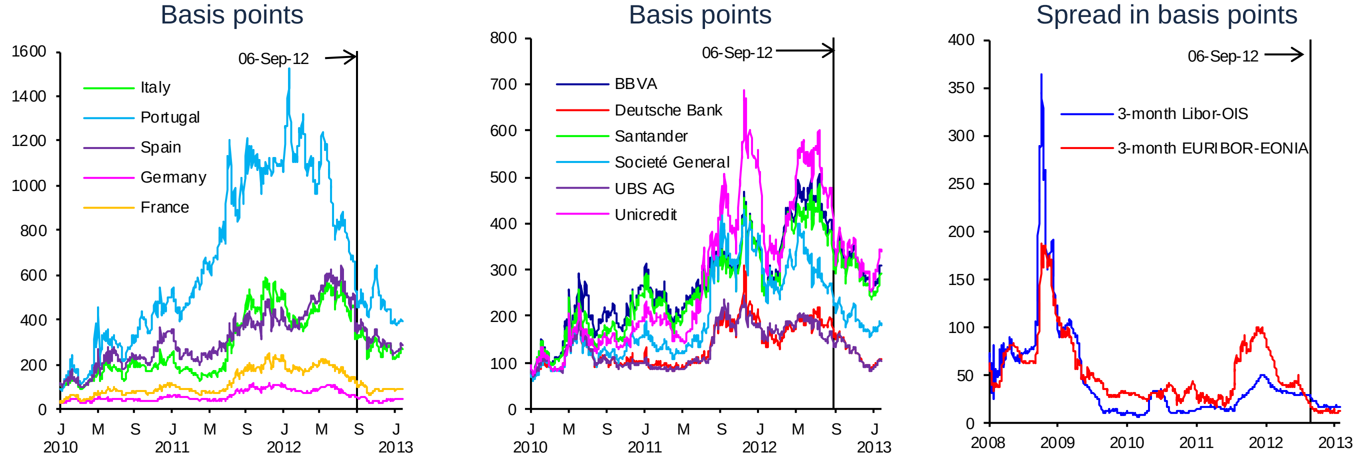
[6] In the meeting, it was also decided to discuss a scheduled working plan regarding other aspects of the regional integration strategy. Thus, on November 20, 2012, the European Parliament presented its

a stronger banking system in the future, and thus will help to prevent the governments from having to destine their fiscal resources in order to avert this system's collapse.

The agreement to create the Single Supervisory Mechanism (SSM) represents only the first step towards an establishment of a banking union. Among the measures that still require an agreement by the European authorities are: a) an establishment of an emergency procedure to allow the direct recapitalization of banks by the European Stability Mechanism (ESM); b) the creation of resolution funds and deposit insurance at the national level; and c) the establishment of a sole resolution fund for the European Union.

Chart 17
Euro Zone Financial Indicators

a) Credit Default Swaps [1/] Basis points | b) Credit Default Swaps [1/] Basis points | c) Short-term Funding Conditions [1/] Spread in basis points



a) 1/ It refers to 5-year CDS of sovereign bonds. On September 6, 2012, the ECB announced its new sovereign bond purchase program.
Source: Bloomberg.

b) 1/ It refers to 5-year CDS of sovereign bonds. On September 6, 2012, the ECB announced its new sovereign bond purchase program.
Source: Bloomberg.

c) 1/ On September 6, 2012, the ECB announced its new sovereign bond purchase program.
Source: Bloomberg.

The approval at the end of November 2012 by the European authorities and the International Monetary Fund (IMF) of a new package of debt relief measures for Greece also positively affected the financial markets. In particular, it reduced the possibility of Greece leaving the Euro zone, which would have produced contagion to other economies with debt sustainability problems.[8]

The favorable evolution of financial markets, particularly interbank and sovereign debt markets, suggests a progress in resolving the debt crisis in the Euro zone. Nevertheless, to a large extent, the sound functioning of these markets still depends on the extraordinary degree of support from the official institutions. In this

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resolution in the Report "Towards a Genuine Economic and Monetary Union", aimed at establishing an effective banking, fiscal, economic and political union.

[7] The supervision will be exercised on a differentiated basis and in close cooperation with the national authorities. The ECB will supervise all the banks directly if the total value of their assets exceeds EUR 30 billion, as well as smaller banks if the ratio of their total assets over the GDP of their home country exceeds 20 percent, and is not below EUR 5 billion.

[8] These measures included an extension of maturities and official credit conditions, as well as an operation of the sovereign bond repurchase with this country's discount. The total of these measures is foreseen to lead to a reduction of Greece's debt-to-GDP ratio by 124 percent in 2020. In this context, in mid-December the rating agency Standard & Poor's (S&P) raised the ratings on Greece to "B-" from "selective default".

sense, risks to the monetary policy implementation at the national and the regional levels persist: (i) the adjustment efforts of the Euro zone's periphery countries should continue receiving support from the central countries, by means of the sovereign bond purchase and the ESM direct bank capitalization; (ii) greater commitment of some member states of the region is required to advance in their fiscal adjustment and structural change policies; and (iii) any delay in implementing the necessary reforms so as to steadily proceed towards a banking and fiscal union could be perceived as the member states' lack of commitment to the monetary union stability, which would affect investors' confidence and would generate a rebound in risk premia.

While uncertainty in international financial markets diminished, lower risk premia translated in increased capital flows and caused the currency appreciation in most emerging economies (Chart 18). As a result, some countries intervened in the exchange rate market to mitigate their currencies' appreciation. On the other hand, the stock markets in most of these countries registered increases in the reference quarter.

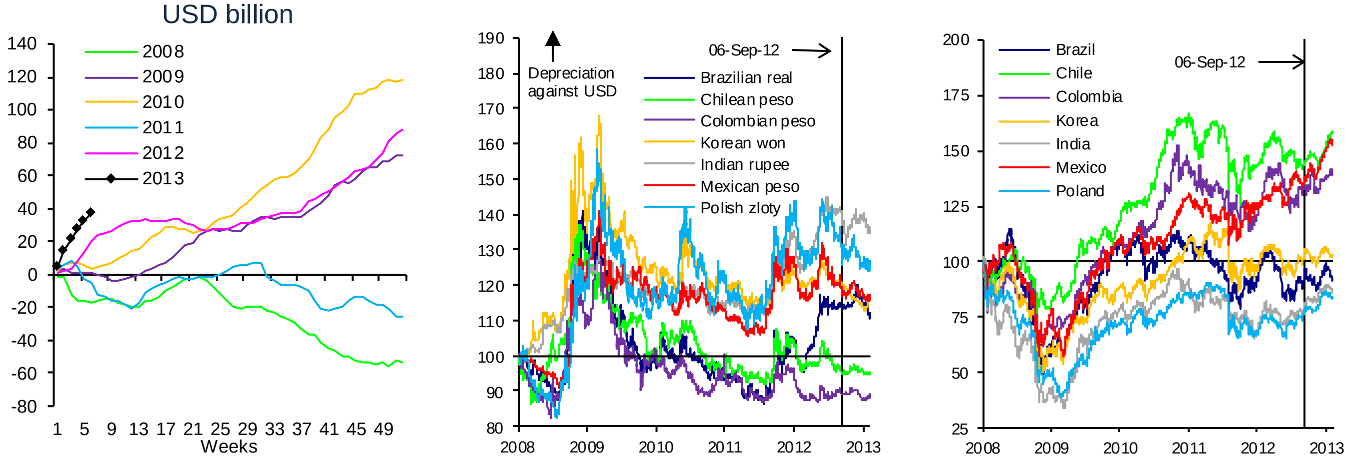
Even though the central banks of the major advanced economies are expected to maintain a strong monetary stimulus in the coming years and, thus, these economies' interest rates are anticipated to remain close to their historical minimum levels, there is a possibility of a partial withdrawal of this stimulus earlier than anticipated.[9] Therefore, although the probability of the referred scenario is low, it represents a risk that the emerging economies could face a capital flows' reversal.

Chart 18
Emerging Economies' Financial Indicators

a) Accumulated Capital Flows (Equity and Debt) USD billion

b) Exchange Rates [1/] Index 01/01/2008=100

c) Stock Exchange Markets [1/] Index 01/01/2008=100



Source: Emerging Portfolio Fund Research.

1/ On September 6, 2012, the ECB announced its new sovereign bond purchase program.
Source: Bloomberg.

1/ On September 6, 2012, the ECB announced its new sovereign bond purchase program.
Source: Bloomberg.

[9] In line with the December Minutes of the Federal Open Market Committee of the U.S. (FOMC), some members of the Committee considered that, if the U.S. economic conditions improved, the program of assets' purchase could conclude earlier than anticipated in the market.

3.2. Development of the Mexican Economy

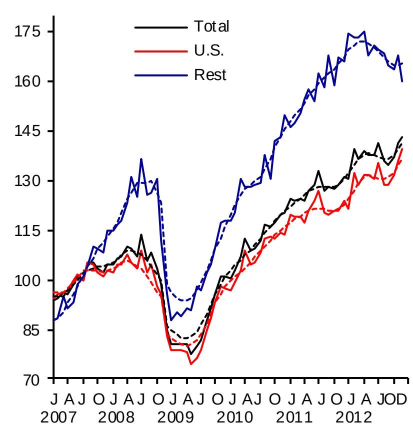
3.2.1. Economic Activity

During the fourth quarter of 2012, economic activity in Mexico observed a slower growth rate as compared to the average of the first two quarters of that year. This lower dynamism mainly resulted from the world economic slowdown, its effect on exports and the spread of this shock to some domestic demand components. Thus, lower economic activity growth rates have initially emerged in the industrial sector, even though eventually they could be expected to spread in a more evident manner to the services sector. In this context, given the expansion rate of the economy in 2012, activity levels continued converging in an orderly manner to levels congruent with the productive potential of the country.

In the last quarter of 2012, manufacturing exports expanded less than the rate observed on average in the first half of 2012. The performance of exports derived both from the moderation in the growth of those directed to the U.S., and above all from lower dynamism of those to the rest of the world (Chart 19a). Likewise, the slowdown of the manufacturing exports has been evident both in those associated with the automobile sector and in the rest of manufacturing exports (Chart 19b and Chart 19c).

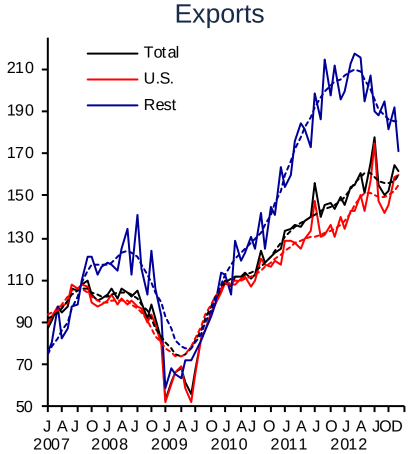
Chart 19
Indicators of Manufacturing Exports
Index 2007=100, s. a.

a) Manufacturing Exports by Region of Destination



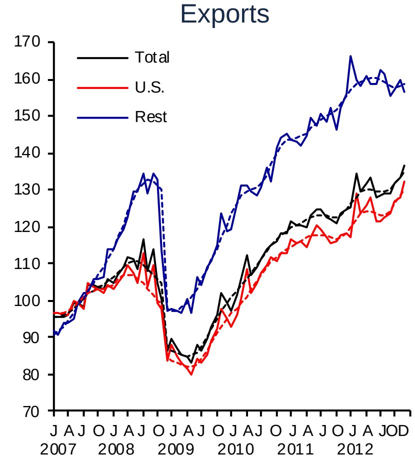
s. a. / Seasonally adjusted and trend data.
Source: Banco de México.

b) Automobile Manufacturing Exports



s. a. / Seasonally adjusted and trend data.
Source: Banco de México.

c) Non-automobile Manufacturing Exports



s. a. / Seasonally adjusted and trend data.
Source: Banco de México.

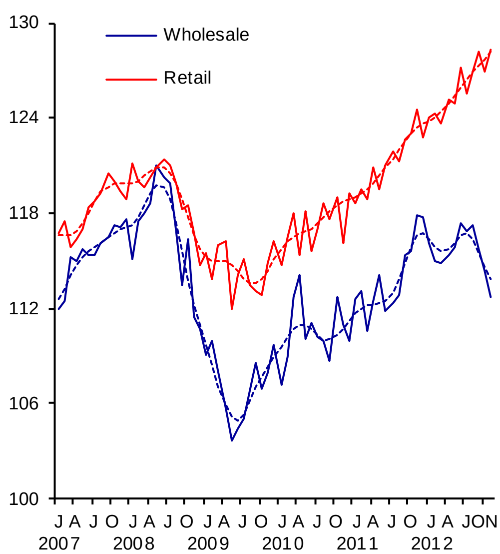
The indicators of domestic demand suggest that it continued its expansion, even though some of its components and determinants registered a lower dynamism in the reference quarter as compared to the first half of the year.

i. With respect to private consumption, both ANTAD sales and commercial establishments' retail sales, increased, even though their expansion in the fourth quarter of the year was relatively more moderate than previously observed. Wholesale sales lost dynamism in a more evident way (Chart 20). It is noteworthy, that although the implementation of the program "*El Buen Fin*" (Mexico's equivalent to Black Friday) led to a rebound in ANTAD sales in November, it was followed by a drop of greater magnitude in December, reason for which on average a lower growth of these sales was observed than in the previous two-month periods. Thus, the most recent data suggest a slowdown in ANTAD sales, and possibly in private consumption as a whole.

ii. The performance of private consumption reflected the lower impulse from some of its major determinants. In particular, the real wage bill of IMSS-insured workers was still affected by lower and, in some months, negative changes of real wages (Chart 21a). Likewise, the consumer credit growth rate was below that observed in the previous quarters (see Section 3.2.2.). In turn, workers' remittances persisted at levels lower than those registered in the first months of 2012, and, although with certain volatility, they seem to be presenting a negative trend (Chart 21b).

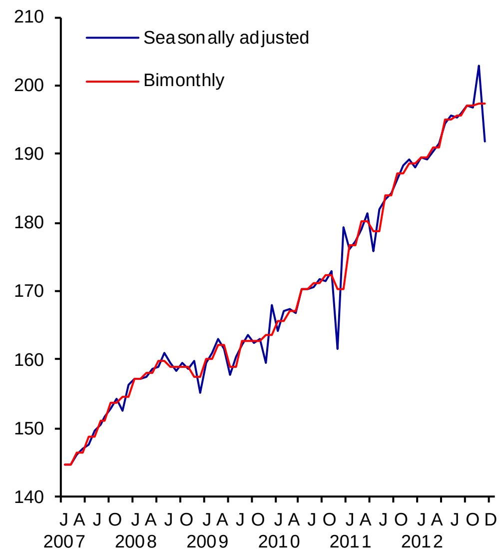
Chart 20
Consumption Indicators

a) Commercial Establishments' Sales
Index 2003=100, s. a.



s. a. / Seasonally adjusted and trend data.
Source: Monthly Survey of Commercial Establishments (*Encuesta Mensual sobre Establecimientos Comerciales*), INEGI.

b) Total ANTAD Sales
Index 2003=100, s. a.

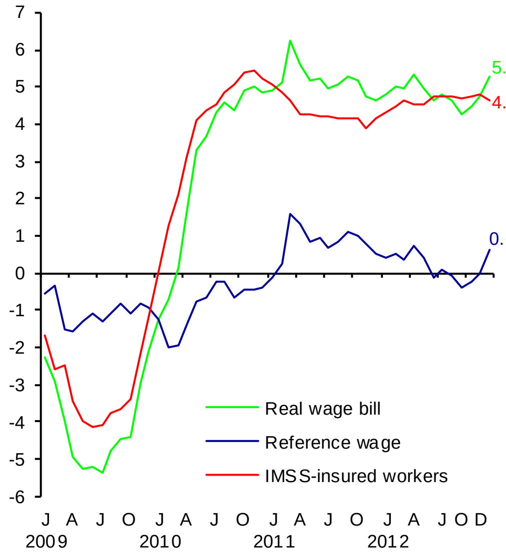


s. a. / Seasonally adjusted data.
Source: Prepared by Banco de México with ANTAD data.

iii. Gross fixed investment kept decelerating its growth rate with respect to the first quarters of 2012 (Chart 22a), affected, on the one hand, by lower dynamism of investment in machinery and equipment, and, on the other hand, by the weak performance of housing construction (Chart 22b).

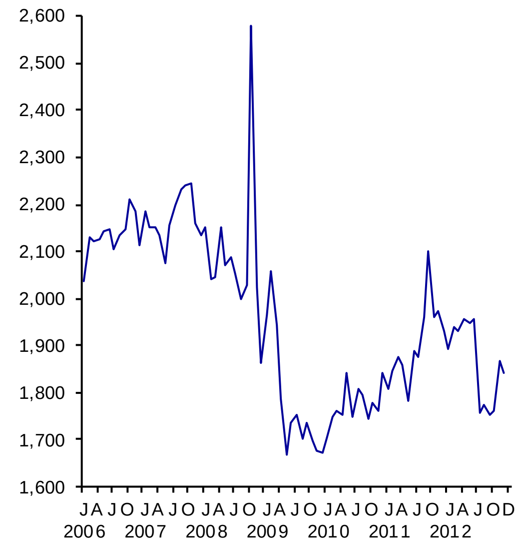
Chart 21
Consumption Determinants

a) Real Wage Bill of IMSS-insured Workers
Annual change in percent



Source: Prepared by Banco de México with data from IMSS.

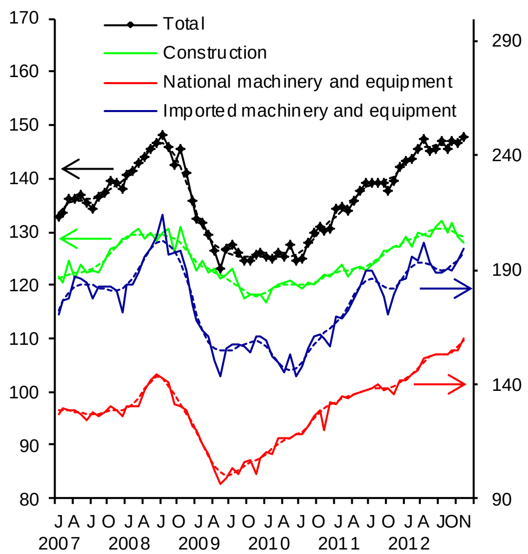
b) Workers' Remittances
USD million, s. a.



s. a. / Seasonally adjusted data.
Source: Banco de México.

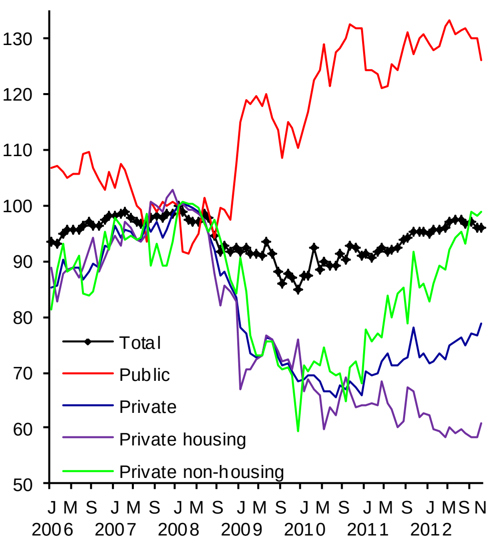
Chart 22
Indicators of Investment and Construction

a) Investment and its Components
Index 2003=100, s. a.



s. a. / Seasonally adjusted and trend data.
Source: Mexico's System of National Accounts, INEGI.

b) Real Value of Production in the Construction Sector by Contracting Institutional Sector
January 2008=100, s. a.

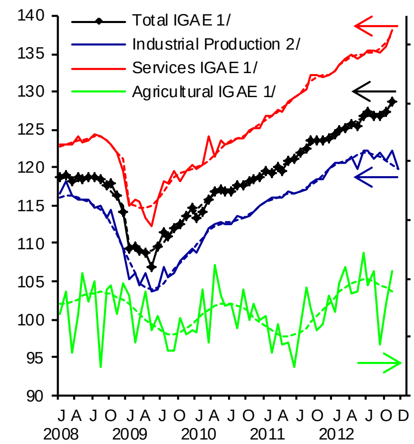


s. a. / Seasonally adjusted figures. For public and private (housing and non-housing) construction, the seasonal adjustment was prepared by Banco de México with data from INEGI.
Source: INEGI.

The moderation of the external demand growth rate, as well as a lower dynamism of some domestic demand components led economic activity to continue to register a lower growth rate in the last quarter of 2012, as compared to the one observed on average in the first half of the year (Chart 23a). In particular, the lower impulse of exports was reflected in a slowdown of manufacturing activity, both in transport equipment production and the rest of manufacturing (Chart 23b). In this context, the weak performance of light vehicles' production and exports in the last three months of 2012 is noteworthy (Chart 23c). It should be pointed out that, despite all of the above, the Global Economic Activity Indicator (IGAE) rebounded in November, which fundamentally reflected a favorable services' performance. Thus, given the link between the industrial activity and the services sector, even though the industry's slowdown could gradually expand to the services sector, it is still not perceived in an obvious manner yet.

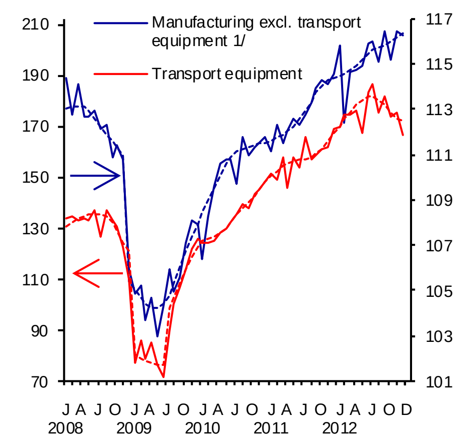
Chart 23
Indicators of Production

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



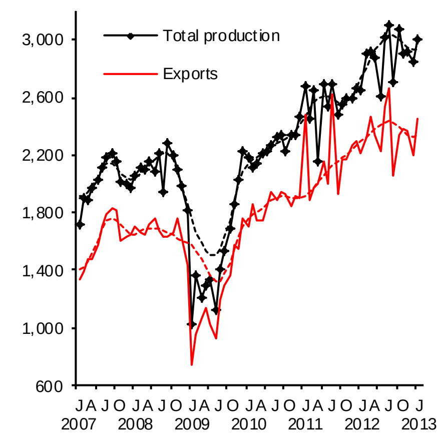
1/ Data as of November 2012.
2/ Data as of December 2012 of the Industrial Activity Indicator.
s. a. / Seasonally adjusted and trend data.
Source: Mexico's System of National Accounts, INEGI.

b) Manufacturing Production
Index 2003=100, s. a.



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

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



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

In the last quarter of 2012, the services sector presented a lower growth rate than the one observed on average in the first half of the year, although, as mentioned above, in November it rebounded. In particular, it is noteworthy that the greater participation of some services sectors in the program "*El Buen Fin*", such as travel agencies, hotels, air transportation, telecommunications, restaurants and recreation services, contributed to the sector's growth in this period.

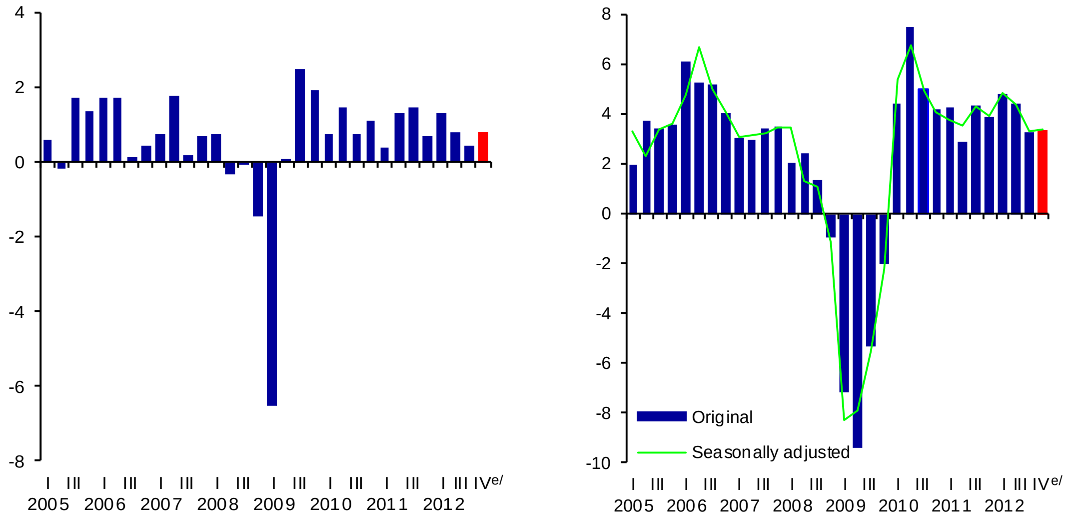
Agricultural sector activity registered a positive quarterly change in the fourth quarter of 2012. Particularly, larger harvest of the agricultural spring-summer cycle, especially regarding corn, was observed. In the same way, livestock production was favored by the fading of the avian flu effects, as well as a greater production of beef.

In this context, for the fourth quarter of 2012, a quarterly seasonally adjusted GDP growth of 0.8 percent is anticipated, as compared to the average expansion of 1.1 percent in the first half of the year. In annual terms, GDP is forecast to grow approximately 3.3 percent in the last quarter of 2012, as compared to 4.9, 4.4 and 3.3 percent in the first three quarters of the year, respectively. Taking this result into account, an expansion rate of around 4.0 percent is expected for the year as a whole (Chart 24).

Chart 24
Gross Domestic Product

a) Quarterly Change
Percent, s. a.

b) Annual Change
Percent



e/ Estimated by Banco de México.
s. a. / Seasonally adjusted figures.
Source: Mexico's System of National Accounts, INEGI. Seasonal adjustment up to the fourth quarter of 2012 by Banco de México.

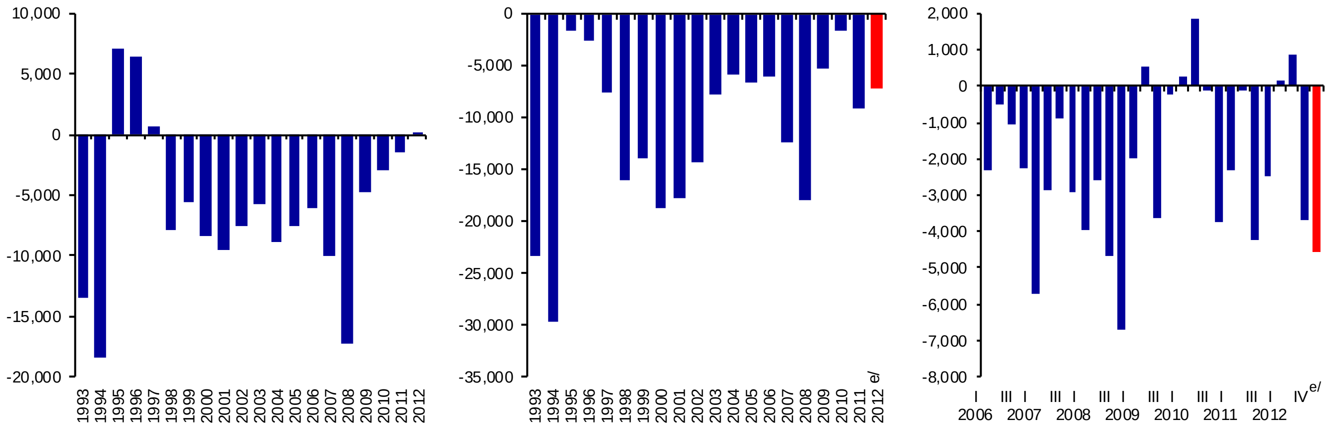
Finally, for 2012 as a whole, the trade balance registered a surplus of USD 163 million, which represents the first annual surplus balance since 1997 (Chart 25a). Additionally, in the last quarter of 2012 the current account is anticipated to have presented a deficit of around 1.4 percent of GDP, reason for which, for 2012 as a whole, a deficit of 0.6 percent of GDP is forecast (Chart 25b and Chart 25c). Therefore, the performance of the country's external accounts suggests that the level of aggregate spending in the economy was in line with its productive potential and with an inflation rate that ended the period within the variability interval of plus/minus one percentage point around the 3 percent permanent target. Likewise, during the year Mexico received sufficient resources that allowed easy financing of the current account deficit. In particular, during the fourth quarter, international reserves increased by USD 1,633.5 billion, reaching a total of USD 163,515.4 billion by the end of the year.

Chart 25
Trade Balance and Current Account
USD million

a) Trade Balance
Annual data

b) Current Account
Annual data

c) Current Account
Quarterly data



Source: Banco de México.

e/ Estimated by Banco de México.
Source: Banco de México.

e/ Estimated by Banco de México.
Source: Banco de México.

3.2.2. Financial Saving and Financing in Mexico

In the fourth quarter of 2012, both the total sources of financial resources and the financing to the non-financial private sector continued to expand. However, in line with the evolution of productive activity in the country, their growth rates showed some moderation.

The annual flow of the economy's sources of financial resources was 10.8 percent of GDP in the third quarter of 2012, lower than the 11.3 percent recorded in the second quarter of the year (Table 2).[10] This smaller figure was due to a lower annual flow of domestic sources, which were below those registered in the first two quarters of 2012. By contrast, the annual flow of external sources of financial resources recovered as compared to the previous quarters, in line with improvements in international financial markets.

[10] The information on annual flows of sources and uses of financial resources is available up to the third quarter of 2012.

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

	Annual flows						Stock 2012 III	
	2011 II	2011 III	2011 IV	2012 I	2012 II	2012 III	% GDP	Est. %
Total sources	**9.5**	**9.6**	**10.1**	**10.6**	**11.3**	**10.8**	**84.9**	**100.0**
Domestic sources [1/]	4.1	4.5	5.7	6.4	6.7	5.6	56.0	66.0
Foreign sources [2/]	5.4	5.1	4.3	4.3	4.6	5.2	28.8	34.0
Total uses	**9.5**	**9.6**	**10.1**	**10.6**	**11.3**	**10.8**	**84.9**	**100.0**
Public sector	3.4	3.2	3.0	3.4	3.4	3.2	39.2	46.2
Public sector (PSBR) [3/]	3.3	3.0	2.7	3.0	2.9	2.8	36.6	43.1
States and municipalities	0.1	0.2	0.3	0.3	0.5	0.5	2.6	3.1
International reserves [4/]	2.5	2.6	2.5	2.3	2.4	2.1	13.6	16.0
Private sector	2.9	3.4	3.5	3.1	3.2	3.3	32.7	38.5
Households	1.3	1.5	1.5	1.5	1.4	1.4	14.1	16.6
Consumption	0.4	0.6	0.7	0.6	0.6	0.7	4.3	5.1
Housing [5/]	0.9	0.9	0.8	0.8	0.7	0.8	9.8	11.5
Firms	1.6	1.9	2.0	1.7	1.8	1.9	18.6	21.9
Domestic [6/]	1.3	1.3	1.3	1.2	1.3	1.3	11.1	13.1
Foreign	0.3	0.7	0.7	0.4	0.6	0.6	7.5	8.8
Commercial banks' foreign assets [7/]	0.4	-0.1	-0.5	-0.3	-0.6	-0.1	1.4	1.7
Other [8/]	0.2	0.5	1.6	2.0	2.9	2.2	-2.0	-2.4

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.
1/ 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.
2/ 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.
3/ 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.
4/ As defined by Banco de México's Law.
5/ 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.
6/ Total portfolio of financial intermediaries. It includes debt-restructuring programs.
7/ It includes assets from abroad and foreign financing.
8/ 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.

The information available for the fourth quarter of 2012 indicates that the sources of financial resources expanded further. In this period, the stock of financial saving in the economy, defined as the monetary aggregate M4 minus the stock of banknotes and coins held by the public, resumed its growth trend, although at a lower rate than in the first half of the year (Chart 26a). This was a result of higher non-residents' financial saving combined with lower residents' financial saving.

The expansion of non-residents' financial saving is accounted for by the strength of Mexico's macroeconomic framework with respect to other economies, as well as by foreign investors' search for yield in an environment of the minimum historical levels of interest rates in advanced economies, among other factors (Chart 26b). In the fourth quarter of 2012, non-residents' financial saving continued being used to acquire mainly medium- and long-term government debt securities, although there was also a significant increase in CETES holdings.

The stock of residents' financial saving was reduced (Chart 26c). Regarding compulsory financial saving, the component related to the pension funds was affected by the change in Siefores' portfolio composition in favor of equity instruments, which are excluded from the definition of the monetary aggregate

M4, while the indicator of savings in the housing fund kept growing.[11,12] A reduction in the voluntary financial savings resulted from the slowdown in economic activity growth, as compared to the first half of the year.

Regarding the use of financial funds, by the third quarter of 2012, annual financing flows to PSBR (Public Sector Borrowing Requirements) were slightly below the levels observed in the previous quarters, while financial resources to states and municipalities remained stable (Table 2).[13] The annual accumulation of international reserves by the third quarter of 2012 remained high, although slightly lower than in the previous quarter. Additionally, the flow of financing to the private sector was similar to that in the previous quarters.

In line with the data regarding the use of financial funds, international reserves accumulation in the fourth quarter of 2012 was low in comparison to the three previous quarters.[14] Also, the increase in the flow of funds to the non-financial private sector was of a lower magnitude compared to the first half of the year.

Domestic financing to non-financial private firms continued to support the performance of productive activity in Mexico. Nonetheless, its rate of growth in the last few months of 2012 was lower than that observed in the first half of the year, mainly as a result of the recent loss of dynamism in the issuance of domestic securities, and, to a lesser extent, of a modest slowdown in bank credit growth (Chart 27).

Particularly, credit to non-financial private firms granted by commercial banks continued to expand in the fourth quarter of 2012, although at a slightly lower rate than in the first half of the year (Chart 28a). This is mainly accounted for by the lower bank debt level of firms that issue debt in securities markets – large companies. In contrast, credit granted by commercial banks to firms that do not obtain funding from securities markets, observed a similar dynamism to that recorded in the first half of 2012.

Development banks continued to expand their firm credit portfolio at a rate above that of this same portfolio by commercial banks, although with a modest slowdown in the first half of the year (Chart 28a). In that regard, the dynamism of credit granted to large companies by development banks, in general, was more moderate with respect to that granted to the rest of firms. Thus, in the period October-December 2012, average growth rates of the credit portfolio to firms from commercial banks and from development banks were 4.9 and 32.7 percent, respectively, in real annual terms. In this context, interest and delinquency rates of credits to firms both from commercial and development banks remained at low and stable levels (Chart 28b and Chart 28c).

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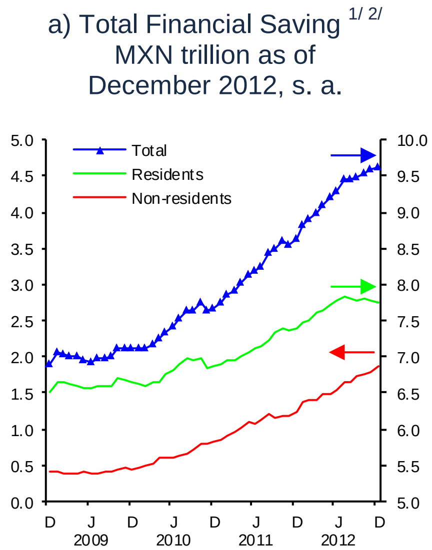
[11] Siefores Portfolio consists of instruments of the monetary aggregate M4, such as investment in domestic securities and ISSSTE Pension Bonus, as well as financial assets excluded from this aggregate, such as equity instruments and foreign debt securities. While in September 2012 investment of Siefores in M4 instruments represented 74 percent of its portfolio, in December it was 70.5 percent.

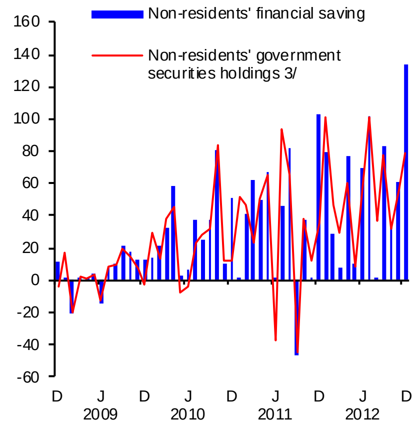
[12] The stock for the housing fund has been affected by the refund of the housing subaccount of the retired workers under the 1973 Social Security Law. In this regard, the Reform of Infonavit Law (transitory Article 8), effective as of January 13, 2012, allows this group of the retired workers to receive the stock of the housing subaccount in one payment.

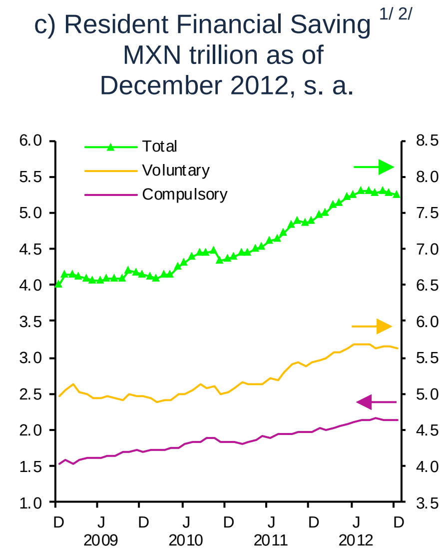
[13] The information of annual flows of sources and uses of financial resources is available up to the third quarter of 2012.

[14] As indicated in Section 3.2.1, in the fourth quarter of 2012, international reserves accumulation was USD 1,633.5 billion, while in the period from the first to the third quarter of the same year it was USD 7,788.6; 7,073.2 and 4,544.6 billion, respectively.

Chart 26
Financial Saving Indicators



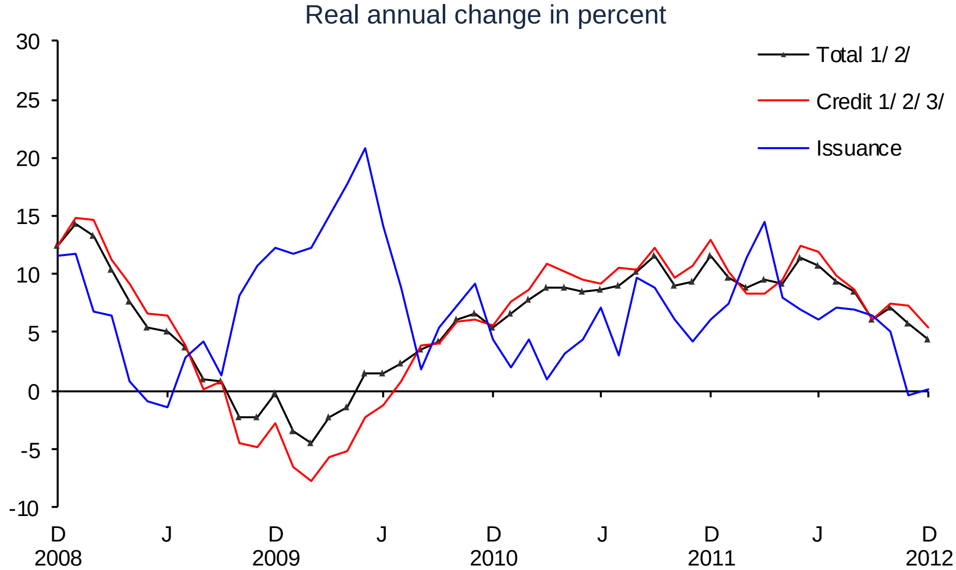




Source: Banco de México.
s. a. / Seasonally adjusted figures.
1/ Defined as the monetary aggregate M4 minus the stock of banknotes and coins held by the public.
2/ Figures are adjusted to exclude the impact of the reform to the ISSSTE Law.
3/ Holdings of government securities expressed in nominal value.

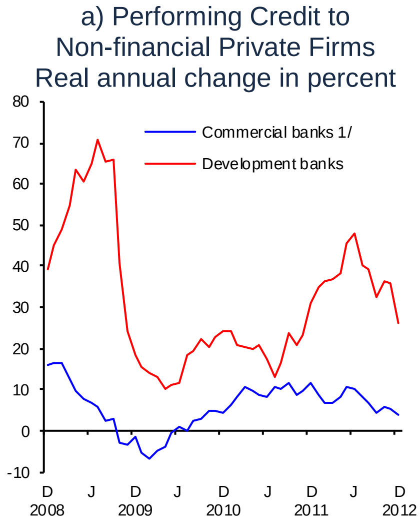
In debt markets, large companies in general continued to finance their operations through securities issuance. External placements grew in the third quarter, which partly explains the abovementioned moderate slowdown of bank credit to firms.

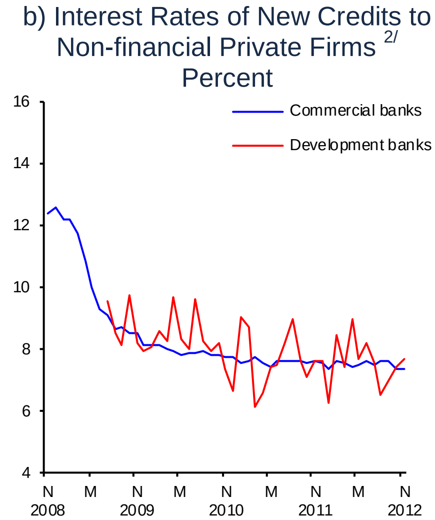
Chart 27
Domestic Financing to Non-financial Private Firms
Real annual change in percent

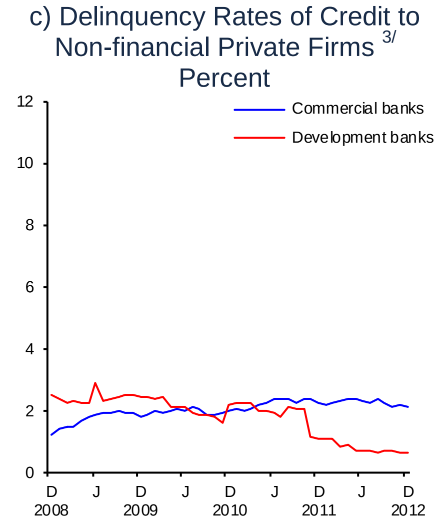


Source: Banco de México.
1/ These figures are affected by the disappearance of some non-banking financial intermediaries and their conversion to non-regulated Sofom.
2/ From February 2009 onwards, figures are affected by the reclassification of credit granted to small- and medium-size firms (PyMES, for 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 nonbank financial intermediaries.

Chart 28
Banks' Credit to Non-financial Private Firms





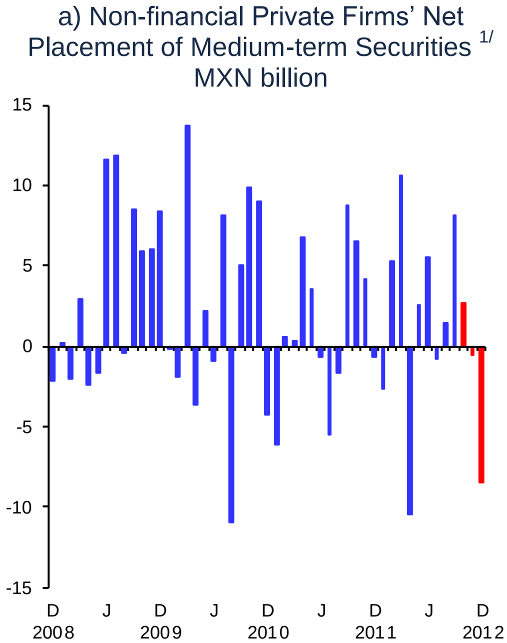


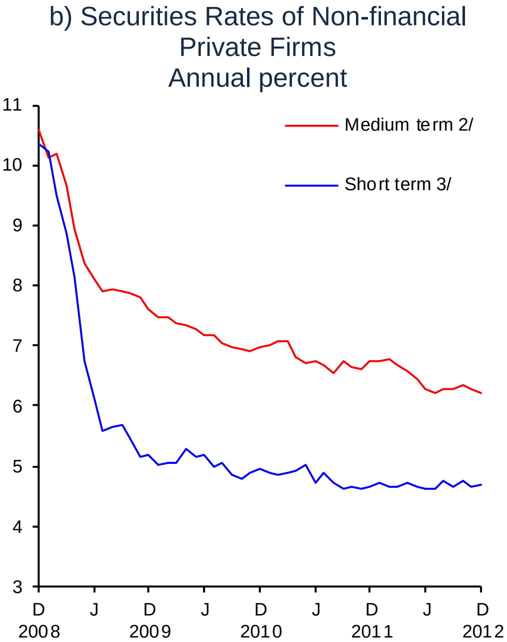
Source: Banco de México.
1/ From February 2009 onwards, figures are affected by the reclassification of credit granted to small- and medium-size firms (PyMES, for its acronym in Spanish) from consumer credit to credit granted to non-financial firms.
2/ It refers to the interest rates of new credits granted by commercial banks to non-financial private firms, weighted by the associated stock of performing credit and for all credit terms requested.
3/ The delinquency rate (*Índice de Morosidad*, IMOR) is defined as non-performing portfolio divided by total loan portfolio.

The domestic debt market continued operating normally, although non-financial private firms relied less on this type of financing and their net debt issuance in the second half of 2012 was lower than in the first half of the year. The net placement of medium-term securities displays certain volatility, given that the private debt market is characterized by the participation of a relatively small number of firms. In the fourth quarter of 2012, the net amortization of medium-term private securities totaled MXN 6.4 billion, which resulted from MXN 7.2 billion in gross placements and MXN 13.6 billion in amortizations, of which MXN 6.6 billion correspond to debt prepayments (Chart 29a).

The lower growth rate of this segment does not reflect the deterioration of trading conditions in this market. On the contrary, debt issuances have taken place under favorable conditions. The average term of new medium-term placements in the fourth quarter of 2012 remained high (over 10 years), while interest rates of medium-term securities have maintained stable since July 2012 (Chart 29b). In the short-term private debt market, a net amortization of MXN 5.4 billion was registered in the quarter, while interest rates of short-term securities did not display significant movements.

Chart 29
Non-financial Private Firms' Securities



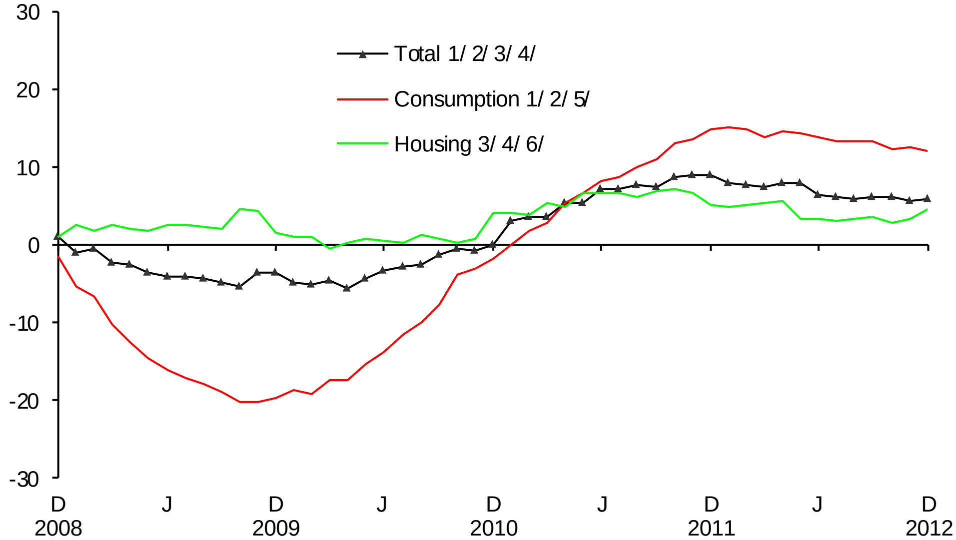


Source: Banco de México, with data from Valmer and Indeval.
1/ Placements less amortizations in each month (securities and prepayments).
2/ Placements of more than one year.
3/ Placements of up to one year.

Household credit maintained an upward trend in the fourth quarter of 2012, albeit at a slower rate compared to the first half of the year. This lower growth rate is accounted for by a modest slowdown of consumer credit, while mortgage loans continued to expand at a rate similar to that observed in previous quarters. Thus, household credit grew at an average real annual rate of 6.2 percent in the period of October-December 2012, driven by the expansions in the consumer and housing credit segments of 12.3 and 3.7 percent, respectively (Chart 30).

Consumer credit continued to display high growth rates, as a result of the sustained expansion of the credit card portfolio and the dynamism of personal and payroll loans. However, the latter observed a slowdown, which translated into lower growth of the consumer credit portfolio overall (Chart 31a). The slowdown of payroll loans could indicate that this market may be reaching its maturity stage. Therefore, in the period of October-December 2012, the average real annual growth rate of the consumer credit performing portfolio of commercial banks was 15.6 percent. It should be noted that the consumer credit expansion has not translated into pressures in this segment, given that interest rates have remained stable and delinquency rates have not observed significant changes, with the exception of the payroll credit portfolio, whose delinquency rates continued to increase in recent months. Still, this delinquency indicator remains below those of other components of the consumer credit portfolio (Chart 31b).

Chart 30
Credit to Households
Real annual change in percent

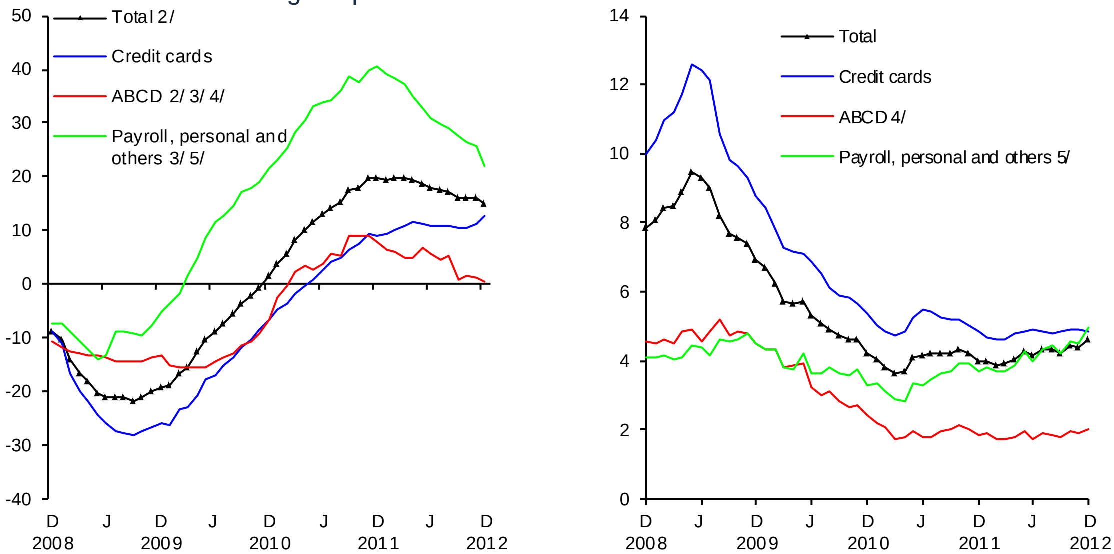


1/ From February 2009 onwards, figures are affected by the reclassification of credit granted to small- and medium-size firms (PyMES, for its acronym in Spanish) from consumer credit to credit granted to non-financial firms.
2/ Figures as of March 2008 include total consumer credit portfolio of commercial 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 the business sector for housing construction.
4/ Figures are adjusted so as to avoid distortions due to the inclusion of the 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, the National Housing Fund (*Instituto del Fondo Nacional de la Vivienda para los Trabajadores*, Infonavit), the ISSSTE Housing Fund (*Fondo de la Vivienda del ISSSTE*, Fovissste) and other non-bank financial intermediaries.

Chart 31
Commercial Banks' Credit to Consumption

a) Commercial Banks' Performing Consumer Credit [1/]
Real annual change in percent

b) Delinquency Rate of Commercial Banks' Consumer Credit [1/ 6/]
Percent



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 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.

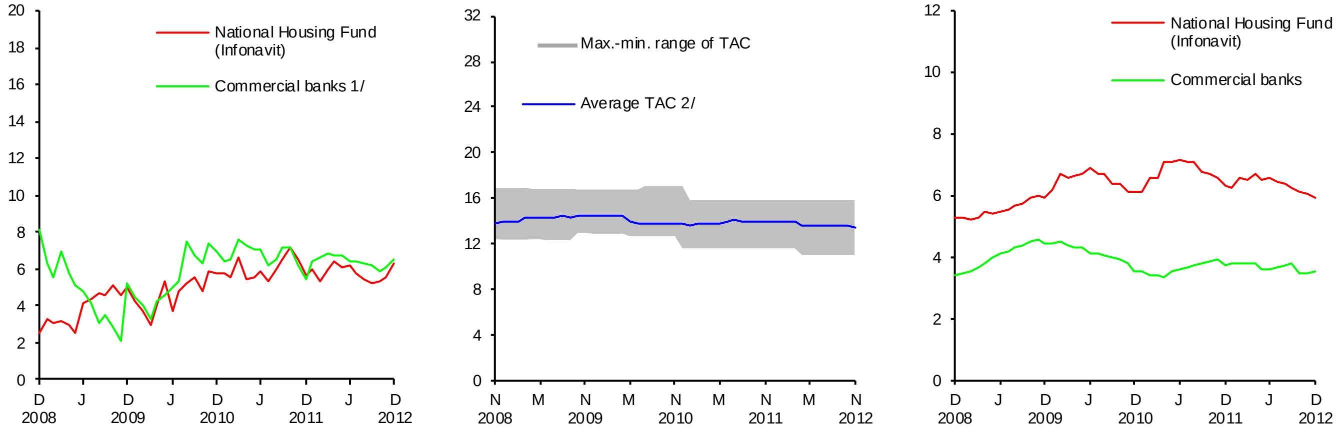
Mortgage loans kept increasing in the last quarter of the year, as a result of the sustained expansion of housing credits granted by both the National Housing Fund (*Instituto del Fondo Nacional de la Vivienda para los Trabajadores*, Infonavit) and commercial banks. The performing portfolio of the National Housing Fund expanded 5.7 percent in real annual terms in the period of October-December 2012, while that of commercial banks increased by 6.2 percent in the same period (Chart 32a). The mortgage credit portfolio expanded in an environment in which stable interest and delinquency rates prevailed (Chart 32b and Chart 32c).

Chart 32
Housing Credit

a) Performing Housing Credit
Real annual change in percent

b) Commercial Banks' Costs of Housing Credit
Percent

c) Delinquency Rates of Housing Credit [3/]
Percent



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

Based on all of the above, it can be inferred that the loanable funds market has been adjusting in an orderly manner throughout the economic cycle, favored by the monetary policy stance. In particular, good credit portfolio quality has been preserved. The fact that the credit slowdown reflects the evolution of the economic activity, in a context in which there have been no upward pressures on interest rates, is of paramount importance. On the contrary, average interest rates faced by firms seeking to finance their operations, particularly in the short term, have been close to the target for the Overnight Interbank Interest Rate established by the Central Institute. Thus, the solvency and flexibility of the loanable funds market should be considered a strength of the Mexican economy, given that, unlike in many countries, the national financial system continues to contribute to sustaining economic growth.

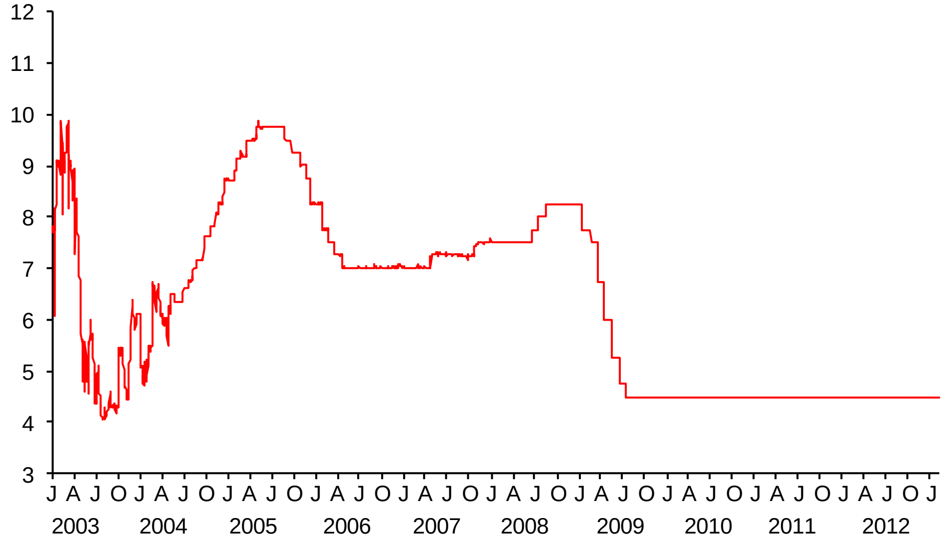
4. Monetary Policy and Inflation Determinants

By the beginning of the last decade, the inflationary process in Mexico converged to low and stable levels, very different from the environment of the last three decades of the last century. During the last ten years, this stability has been consolidating and inflation levels have been gradually converging towards the established target of 3 percent. Even though different shocks have affected the national economy and the inflation levels, the referred convergence process has not been interrupted. Among these shocks the following can be mentioned: significant adjustments to electricity fares in 2002, phytosanitary emergencies in 2004, historical upward adjustments in international commodity prices from 2006 to 2008, the world and domestic recession in 2009, episodes of volatility in international financial markets, which have entailed strong exchange rate depreciations, new increases in commodity prices in 2011 and 2012, and a new phytosanitary emergency in Mexico in 2012. Despite the amount and the intensity of several of these shocks, their impact on inflation has been temporary and they have not affected the long-term convergence of inflation towards its 3 percent target.

In 2012 a series of supply-related shocks provoked a rebound in headline inflation between May and September, when annual headline inflation even registered levels close to 5 percent. In this context, Banco de México's Board of Governors estimated that, given the nature of the referred shocks, this increase in inflation would be temporary and would not contaminate the price and wage formation process in the economy. Based on this estimation and despite the amount and the intensity of some of the referred shocks, which affected inflation, the Board maintained the target for the Overnight Interbank Interest Rate unchanged at 4.5 percent during the fourth quarter of 2012 (Chart 33), and it even expressed its disposition to increase it in case shocks to inflation persisted and if the upward trend of headline and core inflation did not revert. The purpose of the above measures was to consolidate the anchoring of inflation expectations, to prevent the contamination of the rest of the price formation processes in the Mexico's economy and to avoid jeopardizing the inflation's convergence to its target.

During the fourth quarter of 2012, the temporary character of the inflation increase in the previous months was confirmed. Thus, annual headline inflation resumed its tendency towards the permanent 3 percent target and presented a downward trend, which reverted the growth of the previous months, and thus concluding 2012 at a level below 4 percent. Moreover, annual core inflation concluded the year below 3 percent, given the partial fading of the series of supply-related effects on inflation in the referred period, the lower pass-through of supply-related shocks to the underlying inflation trend and the downward trend in telecommunications services prices. As mentioned in Box 1, the referred downside trend represented a significant factor in sustaining low and stable inflation in other economies for many years.

Chart 33
Overnight Interbank Interest Rate 1/
Annual percent



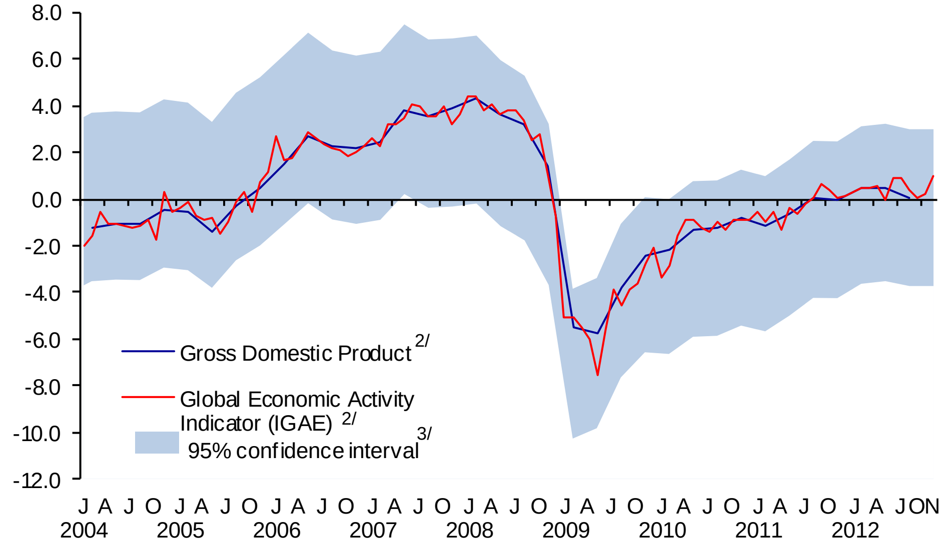
1/ The target for the Overnight Interbank Interest Rate is shown since January 21, 2008.
Source: Banco de México.

Indeed, in this period the progress in controlling inflation has become clear. In particular, the monetary policy stance has played a fundamental role in it, given that in an environment in which the economy is subject to many shocks, the monetary policy stance has been set for many years keeping in mind the 3 percent inflation target. Being in line with the convergence of inflation towards its target, the monetary policy has been essential, so that the different shocks in relative prices, faced by the national economy, could take place in an orderly manner and without second round effects. Therefore, the adopted monetary policy has fostered a lower level, volatility and persistence of inflation, contributing to the anchoring of its expectations and allowing, among other things, the exchange rate fluctuations and the increases in international commodity prices to have a smaller pass-through to the price formation.[15] This is precisely one of the most important advances in curbing inflation: that the different shocks affecting inflation in an economy, like the Mexican one, -that is a price-taking economy, which is highly integrated in terms of trade and finances to the world economy- such as increases in commodity prices, episodes of high international financial uncertainty, among others, would not spread to the domestic price formation process.

Regarding the current phase of the business cycle, just as it has been mentioned, different indicators associated with the degree of slackness coincide in suggesting that in the fourth quarter of 2012 no demand-related pressures on the main input markets, e.g. the labor and the credit markets, nor on the country's external accounts were observed. As a result, the indicator of the output gap remained around zero (Chart 34).

[15] For a detailed description see: i) Box 1 "Estimating the Effect of the Exchange Rate Adjustment on Inflation", published in the Inflation Report, July-September 2012; ii) Box 1 "Considerations on the Impact of International Commodity Price Fluctuations on Consumer Prices in Mexico", published in the Inflation Report, April-June 2012; and iii) the Technical Chapter "Evolution of Inflation Expectations in Mexico", published in the Inflation Report, July-September 2011.

Chart 34
Output Gap Estimation [1/]
Percentage of potential output, s. a.



1/ Estimated using the Hodrick-Prescott (HP) filter with tail corrections; see Banco de México (2009), "Inflation Report, April-June 2009", p.69.
2/ GDP figures up to the third quarter of 2012, IGAE figures up to November 2012.
3/ Confidence interval for the output gap calculated with an unobserved components method.
s. a. / Prepared with seasonally adjusted figures.
Source: Prepared by Banco de México with data from INEGI.

Particularly, in this context the following stands out:

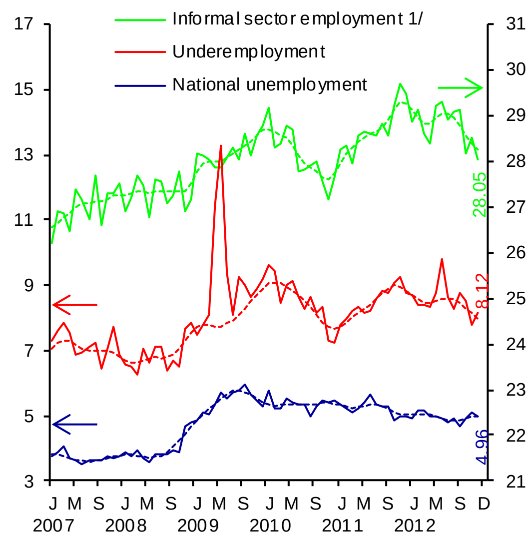
a) In the labor market, even though the national and urban unemployment rates had been registering a gradual decrease in the previous quarters, in the last months of 2012 these indicators resumed their upward trend. Furthermore, these rates, just as the informal sector employment, remained higher than the pre-crisis levels (Chart 35a), despite the fact that the number of IMSS-insured workers kept showing a positive trend (Chart 35b). In this way, the labor market recovery has been in line with the economy's growth capacity, without generating inflationary pressures.

b) The wage bill continued being affected by the moderate increase in workers' wage negotiations. This, together with the positive trend of the average labor productivity, caused unit labor costs to continue at low levels (Chart 36). Thus, no labor cost-related inflationary pressures have been registered.

c) The interest rates of financing to the non-financial private sector have remained stable, in a context, in which, as mentioned before, it decelerated, which points to the absence of evidence of this market's overheating.

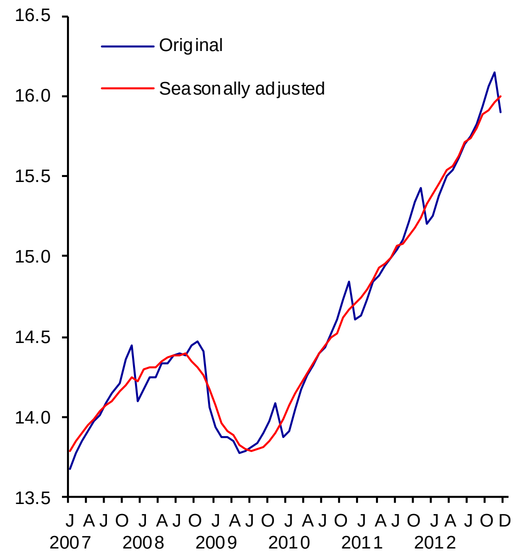
Chart 35
Labor Market Indicators

a) Unemployment and Underemployment Rates and Informal Sector's Employment Rate
Percent, s. a.



1/ Seasonal adjustment by Banco de México.
s. a. / Seasonally adjusted and trend data.
Source: National Employment Survey (*Encuesta Nacional de Ocupación y Empleo*), INEGI.

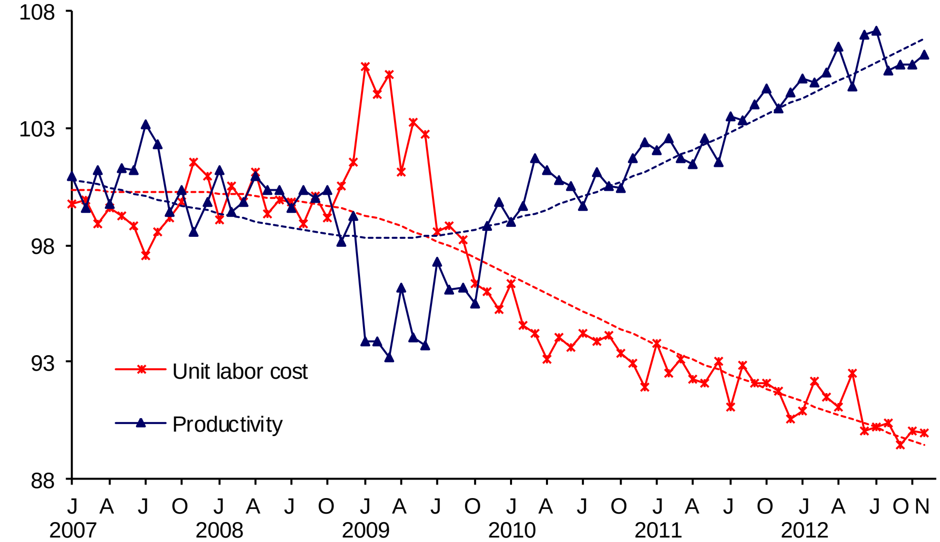
b) IMSS-insured Workers [1/]
Millions of persons



1/ Total permanent workers and temporary workers in urban areas.
Source: IMSS. Seasonal adjustment by Banco de México.

d) Finally, as previously stated, in the fourth quarter of 2012 the current account is expected to have presented a moderate deficit, fully financed by the flow of resources to the financial account. Thus, no demand-related pressures on the country's external accounts were observed in the reference quarter. In particular, the behavior of the external accounts indicates that the growth of aggregate spending has been balanced and congruent both with the potential of the economy's growth and with the inflation target.

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



s. a. / Seasonally adjusted and trend data.
Source: Prepared by Banco de México with seasonally adjusted data from the Monthly Manufacturing Business Survey (*Encuesta Mensual de la Industria Manufacturera*) and the Indicators of Industrial Activity of Mexico's System of National Accounts, INEGI.

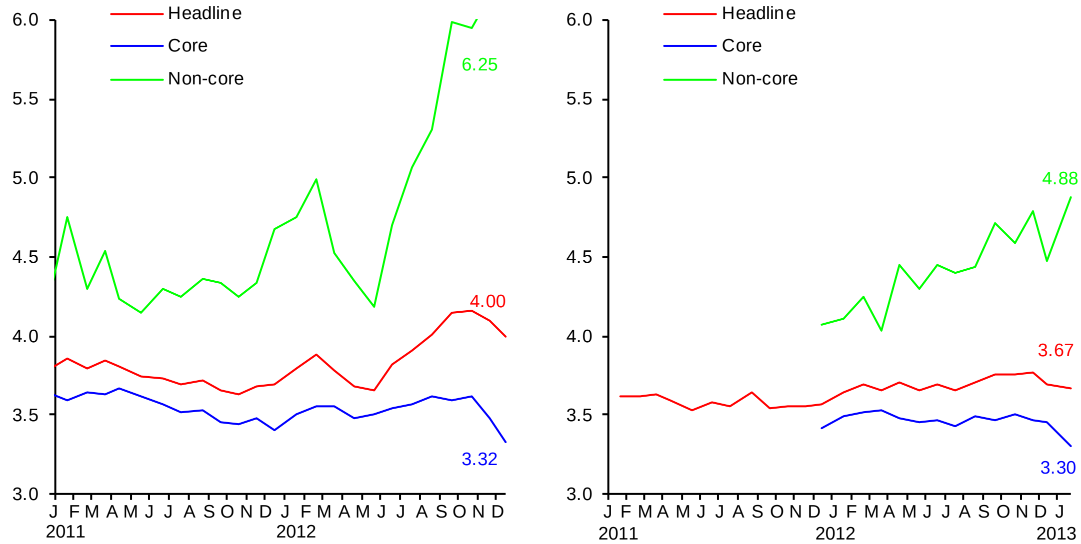
Relative to inflation expectations, it should be mentioned that in the fourth quarter of 2012, the short-term expectations decreased significantly, whereas those corresponding to medium and long terms maintained stable. Inflation expectations for the end of 2012 were revised downwards insofar as the change in the headline inflation trend consolidated. In this way, average expectations for headline inflation for the end of 2012, obtained from Banco de México's survey among private sector analysts, declined significantly and located at 4 percent in December (Chart 37a).[16]

Average inflation expectations for the end of 2013 were also revised downwards from 3.76 percent in the survey of September 2012 to 3.67 percent in the survey of January 2013 (Chart 37b).[17] This reduction resulted from the evolution of average core inflation expectations, which dropped from 3.47 to 3.3 percent in the referred period. Implicit average non-core inflation expectations increased from 4.71 percent in the survey of September to 4.88 percent in the survey of January. Inflation expectations for the end of 2014 remained stable, close to 3.6 percent, throughout the period analyzed by this Inflation Report (Chart 38).[18]

[16] According to the Banamex Survey of Financial Market Analysts' Expectations, average expectations for headline inflation for the end of 2012 located at 3.69 percent in the survey of January 7, 2013.
[17] According to the Banamex Survey of Financial Market Analysts' Expectations, average headline inflation expectations for 2013 shifted from 3.72 percent in the survey of September 20, 2012 to 3.62 percent in the survey of February 5, 2013. Average core inflation expectations dropped from 3.31 to 3.24 percent in the same period, while implicit average expectations for the non-core inflation located at 4.39 percent in the survey of September 20 and at 4.87 percent in the survey of February 5, 2013.
[18] According to the Banamex Survey of Financial Market Analysts' Expectations, conducted on February 5, 2013, average expectations for headline inflation for the end of 2014 located at 3.64 percent, while average expectations for core and non-core inflation located at 3.35 and 4.6 percent, respectively.

Chart 37
Headline, Core and Non-core Inflation Expectations

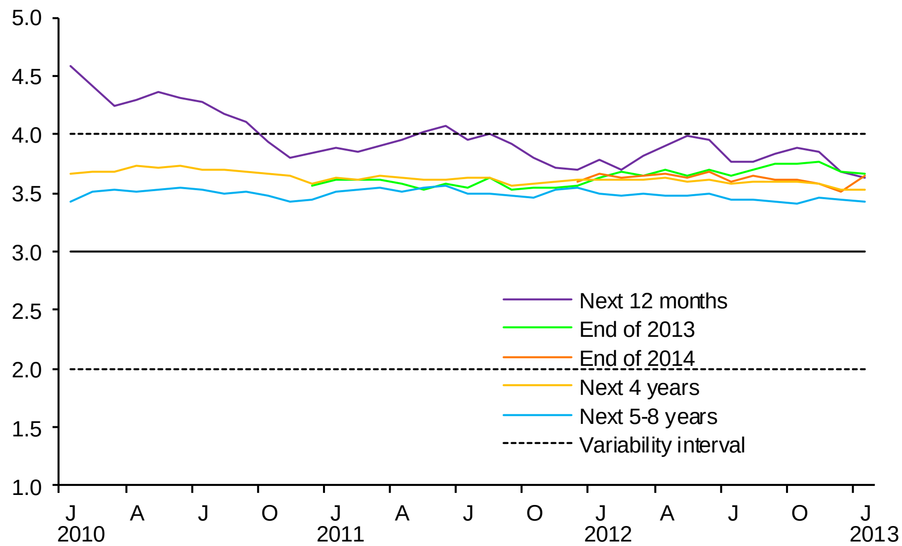
a) End of 2012 — Percent | b) End of 2013 — Percent



Source: Banco de México's Survey. | Source: Banco de México's Survey.

As to medium- and long-term inflation expectations, in the period between September 2012 and January 2013 those for the next 4 years remained at a level close to 3.5 percent, whereas those corresponding to the next 5 to 8 years persisted at around 3.4 percent.

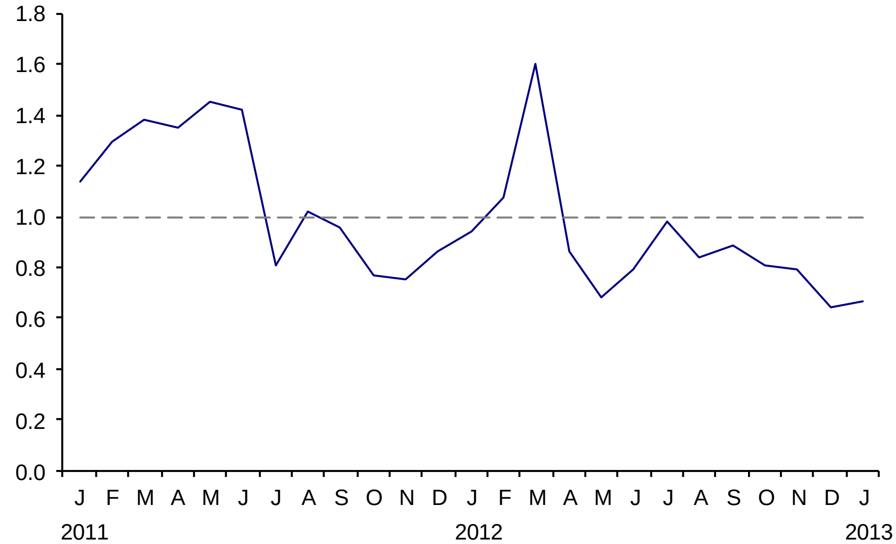
Chart 38
Annual Headline Inflation Expectations [1/]
Percent



1/ Latest available data: January 2013.
Source: Banco de México's survey.

Besides the detailed evolution of average inflation expectations it is important to explore the behavior of the inflation expectations' distribution. Indeed, apart from the first moment, other characteristics of the distribution have registered a favorable evolution in recent months. In particular, a decrease of the upside skewness as compared to the downside skewness has been observed in the distribution of long-term expectations (Chart 39). Thus, for the horizon of 5 to 8 years, the distribution of inflation expectations indicates that upside inflation risks have diminished with respect to the downside ones.[19]

Chart 39
Upside to Downside Skewness Ratio of Inflation Expectations for the Next 5 to 8 Years 1/



1/ Latest available data: January 2013.
Source: Prepared by Banco de México based on data from Banco de México's survey.

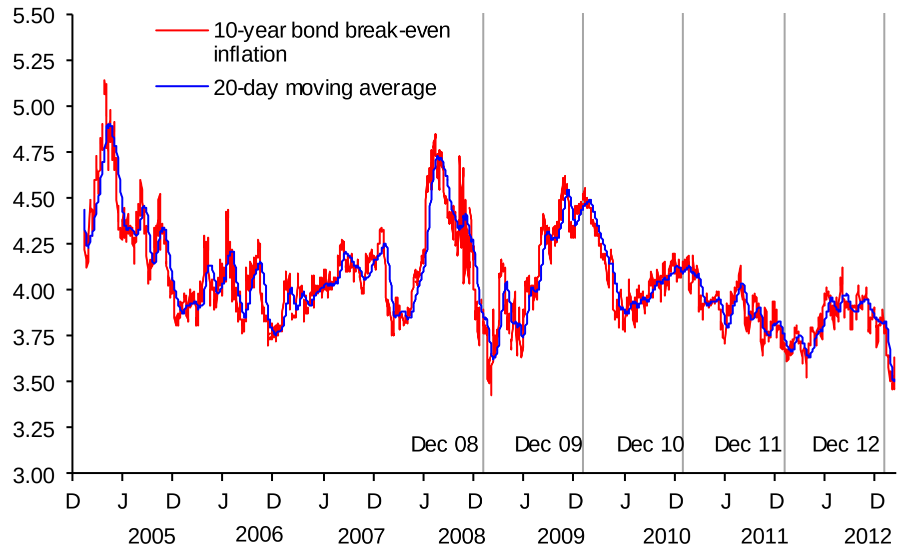
To complement the abovesaid, based on long-term interest rates it is possible to calculate the expected break-even inflation and inflation risk (difference between the 10-year bond nominal yield and the real yield associated to inflation-indexed debt instruments of the same term). This indicator reduced considerably in the last months, although with certain volatility, and recently located around 3.5 percent, close to the minimum historical levels of this indicator (Chart 40). In this regard, it should be pointed out that, given that the inflation risk premium included in this indicator has a positive value, it can be stated that inflation expectations implicit in long-term interest rates are below 3.5 percent. Additionally, the decrease in this

[19] The downside skewness of the inflation expectations distribution could reflect a lower probability of high inflation levels. Methodologically, for the analysis of skewness the expected inflation distribution is assumed to follow a segmented normal distribution, for which it is possible to find the mode of the distribution and the standard deviation in the right and in the left segment. Thus, it is said that if the deviation in the right segment is smaller than that in the left segment, the left tail of the distribution is "heavier" than the right tail, and vice versa. Such a situation indicates that the probability associated with inflation lower than the mode is greater than that associated with inflations higher than the mode, which could be interpreted as downside risks exceeding upside risks. For a detailed description of this analysis see the Technical Chapter "Evolution of Inflation Expectations in Mexico", published in the Inflation Report, July-September 2011. It should be noted that due to the methodological changes in Banco de México's survey of January 2013, in particular, the inclusion of new participants, in this exercise the respondents' sample for January 2013 remained in accordance with the previous month.

indicator is possibly reflecting both reduced inflation expectations, and lower inflation risk premium.

In sum, in the fourth quarter of 2012 a downward inflation trend and a balanced growth of the economic activity, although at a lower rate with respect to the first half of the year, were registered. This took place in a context in which the impact of the relative price adjustments on inflation started to fade; inflation expectations observed a favorable evolution and a considerable number of economic indicators have been pointing to the convergence of the growth rate of goods' and services' production in Mexico to levels close to its potential.

Chart 40
Break-even Inflation and Inflation Risk [1/]
Percent



1/ The break-even inflation and inflation risk implicit in 10-year bonds is calculated based on nominal and real interest rates of the secondary market.
Source: Banco de México estimate with data from Valmer.

During most of the reference quarter, an international environment of moderate volatility in international financial markets persisted, leading to diminished risk premia. As mentioned above, this reduction resulted from:

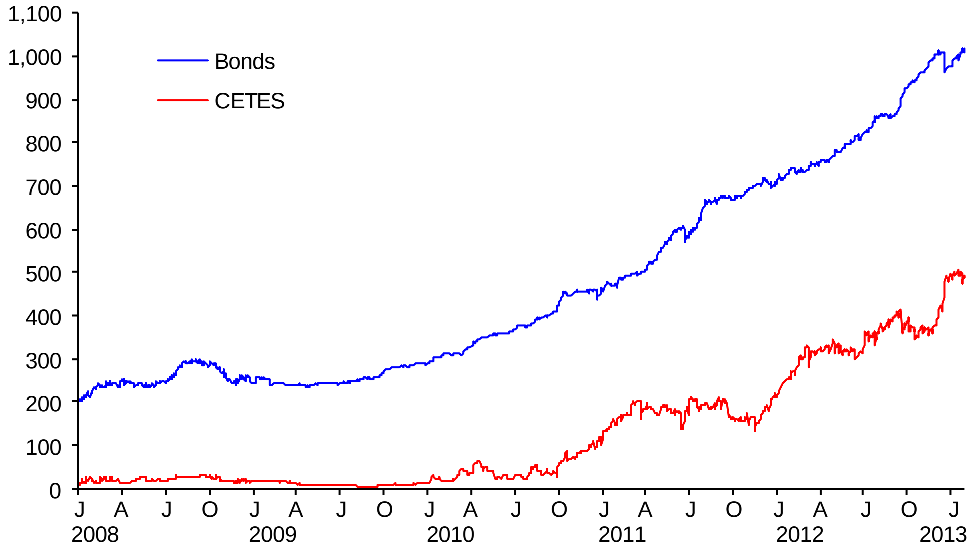
a) The measures taken by the central banks of the main advanced economies, which contributed to significantly easing global financial tensions.

b) The progress in the U.S. fiscal consolidation process, although discussions over this topic are anticipated to continue generating uncertainty.

c) Progress made so far in the Euro zone regarding the structural reforms, including the establishment of the Single Supervisory Mechanism, improvements in the budgetary process and the coordination of the economic policies, and reducing the imbalances among the member states.

In this juncture, in the period analyzed in this Inflation Report, government securities' holdings by foreign investors continued increasing, as a result of their confidence in the Mexican economy and, hence, in its financial assets (Chart 41). In particular, the effectiveness of the framework for the monetary policy conduction and the prospect of important structural reforms have combined to make the economy of Mexico more attractive for international investors. This, together with the monetary stimulus provided by the advanced economies (in particular, the U.S.), which contributed to a significant capital flow to emerging economies, generated an appreciation of the Mexican peso (Chart 42).

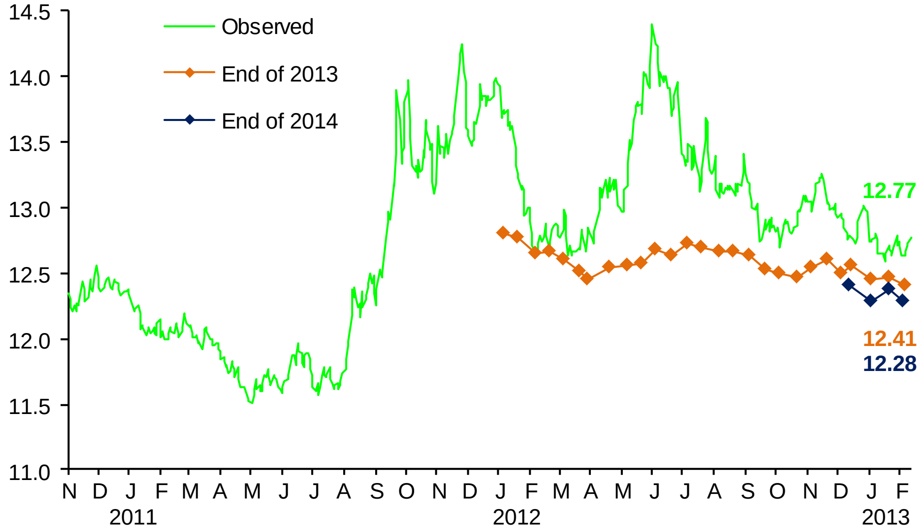
Chart 41
Government Securities' Holdings by Foreign Investors
MXN billion



Source: Banco de México.

In this environment, domestic interest rates decreased (Chart 43a). As to the shorter-term interest rates, it stands out that the interest rate of the 6-month government bonds shifted from levels close to 4.5 percent in September, to around 4.35 percent in the first days of February. The interest rates of longer-term government bonds also observed reductions from the end of September up to the moment. The interest rates of 10-year government bonds shifted from 5.3 percent at the end of September 2012 to a level close to 5.1 percent at the beginning of February (Chart 43b). This was a result of a significant flattening of the yield curve. Thus, the slope of the curve, defined as the difference between the interest rate of 10-year government bonds and that of 6-month government bonds, reached a level around 75 basis points, close to the minimum level in the last 4 years.

Chart 42
Exchange Rate and its Expectations for the End of 2013 and 2014 [1/]
MXN/USD



1/ The observed exchange rate is the monthly average of the FIX exchange rate. The latest data of the observed exchange rate correspond to February 11, 2013. For its expectations, the latest data are as of February 5, 2013.
Source: Banco de México and Banamex Expectations Survey (*Encuesta de Expectativas Banamex)*.

Even though the reduction of longer-term interest rates is partly due to the global investors' search for yield, it is also due to different factors, among which mainly the consolidation of a stable macroeconomic environment in Mexico stands out. In this sense, the current levels of the yield curve, which are close to their historical minimum levels, are considered to deserve a longer-term reflection, apart from the usual discussion, which is carried out in the last paragraphs.

In this context, the conduction of public finances has been a fundamental anchor of stability. Even though it is clear that Mexico needs to strengthen its public finances, it is also true that it has maintained them close to the equilibrium during more than a decade and a half, as a result of one of the lowest levels of debt to GDP ratios among the largest economies worldwide. In the economic program for this year, the fiscal stance has been strengthened even further at the margin.

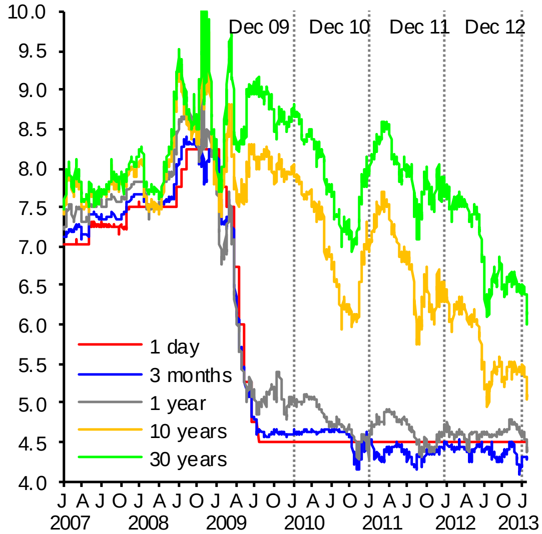
As discussed above, the monetary policy has been aiming at reaching the established 3 percent inflation target for many years already. In the last decade, the process of inflation convergence was subject to severe shocks, which reflects significant changes in the structure of the world expansion. Thus, among others, the global environment has been characterized by important adjustments in the relative prices of commodities and by the recurring episodes of great financial instability.

Once the effects of last year's shocks on annual headline inflation to a large extent dissipated, it currently locates at levels close to 3 percent, and core inflation, surely at its historical minimum levels, is below the 3 percent level. This can be seen more clearly, when conditions faced by the domestic inflationary process are evaluated, which to a greater degree is reflected in the services' inflation. It is well known that it locates below 2 percent. However, looking beyond the numbers, different statistical aspects characterizing inflation clearly indicate an evident improvement.

All of the above have contributed, among other things, to a reduction in risk premia, particularly those associated to inflation risk. Thus, despite 10-year government bonds reaching values close to their historical minimum levels, they could still decrease further.

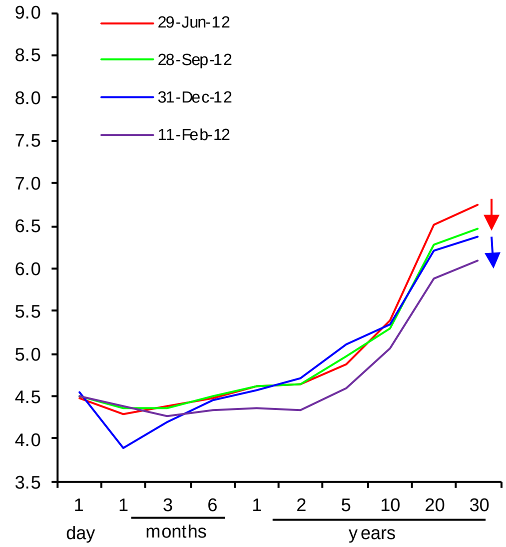
Chart 43
Interest Rates in Mexico

a) Government Securities Interest Rates 1/
Percent



1/ Since January 21, 2008, the one-day (overnight) interest rate corresponds to the target for the Overnight Interbank Interest Rate.
Source: *Proveedor Integral de Precios* (PiP).

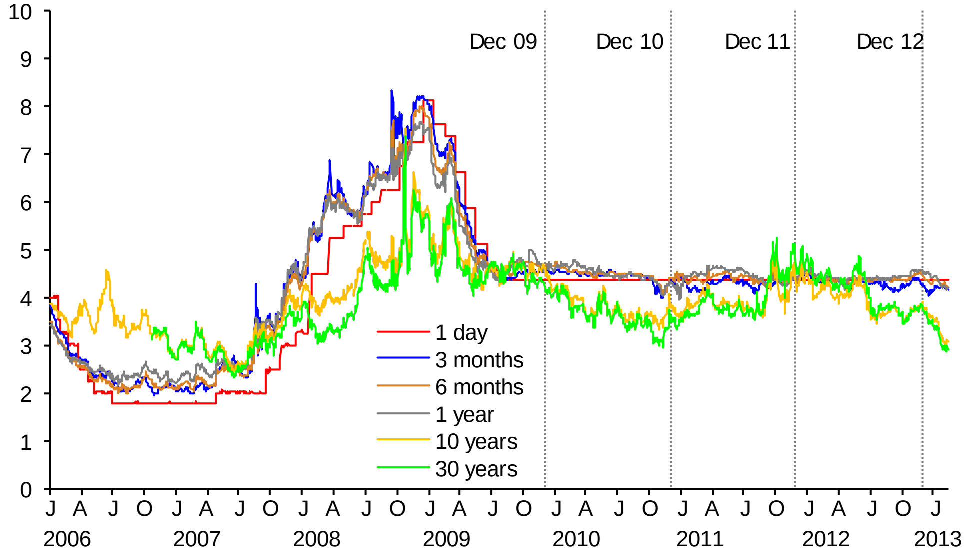
b) Yield Curve
Percent



Source: *Proveedor Integral de Precios* (PiP).

In turn, the interest rate spread between the U.S. and Mexico continue at high levels and above the pre-crisis ones, despite the fact that in January 2013 they registered a significant decrease (Chart 44).

Chart 44
Interest Rate Spread between Mexico and the U.S. [1/]
Percent



1/ For the U.S. target rate, the average of the interval considered by the U.S. Federal Reserve is used.
Source: *Proveedor Integral de Precios* (PiP) and U.S. Treasury Department.

All of the above points to the fact that interest rates could possibly decrease even further, if the benchmark interest rate is reduced. This reflection, however, would be incomplete if the cyclical phase, the economy is currently going through, was not taken into account. In this sense, as mentioned above, the productive activity seems to be converging to levels close to the economy's potential, inflation to its 3 percent target, and the current account deficit is at low and fully fundable levels.

This is the context, in which the monetary policy decision of January 2013 was made. Even though it was decided to maintain the target for the Overnight Interbank Interest Rate unchanged at 4.5 percent, Banco de México's Board of Governors mentioned that, if an environment of lower economic growth and lower inflation consolidates, it could be recommendable to reduce the reference interest rate. This reduction would have two main purposes, both acting to the same end. On the one hand, it would acknowledge the reduction in inflation risk premia, which reflects medium-term achievements in curbing inflation. On the other hand, it would adjust the referred rate to conditions presently prevailing in the Mexican economy. In particular, in light of greater stability and certainty, a measure of this kind can become compatible with the process of inflation convergence towards the permanent 3 percent target.

5. Inflation Forecasts and Balance of Risks

The expectations regarding U.S. economic activity, which the macroeconomic forecast builds on, are similar to those announced in the previous Inflation Report, although the forecast for the industrial production expansion has been slightly revised downwards.[20]

a) U.S. GDP registered a growth rate of 2.2 percent in 2012, as compared to the expected 2.1 percent in the last Inflation Report. For 2013, U.S. GDP is anticipated to increase 1.9 percent, which compares to the 2.0 percent announced in the last Inflation Report. For 2014 an expansion of this indicator is estimated at 2.8 percent.

b) U.S. industrial production expanded 3.7 percent in 2012, while for 2013 a growth of 2.3 percent is foreseen. These figures compare to the expectations of 3.9 and 2.5 percent respectively, in the Inflation Report, July-September 2012. For 2014 U.S. industrial production is expected to grow 3.5 percent.

Growth of the Mexican Economy: Considering U.S. industrial production growth in 2012 and the performance of the Mexican economy throughout the year, the annual GDP growth in Mexico is calculated to have been around 4.0 percent in 2012. In part, this reflects the favorable performance of the services sector in the fourth quarter of 2012. For 2013, the interval for the expected GDP growth rate in Mexico announced in the last Inflation Report remains unchanged, taking into account that progress in the negotiations regarding U.S. fiscal consolidation is in line with the analysts' expectations and the forecast in the previous Inflation Report. Thus, consistent with the expected U.S. economic performance for this year, GDP growth is estimated to locate between 3.0 and 4.0 percent. For 2014, the GDP growth rate of Mexico is foreseen to lie between 3.2 and 4.2 percent, in line with the expectation of a stronger U.S. economic expansion for that year (Chart 45a).

Employment: For 2013, considering the recent evolution of this indicator, the anticipated economic activity growth and the recent approval of the labor reform, the forecast for the increase in the number of IMSS-insured workers is revised upwards from an interval of 500 to 600 thousand workers stated in the previous Inflation Report to an interval of 550 to 650 thousand insured workers. For 2014, an increase of between 700 to 800 thousand workers is expected.

Current Account: Regarding the external accounts, the trade balance registered a moderate surplus of USD 0.2 billion (estimated at 0.0 percent of GDP) in 2012, so that the current account deficit is expected to have reached USD 7.0 billion (0.6 percent of GDP). For 2013, the anticipated trade balance and the current account deficits are USD 5.5 and 17.3 billion, respectively (0.4 and 1.3 percent of GDP). For 2014 the forecast for the trade balance and the current account deficits are USD 12.8 and 24.6 billion, in the same order (0.9 and 1.7 percent of GDP). It is noteworthy that the expected moderate current account deficit, a global environment of ample liquidity, as well as measures taken by the Mexican government to finance its external debt liabilities suggest that financing these

[20] Expectations for the U.S. economy are based on the consensus of analysts surveyed by Blue Chip in February 2013.

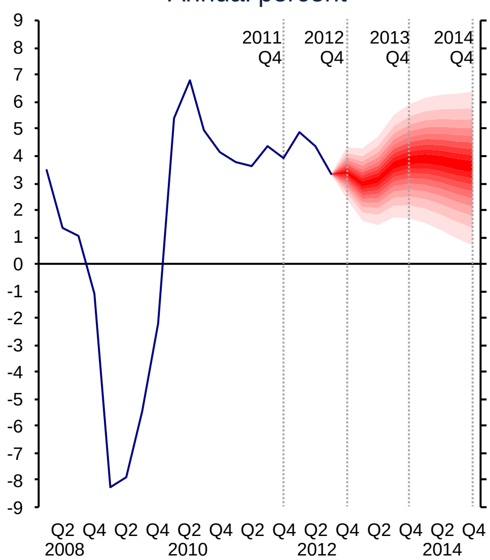
deficits will not pose a problem in the forecast horizon and that there will be no pressures on the exchange rate arising from this source.

Economic growth is estimated to be balanced between the industrial and the services sectors, reflecting both the scenario of the moderate growth in the U.S., and the fact that no real exchange rate misalignments are anticipated. Therefore, the main indicators of slackness in the most important input markets are expected to continue suggesting the absence of aggregate-demand related pressures on prices, although it will be important to remain very alert in order to identify the existence of such pressures in a timely manner, if they happen to occur. In particular, the output gap is estimated to remain close to zero during the forecast horizon, with a slight upward trend in 2013, which, to some extent, would revert in 2014 (Chart 45b).

This forecast growth scenario is very peculiar, given that it shows the convergence of the economy to its growth potential without presenting inflationary pressures and with a fully fundable current account deficit.

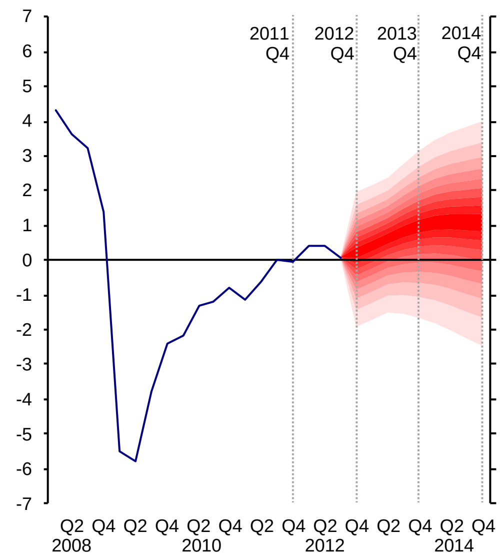
Chart 45
Fan Charts: GDP Growth and Output Gap

a) GDP Growth, s. a.
Annual percent



s. a. / Seasonally adjusted figures.
Source: INEGI and Banco de México.

b) Output Gap [1/]
Percent



1/ Calculated based on seasonally adjusted figures.
Source: Banco de México.

Taking into account the uncertainty conditions still prevailing in the global environment, the main risks for the growth scenario of the Mexican economy are still on the downside. The following risks stand out:

i. A less favorable environment for U.S. economic growth. Even though the recently reached agreements point to the fact that a fiscal adjustment as severe as the one previously legislated has been discarded, there is still uncertainty regarding the magnitude of the fiscal consolidation which will eventually be implemented and regarding the increase in the debt ceiling by the U.S. government. Consequently, a risk of a further weakening of the U.S. economy, which could affect the Mexican economy, persists.

ii. The possibility that events originated in the Euro zone could affect international financial markets has not dissipated, as fiscal and financial problems prevail in the region. Mainly, the problems concerning the lack of competitiveness, which considerably afflict various countries at the periphery of the Euro zone, persist. In this sense, the possibility of an increase in the investors' search for safe haven assets persists, which could be associated with a deterioration in terms of Mexico's access to the international credit.

iii. Additionally, there is the possibility of a lower global demand associated with the persistence of the slowdown in emerging economies, particularly India, Brazil and China, although the forecasts regarding the last one have stabilized after the downturn registered in 2012.

iv. Contrary to the three previous risks, even though the considerable monetary stimulus from the central banks of the major advanced economies is expected to remain for some time, as would be the case of the U.S., there is still a risk that the process of monetary policy normalization could begin earlier than anticipated. This would entail higher interest rates in such countries, which could lead to a partial reversal of the capital flows to the emerging economies. Despite this risk presently being low, insofar as the U.S. and other advanced economies could start showing more dynamism, it would imply greater relevance of this scenario.

Nevertheless, insofar as the process of structural reforms in the country keeps advancing -among which the recent labor and educational reforms, as well as the reform to the General Public Accounting Act (*Ley General de Contabilidad Gubernamental*) represent clear progress- the growth scenario for Mexico in the medium term could become more favorable as compared to that in the described forecast. In particular, the labor reform is expected to enhance labor market flexibility, to promote formal employment and to encourage greater labor productivity, all of which would favorably impact the potential growth of the economy (Box 2).

In this context, it is essential to emphasize the benefits of continuing the implementation of the reforms that would boost productivity from a microeconomic point of view and would complement the macroeconomic stability that Mexico has reached. As previously mentioned, shifting the resource allocation towards their most productive uses, and in a way that allows for the adoption of better technologies is required. These reforms would allow for a higher sustained growth, and at the same time would strengthen the environment of low and stable inflation.

It should be noted that, if the progress in the process of structural reforms is consolidated, no difficulties to finance the investment projects resulting from these are anticipated. On the one hand, there is wide availability of resources at the global level to provide funding to emerging economies' investment projects. On the other hand, the solvency and flexibility conditions in the loanable funds market in Mexico allow anticipating that higher demand for resources to finance investment projects could be easily accommodated by Mexico's financial markets and the banking system.

Box 2
An Estimate of the Impact of the Labor Reform on Potential GDP and Formal Employment Growth

Introduction

As previously stated in various documents by Banco de México, our country is in need of a series of structural reforms to boost its productivity and, therefore, to offset the adverse effects of an environment of slow international economic growth. The importance of implementing reforms to improve the institutional framework and to make markets more flexible, particularly those of inputs, has been repeatedly emphasized. In this way, better resource allocation towards their most productive uses would be achieved, thus triggering higher economic growth and greater welfare of the society.

In this context, the labor reform approved in November 2012 by the Congress, which modifies the regulation governing labor relations in Mexico, takes on special importance. The referred reform is considered to be a step towards a more flexible labor market in the country. This Box describes an exercise carried out to quantify the impact of the mentioned reform on potential GDP growth in Mexico, while acknowledging the difficulty to assess the effects of a policy before its implementation.[1]

The results indicate that, given a redistribution of current workers towards the formal sector induced by the reform, the impact on the potential GPD growth rate over the next five years could range from 0.15 percentage points on average per year, in a scenario considered most probable, although conservative, to 0.25 percentage points on average, in a more optimistic scenario. Additionally, if the formal sector is considered to have access to better technologies as compared to the informal one, and if the reform might possibly result in a favorable change in the formal employment growth rate, as compared to that of the informal sector, permanent effects can be expected, but in a longer term, of approximately 0.10 percentage points of additional potential growth.

Finally, under the baseline scenario, it is estimated that around 370 thousand additional formal jobs on average will be created annually over the following five years, with respect to those that would be generated in the absence of the labor reform. This does not imply that the number of additional formal jobs would be observed from the first year onwards, but rather, on average, over the five-year period.

[1] The results presented in the Box are based on the document by Alcaraz, Chiquiar, Covarrubias and Salcedo (2013), "*Estimación del Efecto de la Reforma Laboral en México*", which is about to be published as a Banco de México working paper.

1. Background

To provide context to the discussion, the main topics of the approved reform are summarized below:

a) To promote labor market flexibility, the following contractual modalities are introduced:
   - Trial contracts, initial training contracts and temporary contracts for specific and seasonal activities.
   - Hourly wage, with certain restrictions.
   - "Teleworking" modality.
   - The regulation of subcontracting and outsourcing.

b) To ease labor market frictions, was approved:
   - A cap on back wages.

c) Union reform:
   - The repeal of the "closed shop clause", i.e. if a worker leaves the union, the employer does not have to terminate the labor relationship anymore.
   - Union transparency:
     - A compulsory free and secret ballot in the union elections, and, additionally, the permission of indirect ballot.
     - The recognition of workers' right to access information about the union's assets at all times and to denounce irregularities.
     - Union's accountability.
     - Sanctions against union leaders who fail to give account of the union's assets.
     - An obligation of the unions to establish internal procedures to solve conflicts over the union's assets.

d) To improve labor organization within firms:
   - Productivity (and not only seniority) will take precedence as the main criterium in handing out vacant and new jobs. "Multi-skills" are included, meaning that workers must carry out activities complementary to their main work.
   - Productivity, certification of labor skills, labor quality, and environmental sustainability are fostered.

e) To protect specific groups of workers and to enhance labor security:
   - The adoption of the concept of "decent work".
   - The concept of discrimination is expanded to include discrimination on the basis of ethnicity, sexual preferences, disabilities, beliefs and marital status.

- The concepts of bullying and sexual harassment are added and defined. Performing, allowing or tolerating these acts is sanctioned.
- Protection to vulnerable groups of workers is granted:
    - Hiring children under the age of 14 outside the family is banned.
    - Special measures are taken to protect the following groups of workers: women, miners, domestic and disabled workers.
    - The incorporation of health and civil protection components are suggested in different national and state commissions.

It is noteworthy that, although the approved reform is considered as a step in the correct direction, it is possible that, with additional measures, greater labor market flexibility could be achieved.

2. Methodology to Estimate the Impact of the Labor Reform on Potential GDP Growth Rate

To calculate the impact of the labor reform on the potential GDP growth rate in Mexico, the following methodology is suggested. First, aggregate production of Mexico Y is given by a Cobb-Douglas function $Y = A\,L^{\alpha}\,K^{\beta}$, where A is total factor productivity, L is labor input, K is capital input, while α and β are the output elasticities of labor and capital, respectively. One of the advantages of using this functional form is that the potential GDP growth rate can be computed as a weighted sum of the growth rates of productivity, labor and capital. That is,

$$\Delta\%Y = \Delta\%A + \alpha\Delta\%L + \beta\Delta\%K.$$

When using this function, the following is assumed:

(i) For the case of Mexico, a productivity differential between formal and informal employment is considered. Therefore, the effective labor input is defined as:

$$L = \lambda\,L_{formal} + L_{informal}\ ,$$

where $\lambda > 1$. Alcaraz, Chiquiar and Ramos-Francia (2011) find that a formal sector worker is on average 13 percent more productive than if this same worker was employed in the informal sector. Therefore, it is assumed that $\lambda = 1.13$.

(ii) Output elasticities are assumed to be $\alpha = 0.7$ and $\beta = 0.3$, consistent with the international evidence and similar to those documented for the case of Mexico (García-Verdú, 2005).

Based on the output function and the referred assumptions, the impact that the main approved measures of the reform could generate is calculated. The strategy is to focus on the approved sections of the reform and estimate the effect that each of them could have on the labor market, i.e. on L_{formal}, $L_{informal}$ and λ. Thus, by incorporating the variations in the output function, the impact of the change in the labor market on the potential GDP growth rate in Mexico is estimated.

3. Outcomes of the Baseline Scenario

Below we describe the components of the reform that are being evaluated and the estimated effect on the potential GDP growth rate in Mexico. To this end, the experience of the labor reforms implemented in Colombia and Germany was considered. The labor reform of 2002 in Colombia considered apprenticeship contracts and trial contracts (Núñez, 2005). In Germany in the period 2003-2005, four labor reforms were introduced seeking to incorporate young people into the labor market. According to Krause and Uhlig (2012), the new steady state in Germany was reached five years after the introduction of the reform, which leads to the expectation that the new steady state in Mexico will also be reached five years after the labor reform adoption. The main results are summarized in Table 1.

3.1 The Introduction of Trial Contracts, Training Contracts and Temporary Contracts

Following the experience of Germany and Colombia, the labor reform in Mexico is expected to reduce the youth unemployment rate. In Germany the unemployment rate declined by 2.8 percentage points. Nevertheless, the effects of the reforms in Germany on the unemployment rate have been particularly profound, since they covered more areas apart from trial, training and temporary contracts only. Therefore, a 2.8 percentage point-drop is not expected for Mexico, but rather a more moderate decrease, given that the Mexican labor reform contains around half the elements of the German reforms as a whole. Still, there could appear complementarities in the reform sections, which could generate a more favorable effect. Thus, a decline of 1.5 percentage points in the unemployment rate of young people between 20 and 26 years old is anticipated, and, given the availability of the new contract types, young employees are assumed to get formal employment. This section of the labor reform, which could be associated to an increase in formal employment L_{formal}, would imply a rise of 0.045 percentage points on average in the annual potential GDP growth rate over the period of five years (Table 1).

Table 1
Estimate of the Impact of the Labor Reform on the Potential GDP Growth Rate in Mexico
Baseline scenario

	Reform	Implication	Impact channel	Estimated effect on potential GDP growth rate [1/]
1	**Introduction of trial contracts, training contracts and temporary contracts**	Lower youth unemployment rate	$\uparrow L_{formal}$	0.045
2	**Introduction of hourly employment and wages**	Part-time salaried workers taking formal jobs	$\uparrow L_{formal}$ $\downarrow L_{informal}$	0.008
3	**Cap on back wages**	Lower hiring barriers in the formal sector	$\uparrow L_{formal}$ $\downarrow L_{informal}$	0.017
4	**Repeal of the closed shop clause**	Lower hiring barriers in the formal sector	$\uparrow L_{formal}$ $\downarrow L_{informal}$	0.012
5	**Growth bias towards formal employment**	Intensified growth of formal employment	$\uparrow \Delta\% L_{formal}$ $\downarrow \Delta\% L_{informal}$	0.008
	Subtotal			**0.090**
6	**Increased productivity of formal workers**	Increased productivity of formal as relative to informal workers	$\uparrow \lambda$	0.061
	TOTAL			**0.151**

1/ In percentage points. The annual impact is calculated based on the average growth rate in a period of 5 years.

3.2 Hourly Employment and Wages

As a result of this measure, part-time salaried workers, or those working less than 20 hours and that at present are generally occupied in informal employments, could find formal jobs. Hence, this reform is expected to increase L_{formal} and to decrease $L_{informal}$. The informality among part-time salaried workers is presumed to diminish, so that the 60 percent informality rate of all workers in the economy is reached, reflecting the reform's contribution to formalizing part-time employments, but also that hiring barriers still persist. It should be pointed out that given the nature of this exercise, the calculations are made in hours (rather than the number of workers) to correctly capture that these part-time workers contribute less to GDP as compared to full-time ones. Based on this premise, the increase in L_{formal} and the decrease in $L_{informal}$ would imply a change of approximately 0.008 percentage points on average in the annual potential GDP growth rate over a period of five years (Table 1).

3.3 A Cap on Back Wages

The strategy to estimate the effect of the reduction of the cost from capping back wages on the potential GDP growth rate consists in calculating the amount of an average back wage a worker could obtain and how much of the total cost of the contract termination it represents. The introduction of a cap on back wages would generate a reduction in the costs associated to employment termination, implying reduced hiring barriers in the formal sector. In this way, lower barriers would imply a higher probability that an informal worker can have access to formal employment if they wished to. Hence, an increase in formal employment is expected. It should be pointed out that Alcaraz, Chiquiar and Salcedo (2012) have found evidence of labor market segmentation in Mexico. Particularly, around 15 percent of informal salaried workers are found to want formal employment but not to have obtained work in the formal sector due to hiring barriers. Under this segmentation model, a 20 percent drop in the formal sector hiring barriers (as expected as a result of this labor reform)[2] would result in a drop in the amount of informal workers who wish to have formal employment from 15 to 12 percent. This shift of workers from the informal sector to the formal one, that is an increase in L_{formal} and a decrease in $L_{informal}$, implies a change of 0.017 percentage points in the potential GDP growth rate on average per year over the period of five years (Table 1).

3.4 Repeal of the Closed Shop Clause

The Closed Shop Clause can also be considered as a hiring barrier and, as mentioned in the previous Subsection, its importance for labor market flexibility is assumed to equal that of the cap on back wages. Therefore, based on the previous exercise, an additional 20 percent decrease in the hiring barriers of the formal sector is assumed. In the model of Alcaraz, Chiquiar and Salcedo (2012), this decrease would mean a drop in the percentage of informal workers who want to have formal employment but cannot obtain one, from 12 to 10 percent. The increase in L_{formal} and the decrease in $L_{informal}$ of this measure could result in a change of 0.012 percentage points in the potential GDP growth rate on average per year over a five-year time frame (Table 1).

3.5 Growth Bias towards Formal Employment

Greater labor market flexibility implied by the labor reform is anticipated to increase formal employment growth as compared to the informal one. To calculate this effect, the long-term growth of total employment, formal employment and informal employment were estimated using the corresponding Hodrick-Prescott filtered series. The exercise assumes that hours worked in the informal sector will increase at a lower rate as compared to that observed if the reform had not been approved and at the same rate at which the hours worked in the formal sector presently grow. In turn, the latter are presumed to grow in a manner in which the current total growth rate of hours worked is maintained. This redistribution of new workers could impact the potential GDP growth rate by 0.008 percentage points on average per year over the period of five years (Table 1).

Adding the estimated effects of the reforms specified in Subsections 3.1 to 3.5, a total increase in the potential GDP growth rate of 0.090 percentage points could be expected. However, an additional effect is added below, in which formal workers' productivity is increased. This effect is introduced after the redistribution between formal and informal workers simulated up to the moment.

3.6 Increased Formal Workers' Productivity

Temporary contracts, training and trial contracts, the precedence of productivity over seniority, a cap on back wages and multi-skills, are all expected to increase formal workers' productivity. This could impact firms' labor force in at least two ways: a) facilitate training and learning of workers who join the formal sector; and, b) increase labor market flexibility. Both effects head in the same direction and could lead to higher average productivity of formal workers. This effect is incorporated in the estimation by assuming an increase in λ slightly above zero, thus modifying its value from 1.13 to 1.14. Therefore, the relative productivity of formal workers with respect to informal ones increases by around 8 percent. To put this into context, Boedo and Mukoyama (2012) find that an increase in dismissal costs from the level observed in the U.S. to the average level of dismissal costs in low income countries would imply a drop of 34 percent in total factor productivity. Under this estimation, if, as in Subsection 3.3, the dismissal costs in Mexico drop by 20 percent, productivity would increase by 10 percent, a number similar to that implicit in the assumed increase of λ. The change in the reform associated to the increase in productivity would imply a raise of 0.061 percentage points in the potential GDP growth rate on average per year over the period of five years (Table 1).

3.7 Overall Effect of the Reform

In sum, based on the proposed model and the described assumptions, and adding up the results of all exercises, the recently approved labor reform is estimated to possibly impact the annual potential GDP growth rate of Mexico by 0.15 percentage points on average per year over the next five years. It is noteworthy that the described effects, except for the growth bias towards formal employment, have an impact on the potential GDP growth rate while gradually conversing to a new steady state, which is assumed to be reached in five years.

Nevertheless, if the formal sector is considered to have access to better technologies as compared to the informal one, therefore making its total productivity growth higher, permanent effects of the labor reform on the potential GDP growth rate can be expected. In this context, and based on the scenario of the exercise in Subsection 3.5 of growth bias towards formal employment, where it is assumed that a greater share of workers who enter the labor force in the future joins the formal sector, the labor reform is expected to possibly have a permanent effect on the

[2] Comparing the new legislation with the previous one, and data on duration and costs of trials following an unjustified dismissal (STPS, 2010), the reduction in the average severance pay in light of lower back salaires would be approximately 57 percent. Furthermore, the severance pay is assumed to represent half of total hiring barriers (while interest groups could represent the other half), i.e. 28.5 percent of total costs. Given the difficulty to produce an accurate estimate of the relative importance of the severance pay, the equality between these two barriers is considered as a focal point. Finally, in line with Sadka (2012), 90 percent of employees who begin a trial, claim back wages, of which 74 percent obtain them. Therefore, a reduction in hiring barriers is assumed to drop by about 20 percent (0.285x0.90x0.74).

potential GDP growth rate of approximately 0.10 percentage points.[3]

4. Results in an Optimistic Scenario

For the purpose of comparison, an alternative exercise was conducted. In it, the labor reform is assumed to have more favorable effects on the labor market with respect to those specified in the baseline scenario. In particular, the assumptions described below have been modified:

- *Introduction of trial, training and temporary contracts*. In this alternative exercise the decrease in the youth unemployment rate shifts from 1.5 percentage points in the baseline scenario to 2.0 percentage points, which would result in an increase of 0.061 percentage points on average in the annual potential GDP growth rate over the period of five years, as compared to 0.045 percentage points in the baseline scenario.
- *Introduction of employment and hourly wages.* For this optimistic scenario, the proportion of formal to informal part-time salaried workers drops to 40 percent. This decrease could be associated to a raise of 0.013 percentage points in the potential GDP growth rate on average per year over the period of five years, as compared to 0.008 percentage points in the baseline scenario.
- *Reduced costs of back wages and the repeal of the close shop clause.* In this case it is assumed that both of these measures reduce labor market segmentation (the hiring barriers diminish), so that the share of involuntary informal workers decreases from 15 to 5 percent. These assumptions would imply an increase in the annual potential GDP growth rate of 0.057 percentage points on average per year over the period of five years, as compared to 0.029 percentage points in the baseline scenario.
- *Increased productivity of formal workers.* Finally, this effect is assumed to increase formal employment productivity to a greater degree than in the baseline scenario. Particularly, λ increases from 1.13 to 1.15. In this case, an increase in the annual potential GDP growth rate of 0.111 percentage points on average per year over the period of five years would be observed, while in the baseline scenario an increase of 0.061 percentage points was assumed.

[3] To calculate the differences in productivity between the formal and the informal sector, a formal GDP and an informal GDP were estimated, weighting each sector's GDP by the share of formal and informal workers, respectively. Then, the change in these two sectors' PFT was calculated, under the assumption that the capital growth rate in these two sectors is constant. Finally, the change in the growth rates of the formal and informal labor force, together with the effect associated to the access to better technologies by the formal sector workers were simulated.

As a whole, this alternative, more optimistic scenario indicates the possibility that the labor reform could increase the potential GDP growth rate by 0.25 percentage points on average per year over a time span of five years. Thus, the estimate suggested in this Box implies that, as a consequence of the labor reform, the annual potential GDP growth rate could increase by 0.15 to 0.25 percentage points on average per year over the period of five years.

5. Other Effects Not Considered in this Exercise

There are other factors not considered in the estimation of the effects of the labor reform, which nevertheless could affect potential GDP growth in the medium and long term. The following could be relevant:

- The labor reform could generate an environment of greater certainty with regard to hiring practices in the labor market, which could reduce the uncertainty of foreign investors interested in developing projects in Mexico. Higher foreign direct investment would intensify capital formation and accumulation, leading to a possible increase in potential GDP growth in Mexico.
- Fewer frictions in the labor market could facilitate the adoption of more efficient technologies by firms. Indeed, firms could make the hiring process more fluent for those employees more open to new technologies.
- More flexible contracts could motivate people previously not willing to work to find employment, and thus join the labor force. This would enhance effective labor.
- By increasing union transparency, the labor reform could align the incentives of workers and business owners so as to boost firms' productivity and thus to preserve and to expand sources of employment.
- There may be synergy among the different sections of the reform, which could imply a greater effect on potential GDP.

6. Estimate of the Impact of the Labor Reform on Formal Employment

The methodology suggested to estimate the impact of the labor reform on the potential GDP growth rate is based on using a production function, in which the labor input consists of formal and informal workers. Thus, the possible effects of the approved sections of the reform on formal and informal employment have been identified. Hence, the evaluation of the effect of the labor reform on potential GDP growth implicitly entails an estimation of the formal employment growth associated with the amendments to the law. In this context, the labor reform is estimated to possibly generate around 370 thousand formal annual employments on average per year over the five years in addition to those created had the reform not been approved.

Given that in recent years approximately 670 thousand formal jobs have been created annually, with the reform approximately a million new formal jobs per year can be expected. Once again, this does not imply that the referred effect would be observed during the first year after the reform approval, but rather on average over a five-year period. Thus, taking into account that the labor force grew on average by around 1.2 million persons in recent years, the labor reform is anticipated to contribute to the reduction of pressures on the expansion of the informal sector.

To put in context the above results, a survey among manufacturing and non-manufacturing sector entrepreneurs (with firms of over 11 employees) was conducted, so as to estimate the effect that these firms consider the labor reform could have on their hiring plans in 2013. The survey results are representative of the economy's formal sector at the national level, as well as by activity sector and by the size of the enterprise.[4] The survey was conducted from December 6 to December 31, 2012, and included the following questions:

Considering the firm's plans for 2013, and given the recent approval of the labor reform and as its direct consequence:

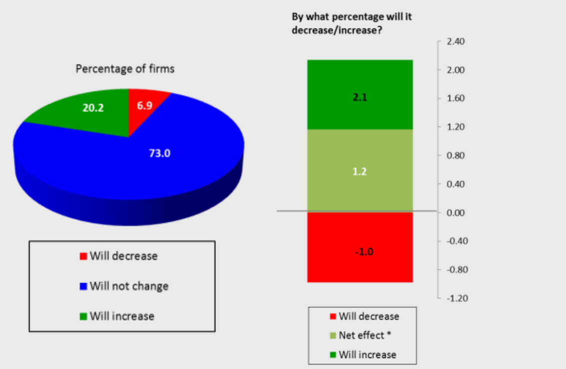
1. How do you anticipate your firm's production level to be modified next year?
1. How do you expect to modify your firm's employment trend (including subcontracted personnel) next year? [5]
2. Do you wish to comment on the impact that the labor reform will have on your enterprise?

This survey's results point to the fact that, as a direct consequence of the labor reform, 73 percent of businesses will not modify their hiring plans in 2013; 20.2 percent believe that hiring personnel will increase; and 6.9 percent estimate that it will drop (Chart 1). The business owners who consider an increase in the amount of personnel hired on average believe it to increase by 2.1 percent. Those who anticipate a decline in the amount of employed staff, expect it to be of 1 percent. The referred results imply that the net effect of the labor reform expected by entrepreneurs would be an increase of approximately 1.2 percent of the employment in the private formal sector during 2013, equivalent to 194,000 new jobs according to IMSS employment statistics (which accounted for a total of 16.2 million workers in November 2012).[6]

This survey's results suggest a greater impulse to job creation to be witnessed in larger enterprises. Indeed, 78 percent of new employments are estimated to be generated in firms of over 100 workers, while the remaining 22 percent in firms of 11 to 100 workers (Chart 2). Moreover, among the newly generated employments, 54 percent could correspond to the non-manufacturing sector, and 46 percent, to the manufacturing one.

The difference between the estimate of the labor reform impact on formal employment, described in Section 3 of this Box, and the results of the above reported survey derives from important variations in the interpretation that should be given to each of the obtained results. The survey results illustrate a partial equilibrium scenario, in which firms unilaterally establish their hiring plans and consider fixed their input prices. These results refer to the short-term effect of the reform, in particular, the reform impact expected by surveyed business contacts on the established hiring plans for 2013. In contrast, the exercise based on the production function in Section 3 incorporates a general equilibrium approach, which implicitly allows the adjustment of the economy's prices given a new resource allocation in the labor market, since it sums up the result of both supply and demand changes, besides seeking to identify the medium-term effect of the reform, which is expected to take place in a longer time span.

Chart 1
As a Result of the Labor Reform, How do you Expect to Modify Your Firm's Employment Trend Next Year?



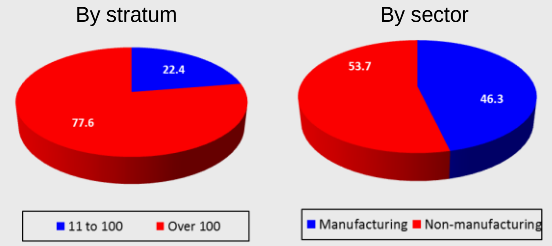
*/ The net effect results from the output sum of the percentage of firms who responded that they would increase/decrease the personnel employed in 2013 and the weighted percentage of the increase/decrease.
Source: Banco de México.

[4] A total of 1,884 firms participated, out of which 760 are from the manufacturing sector and 1,124, from the non-manufacturing sector. Likewise, 497 firms count with 11 to 100 workers and 1,387 firms have over 100 employees.

[5] The response options for the first two questions were: Will increase, Will decrease and Will not change; firms who indicated that it would increase or decrease were asked about the percentage of this modification. The third question was open.

[6] According to the obtained results, it would be advisable to repeat this execise in the coming months, given that during the first survey conduction around 9 percent of firms responded that they still did not know the possible effect of this reform on their firms' personnel hiring or that the reform would produce no effect.

Chart 2
Net Effect of the Labor Reform on Hiring Plans in 2013
Percentage of contribution by sector and stratum



Source: Banco de México.

Conclusion

In this Box it has been argued that the labor reform seems to be an important step forward in the process of structural reforms in Mexico. In particular, higher productivity, lower hiring barriers and in general greater labor market flexibility are expected. Thus, this structural change is anticipated to generate further growth in the potential GDP and formal employment in Mexico.

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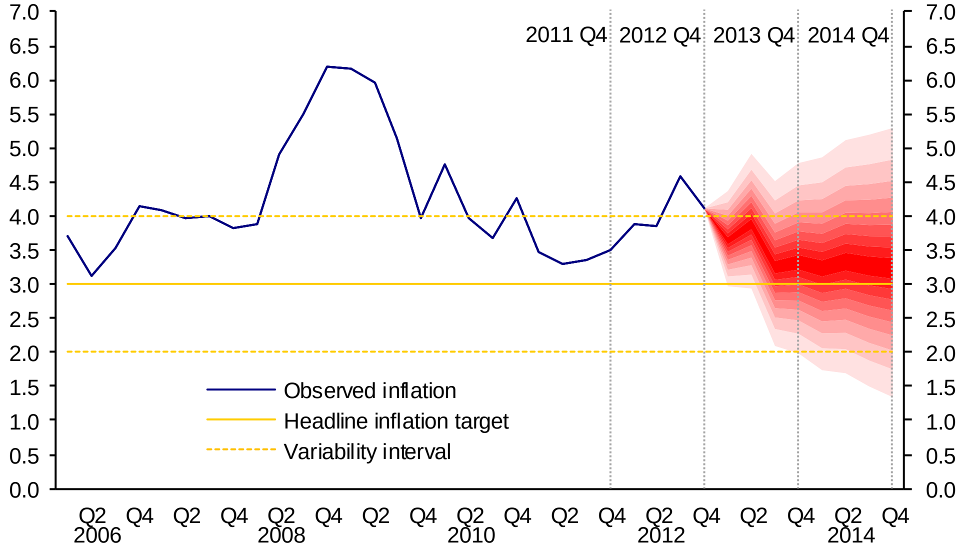
Inflation: Annual headline inflation for the following two years is expected to be lower than in 2012. Particularly, annual headline inflation is estimated to lie at levels close to the 3 percent target during most of 2013 and in 2014. However, given its evolution in 2012, this variable is expected to temporarily increase by the end of the first quarter and the beginning of the second quarter of 2013. This effect is estimated to partially revert in subsequent months and it is not anticipated to affect the process of inflation convergence to the 3 percent permanent target (Chart 46). The forecast for annual core inflation remains close to 3 percent and even below that level throughout most of the reference horizon (Chart 47).

Lower levels of annual headline inflation, expected for the next two years, reflect both the core and non-core component of the CPI. In the forecast for annual core inflation the lower-than-expected growth rate stands out in the subindex of merchandise prices, with respect to 2012. This would stem from lower incidences of food and the rest of merchandise prices. The referred impact is expected to be partially counteracted by a higher annual change rate of services' prices, given that, although this change is anticipated to remain below 3 percent throughout the forecast horizon, its level could be higher than in 2012, reflecting that the downward tendency of the telecommunication tariffs will be less pronounced in the next two years with respect to the last one.

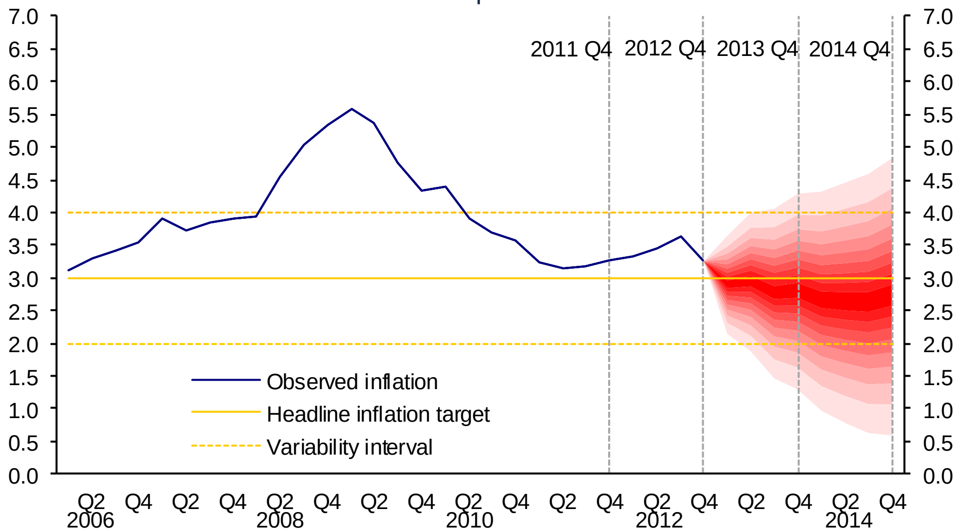
Annual non-core inflation is also expected to exhibit a downward trend, mainly influenced by the evolution of livestock prices. It is forecast to continue declining in 2013 as a result of a moderation in these goods' price increases. The referred trend is expected to become more pronounced in 2014, once the production of different livestock products is fully reestablished.

Chart 46
Fan Chart: Annual Headline Inflation [1/]
Annual percent



1/ Quarterly average of annual headline inflation.
Source: INEGI and Banco de México.

Chart 47
Fan Chart: Annual Core Inflation [1/]
Annual percent



1/ Quarterly average of annual core inflation.
Source: INEGI and Banco de México.

The expected inflation scenario is a reflection of the effects of the present monetary policy and that exercised for the last two years. In particular, the inflation trend, captured by the expected evolution of core inflation, is anticipated to locate at levels very close to and even below 3 percent. Non-core inflation is estimated to continue its downward trend, once the effects of various shocks affecting it dissipate. A fundamental part of this forecast is the nature of the expected growth scenario: an economy that is converging close to its potential without generating pressures on main commodity prices. Of course, the fiscal policy has also been a fundamental factor in maintaining the balance in public finances. All this can be witnessed in the improvements generated throughout the last two years, in the very nature of the inflationary process. Clearly, the economy is subject to different shocks that the authorities have no control over and that can impact inflation. Therefore, a balance of risks is included to forecast inflation. Nonetheless, a prudent fiscal and monetary management is expected to continue. Indeed, the fiscal and monetary policies conduction has contributed to making the national economy increasingly resistant to shocks and to reaching an environment of stability, avoiding the accumulation of macroeconomic and financial imbalances.

Apart from the abovementioned considerations, the forecasts of low and stable inflation for the next two years are based on the following elements:

1. A global environment of weak growth.
2. Absence of considerable demand pressures on the Mexico's economy.
3. Intensified competition in some sectors.
4. Fading of the effect that some food price shocks had on inflation.

The anticipated forecast trajectory could be affected by some factors. Even in an environment in which the economy is expected to locate close to its potential, and therefore without demand-driven pressures, the following factors could have an upward impact on the mentioned forecast:

A. The possibility of increases in public goods and services' prices higher than expected, especially with regard to local public transport fares and fees for the license plate endorsement. Despite this, it should be considered that so far in the states, where the referred fee has been suggested, it was solely for high-value vehicles, which means that its impact on inflation is estimated to be relatively limited.

B. Unfavorable climatic or sanitary conditions, which impact agricultural products' supply. However, if adverse conditions emerge, they would only produce a temporary effect on headline inflation, and would not affect its downward trend in the medium term, nor would they impact inflation expectations, just as it occurred in the last episode of this type between May and September 2012.

C. A new episode of volatility in international financial markets that could impact the evolution of the exchange rate. Nonetheless, the strength of the macroeconomic framework in Mexico and the recent evidence of a low pass-through of exchange rate variations to inflation suggest that, in the case of volatility in international financial markets increasing again, the effect on inflation would be limited.

In contrast, a factor that would exercise a downward impact on inflation forecast is the following: insofar as the competition in the telecommunications industry keeps intensifying, and as the quality of the services offered to the public continues improving, the downward contribution of this group's inflation would be greater than presently estimated.

Considering all of the above, in January 2013 the Board of Governors announced that if the environment of lower growth and lower inflation is consolidated, reducing the target for the Overnight Interbank Interest Rate could be advisable. The possibility of a decrease in the reference rate should be analyzed taking into account the solid economic fundamentals and the strength of the framework for the macroeconomic policy conduction in Mexico. Regarding the latter factor, the role of the monetary policy aimed at pursuing low and stable inflation for many years already and the role of the fiscal policy, a fundamental anchor in an environment of low and stable inflation, should be stressed. The environment of greater certainty has allowed a reduction in risk premia, particularly those associated with inflation risk, leading to lower interest rates across all contract lengths.

If this environment is consolidated, a reduction in the reference rate would be in line with the convergence process of inflation towards its permanent target. Furthermore, this measure should be interpreted as an adjustment in the target for the monetary policy reference rate, which acknowledges and accommodates the achievements in controlling inflation. In any event, the Board will monitor the evolution of all inflation determinants, in order to reach the permanent 3 percent inflation target.

Finally, Mexico is expected to display further economic growth in the future, derived from the deepening of the process of structural reforms, which is expected to lead to a more efficient resource allocation, and, therefore, to a greater productivity growth. This, together with the progress made in terms of curbing inflation, will allow the economy to grow at higher rates without generating inflationary pressures. It would also contribute to a greater resilience of the Mexican economy to different shocks, and will further enhance the degrees of freedom for the monetary policy to maintain inflation at low and stable levels.

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