



BANCO DE MÉXICO

Quarterly Report

April – June 2015



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QUARTERLY REPORT

This report analyzes the development of inflation, the economic activity and different economic indicators in Mexico, as well as the monetary policy implementation in the quarter April – June 2015 and, in general, the activities of Banco de México over the referred period, in the context of the Mexican and international economic environment, in compliance with Article 51, section II 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 Quarterly Report in Spanish is the only official document.

Unless otherwise stated, this document has been prepared using data available as of August 11, 2015. Figures are preliminary and subject to changes.

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1. Introduction

In line with its constitutional mandate, the monetary policy conducted by Banco de México focuses on procuring the stability of the national currency's purchasing power, while observing at all times that this happens at the lowest possible cost to society in terms of economic activity. As a result of the Central Institute's effort during the last years to curb inflation, during the present year convergence of inflation to its permanent 3 percent target has been achieved. In the quarter subject of this Report, inflation even reached historical minimum levels and it remains below the referred target, where it is expected to remain during the rest of the year.

The outcomes in terms of inflation control have been achieved in a particularly complex environment, given the juncture the Central Institute has been facing with respect to the conduct of monetary policy in Mexico. On the one hand, in the domestic environment, given the low growth rate of economic activity, conditions of slack prevail in the economy. Thus, no widespread demand-driven inflation pressures on prices have been observed. In this environment, inflation has shown a favorable evolution, to which reductions in prices of widely used inputs, such as energy, commodities and telecommunication services have also contributed, both directly and indirectly. On the other hand, in the external environment, although an increase in the federal funds rate as a response to the improved economic outlook in the U.S. will tend to favor the world economy and Mexico in particular, uncertainty regarding the imminent beginning of the normalization of U.S. monetary policy, together with the economic situation in Greece, the problems in Chinese financial markets and the commodity price decline, especially crude oil, contributed to increased volatility in international financial markets. This, coupled with reduced oil production in Mexico, led the Mexican peso to depreciate considerably against the U.S. dollar. Still, the pass-through of the currency depreciation to prices has been limited, mainly affecting durable goods' prices, without generating second round effects. In light of this, the Central Institute has remained alert in order to prevent that the adjustment in relative prices associated with this depreciation does not contaminate inflation expectations. Indeed, long-term inflation expectations have remained well-anchored, while those for the end of 2015 and for 2016 have decreased. Taking into account all these elements, in the period covered by the present Report, the Board of Governors maintained the Overnight Interbank Interest Rate target at 3 percent by virtue of the fact that it estimated this monetary policy stance to be conducive to support the convergence of inflation to its permanent 3 percent target.

In the second quarter of 2015, economic activity in Mexico kept showing a low growth pace. In particular, external demand maintained a weak performance, while some domestic demand indicators registered moderate growth trends. In this context, conditions of slack persist in the economy, thus no pressures on prices in main input markets or external accounts are anticipated.

The global economy experienced in the quarter subject of this Report a moderate recovery with respect to the weakness observed in the previous quarter. This was due to the strengthening of advanced economies' domestic demand, supported by the ongoing highly accommodative monetary policies. In the particular case of the U.S., the recovery of economic activity was favored by an improvement in

consumption. However, as in the first quarter, industrial production kept showing signs of weakness. Meanwhile, world inflation and inflation expectations remained below most central banks' targets.

International financial markets experienced high volatility due to the outlook that the Federal Reserve will start to increase its policy rate this year, the situation in Greece, the problems in Chinese financial markets, as well as lower commodity prices, which led to a deterioration of the terms of trade of several emerging economies. All this contributed to the appreciation of the U.S. dollar against basically all currencies, both of advanced and emerging economies, to less capital inflows to the latter ones and to less favorable financial conditions. From here on, the process of monetary policy normalization in the U.S. in response to a better U.S. economic outlook is expected to favor the dynamism of global economic activity, including that of emerging economies and that of Mexico in particular due to its trade linkages with the U.S. economy. However, given the uncertainty regarding the possible effects of the beginning of the referred normalization process on the reallocation of international portfolios and the outlook of commodity prices remaining at low levels, emerging economies are expected to face less favorable financing conditions.

Thus, the persistence of elevated volatility levels in external financial markets was reflected in domestic markets. Although no net capital outflows were observed, investors' portfolio adjustment to risk exposure increased the demand for foreign exchange risk hedges in derivative markets, contributing to a depreciation of the Mexican peso against the U.S. dollar. In this regard, it should be mentioned that the nominal exchange rate depreciation, in a context of well-anchored inflation expectations and a low pass-through of exchange rate movements to prices, has caused the real exchange rate depreciation, associated among other factors with expected higher interest rates in the U.S. and with last year's oil price and oil production reductions, to take place efficiently, thereby illustrating the strength of Mexico's macroeconomic framework. This was also evidenced in the debt market, where interest rates of Mexican government bonds maintained a positive correlation with U.S. bonds, leading only to a slight increase in medium- and long-term interest rates.

Considering the possibility of persisting or even increasing volatility in external financial markets, it is fundamental to strengthen Mexico's macroeconomic framework. Therefore, it would be necessary to consolidate recent efforts in the fiscal position and to adjust the monetary policy stance in a timely manner. This would contribute to maintaining confidence in the Mexican economy and, consequently, to hold the risk premia of interest rates at low levels, which would be crucial given an external environment in which financial conditions will be more stringent.

Given the lower growth perspectives for the U.S. economy with respect to those foreseen in the last Report, the reduction in the oil production platform and the moderate dynamism of domestic demand, the forecast for Mexico's GDP growth for 2015 is revised from an interval of between 2.0 and 3.0 percent in the previous Report to one between 1.7 and 2.5 percent in the present Report. For 2016, considering the expectation of a more solid recovery of the U.S. industrial sector, together with the perspective of progress in the implementation of structural reforms

in Mexico, GDP growth is expected to be between 2.5 and 3.5 percent, the same interval as in the previous Report.

Taking into consideration the lack of aggregate demand-driven inflationary pressures on prices, as well as the recent evolution of inflation, it is expected that the monetary policy stance will contribute to a favorable evolution of inflation during the rest of the year and during 2016. In particular, it is anticipated that annual headline and core inflation will remain below 3 percent during the rest of 2015. For 2016, headline as well as core inflation are estimated to remain at levels close to 3 percent.

Looking ahead, the Board of Governors will continue to monitor the performance of all inflation determinants and its medium- and long-term expectations, in particular, the exchange rate performance, the monetary policy stance of Mexico relative to the U.S., as well as the evolution of the degree of slackness in the economy. All this in order to be able to take the necessary decisions in a flexible manner and whenever conditions demand it in order to consolidate the convergence of inflation to the 3 percent target.

2. Recent Development of Inflation

2.1. Inflation

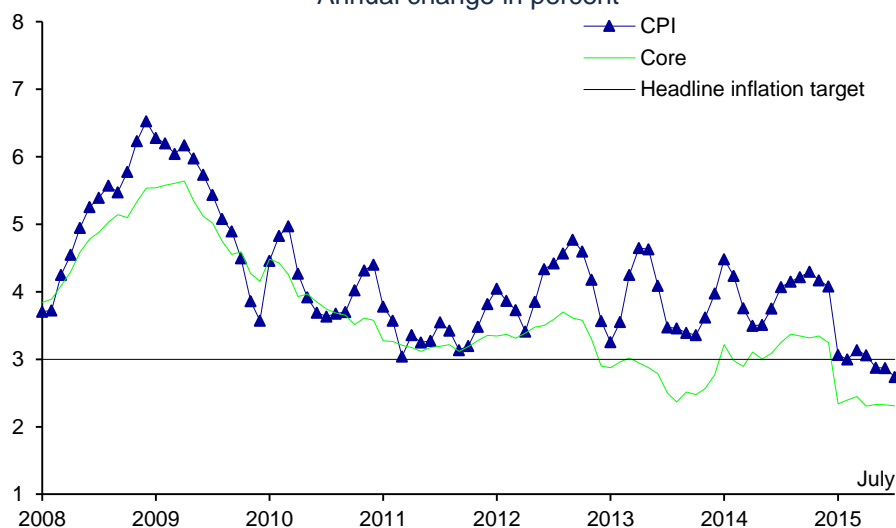
In an environment of absence of aggregate demand-driven pressures on prices, the monetary policy stance has contributed to the fact that headline inflation converged to the permanent 3 percent target and that it even located below that target since May, reaching historic minimum levels. This result stands out, considering the significant exchange rate depreciation, whose pass-through onto prices has been limited so far, mainly affecting durable goods' prices, as expected, and without generating second round effects in the economy's price formation process. Meanwhile, reductions in input prices, such as energy, commodity and telecommunication services' prices have also contributed, both directly and indirectly, to the favorable evolution of inflation this year. Thus, annual headline inflation registered an average of 3.07 percent in the first quarter of 2015, reduced to 2.94 percent in the reference quarter and reached 2.74 percent in July. Average annual core inflation was 2.39 percent in the first quarter of the year, 2.32 percent in the second quarter and 2.31 percent in July (Table 1 and Chart 1).

Table 1
Consumer Price Index, Main Components and Trimmed Mean Indicators
Annual change in percent

	2013		2014				2015		
	IV	I	II	III	IV	I	II	July	
CPI	3.65	4.16	3.59	4.15	4.18	3.07	2.94	2.74	
Core	2.61	3.03	3.07	3.32	3.30	2.39	2.32	2.31	
Merchandise	2.09	2.91	3.10	3.46	3.57	2.56	2.52	2.47	
Food, beverages and tobacco	2.92	4.65	4.81	5.32	5.35	3.15	2.56	2.27	
Non-food merchandise	1.43	1.51	1.72	1.96	2.13	2.07	2.49	2.64	
Services	3.04	3.14	3.04	3.21	3.08	2.26	2.15	2.18	
Housing	2.19	2.24	2.20	2.11	2.14	2.10	2.09	2.08	
Education (tuitions)	4.42	4.36	4.42	4.29	4.30	4.36	4.35	4.36	
Other services	3.52	3.73	3.54	4.06	3.72	1.80	1.57	1.64	
Non-core	7.02	7.79	5.29	6.89	6.99	5.17	4.92	4.12	
Agriculture	4.62	4.33	0.94	6.53	8.04	8.39	8.34	6.94	
Fruit and vegetables	8.77	4.54	-6.86	1.48	-0.73	-1.39	7.43	8.93	
Livestock	2.13	4.12	5.49	9.33	13.43	14.15	8.81	5.92	
Energy and government approved fares	8.57	9.99	8.09	7.11	6.35	3.30	2.87	2.42	
Energy	8.69	9.87	8.92	7.92	7.12	3.82	3.21	2.61	
Government approved fares	8.27	10.23	6.64	5.71	4.93	2.32	2.26	2.08	
Trimmed Mean Indicator ^{1/}									
CPI	3.17	3.66	3.65	3.75	3.81	3.10	2.84	2.68	
Core	2.60	2.93	3.05	3.14	3.19	2.81	2.74	2.70	

^{1/} Prepared by Banco de México with data from INEGI.
Source: Banco de México and INEGI.

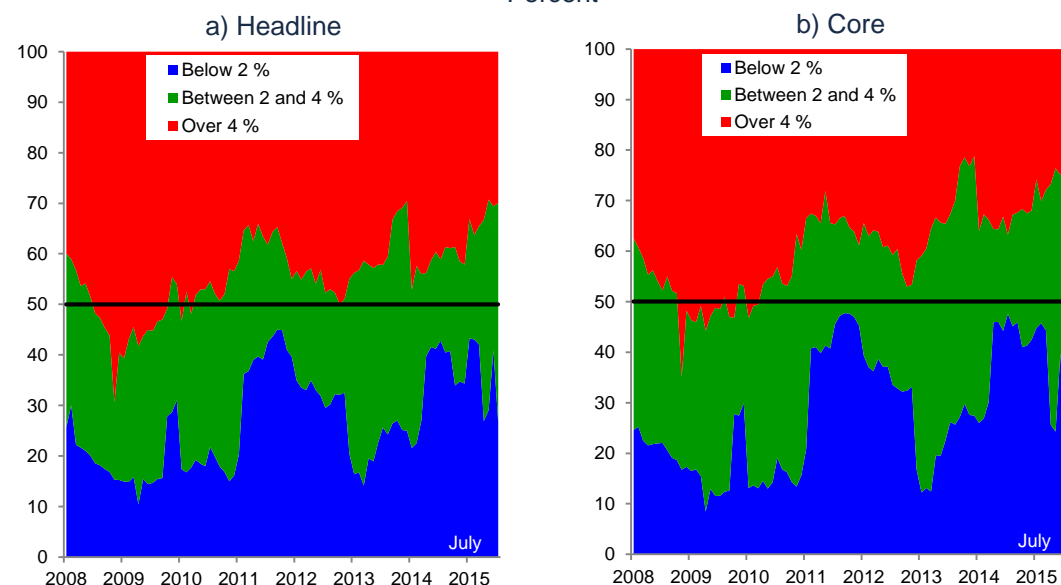
Chart 1
Consumer Price Index
 Annual change in percent



Source: Banco de México and INEGI.

Different indicators keep showing that the observed dynamics of headline and core inflation are due to a favorable evolution of most goods and services' prices. The first indicator is obtained by calculating the share of the Consumer Price Index (CPI) basket that presents annual price changes within certain intervals. In order to do so, each month the generic items, which compose the basket of the headline and core index, are grouped into three categories according to their annual price change: the items with an annual price change below 2 percent, between 2 and 4 percent, and over 4 percent. By calculating the percentage of the CPI basket, which lies in each of these categories, turns out that a high percentage presents price increments of less than 4 percent (blue and green areas, Chart 2). In fact, in both cases, the CPI as well as the core inflation index, the share of the goods and services basket with annual price increases lower than 4 percent has been showing an upward trend. In particular, in the first quarter of 2015, 65 percent of the basket of the headline index registered price increases of less than 4 percent, while in the second quarter this share increased to 69 percent (Chart 2a). With regard to the core component, the referred share went from 72 percent to 75 percent in the same period (Chart 2b).

Chart 2
Percentage of the CPI Basket according to Intervals of Annual Increments
 Percent



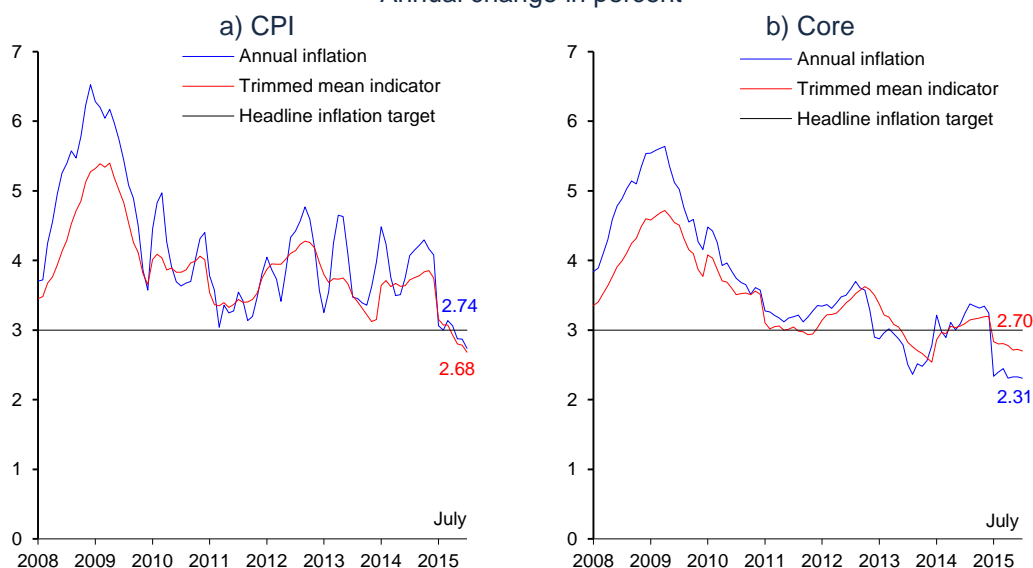
Source: Banco de México and INEGI.

The evolution of the medium term trend indicator of both, headline and core inflation also suggests that low levels of inflation are the result of the favorable dynamics of the majority of goods' and services' prices in the economy. One of the measures frequently used to analyze the medium term inflation trend is the Trimmed Mean Indicator. This indicator analyzes the evolution of headline and core inflation in the low frequency, excluding extreme (high and low) price changes in each period. Thus, this indicator is usually not affected by relative price changes of a few goods and services, which have only transitory effects on inflation.¹ The Trimmed Mean Indicator for headline inflation shows that lower inflation observed in the reference quarter has been the result of a generalized reduction in the price growth rate. Specifically, for headline inflation, this indicator located below 3 percent in this quarter, while that of core inflation was 2.70 percent (Chart 3 and Table 1).

Another useful indicator to analyze inflation dynamics, is the annualized monthly (seasonally adjusted) inflation. This indicator shows that, although excluding the downward effects due to the comparison base of annual inflation indicators, at the margin, both headline and core inflation located at levels in line with the 3 percent inflation target in the period covered by this Report, (Chart 4).

¹ For a detailed explanation of the construction of the Trimmed Mean Indicator of Inflation, see Box 1 "Trimmed Mean as a Measure of Inflation Trend", Quarterly Report, January-March 2015.

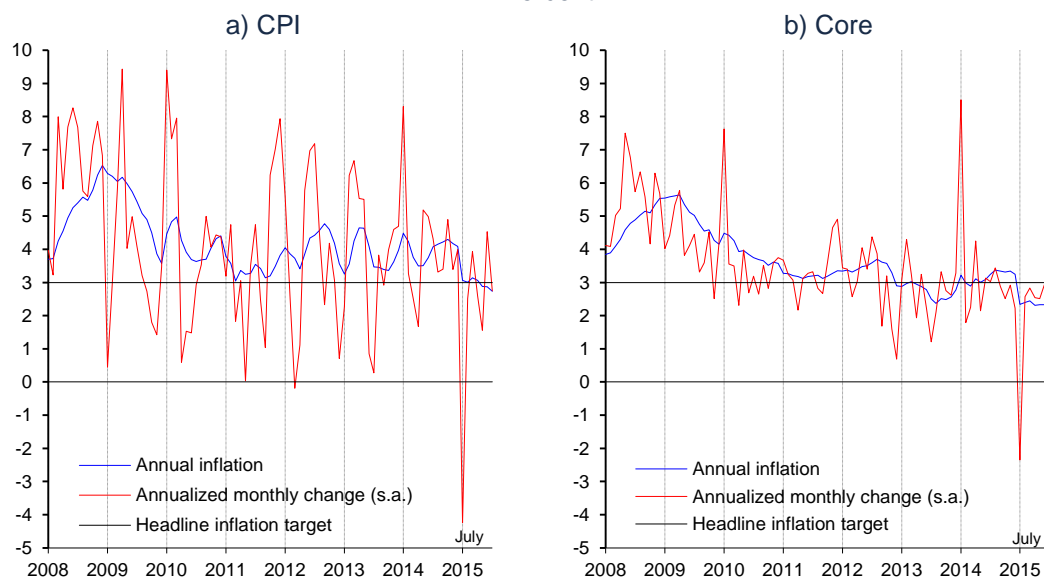
Chart 3
Price Indices and Trimmed Mean Indicators ^{1/}
 Annual change in percent



1/ The Trimmed Mean Indicator excludes the contribution of extreme variations in the prices of some generic items from the inflation of a price index. To eliminate the effect of these changes, the following is done: i) the monthly seasonally adjusted changes of the generic items of the price index are arranged from the smallest to the largest value; ii) generic items with the biggest and the smallest variation are excluded, considering in each distribution tail up to 10 percent of the price index basket, respectively; and iii) using the remaining generic items, which by construction lie in the center of the distribution, the Trimmed Mean Indicator is calculated.

Source: Prepared by Banco de México with own data and data from INEGI.

Chart 4
Annual Change and Annualized Seasonally Adjusted Monthly Change
 Percent



s. a. / Seasonally adjusted data.

Source: Seasonal adjustment prepared by Banco de México with own data and data from INEGI.

In this way, the previous indicators show that the recent trajectory of inflation is explained by a favorable evolution of most of the goods' and services' prices in the economy, rather than a few. This means that during 2015 inflation has converged to the permanent 3 percent target.

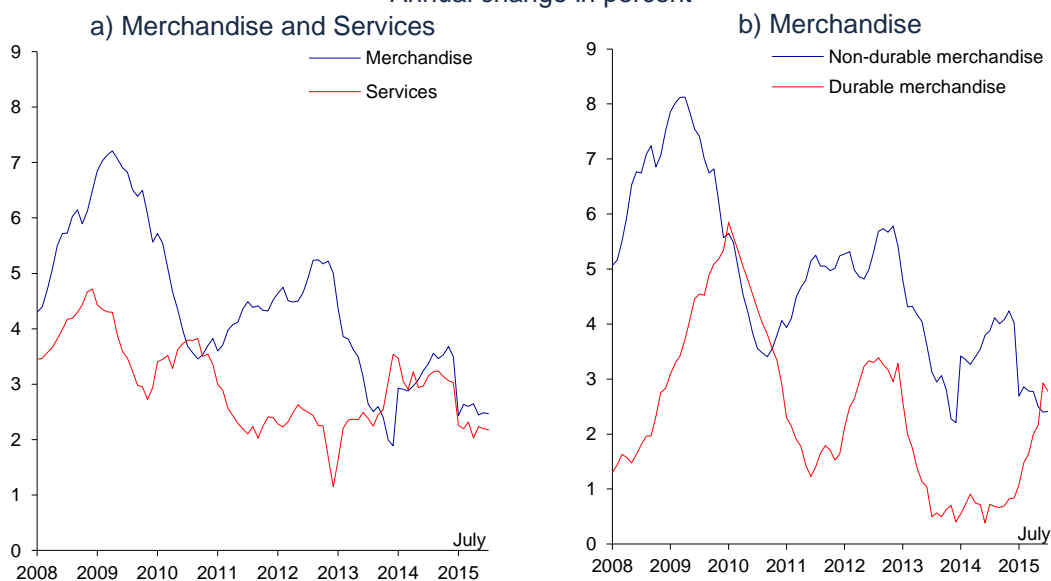
The favorable behavior of core inflation has been registered both in the merchandise and service price subindex. Indeed, the annual change of both subindices was below 3 percent, reflecting that the increase in the relative price of merchandise in relation to services has been moderate until now, in comparison with that, which would have been expected in light of the real exchange rate depreciation.

In particular:

- The average annual change of the merchandise price subindex was 2.56 percent in the first quarter of 2015, while in the second quarter it was 2.52 percent and 2.47 percent in July. In the case of non-food merchandise, the average annual change rate increased from 2.07 to 2.49 percent during the referred quarters and to 2.64 percent in July. This is a reflection of the currency depreciation, whose effect has been mainly affecting durable merchandise prices, which went from an average annual change rate of 1.40 percent in the first quarter of 2015 to 2.36 percent in the second one, and to 2.78 percent in July. On the other hand, the food merchandise subindex observed a decrease in its annual change rate, which is mainly explained by a lower price growth rate of food commodities. Therefore, the average annual change rate of this subindex dropped from 3.15 percent in the first quarter to 2.56 percent in the second quarter and to 2.27 percent in July (Chart 5).
- The average annual change rate of the service price subindex decreased from 2.26 percent to 2.15 percent between the first and second quarter of 2015. In July it located at 2.18 percent (Chart 5a). To a great extent, this decline is related to the behavior of the group of services other than education and housing, whose annual change went from 1.80 percent to 1.64 percent between the first quarter and July. To this result contributed the price reductions observed in the telecommunication sector, as well as the increases in travel service prices, which were below those in the previous year.

Chart 5
Core Price Index

Annual change in percent

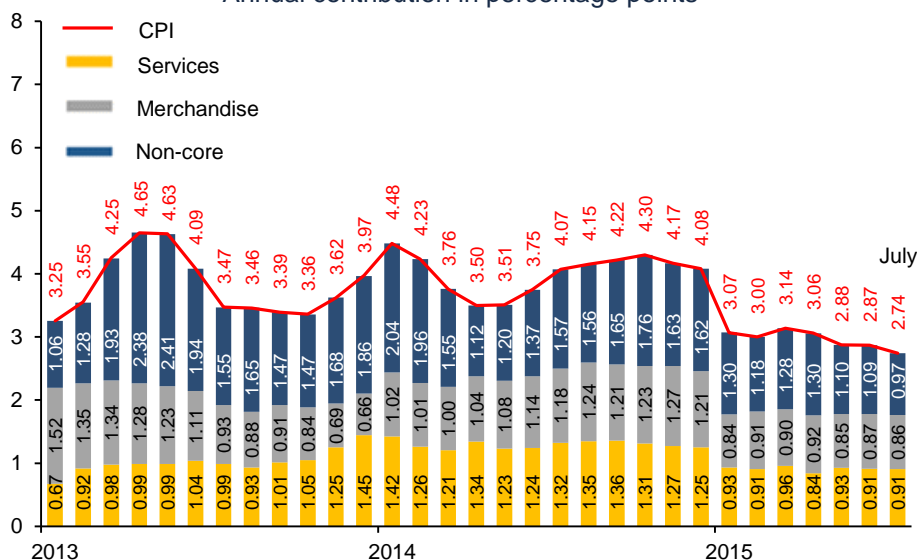


Source: Banco de México and INEGI.

The non-core component reduced its average annual growth rate from 5.17 percent in the first quarter of 2015 to 4.92 percent in the reported quarter and to 4.12 percent in July. Consequently, the average contributions of this component to headline inflation also presented decreases during the referred quarters (Chart 6 and Table 1).

- With regard to this, the average annual change rates of the subindex of energy prices and government approved fares stand out, which showed a decline between the first and the second quarter of 2015, passing from 3.30 percent to 2.87 percent and to 2.42 percent in July. Of particular relevance for this result has been the evolution of energy prices, whose average annual change rate dropped from 3.82 percent in the first quarter to 3.21 percent in the second quarter and to 2.61 percent in July. In particular, the average annual change rates of residential electricity fares went from 0.07 to -2.09 percent in the referred quarters. On the other hand, the average annual increase in gasoline prices in the mentioned quarters reduced from 5.23 to 5.09 percent, while domestic gas, from 5.28 to 3.51 percent.
- The average annual change rate of the subindex of agriculture product prices remained relatively stable, passing from 8.39 percent to 8.34 percent between the first and the second quarter of 2015 and to 6.94 percent in July. It is noteworthy that this groups' components behaved differently, because, while the average annual change rate of fruit and vegetable prices increased, the subindex of livestock products declined. In particular, that of the first subindex mentioned went from -1.39 to 7.43 percent during the reported quarters and located at 8.93 percent in July. On the other hand, the figures corresponding to the subindex of livestock product prices were 14.15, 8.81 and 5.92 percent respectively during the same period.

Chart 6
Consumer Price Index
 Annual contribution in percentage points ^{1/}

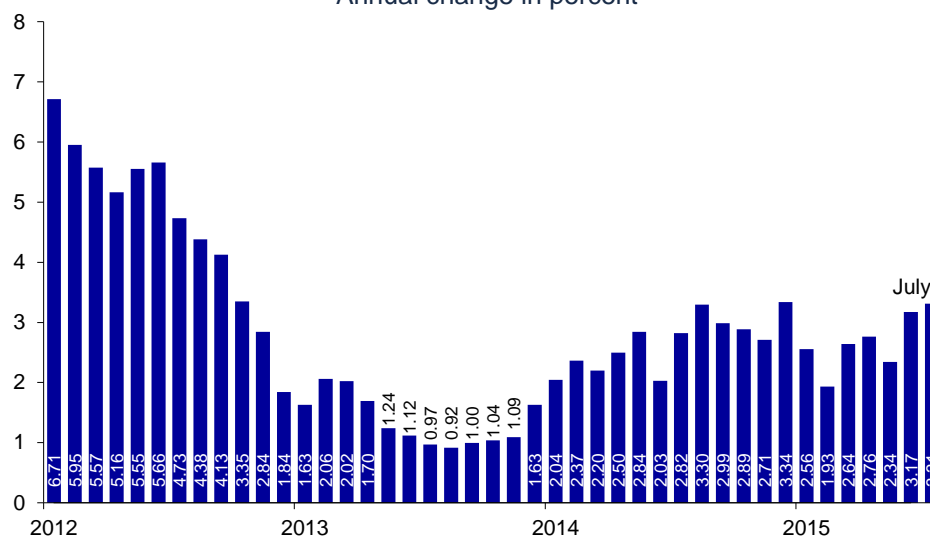


^{1/} In some cases, the sum of respective components can differ due to rounding.
 Source: Prepared by Banco de México with data from INEGI.

2.2. Producer Price Index

With respect to the Producer Price Index (PPI) of total production, excluding oil, in the first quarter of 2015 it registered an average annual change rate of 2.38 percent, while in the second quarter it was 2.76 percent and 3.31 percent in July (Chart 7). The referred increase was mainly due to the increment in the Mexican peso-denominated prices of some export goods, such as electronic appliances, computers and cars, which was reflected in the final merchandise and services' index. Meanwhile, goods and services for the intermediate use kept showing lower annual price growth rates than those registered for final merchandise and services, with industrial electricity fares and oil product prices standing out.

Chart 7
Producer Price Index ^{1/}
 Annual change in percent

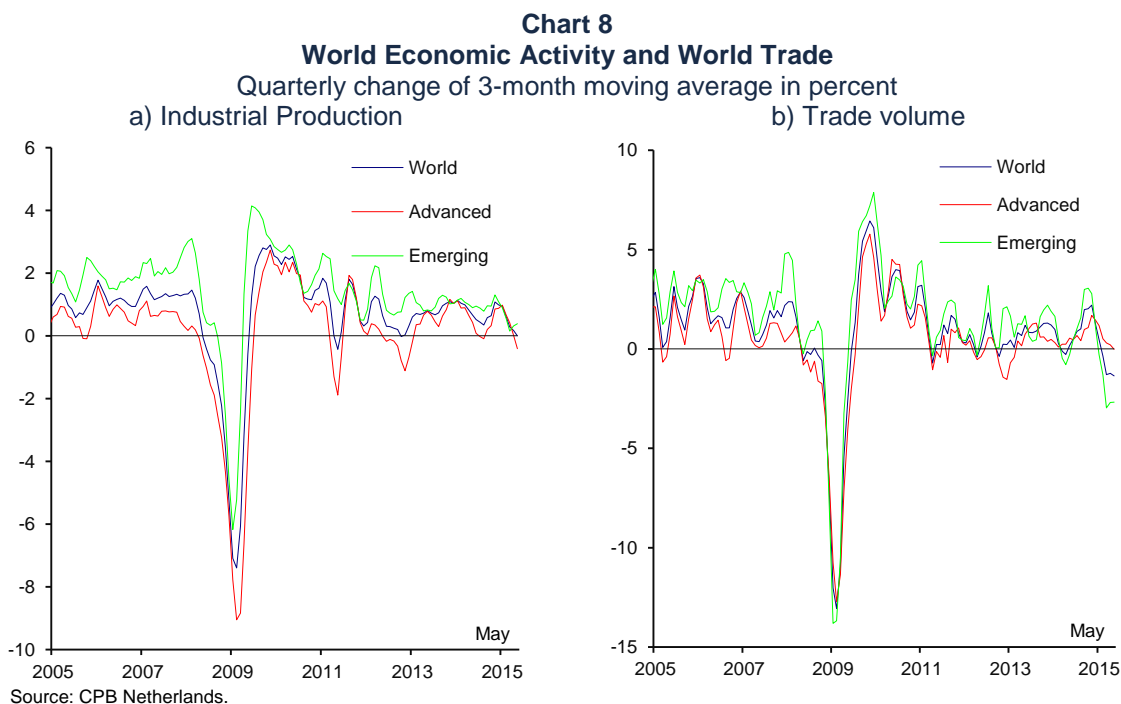


^{1/} Total Producer Price Index, excluding crude oil.
 Source: Banco de México and INEGI.

3. Economic and Financial Environment

3.1. International Environment

Global economic activity registered a moderate recovery during the second quarter, after the weak growth in the first quarter. The higher growth pace was mainly due to the rebound in private consumption in advanced economies, in light of accommodative monetary policy stances. In contrast, a decrease in trade volume and less dynamic global industrial production was observed (Chart 8). In this context, volatility in international financial markets remained elevated in face of the uncertainty regarding the monetary policy normalization process in the U.S. To this also contributed the situation in Greece, the problems in Chinese financial markets, and the commodity price decline, which implies an unfavorable effect on economic activity, the trade balance and public finances in many emerging economies.



3.1.1. World Economic Activity

In the U.S., economic activity recovered in the second quarter, growing at an annualized quarterly rate of 2.3 percent, compared to 0.6 percent in the previous quarter, due to the fading of some of the transitory factors that affected growth at the beginning of the year.² Among the most dynamic aggregate demand components stand out private consumption and residential investment (Chart 9a). However, investment in non-residential infrastructure and in equipment contracted further, to a great extent, due to the still weak activity of exploration of oil reservoirs.

On the other hand, the U.S. dollar appreciation, low oil prices and weak growth of external demand continued having a negative effect on U.S. industrial production

² According to the GDP Second Quarter Advance Estimate of the Bureau of Economic Analysis (BEA).

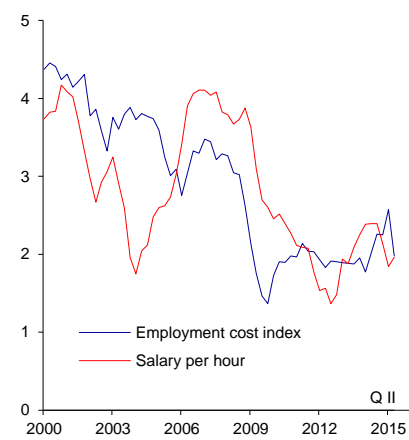
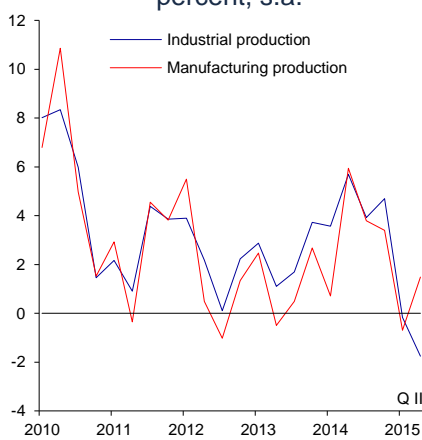
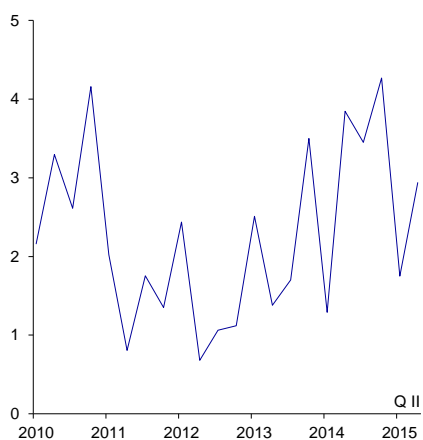
and net exports. In particular, industrial production weakened further, contracting 1.7 percent at an annualized quarterly rate in the second quarter, compared to a decline of 0.2 percent in the first quarter (Chart 9b). To this contributed the strong reduction in mining activity (12.7 percent), associated to a great extent to less exploration and drilling of oil and gas fields. In contrast, manufacturing production registered a moderate recovery (1.5 percent), after a 0.7 percent drop in the first quarter, supported by increased vehicle and parts production.

Nonetheless, labor market conditions kept improving with respect to the first quarter, without generating upward pressures on wage inflation so far (Chart 9c). During the second quarter, an average of 226 thousand non-farm jobs were generated each month, compared to 195 thousand jobs in the first quarter. In July, non-farm payroll continued expanding by 215 thousand jobs. In the case of unemployment rate, it slightly decreased from 5.5 percent in March to 5.3 percent in June, remaining unchanged in July. However, the labor participation rate maintained low levels (from 62.7 percent of working age population in March to 62.6 percent in July), still pointing to the existence of certain slackness in the labor market.

Chart 9
U.S. Economic Activity
 b) Industrial and Manufacturing Production
 Quarterly annualized change in percent, s.a.

a) Real Consumption Expenditure
 Quarterly annualized change in percent, s.a.

c) Wage Indicators
 Annual change in percent



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

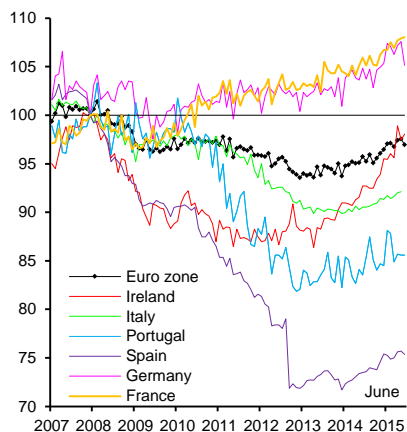
s. a. / Seasonally adjusted data.
 Source: Federal Reserve.

Source: BLS, Haver Analytics.

During the second quarter, economic activity in the Euro zone kept recovering at a moderate pace, particularly as a reflection of the dynamism of consumption and an incipient recovery of investment (Chart 10a). This recovery was supported by additional monetary easing and the recent euro depreciation. However, the growth rate is still affected by the high unemployment level, the still low credit growth and persistent structural deficiencies (Chart 10b). The generalized loosening of monetary conditions also contributed to the important reduction in interest rates for the non-financial private sector, which has been reflected in an improvement in consumers' and firms' confidence (Chart 10c).

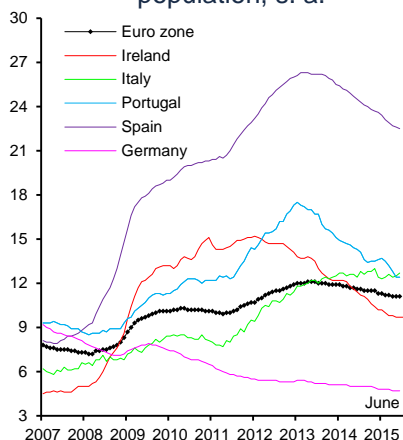
Chart 10
Euro Zone Economic Activity

a) Retail Sales ^{1/}
Index December 2007=100, s. a.



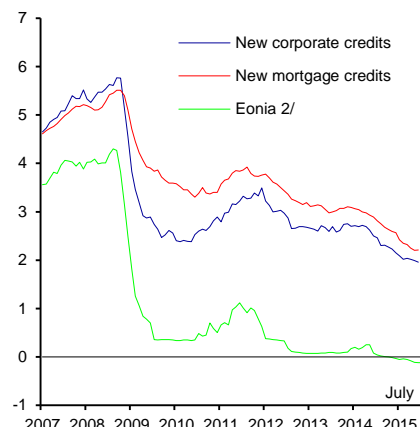
s. a. / Seasonally adjusted figures.
1/ Car sales excluded.
Source: Eurostat.

b) Unemployment Rate
Percent of economically active population, s. a.



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

c) Interest Rates of Bank Credit
In percent



2/ Eonia (Euro OverNight Index Average) is the Overnight Interbank Interest Rate of the Euro zone.
Source: ECB.

The possible exit of Greece from the Euro zone represented a recurrent risk for the region in the last years. Since 2009, this country had been implementing an economic adjustment program, monitored by the European authorities and the International Monetary Fund (IMF). This effort, which was supported by a considerable financing and restructuring of public debt, had achieved a substantial reduction of the high public deficits and the current account. However, in the last year, serious drawbacks in the implementation of that program were registered, which was reflected in increased weakening of the economy and increasing levels of indebtedness. In this environment, a new government, elected at the beginning of the year under a base contrary to the implementation of the adjustment measures, did not reach an agreement with its creditors to modify the financial support program. This led to a default in the payment obligations to the IMF in June (regularized in July) and a strong additional deterioration of the economic and financial situation, which provoked a temporary shutdown of its financial markets and imposition of capital controls. In light of a higher risk of this country's exit from the Euro zone, in mid-July Greek authorities felt obliged to accept the immediate approval of a package of severe measures in order to reinstate negotiations with the creditors about a new multiannual financial support program. The tentative agreement, which was reached, reduced uncertainty international financial markets, stemming from the Greek crisis. Nonetheless, the implementation of the new program will face important challenges, particularly due to the high levels of indebtedness and the magnitude of fiscal adjustment needed to ensure the sustainability of debt in the medium term. Consequently, the evolution of the economic situation in Greece continues being a risk factor for Europe and international financial markets.

So far, the impact of the crisis in Greece on economic activity and financial stability in the Euro zone has been limited. This is, among other factors, due to the reduced participation of this country in the trade of other countries in the region, the low exposure of the rest of the Euro zone's private sector to Greek assets and the

commitment of the European Central Bank (ECB) to use the instruments at its disposal to safeguard the stability of the Euro zone.

On the other hand, after a favorable performance in the previous quarter, the growth pace of Japan's economy seems to have slowed down significantly in the second quarter. This was the reflection of a shrinkage of industrial production and exports. Additionally, consumption expansion weakened, despite the increase in salaries and the improvement in labor markets, partially due to adverse climate conditions. Moreover, business confidence surveys, as well as capital goods' transactions give mixed signals about the evolution of business investments in the quarter, given the high corporate profits.

Emerging economies' activity kept weakening in the second quarter. Although the downturn seems to have been concentrated in countries like Russia and Brazil, the slowdown in growth has spread to other economies, including emerging countries in Asia, other than India.³ In particular, these economies have registered lower growth rates and, in several cases, reductions in industrial production and exports (Chart 11).

In the case of China, there were signs suggesting that the downward trend of growth rates could be stabilizing, supported by the monetary stimulus measures adopted by the central bank. Nevertheless, there is a risk that this apparent improvement might be temporary, given the strong falls in the country's stock markets and considering that the lower growth in the rest of the Asian emerging economies could be reflecting a persistent weakness of the Chinese economy, still not shown by the data.

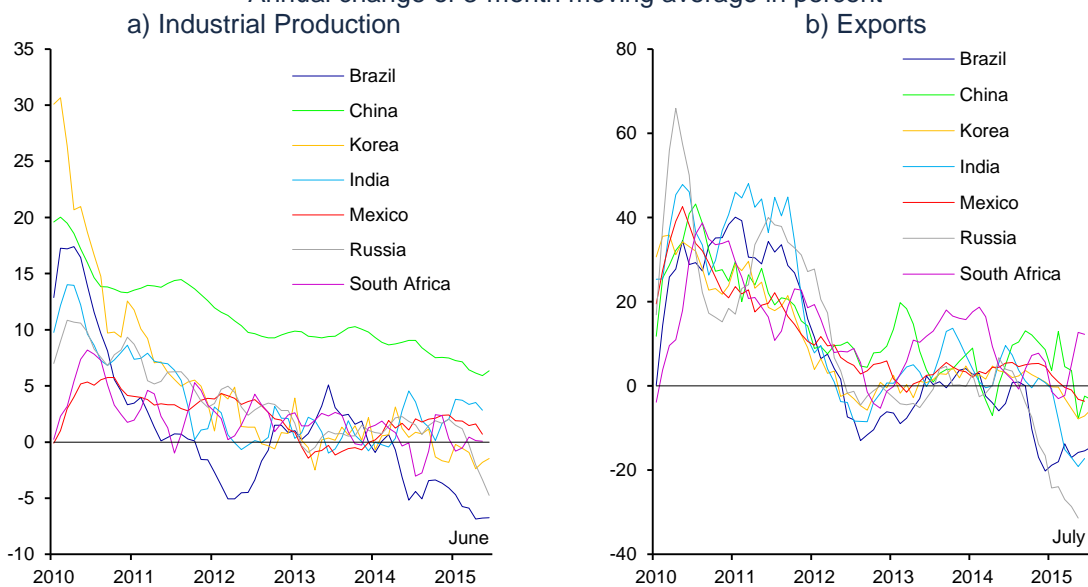
In face of the observed adjustment in Chinese stock markets at the end of the second quarter and at the beginning of July, after the impulse received, among other factors, by the high leveraging of investors' stock purchases, doubts aroused regarding this country's financial market liberalization process and the capacity to ensure financial stability in the medium term, given the high credit growth during the last years.⁴ Additionally, China's central bank announced on August 11 the devaluation of 1.9 percent of the CNY/USD exchange rate fixed parity in order to better reflect the FX market conditions. Furthermore, they announced that from this day on, they will seek the daily exchange rate parity quote to reflect the conditions prevailing in the market at the end of the previous day.

³ This group includes: China, Korea, Indonesia, Thailand, Malaysia, Philippines, Bangladesh and Vietnam.

⁴ Among the measures taken by Chinese authorities to face the problems in the stock market are: channeling of Central Bank's financing to stock purchase, imposition of temporary restrictions to stock sales, prohibition of short sales, suspension of IPOs, temporary suspension of securities trading, and the less strict requirements for stock purchases.

Chart 11
Emerging Economies' Activity

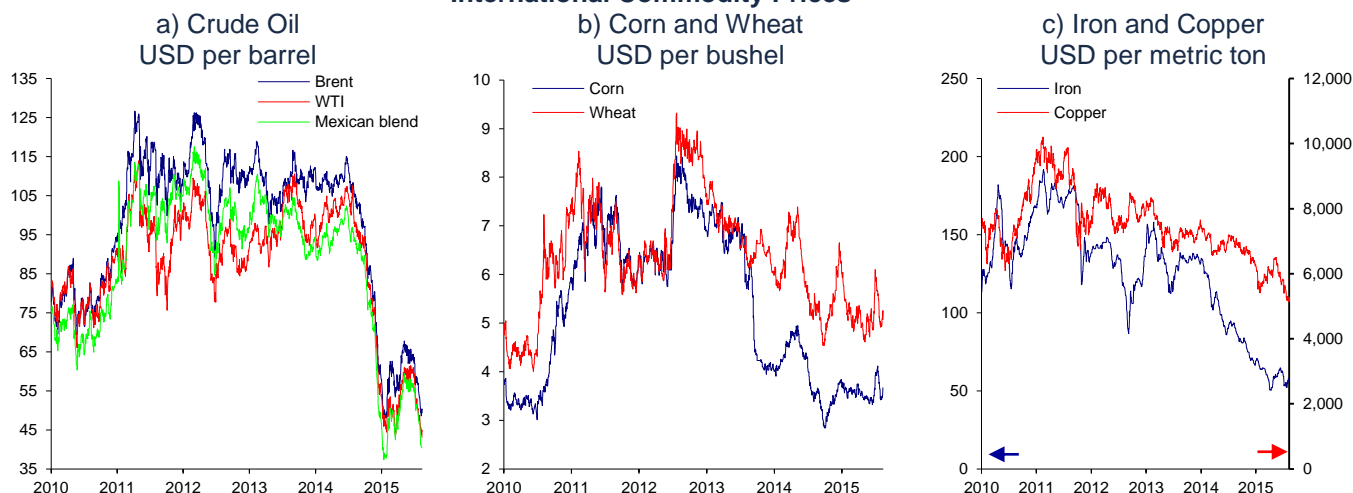
Annual change of 3-month moving average in percent



3.1.2. Commodity Prices

Commodity prices showed high volatility during the period covered by this Report, although they remained at low levels. In particular, oil prices increased during most of the second quarter, in light of signs of increased demand and a reduction in stock levels. However, these increments reverted later due to, among other factors, the incipient recovery in the number of oil rigs operating in the U.S., the possibility of increased exports from Iran after having reached a preliminary agreement that could remove the economic sanctions imposed on the country, and a strong recovery of stock levels. Therefore, the prices of WTI oil and the Mexican blend reduced from 50 and 45 USD/barrel in late March to 43 and 40 USD/barrel in early August, after having reached levels close to 60 and 58 USD/barrel in June, respectively (Chart 12a). Meanwhile, grain prices maintained low levels, although they increased moderately during the last weeks because the expectation of a reduction in wheat and corn harvest caused by the adverse climate conditions in the U.S., Canada and Europe (Chart 12b). In contrast, metal prices continue falling as a consequence of weak global demand and the generalized appreciation of the U.S. dollar (Chart 12c).

Chart 12
International Commodity Prices ^{1/}



3.1.3. Inflation Trends Abroad

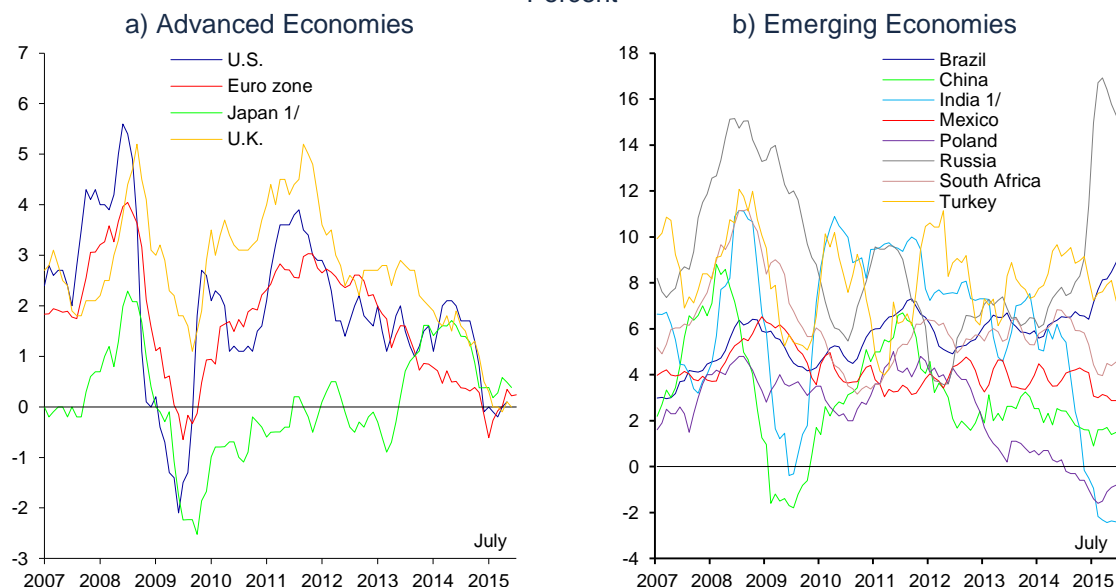
During the second quarter of the year, inflation at the global level stopped its downward trend and showed a gradual recovery. In the main advanced economies, inflation expectations, based on financial instruments, slightly increased, reflecting a decline in the deflation risk and the second round effects associated with the drop in oil prices observed in the previous months (Chart 13a). However, inflation is anticipated to maintain levels below the central banks' targets during the rest of the year.

In the U.S., the annual change of the consumption deflator continued at low levels, registering an increase of 0.3 percent in March and June. In the case of core inflation, it also remained stable with an annual change of 1.3 percent in June, same as in March. Inflation is expected to increase gradually to levels close to 2 percent, as effects of the elevated base of comparison of energy prices observed last year are fading away. However, this may not happen, if the downward trend of oil prices observed during the last days consolidates.

In the Euro zone, inflation reached a turning point in January and from there on, increased (from -0.1 percent in March to 0.2 percent in June), mainly due to a less negative contribution of energy prices. The impact of the euro depreciation on inflation is expected to be more visible in the next months, particularly on core inflation, which went from 0.6 percent in March to 0.8 percent in June. According to the ECB, the pass-through of the exchange rate depreciation, together with the recovery of domestic demand, will translate into a rebound of inflation at the end of the year, with a gradual upward trend in the next years. However, although medium-term inflation expectations showed a slight improvement during the second quarter, they remain around 1.0 percent below the ECB target (inflation close but below 2.0 percent).

The inflation outlook in emerging economies has been more differentiated. In particular, most countries showed low inflation in an environment of weak domestic demand, while in others, like Brazil and Russia, inflation showed an upward trend due to idiosyncratic factors and imbalances in their economies (Chart 13b).

Chart 13
Annual Headline Inflation in Advanced and Emerging Economies
 Percent



1/lt excludes the direct effect of the increment in the consumption tax.

Source: BLS, Eurostat and Statistics Bureaus of Japan.

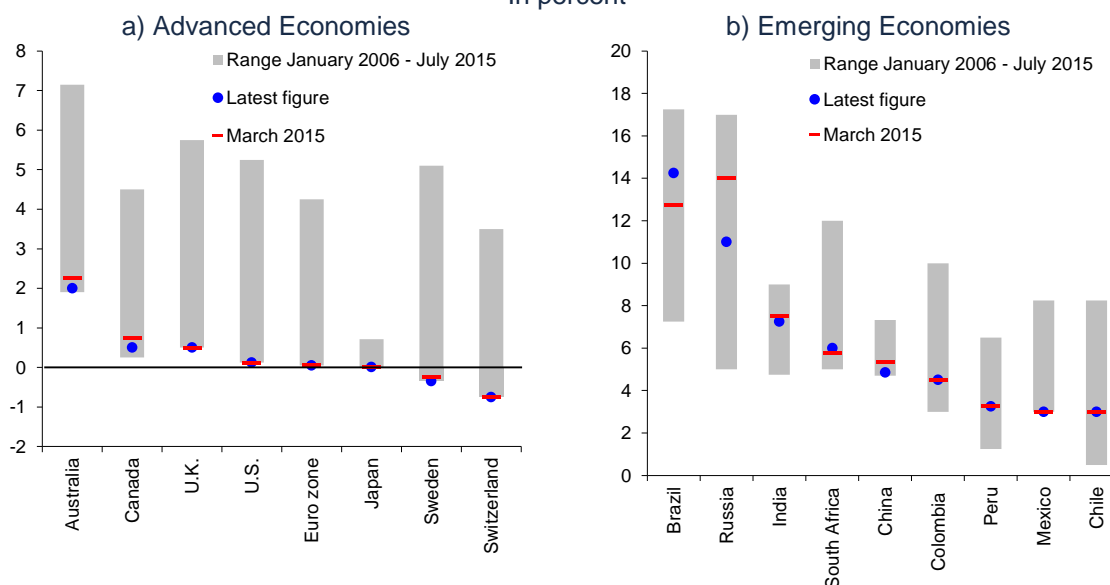
1/ lt refers to inflation of wholesale prices.

Source: National Statistics Bureaus and Central Banks. .

3.1.4. Monetary Policy and International Financial Markets

In the described environment, during the period covered by this Report accommodative monetary policy stances prevailed in both advanced and emerging economies. In the future, the Federal Reserve will initiate the process of normalization of their monetary policy before the end of the year, while the ECB and the Bank of Japan are expected to maintain their highly accommodative stances for a certain time (Chart 14).

Chart 14
Monetary Policy Rates in Advanced and Emerging Economies
 In percent



Source: Haver Analytics.

The Federal Reserve, in its June meeting, maintained the reference rate and its forward guidance unchanged, indicating that it will increase the target rate of the federal funds rate once the labor market shows progress and if there's reasonable certainty about inflation returning to its 2 percent target in the medium term. This institution pointed out that economic activity kept expanding at a moderate pace in the last months. However, it stated that the labor market further improved, showing a sound increase in employment, a lower unemployment rate and that the degree of slackness in this market decreased since the beginning of the year. Regarding inflation, it was reiterated that inflation remains below the target. Additionally, several central bank analysts mentioned that, based on recent forecasts, they estimate that the first increase of the reference rate will take place in 2015 and that the subsequent increases will be gradual.

In the Euro zone, the ECB maintained the reference rates unchanged during the period covered by this Report. On the other hand, during its July meeting, the ECB stated that volatility in financial markets, partially due to uncertainty about the permanence of Greece in the Euro zone, has not changed the outlook regarding the economic recovery of the region and regarding a gradual increase of inflation during the next years. Nonetheless, it warned that if monetary conditions tighten without reason, or if the forecast for price stability changes significantly, then it would respond by using all measures available within their mandate.

In its August meeting, the Bank of Japan ratified that it will continue its monetary easing program announced last October with the aim of reaching its inflation target of 2 percent, considering that implemented quantitative and qualitative stimulus measures having the expected effects. In this way, it maintained the objective of increasing the monetary base by an annual rate of close to JPY 80 trillion, and its decision to continue purchasing government bonds and other instruments. Moreover, it pointed out that long-term inflation expectations continued recovering,

but annual inflation will most likely remain at low levels for a certain time, due to the effects of the energy price drop.

Volatility in international financial markets continued during the period subject of this Report, in face of the uncertainty prevailing regarding the start and subsequent pace of the normalization of U.S. monetary policy. To this vulnerability also contributed the described situation in Greece, the problems in Chinese stock markets, as well as the decrease in commodity prices, mainly crude oil.

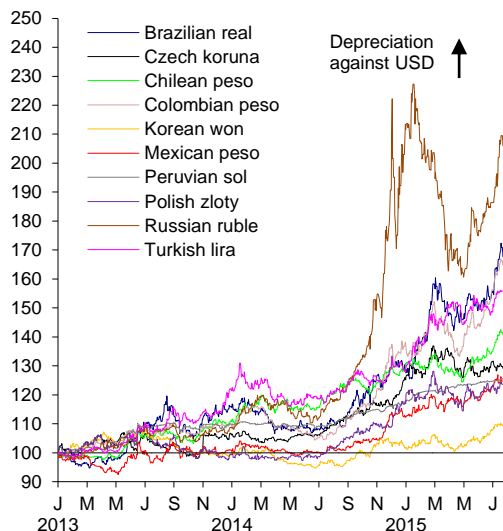
Given this, the foreign exchange markets continued showing high volatility, where emerging economies' currencies, which also had been affected by lower commodity prices, recorded a considerable depreciation in a context of less capital flows (Chart 15). Additionally, the elevated level of corporate indebtedness in some emerging countries had a negative effect on the risk perceptions towards them. All the aforementioned, led to a more restrictive access to financing in international markets for this country group. In the future, given the outlook that commodity prices will remain at low levels and that an upward trajectory of the U.S. federal funds rate will be observed, these economies' financing conditions are expected to be less favorable. However, the decision of the Federal Reserve to initiate the monetary policy normalization process will take place in a scenario of a sustained recovery of U.S. growth. The expected increase in U.S. activity should have positive effects on the world economy, in particular on its main trade partners, like Mexico and Canada.

Final point to mention is that, during the period covered in this Report, there was also greater volatility in stock and debt markets (Chart 16). Thus, long-term interest rates of main advanced economies increased, mainly due to the beginning of a correction process of term premia, which were at historic low levels, and due to a reduction in the deflation risk in this country group. This was the reflection of a general improvement of the economic outlook, as well as the imminent onset of the normalization process of the U.S. monetary policy. However, during the last weeks, the long-term interest rates showed a tendency to stabilize as a result of greater risk aversion, driven by an environment of volatility in face of uncertainty generated by the drop in stock market indices in China and the situation in Greece. In turn, stock markets in the main advanced economies also registered higher volatility, partly reflecting an adjustment to the environment of higher interest rates.

Chart 15

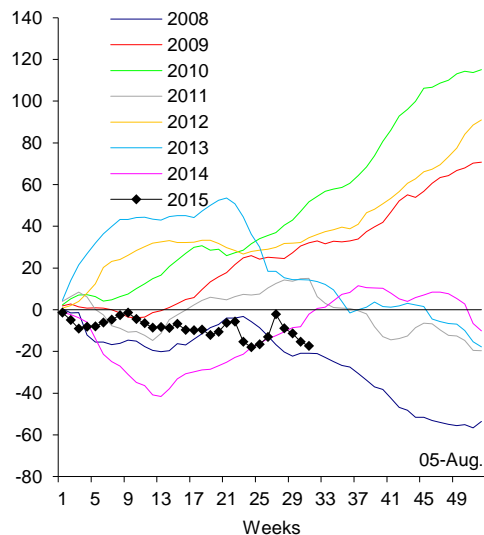
Financial Indicators of Emerging Economies

a) Exchange Rate Index 01/01/2013=100



Source: Bloomberg.

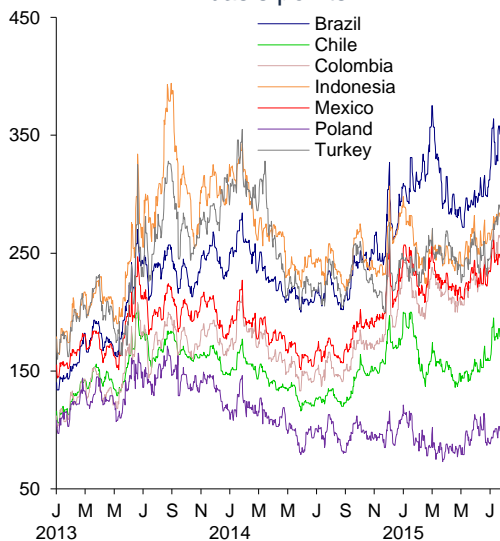
b) Total Flows of Funds Dedicated to Emerging Economies (Debt and Stocks) ^{1/}



^{1/} The sample includes funds used for emerging economies' stock and bonds transactions, registered in advanced economies. The flows exclude the performance of the portfolio and exchange rate movements.

Source: Emerging Portfolio Fund Research.

c) Sovereign Spreads (EMBI) In basis points



1/ It refers to the 9-year bond.
2/ It refers to the 8-year bond.
Source: Bloomberg.

d) 10-year Bond Rates In percent

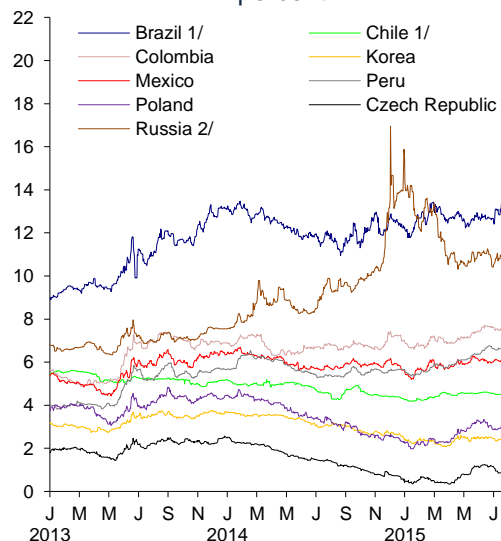
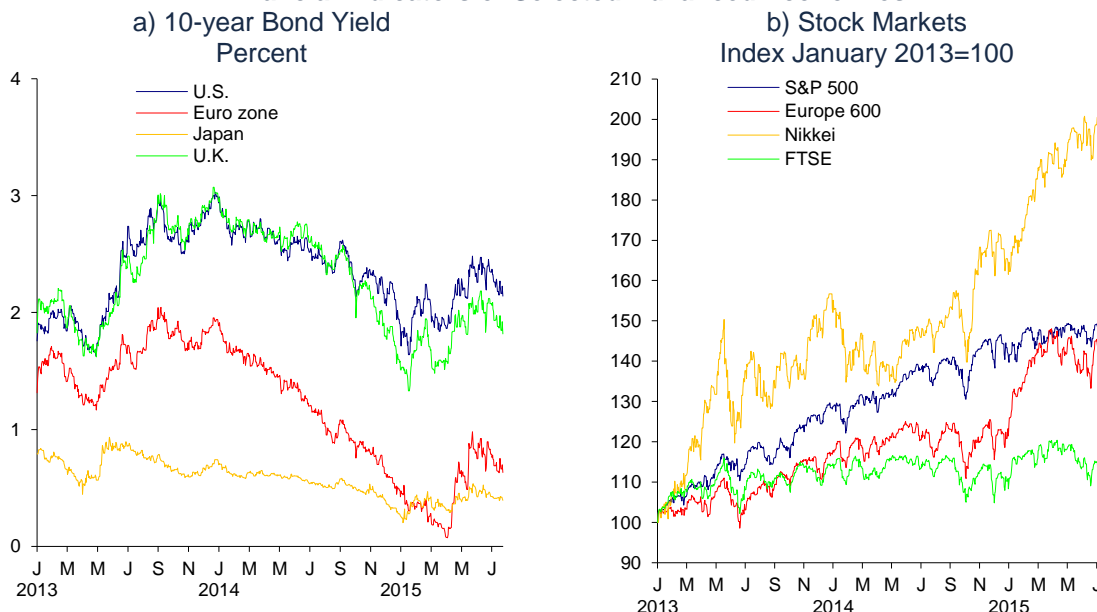


Chart 16

Financial Indicators of Selected Advanced Economies



Source: Bloomberg.

3.2. Evolution of the Mexican Economy

3.2.1. Economic Activity

The most recent information suggests that during the second quarter of 2015 the Mexican economy exhibited moderate growth rate, which was lower than expected in the previous Report. In particular, low dynamism of external demand prevailed, while some domestic demand components presented a moderate expansion.

In the period April - June 2015, manufacturing exports kept registering a weak performance (Chart 17a). Despite the fact that automobile exports maintained a positive trend, the rest of the manufacturing exports continued showing an unfavorable behavior (Chart 17b and Chart 17c). In this context, the weakness of non-automotive manufacturing exports mainly responded to the low dynamism of U.S. industrial production (see Box 1) in the first half of the year and also to idiosyncratic factors, among them low productivity, which also negatively affected the evolution of this sector.⁵ Despite this, it is foreseen that in the short run the depreciation of the real exchange rate will support the recovery of exports in the following quarters and that in the medium term progress in the instrumentation of structural reforms will contribute to increase competitiveness of the economy, including the non-automotive sector.

Regarding oil exports, in the last years they have presented a downward trend, which intensified in 2014. From here on, it is expected that as progress in the implementation of the energy reform is achieved and crude oil prices stabilize, the dynamism of these exports could gradually benefit (Chart 17d).

⁵ In some subsectors, the absence of productivity gains in the last years was reflected in the loss of some products' share in the U.S. market.

In relation to domestic demand components, private consumption continued showing a moderate recovery. As for gross fixed investment, it lost dynamism with respect to the recovery registered in 2014. In particular:

- i. As regards private consumption, the upward trajectory of domestic light vehicle sales and ANTAD sales stand out (Chart 18a). Meanwhile commercial firms' retail sales and the monthly indicator of private consumption in the domestic market, although also continued growing, showed certain loss of dynamism in the period of this Report (Chart 18b and Chart 18c).
- ii. With respect to the consumption determinants, it is observed that, in general, they still do not show clear signs of recovery. In specific, although workers' wage bill improved recently, it is still at low levels (Chart 19a). Consumer confidence kept stagnated (Chart 19b), while in the quarter April – June 2015 remittances registered a weakening in foreign currency, although not in Mexican pesos (Chart 19c). Consumer credit continued supporting the moderate recovery of private consumption, showing similar growth rates than those reported in the previous quarter (see Section 3.2.3.)
- iii. Referring to gross fixed investment, at the beginning of the second quarter of 2015, it registered less dynamism as compared to previous quarters (Chart 20a). In particular, investment in residential construction reduced its growth pace, while non-residential one stagnated (Chart 20b). In contrast, capital goods' imports followed the upward trajectory observed since the beginning of the year, mostly as a result of the expansion of productive capacity in the automotive sector (Chart 20c).

Box 1 Synchronization of Mexican and U.S. Manufacturing Production

1. Introduction

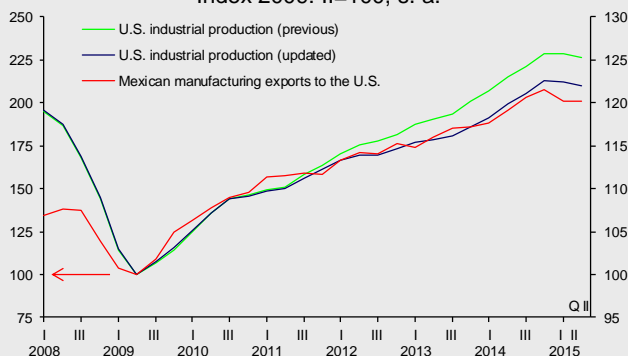
In the Quarterly Report January – March 2014, an analysis about the synchronization of manufacturing sectors in the Mexican and U.S. economy was presented. The reported results showed that, although it would seem to have been observed growth of the Mexican economy below that the one that would have been anticipated considering the behavior of the U.S. economy, this apparent temporary decoupling was not due to a structural change in the relation between these two countries' manufacturing sectors.

Derived from the change in the base year to 2012 of the U.S. industrial production index, published by the Federal Reserve on July 21, 2015, in this Box the previously published results are updated. As in the previous occasion, evidence is found that the synchronization between both economies is maintained and that the correlations between the Mexican manufacturing exports to the U.S. and manufacturing production of that country are high. With the new information, correlation is found to be even higher.

2. Recent Evolution of the Relation between the Mexican and U.S. Economy

With the change in the base year of U.S. industrial production, the decoupling that would seem to have been presented between both economies since 2012 is even less evident. Indeed, both Mexican manufacturing exports to the U.S. and Mexican manufacturing production are more related to the revised U.S. series than to the previous series (Chart 1 and Chart 2).

Chart 1
U.S. Industrial Production and Mexican Manufacturing Exports to the U.S.
Index 2009: II=100, s. a.



s. a. / Seasonally adjusted figures.

Source: U.S. Federal Reserve Board and Banco de México with data from the Working Group on Foreign Trade Statistics.

Chart 2
U.S. and Mexican Manufacturing Production
Index 2009: II=100, s. a.



s. a. / Seasonally adjusted figures.

Source: U.S. Federal Reserve Board and INEGI.

Thus, the slowdown recently presented by manufacturing exports turns out to be more in line with the weak performance of U.S. industrial production exhibited by the revised series than with the previously published series. Another proof of this is found by analyzing the correlations between Mexican manufacturing exports to the U.S. and the U.S. manufacturing production. Table 1 reports that with the new information, the correlation between both countries referred activities is still high.

Table 1
Correlation between Mexican Manufacturing Exports to the U.S. and U.S. Manufacturing Production*

Subsector	Percentage of total manufacturing exports in 2014	From 2008:1 to 2015:1
Total manufacturing	100.00	0.83
Motor vehicles and their components	32.07	0.95
Manufacturing excl. motor vehicles and their comp.	67.93	0.72
Communications, computer and other equip.	23.78	0.75
Accessories and electric power generation equip.	9.09	0.62
Machinery and equipment	8.45	0.68
Food, beverage and tobacco industries	3.67	0.32
Fabricated metal products	3.30	0.91
Primarily metal industry	3.22	0.67
Other manufacturing industries	2.73	0.53
Transportation and aerospace equipment	2.61	0.39
Plastic and rubber industry	2.12	0.81
Chemicals	2.01	0.84
Apparel	1.93	0.71
Oil and coal derived products	1.81	0.11
Non-metallic mineral products	1.08	0.65
Textile inputs manufacturing	0.70	0.80
Furniture and related products	0.65	0.53
Paper	0.53	0.77
Printing and related industries	0.14	0.64
Wood products	0.13	0.68

* Correlations between the annual change rate of seasonally adjusted quarterly series of manufacturing exports to the U.S. and that corresponding to U.S. manufacturing production are reported.

In particular, the tests presented in Box 1 of the Quarterly Report January – March 2014 are updated. Thus, the methodology suggested by Vahid and Engle (1993) is applied again. With that methodology, first the existence of a long-term relationship (cointegration) between the Mexican manufacturing GDP and the U.S. manufacturing production is analyzed (Table 2). Later, a test is again applied to determine if there is a “common cycle” between both variables (Table 3).

Table 2
Analysis of Cointegration between Mexican Manufacturing GDP and U.S. Manufacturing Production
1996-I to 2015-I

Null-hypothesis of the number of cointegrating vectors	Trace statistic	Critical value at 5% ^{1/}
None	18.09*	15.49
At most 1	0.41	3.84
	y_1	y_2
Cointegrating vector	1	-0.96

* Null-hypothesis rejected at 5 percent significance level.

where:

y_1 is the logarithm of Mexican manufacturing GDP, seasonally adjusted figures.

y_2 is the logarithm of the U.S. manufacturing production index, seasonally adjusted figures.

1/ Critical values, as in MacKinnon et al. (1999).

Table 3
Analysis of the Common Cycle between Mexican Manufacturing GDP and U.S. Industrial Production^{1/}
1996-I to 2015-I

Null-hypothesis of the number of common cycles	Common cycle test statistic	Critical value at 5% ^{2/}
More than 0	7.59	9.49
More than 1	99.96*	18.31
	$\Delta(y_1)$	$\Delta(y_2)$
Common cycle vector	1	-0.93

* Null-hypothesis rejected at 5 percent significance level.

Where:

Δ is the change with respect to the previous quarter of the variable in brackets.

y_1 is the logarithm of Mexican manufacturing GDP, seasonally adjusted figures.

y_2 is the logarithm of U.S. manufacturing production index, seasonally adjusted figures.

1/ Suggested by Vahid and Engle (1993).

2/ Critical values obtained from χ^2 distribution with degrees of freedom determined according to Vahid and Engle (1993).

The results considering the new available information suggest: i) that there is a long-term relation between the Mexican and U.S. manufacturing production in the analyzed period (Table 2) and, ii) the presence of a common cycle between the Mexican and U.S. manufacturing production (Table 3).

Additionally, the test of Andrews and Kim (2006) is used to again formally evaluate the hypothesis of a possible decoupling in the last periods of the sample between the U.S. manufacturing production and the Mexican manufacturing exports to the U.S. This test is implemented both for the total of both sectors and for each of their

subsectors. As shown in Table 4, no evidence of a breakdown of cointegration is found in the last six months for total manufacturing, with or without automobile sector. Likewise, the results suggest that for the subsectors which represent around 91 percent of manufacturing exports from Mexico to the U.S., no evidence of a structural change in the long-term relation with the U.S. manufacturing production is found.¹

Table 4
Tests for Cointegration Breakdown at the End of the Sample between Mexican Manufacturing Exports and U.S. Manufacturing Production

Subsector	p-value *		Percentage of total manufacturing exports in 2014
	Pc	Rc	
Total manufacturing	46.15	46.15	100.00
Motor vehicles and their components	39.56	40.66	32.07
Manufacturing excl. motor vehicles and their comp.	36.26	40.66	67.93
Communications, computer and other equip.	61.54	54.95	23.78
Accessories and electric power generation equip.	21.98	21.98	9.09
Machinery and equipment	47.25	47.25	8.45
Food, beverage and tobacco industries	24.18	24.18	3.67
Fabricated metal products	6.59	6.59	3.30
Primarily metal industry	62.64	65.93	3.22
Other manufacturing industries	9.89	6.59	2.73
Transportation and aerospace equipment	72.53	79.12	2.61
Plastic and rubber industry	62.64	60.44	2.12
Chemicals	24.18	26.37	2.01
Apparel	63.74	51.65	1.93
Oil and coal derived products	0.00	0.00	1.81
Non-metallic mineral products	20.88	21.98	1.08
Textile inputs manufacturing	26.37	23.08	0.70
Furniture and related products	10.99	8.79	0.65
Paper	15.38	13.19	0.53
Printing and related industries	83.52	73.63	0.14
Wood products	7.69	8.79	0.13

* p-value reported in percent for test Pc and Rc. See Andrews and Kim (2006). For p-values over 10 the null-hypothesis of the cointegration relation being the same for the whole sample (January 2007 to June 2015) is not rejected.

3. Final Considerations

The results reported in this Box show that the long-term relation between the Mexican productive activity and the U.S. industrial sector is still in place, and that the economic cycles of both countries tend to be synchronized. Thus, it is foreseen that greater growth of the U.S. economic activity will be reflected in an increased dynamism of the Mexican manufacturing sector.

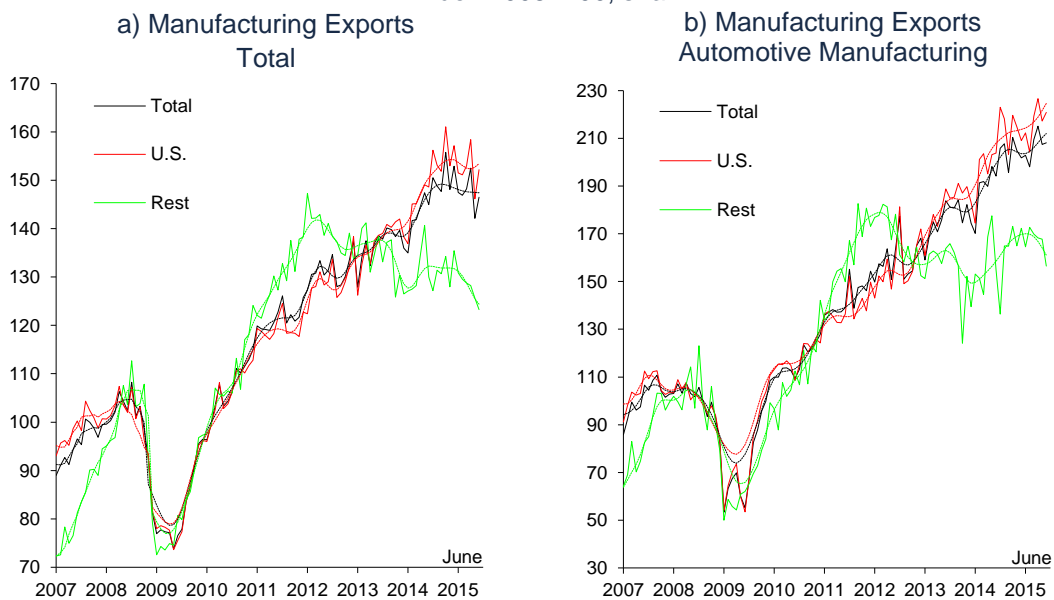
References

Andrews, D. and J. Kim, (2006), “Tests for cointegration breakdown over a short time period,” *Journal of Business and Economic Statistics* 24(4): 379-394.

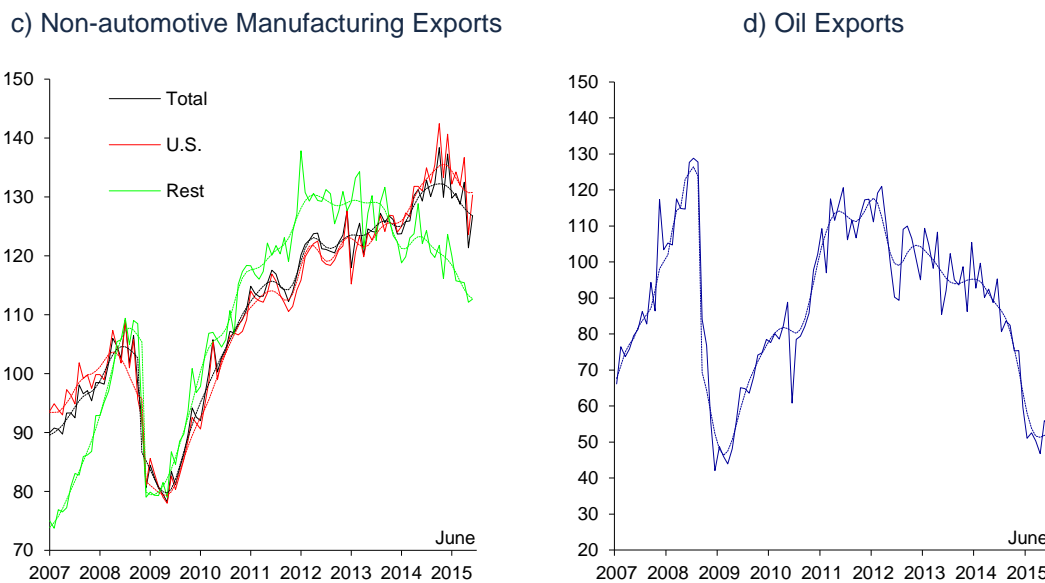
Vahid, F. and R. Engle, (1993), “Common Trends and Common Cycles,” *Journal of Applied Econometrics* 8: 341-360.

¹ The subsectors in Table 4 for which evidence of a possible change in their long-term relation in the last six months of the sample is found, are: Metal product production; Other manufacturing industries; Oil and coal derived products; Production of furniture and related products; and Wood products.

Chart 17
Export Indicators
 Index 2008=100, s. a.



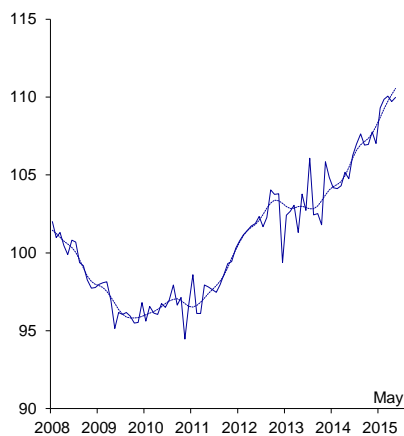
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 Source: Banco de México with data from Working Group on Foreign Trade Statistics.



s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 Source: Banco de México with data from Working Group on Foreign Trade Statistics.

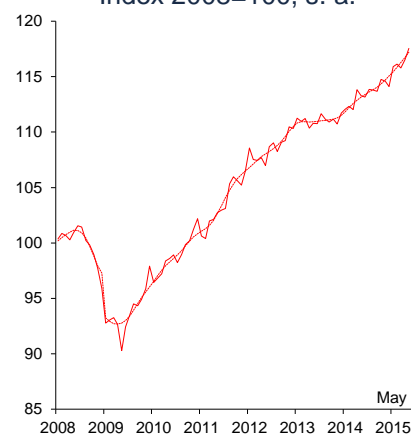
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 Source: Working Group on Foreign Trade Statistics.

Chart 18
Consumption Indicators
 b) Revenues of Commercial Retail Business
 Index 2008=100, s. a.



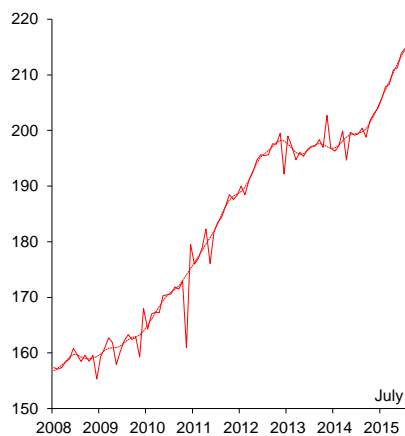
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 Source: Monthly Survey of Commercial Businesses, EMEC, INEGI.

c) Monthly Indicator of Private Consumption in the Domestic Market
 Index 2008=100, s. a.



s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 Source: INEGI.

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



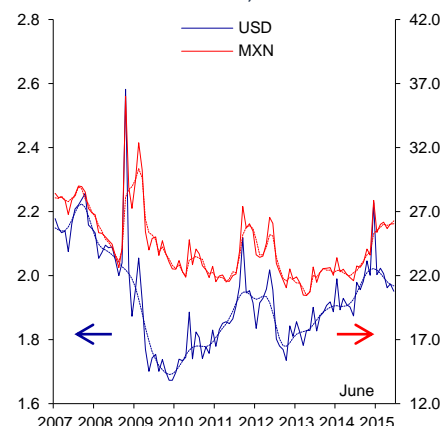
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 Source: Prepared by Banco de México with ANTAD data.

Chart 19
Consumption Determinants
 b) Consumer Confidence Index
 Index January 2003=100, s. a.



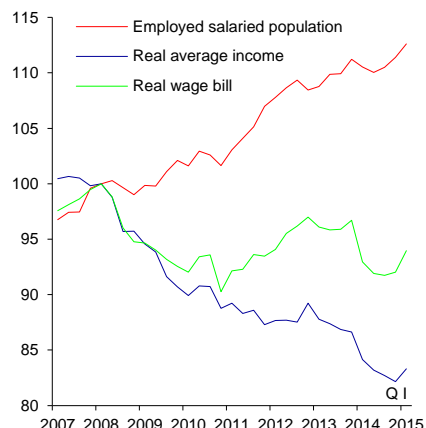
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 Source: NATIONAL Consumer Confidence Survey (ENCO), INEGI and Banco de México.

c) Workers' Remittances
 Billion, constant USD and MXN,^{1/} s. a.



s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
 1/ At prices of the second fortnight of December 2010.
 Source: Banco de México.

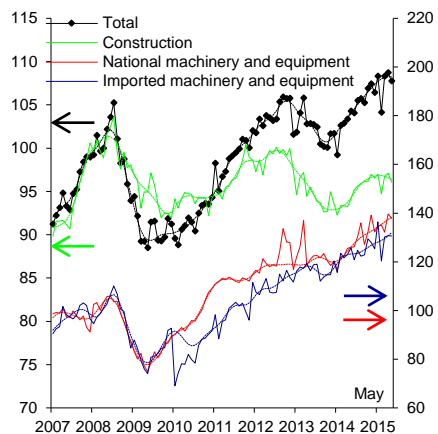
a) Real Total Wage Bill
 Index I-2008=100, s. a.



s. a. / Seasonally adjusted data.
 Source: Prepared by Banco de México with data from the National Survey on Occupation and Employment (ENOE), INEGI.

Chart 20
Investment Indicators
 Index 2008=100, s. a.

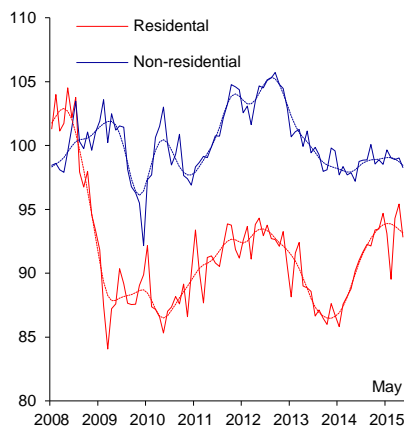
a) Investment and its Components



s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.

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

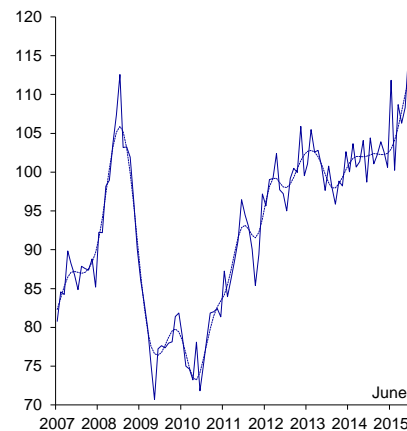
b) Investment in Residential and Non-residential Construction



s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.

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

c) Imports of Capital Goods



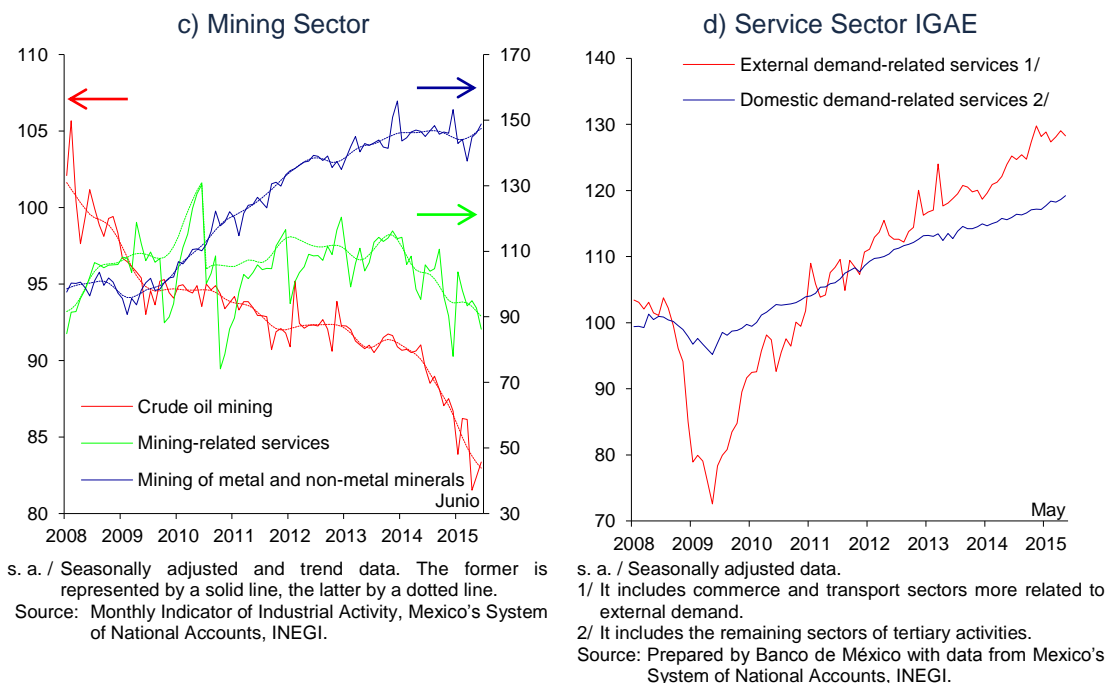
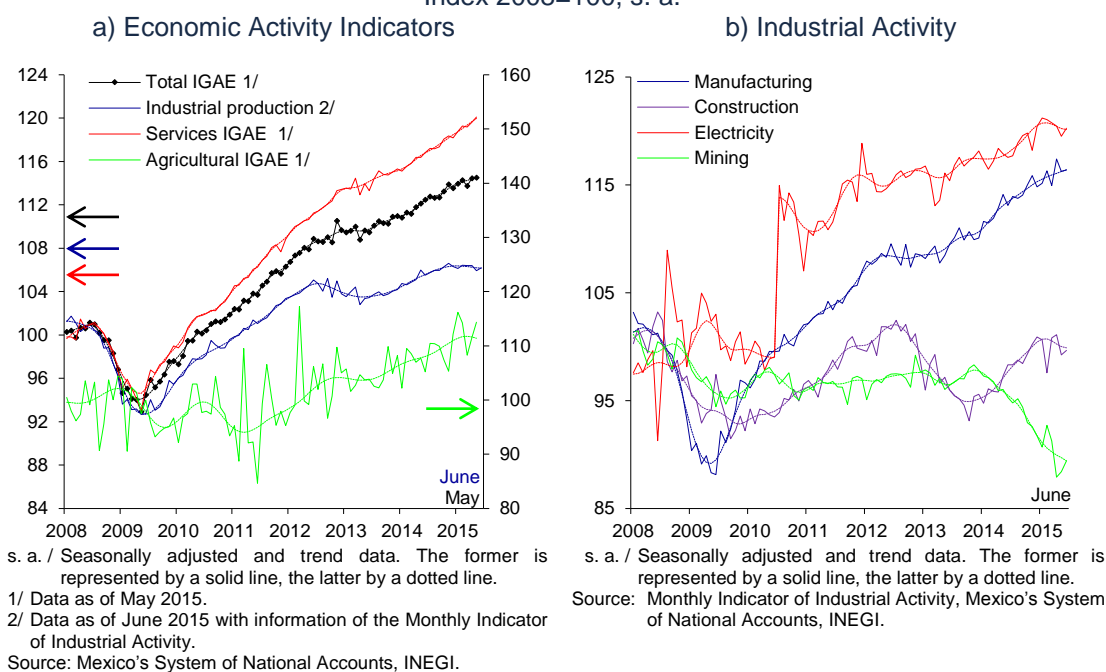
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.

Source: Working Group on Foreign Trade Statistics.

In line with the evolution of the aggregate demand components, productive activity continued showing a low growth rate in the second quarter of the year. In particular, industrial production registered a contraction, while in the first two months of this quarter services kept showing a slight upward trend (Chart 21a). Specifically:

- i. As regards industrial activity, in the second quarter manufacturing production maintained a positive trajectory, although lost dynamism (Chart 21b). On the other hand, mining further decreased, mainly as a reflection of the drop in oil production caused by the accident in the Abkatun A-Permanente platform in April (Chart 21c). With respect to this, it should be mentioned that this effect was important, but only transitory, given that in July production returned to the levels scheduled for this month since the beginning of the year. Finally, the construction sector started showing a further weakening, after having recovered since the second half of last year.
- ii. In April and May of 2015, services showed a positive evolution, mainly derived from the growth of those more related to domestic demand, such as financial and real estate services, domestic trade and temporary accommodation services and food preparation. On the other hand, in line with the weakening of the export sector, although those services more related with external demand, such as trade and transport of the external sector, also increased, they registered a lower dynamism than those more related to domestic demand (Chart 21d).
- iii. In the first two months of the second quarter 2015, agricultural activities registered a trend of stagnation, although with the volatility usually presented by this sector. This performance derived from the combination of a reduced area planted in the spring-summer cycle, a better harvest in the autumn-winter cycle and an increase in the production of some perennial crops and some livestock products.

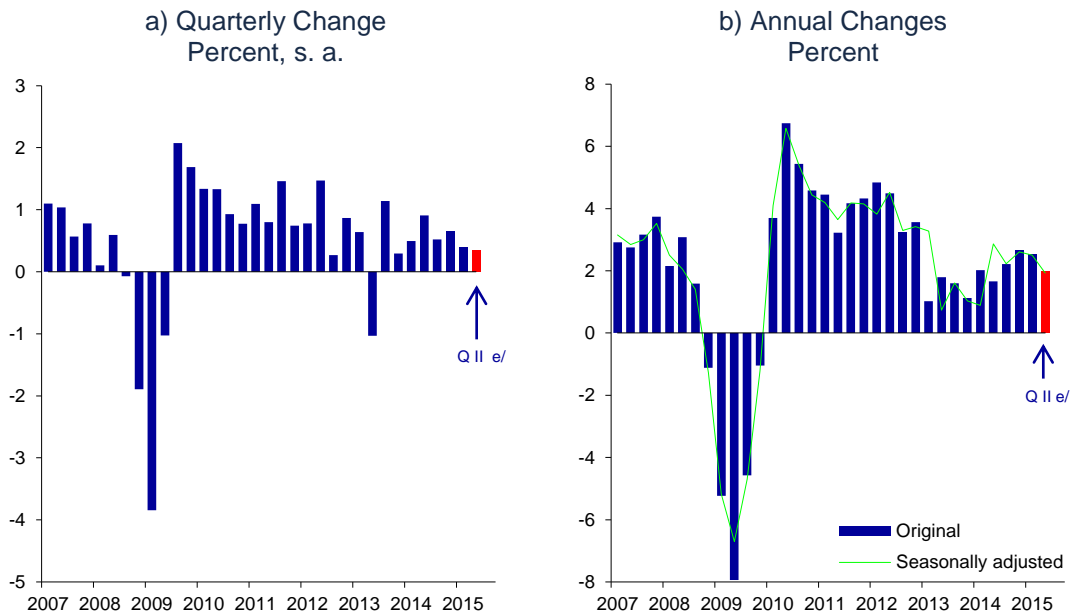
Chart 21
Production Indicators
 Index 2008=100, s. a.



For the second quarter of 2015, a quarterly GDP growth of around 0.3 percent (seasonally adjusted) is calculated, compared with the 0.4 percent increase observed in the previous quarter (Chart 22a). At an annual rate, both with seasonally adjusted and original data, a GDP growth of around 2.0 percent is

estimated for the period April – June 2015, compared with 2.5 percent registered in the previous quarter, also with seasonally adjusted and original data (Chart 22b).

Chart 22
Gross Domestic Product



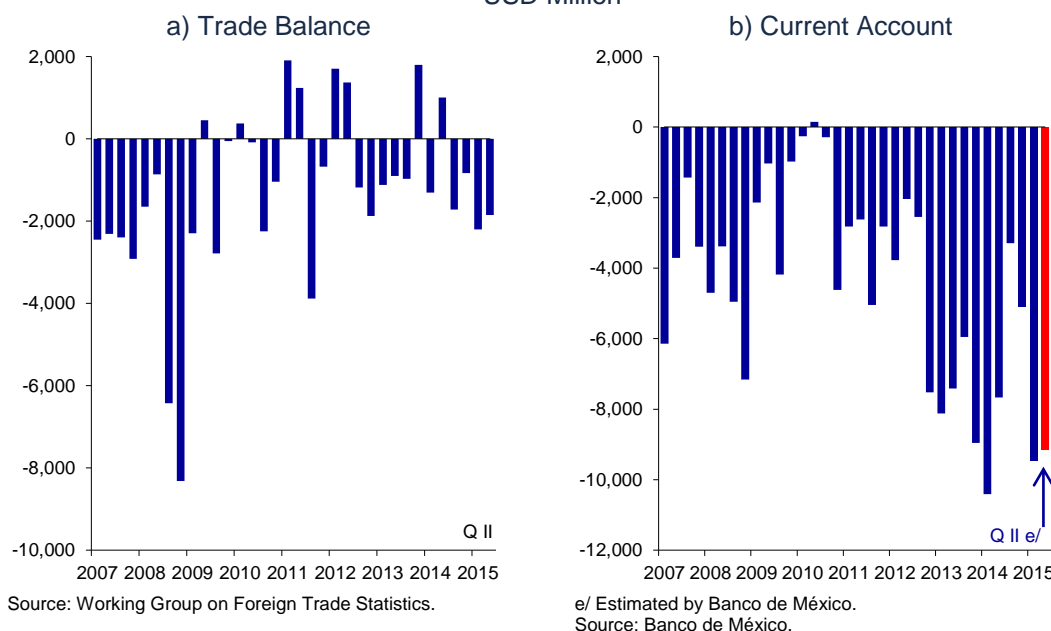
s. a. / Seasonally adjusted data.

e/ Estimated by Banco de México.

Source: Mexico's System of National Accounts, INEGI. Seasonal adjustment of the second quarter of 2015 was prepared by Banco de México.

In the second quarter of 2015, the trade balance deficit was USD 1,852 million (Chart 23a). On the other hand, latest data suggests that the current account presented a moderate deficit in the same period and that capital inflows received through the financial account allowed the financing of that deficit (Chart 23b).

Chart 23
Trade Balance and Current Account
 USD Million



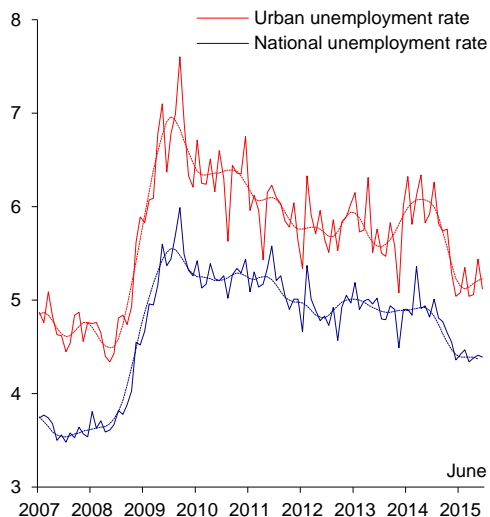
3.2.2. Labor Market

In the second quarter of 2015, slack conditions persisted in the labor market, in a context where some indicators stopped showing the improvement they were exhibiting since 2014. In particular:

- i. National and urban unemployment rates stopped the downward trajectory observed since the beginning of 2014, in addition to still being above pre-crisis levels (Chart 24a). Indeed, in the second quarter the national unemployment rate showed a seasonally adjusted average level of 4.39 percent, figure similar to the one presented last quarter of 4.41 percent.
- ii. This behavior of the unemployment rates took place while the labor participation rate remained relatively stable around 59.6 percent (Chart 24b).
- iii. With respect to the evolution of employment, the number of IMSS-insured workers continued showing an upward trend. At the same time, the total number of economy's workers also increased (Chart 24c), although less than the number of IMSS-insured workers.
- iv. In the period April – June, the informal sector employment rate remained at levels close to those registered in the previous quarter. In turn, the labor informality rate stopped showing the clear downward trend observed until the end of 2014 (Chart 24d).

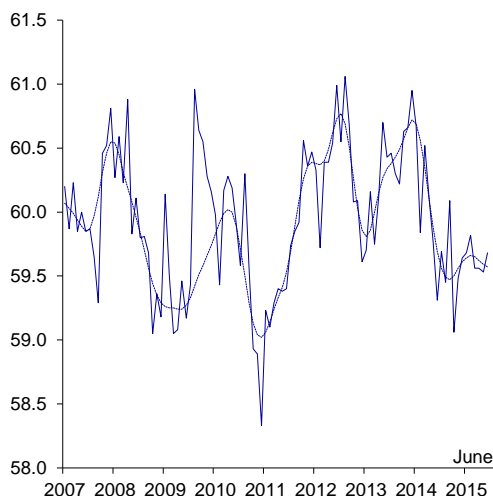
Chart 24
Labor Market Indicators

a) National and Urban Unemployment Rate
Percent, s. a.



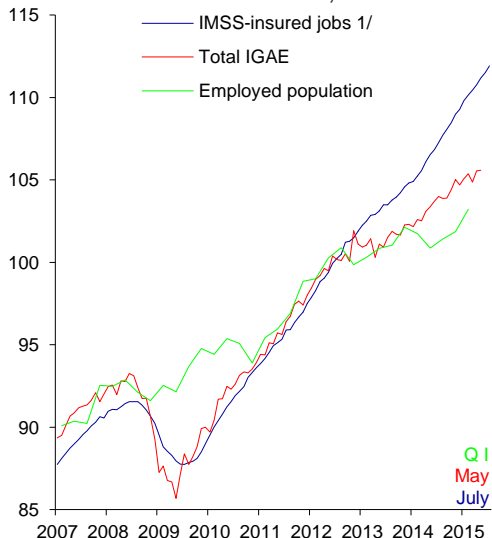
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
Source: National Survey on Occupation and Employment (ENOE), INEGI.

b) National Labor Participation Rate ^{1/}
Percent, s. a.



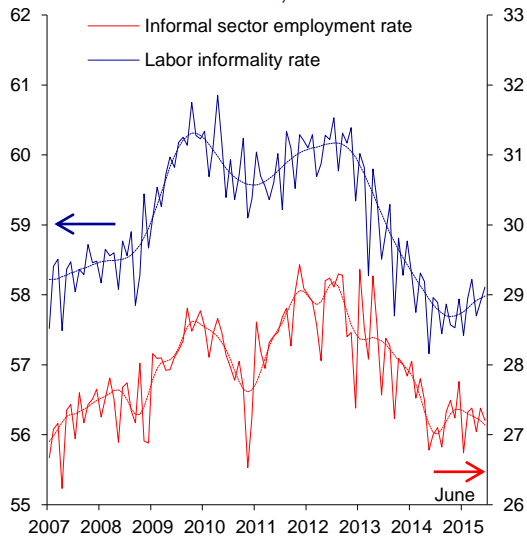
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
^{1/} Percentage of economically active population (EAP) with respect to the population of 15 years old and older.
Source: National Survey on Occupation and Employment (ENOE), INEGI.

c) IMSS-insured Workers, Employed Population and Total IGAE
Index 2012=100, s. a.



s. a. / Seasonally adjusted data.
^{1/} Permanent and temporary jobs in urban areas. Seasonal adjustment by Banco de México.
Source: Prepared by Banco de México with data from IMSS and INEGI (SCNM and ENOE).

d) Employment in the Informal Sector ^{1/}
and Labor Informality ^{2/}
Percent, s. a.



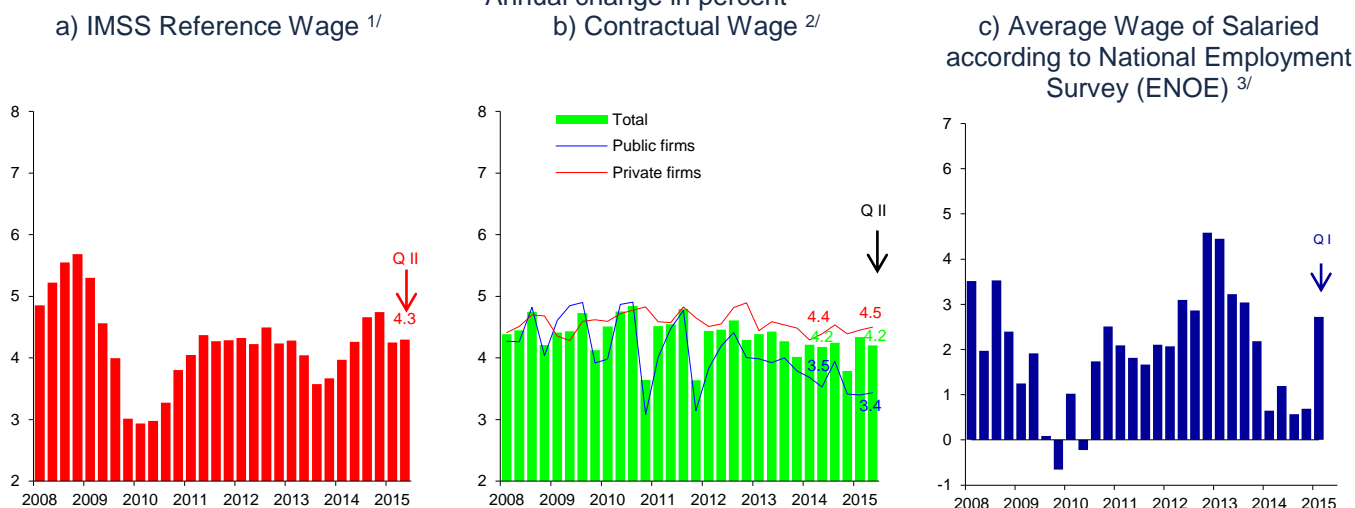
s. a. / Seasonally adjusted and trend data. The former is represented by a solid line, the latter by a dotted line.
^{1/} It refers to individuals working in non-agricultural economic units, operating with no accounting records and that function by means of households' resources.
^{2/} It includes workers who, besides being employed in the informal sector, work without social security protection and whose services are used by registered economic units, and workers self-employed in subsistence agriculture.
Source: National Survey on Occupation and Employment (ENOE), INEGI.

In light of slack conditions in the labor market, during the second quarter of 2015 growth rates of the main wage indicators did not register significant changes as compared to the previous quarter. In particular:

- i. The IMSS reference wage of IMSS-insured jobs increased 4.3 percent annually during the second quarter of 2015, same figure as reported last quarter (Chart 25a).
- ii. As regards the contractual wages negotiated by firms under federal jurisdiction in the second quarter of 2015, they presented the same growth rate as in the same quarter last year (4.2 percent, Chart 25b). This result was derived from the fact that both private firms' and public firms' wage negotiations turned out on average similar to those observed in the same quarter last year (4.5 percent in the second quarter of 2015 and 4.4 in the same quarter of 2014 in the case of private firms; and 3.4 and 3.5 percent in the period April – June 2015 and 2014, respectively, in the case of public firms). In July 2015, the average contractual wage increase of firms under federal jurisdiction was 4.8 percent. It should be mentioned that in that month there were no negotiations by public firms' workers, while private firms' workers negotiated on average the same raise as last year.
- iii. Available information shows that in the first quarter of 2015, the growth rate of average wage of the total of employed workers of the economy was still below levels registered in 2012 (Chart 25c).

**Chart 25
Wage Indicators**

Annual change in percent
a) IMSS Reference Wage ^{1/}
b) Contractual Wage ^{2/}



1/ During the second quarter of 2015, on average 17.7 million workers registered at 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 (STPS) equals approximately 2 million.

3/ To calculate the average monthly nominal wages, the lowest 1 percent and the highest 1 percent in the wage distribution were excluded. Individuals with zero income or those who did not report are excluded.

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

3.2.3. Financial Saving and Financing in Mexico

In the second quarter of 2015, the sources of financial resources in the economy increased at a lower rate than that observed in the previous quarter, which was reflected in a moderation of annual flows during the period (Table 2). This performance was explained by less dynamism of external sources –in an environment characterized by volatility in international financial markets and lower capital flows to emerging economies in general–, since domestic sources expanded at a rate similar to that of last quarter.

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

	Annual flows						Stock 2015 II ^{e/}	
	2014 I	2014 II	2014 III	2014 IV	2015 I	2015 II ^{e/}	% GDP	Est. %
Total sources	8.4	11.7	9.9	10.2	9.1	7.8	100.8	100.0
Domestic sources ^{1/}	5.1	6.2	5.5	5.8	5.1	5.1	62.5	62.1
Foreign sources ^{2/}	3.3	5.5	4.5	4.3	4.0	2.7	38.2	37.9
Total uses	8.4	11.7	9.9	10.2	9.1	7.8	100.8	100.0
Public sector financing	3.9	4.2	4.5	4.2	4.3	4.5	48.7	48.3
Public Sector Borrowing Requirements (PSBR) ^{3/}	3.6	3.9	4.3	4.0	4.1	4.3	45.7	45.3
States and municipalities	0.3	0.3	0.3	0.2	0.2	0.1	3.0	3.0
International reserves ^{4/}	1.3	1.9	1.4	1.3	1.0	0.2	17.2	17.1
Non-financial private sector	3.6	3.8	3.2	2.4	2.6	2.7	38.4	38.1
Households	1.2	1.1	1.1	1.1	1.2	1.2	15.2	15.1
Consumption	0.4	0.4	0.4	0.3	0.3	0.3	4.8	4.8
Housing ^{5/}	0.7	0.7	0.7	0.7	0.8	0.8	10.4	10.3
Firms	2.4	2.7	2.1	1.3	1.5	1.5	23.2	23.0
Domestic ^{6/}	1.1	1.0	1.0	0.6	1.0	1.2	12.9	12.8
Foreign	1.4	1.7	1.2	0.7	0.5	0.3	10.3	10.2
Commercial banks' foreign assets ^{7/}	-0.1	0.2	0.2	0.1	0.0	0.1	1.5	1.5
Other ^{8/}	-0.3	1.6	0.6	2.2	1.3	0.4	-5.1	-5.0

Note: Figures may not add up due to rounding. Figures expressed in percent of nominal average annual GDP. The information on (revalued) flows is stripped from the effect of exchange rate fluctuations.

e/ Estimated figures based on timely data available for the second quarter 2015.

1/ Includes the monetary aggregate M4 held by residents.

2/ Includes the monetary aggregate M4 held by non-residents, foreign financing for the federal government, public institutions and entities, 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 historic stock, reported by the Ministry of Finance (SHCP).

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

5/ Total portfolio of financial intermediaries, 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). Includes restructuring programs.

6/ Portfolio of financial intermediaries. Includes restructuring programs.

7/ Includes foreign assets 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, non-monetary liabilities from the Institute for the Protection of Bank Savings (Instituto de Protección del Ahorro Bancario, IPAB), the effect of the change in the valuation of public debt instruments, as well as non-recurring revenues of the public sector derived from the net acquisition of financial assets and liabilities, among other concepts.

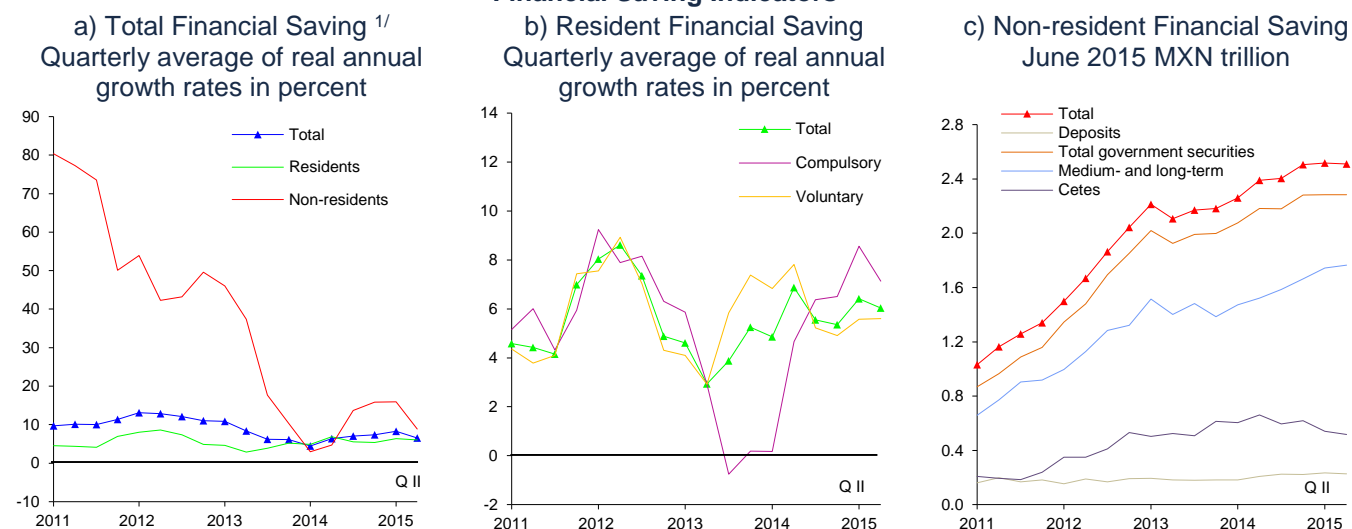
Source: Banco de México.

With respect to the domestic sources of financial resources, the stock of domestic financial saving –defined as the monetary aggregate M4 held by residents minus the stock of currency held by the public– registered a lower real annual change than that observed in the previous quarter (Chart 26a). The above mainly derived from a lower dynamism of the compulsory savings' component, while the voluntary savings' component maintained its expansion rate (Chart 26b). The monetary base increased at a higher rate as compared to the previous quarter. This was mainly the result of the temporary increase in money demand due to the elections that took

place in Mexico, whose impact on the annual rates of growth should fade out in the following months.

In what concerns the external sources of financial resources, the stock of non-resident financial saving lowered its growth rate compared to the previous quarter. It is worth noting that, although foreign investors reduced their holdings of short-term government securities, they continued to increase their holdings of medium- and long-term bonds (Chart 26c), even in spite of the programmed biannual expiration of M Bonds that occurred on June 18, which implied a temporary reduction of the holdings of these instruments by non-residents. On the other hand, the growth rate of financial resources from foreign sources channeled to the financing of the private sector also slowed down in the reference quarter.

Chart 26
Financial Saving Indicators



^{1/} Defined as the monetary aggregate M4 minus the stock of currency held by the public.
Source: Banco de México.

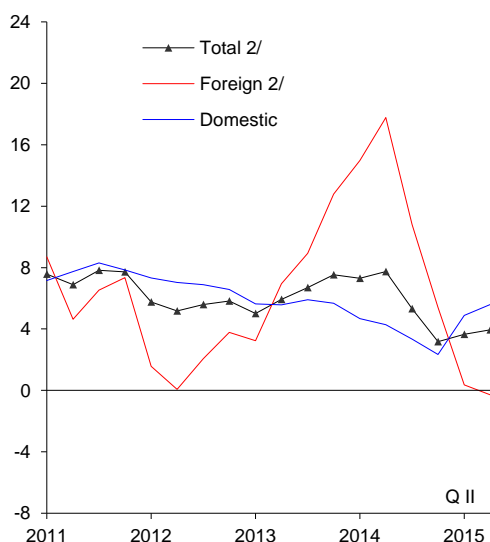
In line with the above, the use of financial resources in the economy registered a moderation in their annual flows during the second quarter as compared to the first quarter (Table 2). This was mainly a reflection of the decrease in international reserves that took place during the quarter. This in turn derived from the USD auctions that Banco de México implemented under the guidelines set forth by the Foreign Exchange Commission to provide adequate liquidity in the foreign exchange market (see Section 4), as well as from the reduced USD sales from Pemex to the Central Institute. In contrast, financing to the public sector registered a slight increase compared to the previous one, due to the rise in Public Sector Borrowing Requirements (PSBR). Meanwhile, financing to the non-financial private sector was slightly higher in the period April - June 2015 than in the previous quarter.

Regarding this last point, domestic financing to non-financial private firms in the second quarter of 2015 grew at a higher rate than in the previous quarter (Chart 27). This was the result of a greater dynamism of bank credit and debt placement in the domestic market, in contrast to the slowdown experienced by these segments at the end of 2014. In particular, commercial bank credit to non-financial private firms registered an average real annual growth rate of 9.3 percent in the second quarter of 2015, which is above the 7.5 percent average recorded last quarter (Chart 28a). Likewise, direct credit from development banks increased its expansion rate. This happened in an environment where interest rates and delinquency rates remained at low and stable levels (Chart 28b and Chart 28c).

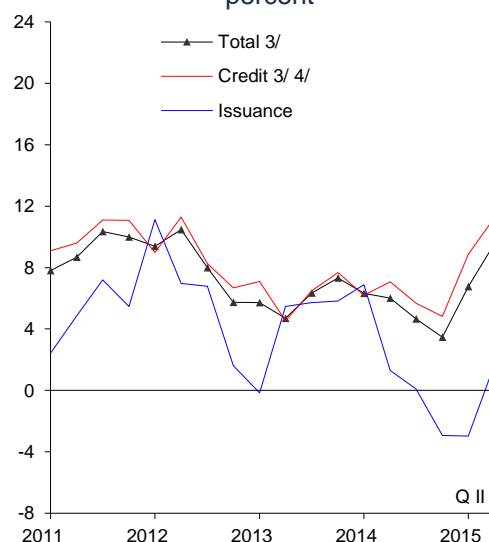
Chart 27

Financing to the Non-financial Private Sector

a) Total Financing to the Non-financial Private Sector ^{1/}
Real annual growth rate in percent



b) Domestic Financing to Non-financial Private Firms
Quarterly average of real annual growth rates in percent



1/ Data adjusted for exchange rate effects.

2/ Data of foreign financing for the second quarter of 2015 are preliminary.

3/ These data can be affected by the disappearance of some nonbank financial intermediaries and their conversion to non-regulated multiple purpose financial corporations (Sofom ENR).

4/ It refers to the performing and non-performing portfolio, and includes credit from commercial and development banks, as well as other nonbank financial intermediaries.

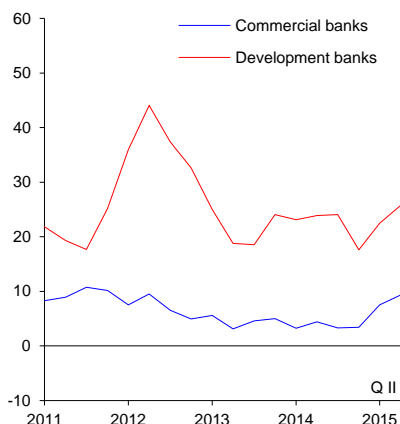
Source: Banco de México.

In the debt market, placements of domestic corporate securities in the second quarter continued to display a similar dynamism with respect to the previous quarter, after having registered low activity throughout 2014. In particular, in April – June 2015, gross placements of medium-term domestic debt instruments were MXN 19.9 billion, while gross amortizations –scheduled redemptions and prepayments– were MXN 4.6 billion. Thus, the net placement of corporate securities was MXN 15.3 billion, in a context where interest rates in general remained relatively stable (Chart 29a and Chart 29b). In contrast, private debt placements in international markets grew at a slow rate, reflected in lower growth rates of foreign financing compared to the previous quarter.

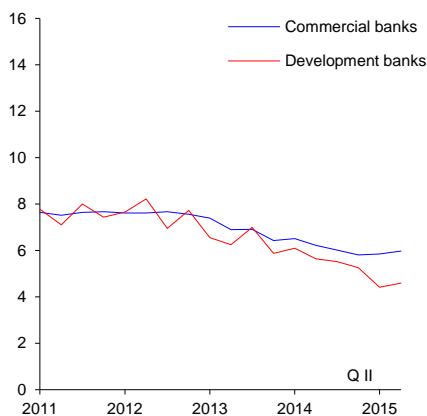
Chart 28

Bank Credit to Non-financial Private Firms

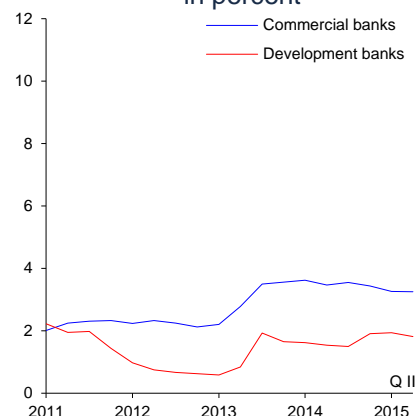
a) Performing Credit to Non-financial Private Firms
Quarterly average of real annual growth rates in percent



b) Interest Rates of New Credits to Non-financial Private Firms ^{1/}
Quarterly average of annual rates in percent



c) Delinquency Rates of Credit to Non-financial Private firms ^{2/}
Quarterly average of monthly rates in percent



1/ It refers to the interest rate of new bank credits to non-financial private firms, weighted by the associated stock of the performing credit and for all credit terms requested. The data of June for the development bank is preliminary.

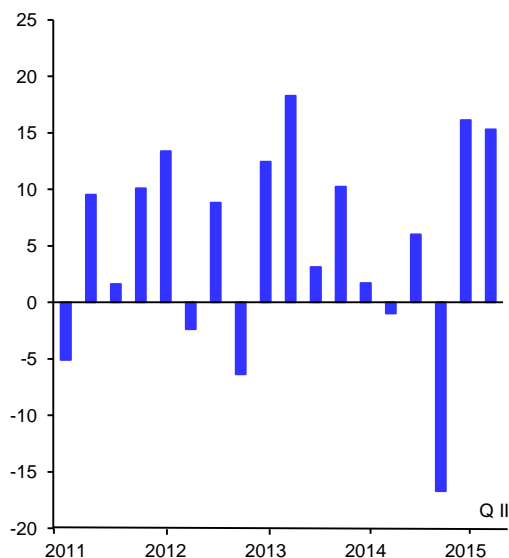
2/ The delinquency rate is defined as the stock of non-performing loans divided by the stock of total loans.

Source: Banco de México.

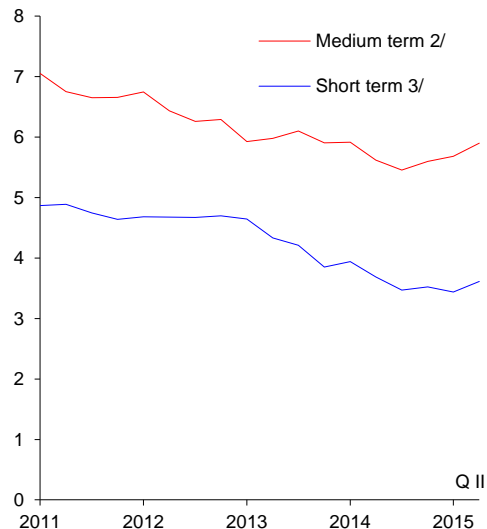
Chart 29

Securities of Non-financial Private Firms in the Domestic Market

a) Net Placement of Medium-term Securities by Non-financial Private Firms ^{1/}
MXN billion



b) Interest Rates of Securities Issued by Non-financial Private Firms
Quarterly average of annual rates in percent



1/ Placements excluding amortizations in the quarter (maturities and prepayments).

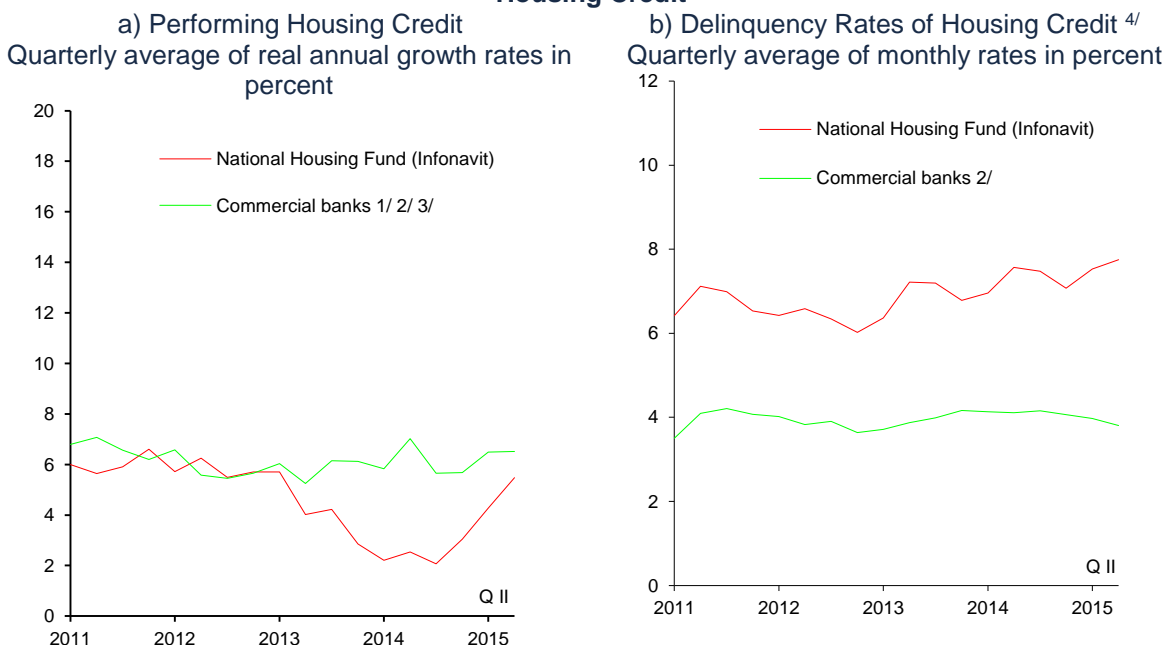
2/ Placements of more than one year.

3/ Placements of up to one year.

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

With respect to credit to households, its growth rates were modestly higher than in the previous quarter. This was mainly explained by the expansion of mortgage credit granted by Infonavit, which grew 5.5 percent on average during the second quarter of the year, above the 4.3 percent registered in the period January – March 2015. The mortgage credit portfolio of commercial banks and their sofomes maintained last period’s dynamism, expanding at a real average annual rate of 6.5 percent (Chart 30a). In this environment, the interest rates and delinquency rates of commercial bank mortgage loans did not present significant changes during the reported quarter. However, the delinquency rate of the Infonavit portfolio has shown a gradual deterioration (Chart 30b).

Chart 30
Housing Credit

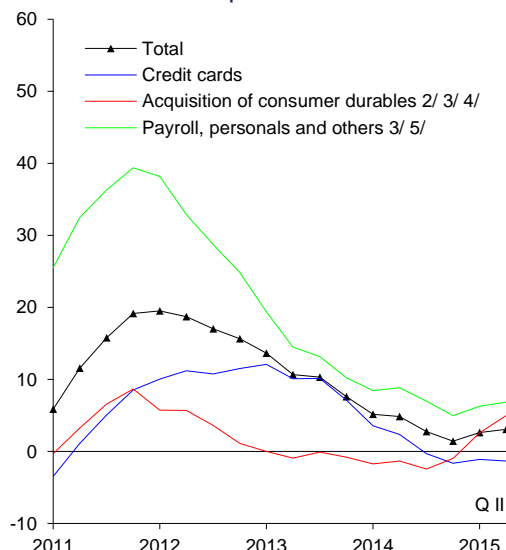


1/ Figures are adjusted in order to avoid distortions by the transfer from the UDIS trust portfolio to the commercial banks’ balance sheet and by the reclassification of direct credit portfolio to ADES program.
 2/ It includes sofomes owned by commercial banks.
 3/ Figures are adjusted to avoid distortions due to the inclusion of some regulated sofomes to the bank credit statistics.
 4/ The delinquency rate is defined as the stock of non-performing loans divided by the stock of total loans.
 Source: Banco de México.

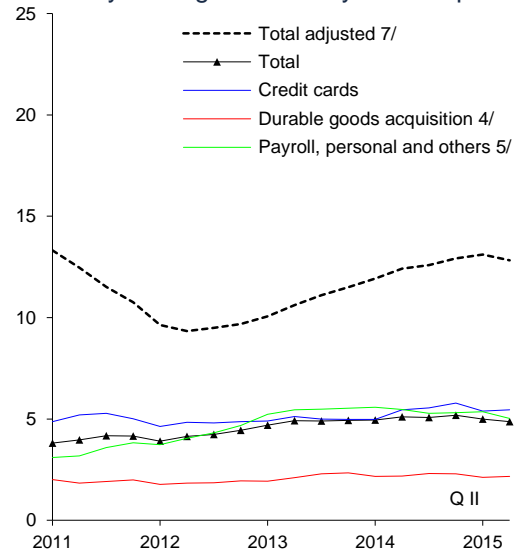
With regards to consumer credit, although it expanded at rates similar to those observed in the previous quarter –3.1 percent during the second quarter of 2015–, its different segments showed a mixed performance. In particular, while payroll loans kept growing at double digit rates, personal and credit card loans continued without showing clear signs of recovery (Chart 31a). Interest rates and delinquency rates of these segments practically remained unchanged, although the adjusted delinquency rate –which considers bad debt write-offs accumulated in the last twelve months– remains at high levels (Chart 31b).

**Chart 31
Commercial Banks' Consumer Credit**

a) Commercial Bank Performing Credit ^{1/}
Quarterly average of real annual growth rates in percent



b) Delinquency Rates of Commercial Bank Consumer Credit ^{1/ 6/}
Quarterly average of monthly rates in percent



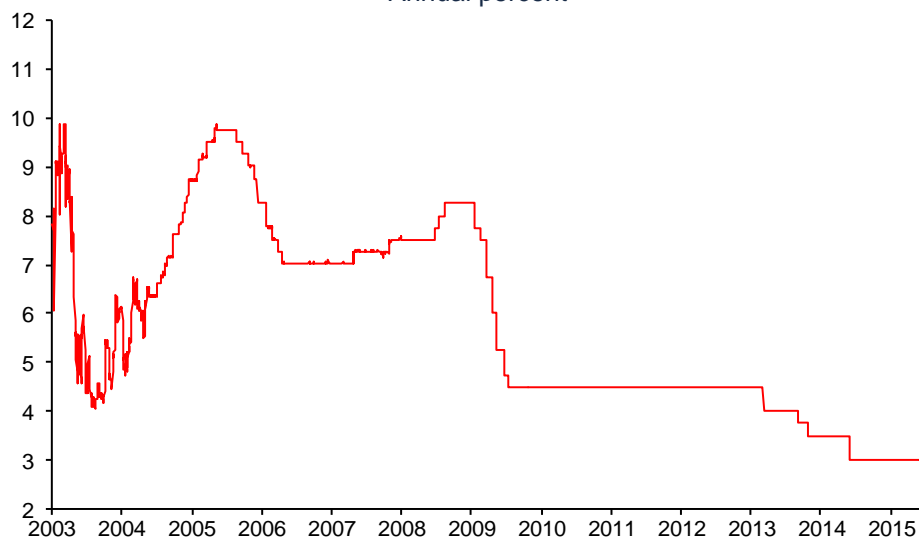
- 1/ It includes loans by credit card-regulated sofomes: Tarjetas Banamex, Santander Consumo, Banorte-Ixe Tarjetas and Sociedad Financiera Inbursa.
 - 2/ Between June 2010 and May 2011, figures are adjusted in order to avoid distortions due to the purchase of one banking institution's automobile loan portfolio.
 - 3/ From July 2011 onwards, figures are adjusted in order to avoid distortions due to the reclassification from acquisition of durable goods (ABCD) to other consumer credits by one banking institution.
 - 4/ It includes credit for movable property acquisition and auto loans.
 - 5/ "Others" refers to credit for payable leasing operations and other consumer credits.
 - 6/ The delinquency rate is defined as the stock of non-performing loans divided by the stock of total loans.
 - 7/ It is defined as non-performing portfolio plus debt write-offs accumulated over the last 12 months divided by the total portfolio plus debt write-offs accumulated over the last 12 months.
- Source: Banco de México.

In sum, despite less favorable financial conditions in international financial markets, the evolution of financing in Mexico continued supporting productive activity. All of this, in an environment of stable interest rates and delinquency levels, indicating that there are no pressures affecting the markets for loanable funds.

4. Monetary Policy and Inflation Determinants

During the period covered by this Report, the Board of Governors maintained the target for the Overnight Interbank Interest Rate at 3 percent by virtue of the fact that it deemed this monetary policy stance to be conducive to the consolidation of the convergence of inflation to its permanent 3 percent target (Chart 32). Regarding this, it is noteworthy that the conduct of monetary policy in Mexico continued facing a complicated environment that required the Central Institute to weigh both internal and external factors in order to define the appropriate monetary policy stance.

Chart 32
Overnight Interbank Interest Rate ^{1/}
Annual percent



^{1/} The Overnight Interbank Interest Rate is shown until January 20, 2008.
Source: Banco de México.

Among the factors considered in order to make the mentioned monetary policy decisions, the following stand out. With respect to the internal factors:

- a) Inflation did not only reach the permanent 3 percent target, it even located at levels below the referred target, marking historic minimum levels. Additionally, it is anticipated to remain below 3 percent during the rest of this year and close to that level next year.
- b) To the favorable behavior of inflation contributed the absence of aggregate demand-related pressures on prices given that, in face of the weak dynamism of economic activity, conditions of slackness prevail in the economy.
- c) Given the Mexican peso depreciation, the pass-through onto prices has been limited, mainly affecting some durable goods' prices and without generating second round effects.
- d) Reductions in input prices, such as energy, commodity and telecommunication service prices contributed, both directly and indirectly, to the decrease in inflation.
- e) Inflation expectations remained well-anchored, even those for short and medium-term horizons declined.

With respect to the external factors:

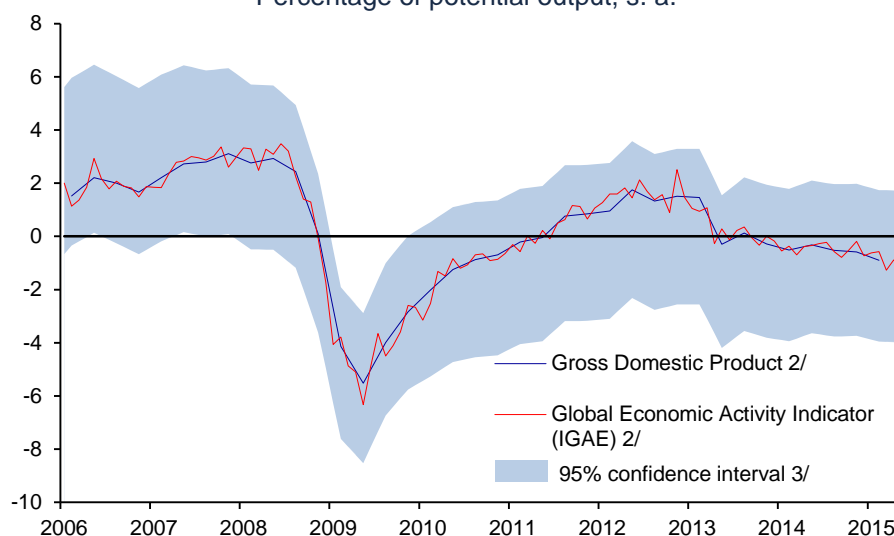
- f) The Mexican peso, as well as other currencies of emerging economies, has registered an additional depreciation, in face of the increasingly imminent rise in interest rates by the U.S. Federal Reserve before the year ends. Although so far this adjustment of the quote of the national currency has not been reflected in a generalized price increase, this cannot be ruled out and inflation expectations might be affected. On the other hand, as mentioned before, the appreciation of the U.S. dollar has practically been a generalized phenomenon with respect to the rest of the currencies. Trying to stop by means of monetary policy actions the real depreciation of the Mexican currency, as long as this is taking place in an orderly manner and under appropriate liquidity conditions in the national markets, can also imply considerable costs.

Going into the details of inflation determinants, the moderate growth pace of economic activity has led to slack conditions in the economy, so that no aggregate demand-driven pressures on prices in the main input markets or external accounts were present. In particular:

- i. The output gap has continued registering negative levels (Chart 33). However, once economic activity shows greater dynamism, the output gap will be gradually closing.
- ii. In the labor market, sluggish conditions persists.
- iii. Moderate increases in the main wage indicators, together with the positive trend shown by labor productivity, led to the fact that unit labor costs for the total economy persisted at low levels (Chart 34).

Chart 33
Output Gap Estimate ^{1/}

Percentage of potential output, s. a.



s. a. / Prepared with seasonally adjusted data.

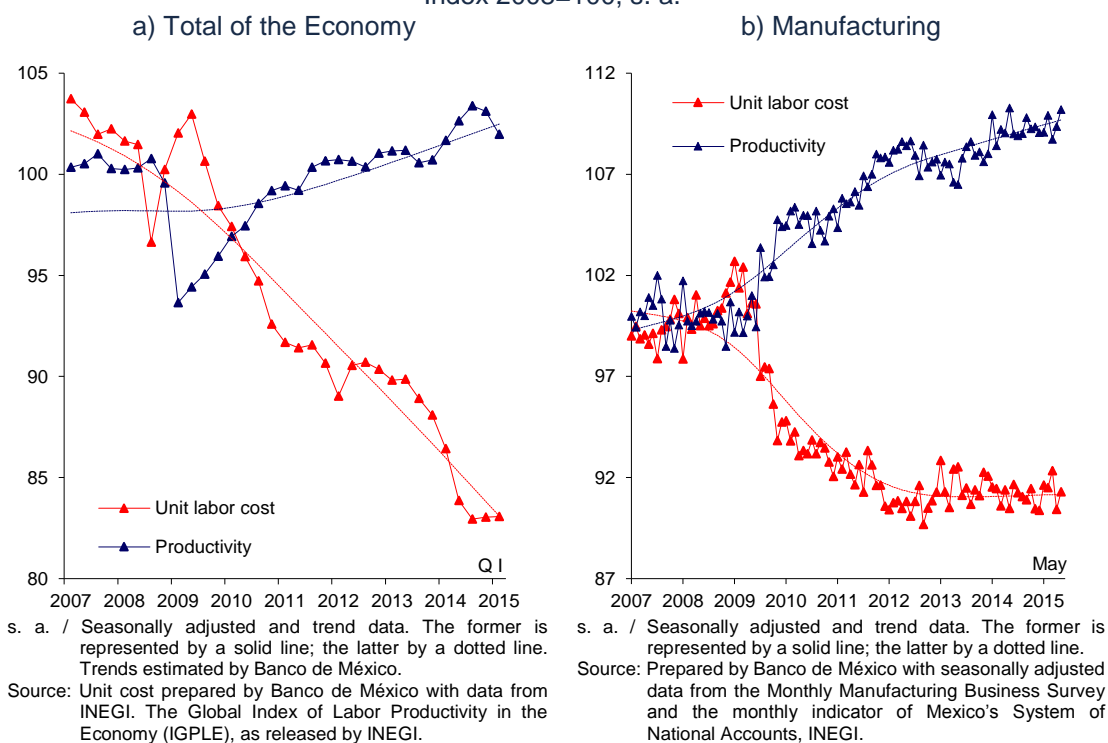
1/ Estimated using the Hodrick-Prescott (HP) filter with tail correction; see Banco de México Inflation Report, April – June 2009, p. 69.

2/ GDP figures as of the first quarter of 2015, IGAE figures as of May 2015.

3/ Confidence interval of the output gap calculated with an unobserved components' method.

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

Chart 34
Productivity and Unit Labor Cost
 Index 2008=100, s. a.



Regarding the recent evolution of inflation expectations, it is worth noting that in those derived from Banco de México's survey to private sector specialists, the median at the end of 2015 decreased from 3.1 to 2.9 percent between the March and July 2015 surveys.⁶ In particular, both the median corresponding to core inflation expectations and non-core inflation expectation implicit in these medians for the end of the referred year decreased from 2.9 to 2.7 percent and from 3.9 to 3.7 percent, respectively, between the referred surveys (Chart 35a). In turn, the median of headline inflation expectations for the end of 2016 dropped from 3.5 to 3.4 percent between the same surveys.⁷ In particular, the median of those for the core component declined from 3.2 to 3.1 percent, while non-core implicit expectations fell from 4.5 to 4.3 percent (Chart 35b). Last, longer-term inflation expectations remained stable around 3.5 percent (Chart 35c).⁸

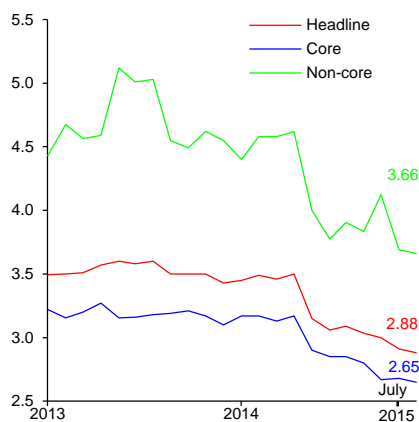
⁶ According to Banamex Survey of Financial Market Analysts' Expectations, the median of headline inflation expectation for the end of 2015 registered a similar behavior, decreasing from 3.1 percent in the survey of March 20, 2015 to 2.9 percent in the survey of August 5, 2015.

⁷ The median of headline inflation expectation for the end of 2016, based on the Banamex survey, remained around 3.5 percent between the survey of March 20, 2015 and that of August 5, 2015.

⁸ The median of long-term inflation expectations in the Banamex survey (corresponding to the period 2017-2021) has also remained on average around 3.5 percent between the surveys of March 20, 2015 and that of August 5, 2015.

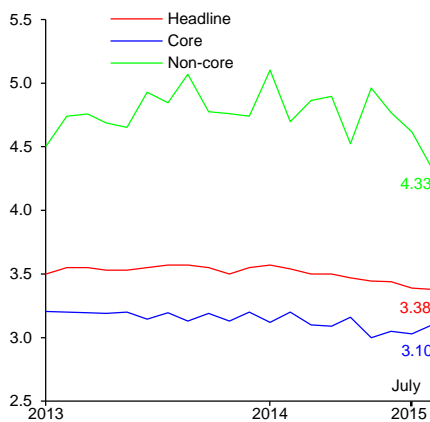
Chart 35
Inflation Expectations
Percent

a) Medians of Headline, Core and Non-core Inflation Expectations as of End of 2015

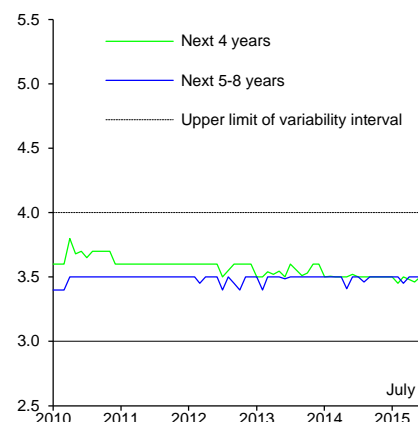


Source: Banco de México's survey.

b) Medians of Headline, Core and Non-core Inflation Expectations as of End of 2016



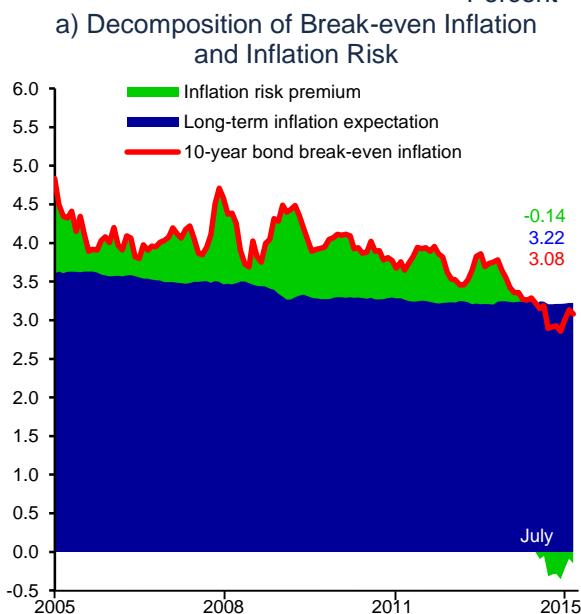
c) Medians of Headline Inflation Expectations of Different Terms



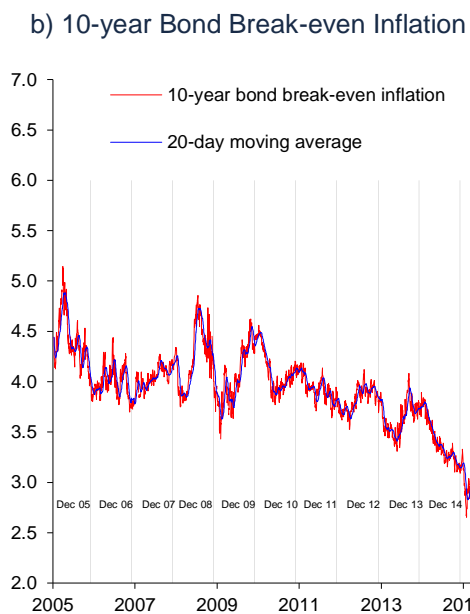
With reference to the evolution of inflation expectations implicit in 10-year market instruments, they remained stable around 3.2 percent between March and July 2015, while the inflationary risk premium adjusted from around -30 to -15 basis points, although it remained at negative levels (Chart 36a).⁹ In this way, although break-even inflation (the difference between long-term nominal and real interest rates) increased from approximately 2.85 to 3.00 percent during the reference period, it still persists close to historic minimum levels (Chart 36b), reflecting that the holders of nominal interest rate-indexed instruments keep on demanding a relatively low compensation for inflation and inflationary risk related to Mexican government bonds.

⁹ For a description of the estimation of long-term inflation expectations, see the Box “Decomposition of Break-even Inflation” in the Quarterly Report, October-December 2013.

Chart 36
Inflation Expectations
Percent



Source: Estimated by Banco de México.



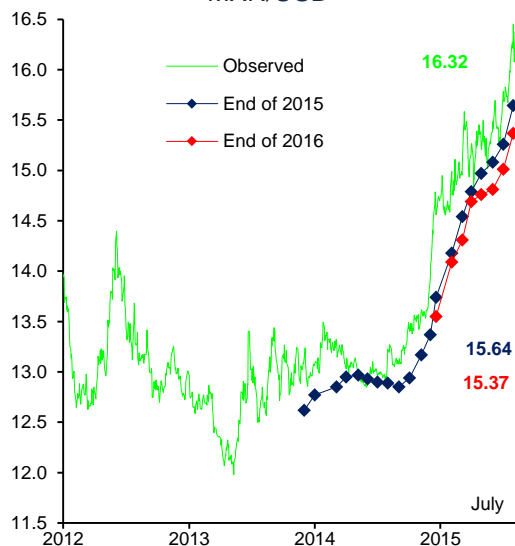
Source: Estimated by Banco de México with data from Valmer and Bloomberg.

In the environment of high volatility in international financial markets described in the previous sections of this Report, national financial markets were also affected. Thus, the Mexican peso registered a significant depreciation against the U.S. dollar, passing from levels around 15.1 to 16.3 MXN/USD between late March and early August 2015 (Chart 37a and Chart 37b).

Although the most important factor that contributed to the depreciation of the Mexican peso was the expectation of an increase of the Federal Reserve interest rate, other real factors, such as the adverse shock to the terms of trade that represented the drop in oil prices and downward revisions of the oil production platform, with the consequent impact on public finances and the oil trade balance, also influenced the quote of the Mexican currency.

Chart 37
Exchange Rate and Implied Volatility

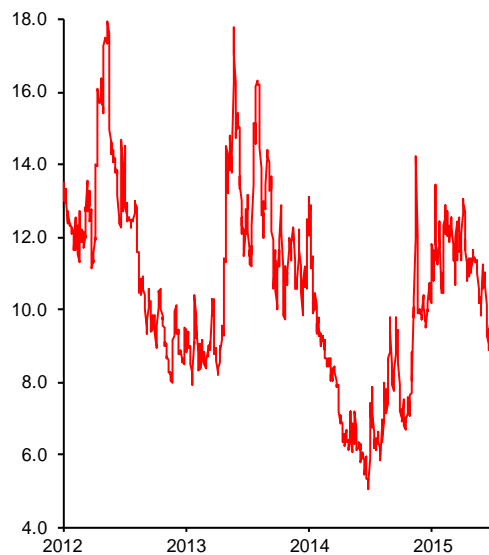
a) Nominal Exchange Rate and Exchange Rate Expectations for the End of 2015 and 2016 ^{1/}
MXN/USD



^{1/} The observed exchange rate is the daily quote of the FIX exchange rate. The latest quote of the observed exchange rate corresponds to August 11, 2015.

Source: Banco de México and Banco de México's survey.

b) Currency Option Implied Volatility ^{2/}
Percent



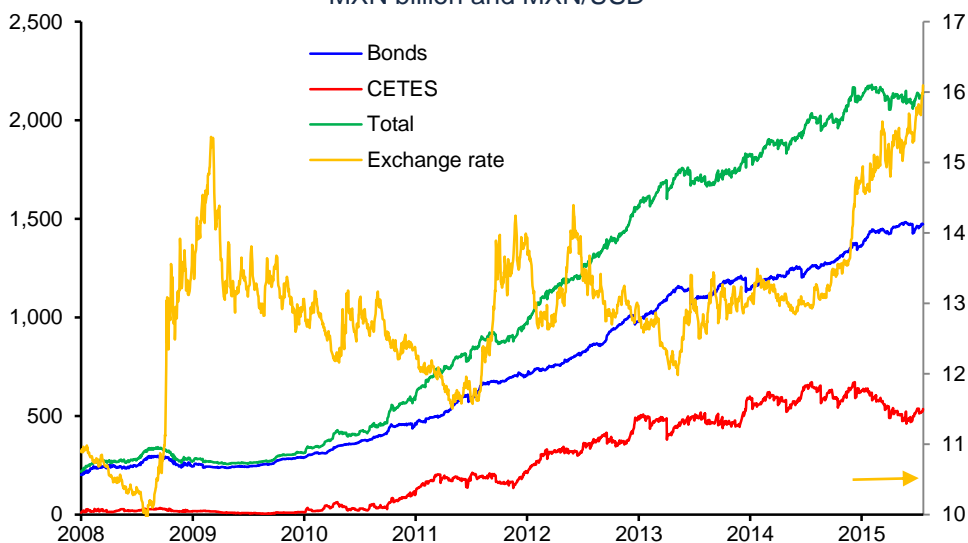
^{2/} Currency option implied volatility refers to one-month options.

Source: Bloomberg.

Despite the volatility registered in financial markets, no net capital outflows have been observed. Non-residents' government bond holdings remained stable, although with certain changes of its composition. In particular, investors' holdings of short-term instruments decreased, while holdings of medium- and long-term bonds continued increasing (Chart 38). However, the adjustment of risk exposure of investors' portfolio has implied a stronger demand for currency hedges, which contributed to the depreciation of the national currency.

In this context, to reduce the probability of potential pressures affecting the adequate (i.e. with appropriate liquidity conditions) functioning of the national exchange market, the Foreign Exchange Commission took several measures during the reference period. First, it determined to extend from June 9 to September 29, 2015 the mechanism through which Banco de México daily auctioned USD 52 million without minimum price, in place since March 11, as well as to maintain the mechanism of daily auctions of USD 200 million with minimum price (at an exchange rate 1.5 percent higher than the FIX exchange rate determined the previous day), introduced on December 8, 2014. Later, in face of an increase in the volatility of international financial markets, it decided to reinforce the mentioned mechanisms. Specifically, from July 31 to September 30, it increased the amount of the auction without minimum price from USD 52 million to USD 200 million and reduced the minimum price of the daily auction of USD 200 million to the equivalent of the FIX exchange rate determined the previous working day plus 1 percent. It is noteworthy that, since its introduction this auction mechanism has been activated in five occasions, resulting in a total of USD 973 million sold. The Foreign Exchange Commission stated that at the end of this period, it will continue evaluating the convenience of carrying out additional actions if necessary.

Chart 38
Government Securities Holdings by Foreign Investors and Exchange Rate
 MXN billion and MXN/USD

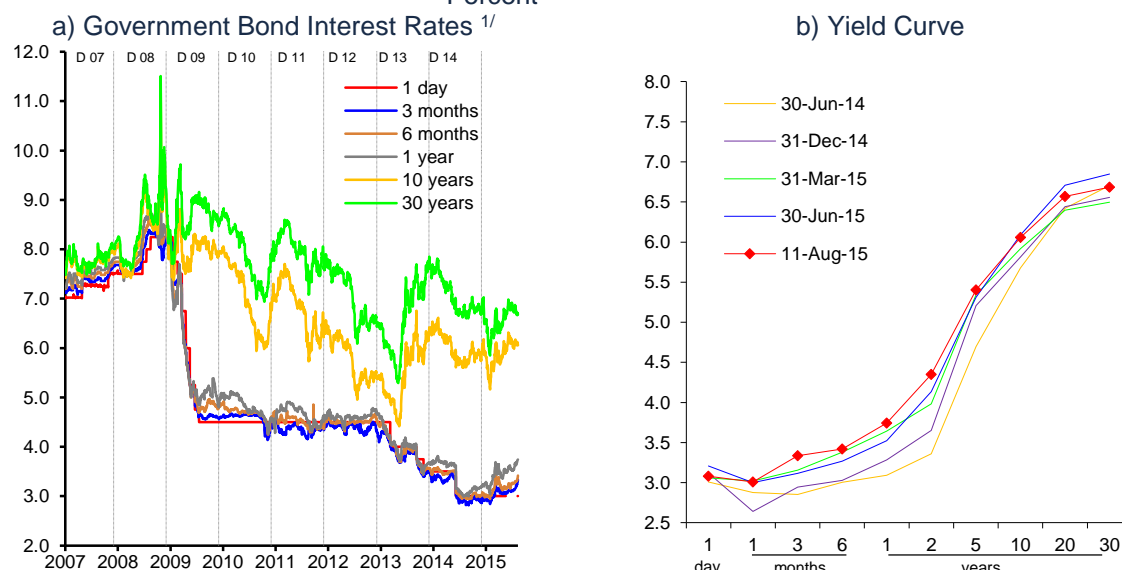


Source: Banco de México.

The adjustment in real terms of the Mexican exchange rate facilitates that the economy adapts to the new international environment. In this sense, the nominal exchange rate depreciation, in a context of well-anchored inflation expectations, and consequently of a low pass-through of exchange rate movements onto prices, as well as the efforts in the area of fiscal consolidation, contributes to the fact that the real exchange rate depreciation takes place more efficiently. This has implied changes in the structure of production and the aggregate demand, mitigating in this way their falls, as well as that of employment. Looking forward, and with a longer-term perspective, it should be pointed out that, even though the uncertainty regarding the normalization process of the U.S. monetary policy has led to an environment of high volatility in international financial markets, it is to be expected that, to the extent that the Federal Reserve increases its reference rate in response to a more dynamic economic activity in the U.S., the outlook for both Mexican exports and the Mexican peso will be more favorable.

Meanwhile, the Mexican interest rates registered increases during the reference period. This was the reflection of an adjustment process of U.S. interest rates and given the positive correlation both rates hold. In particular, the interest rate of the 10-year government bond increased around 20 basis points from late March to early August, passing from 5.9 to 6.1 percent, while the 2-year bond rate increased approximately 40 basis point, shifting from 4.0 to 4.4 percent. Likewise, 3-month government bonds' rate increased by approximately 10 basis points from 3.2 to 3.3 percent (Chart 39a). Accordingly, the slope of the yield curve (the difference between 10-year and 3-month rate) registered an upward shift of approximately 10 basis points, moving from 270 to 280 basis points in the same period (Chart 39b).

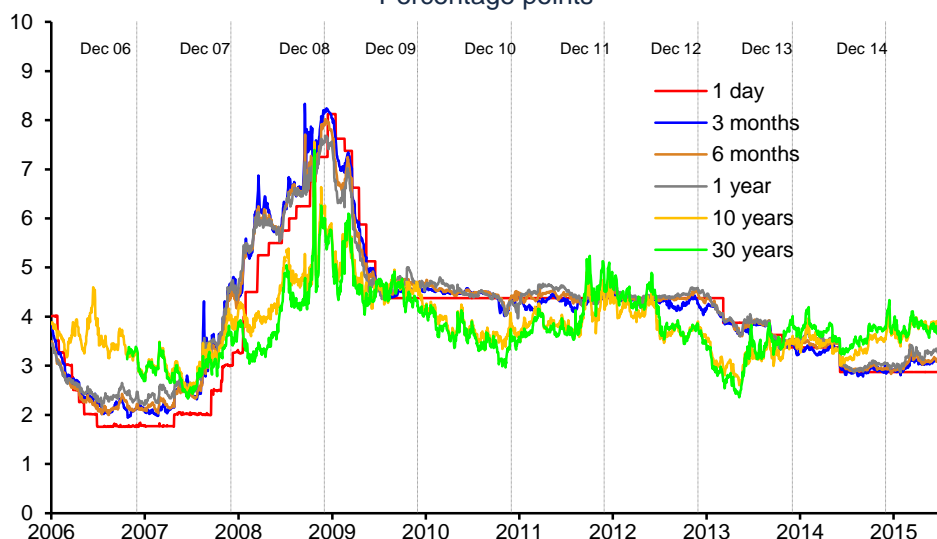
Chart 39
Mexican Interest Rates
Percent



^{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)*.

As a result of the evolution of the interest rates described before, and given that the respective U.S. interest rates increased to a greater extent, the long-term interest rate spreads between both economies showed slight declines. In particular, the 10-year bond rate spread marginally went down from about 390 to 385 basis points in the period covered by this Report (Chart 40).

Chart 40
Spreads between Mexican and U.S. Interest Rates^{1/}
Percentage points



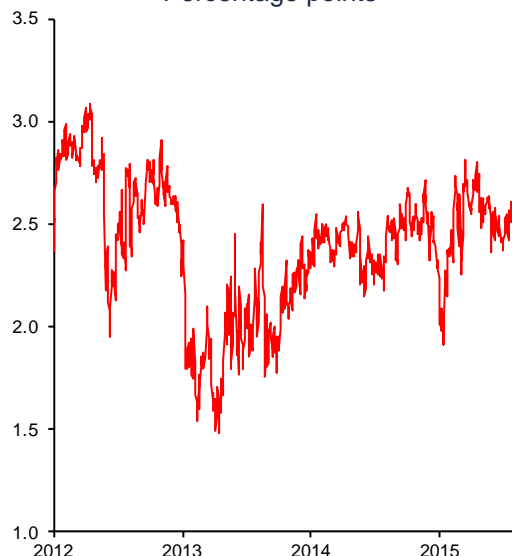
^{1/} For the U.S. target rate, an average interval by the Federal Reserve is considered.
Source: *Proveedor Integral de Precios (PIP)* and U.S. Department of the Treasury.

To further examine the evolution of longer-term interest rates in Mexico, as in other occasions, the performance of their components should be analyzed: the short-term interest rate (the reference rate); the expected short-term interest rates; and the risk premia. In this regard, it stands out that during the period covered by this Report:

- a) The target for the Overnight Interbank Interest Rate remained at 3.0 percent.
- b) Expected short-term interest rates decreased. In particular, according to Banco de México's survey to private sector specialists, the median of expectations for the bank funding' rate at the end of 2015 went from around 3.5 to 3.3 percent between the surveys of March and July 2015. A similar behavior for the end of 2015 is inferred from the expectations implicit in market instruments' interest rates. Meanwhile, for the end of 2016, the median of the expectations resulting from the referred surveys went from 4.5 to 4.0 percent. This performance was similar for the expectations corresponding to the U.S. interest rates.
- c) The behavior of the diverse risk prima was mixed, although in general they remained at low levels:
 - i. Market indicators that measure the sovereign credit risk increased. In particular, the 5-year *Credit Default Swap* raised approximately 10 basis points.
 - ii. Inflation risk premium has been correcting the negative levels, presented since November last year, and currently locates around -15 basis points (Chart 36a).
 - iii. The exchange rate risk premium, approximated by the interest rate spread of the MXN-indexed 10-year government bond and that corresponding to the same term issued in USD, showed a slight reduction (Chart 41a).
 - iv. Lastly, an indicator of the term premium (indicated by the difference between the 10-year and 2-year interest rate spread) declined slightly, shifting from 190 to 180 basis points (Chart 41b).

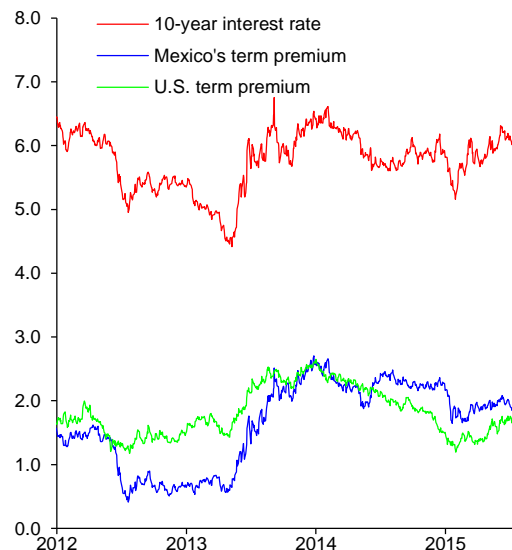
**Chart 41
Risk Premia**

a) Spread between MXN- and USD-indexed 10-year Bond Rate
Percentage points



Source: Bloomberg, *Proveedor Integral de Precios (PIP)* and Valmer.

b) Mexico's 10-year Government Bond Interest Rate and the Term Premium ^{1/}
Percentage points, percent



^{1/} The term premium refers to the difference between the 10-year and the 2-year interest rate.

Source: Banco de México, *Proveedor Integral de Precios (PIP)* and Bloomberg.

To sum up, in light of the complex external environment, the importance of strengthening Mexico's macroeconomic framework should be emphasized. Thus, it will be necessary to timely adjust the monetary policy and to consolidate efforts in the fiscal area. This would contribute to maintain confidence in the Mexican economy and, consequently, the risk premia of interest rates to remain at low levels, which will be crucial to propitiate a favorable evolution of the country's interest rates in light of a future outlook of more astringent global financial conditions.

5. Inflation Forecast and Balance of Risks

Considering the outlook described in this Report for the external environment and the recent evolution of the different domestic demand components, the macroeconomic scenario foreseen for the Mexican economy is presented below.

GDP Growth: For 2015, the forecast for Mexico's GDP growth is revised from an interval of between 2.0 and 3.0 percent in the previous Report to one from 1.7 to 2.5 percent. For 2016, GDP growth is expected to be between 2.5 and 3.5 percent, the same interval as in the previous Report (Chart 42a).

This forecast is based on several elements. On the one hand, the growth pace of economic activity in Mexico in the first semester of 2015 was lower than expected. In particular, industrial production registered a weak performance, reflecting the fact that the crude oil mining sector continued presenting a negative trend and the construction sector paused the recovery it had been showing. Additionally, manufacturing production exhibited low dynamism as a reflection of the contraction in manufacturing exports, associated in turn with the drop in U.S. industrial production. In this context, domestic demand components registered moderate growth.

From here on, Mexico's economic activity is expected to improve in the second half of the year, although at a lower rate than that anticipated in the previous Report. Domestic demand growth is expected to remain moderate, so the recovery would be mainly associated with higher manufacturing production in Mexico, reflecting increased exports of this sector due to an improvement of U.S. industrial activity and the real depreciation of the Mexican peso against the U.S. dollar. It is noteworthy that, although expectations for U.S. industrial production for 2015 recently adjusted downwards, a recovery is still expected in the second quarter.¹⁰

For 2016, the implementation of structural reforms is anticipated to gradually be reflected in a greater dynamism of investment, which would complement the moderate recovery presented so far by consumption. Additionally, U.S. industrial activity and, as a consequence, Mexican exports are expected to further recover.

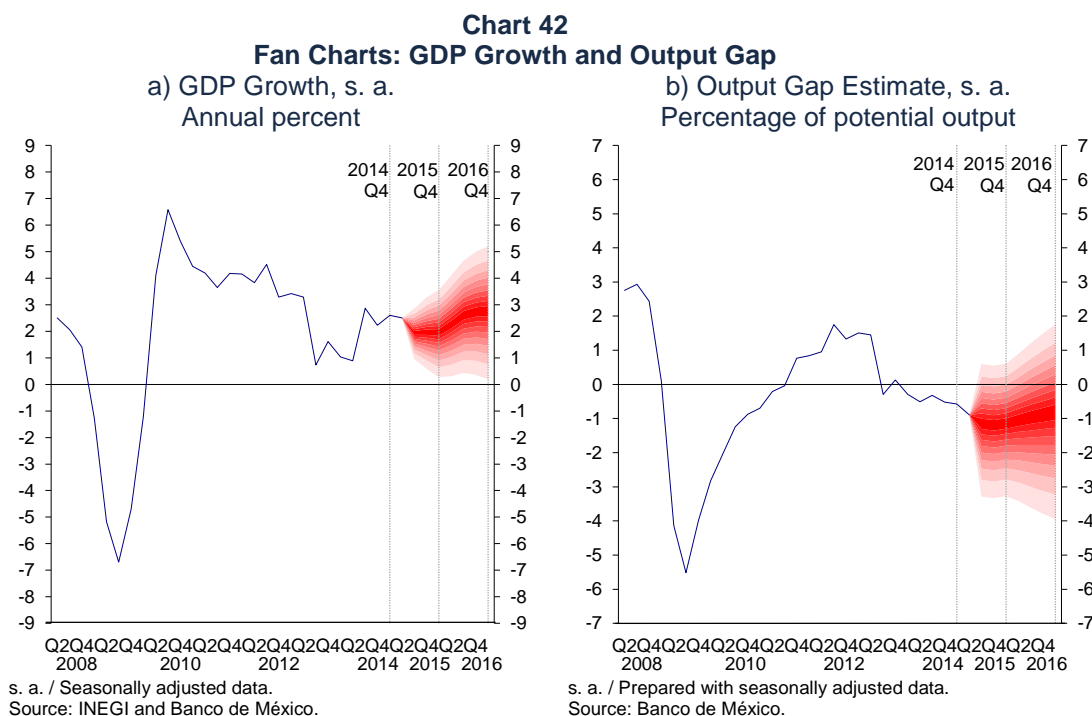
Employment: In line with the adjustment of the economic growth outlook for 2015, the forecast of the increase in the number of IMSS-insured jobs is also revised downwards for this year. So, for 2015, an increase of between 560 and 660 thousand IMSS-insured jobs is expected, as compared to the expectation of an increase of between 580 and 680 thousand in the previous Report. For 2016, an increase of between 600 and 700 thousand IMSS-insured jobs is expected, the same interval as in the previous Report.

Current Account: For 2015, trade balance and current account deficits of USD 6.0 billion and USD 30.6 billion are expected, respectively (0.5 and 2.6 percent of GDP,

¹⁰ Expectations for the U.S. economy are based on the consensus of analysts surveyed by Blue Chip in August 2015. For industrial production in 2015, these are adjusted from an annual growth of 2.5 percent in the previous Report to 1.9 percent in the present Report. For 2016, the growth of this indicator is revised from 3.1 percent reported in the previous Report to 2.7 percent in the present Report.

in that same order). For 2016, the expected deficits are USD 6.3 billion and USD 31.8 billion, respectively (0.5 and 2.5 percent of GDP, in that order).

Although certain recovery of economic activity in Mexico in the second half of the year and in 2016 is foreseen, no aggregate demand-related pressures on inflation or external accounts are expected. In particular, the GDP gap is anticipated to remain negative in the forecast horizon, although trending towards gradually closing (Chart 42b).



The GDP growth scenario for Mexico is subject to diverse risks. Among the downward risks are the following:

- i. That manufacturing exports continue to register a low dynamism if the U.S. industrial sector keeps showing a weak performance.
- ii. A deterioration in investors' outlook due to the lack of favorable results with regard to the implementation of the energy reform and/or in face of an additional weakening of the perception of the rule of law.
- iii. That Mexican oil production recovery is delayed, affecting the dynamism of the country's industrial sector.
- iv. An additional increase in international financial markets' volatility that deteriorates access conditions to external financing for the Mexican economy.

On the other hand, among the upward risks for the foreseen GDP growth scenario the following stand out:

- i. Greater dynamism of the export sector in case of a greater than expected recovery of external demand.
- ii. Better progress in the implementation of structural reforms and/or in the strengthening of the rule of law.

Inflation: Taking into consideration the lack of aggregate demand-driven inflationary pressures on prices, as well as its latest unfolding, inflation is foreseen to further show a favorable evolution during the rest of the year and during 2016. It is anticipated that both headline and core inflation will remain below 3 percent during the rest of 2015, according to a moderate change in both merchandise and service prices. For 2016, headline as well as core inflation are estimated to remain at levels close to 3 percent. This forecast considers a recovery of economic activity and a further gradual adjustment of the price of merchandise relative to services in line with the depreciation of the real exchange rate, as the Mexican economy transits to the new external environment (Chart 43 and Chart 44).

The forecast for the inflation trajectory could be affected by some risks, among which stand out the following. Upward risks:

- i. That the depreciation of the Mexican peso continues to a greater extent and that it passes through onto non-tradable goods prices, which could contaminate inflation expectations.

Downward risks:

- i. A still lower than expected dynamism of economic activity.
- ii. Additional decreases of energy and/or telecommunication services prices.

Chart 43
Fan Chart: Annual Headline Inflation ^{1/}
 Percent

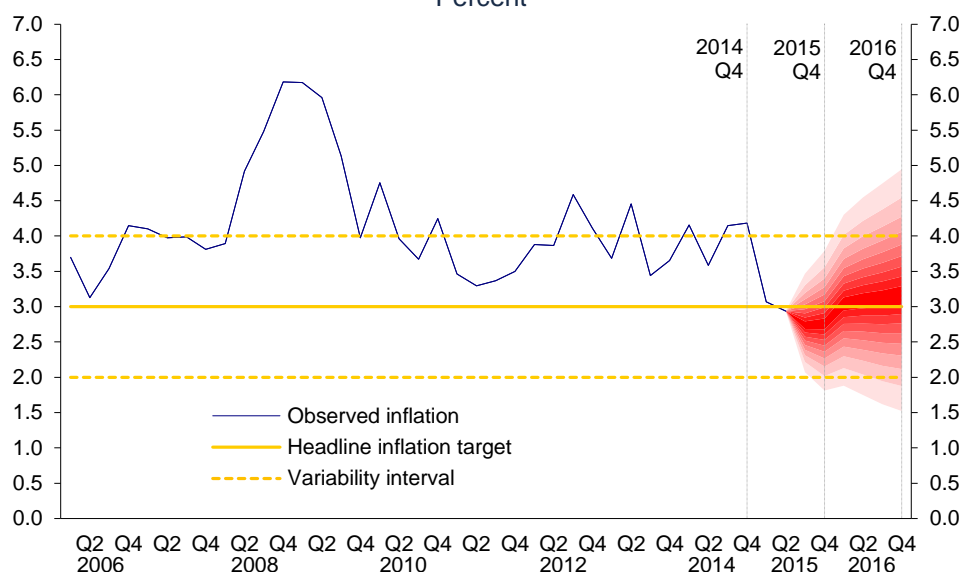
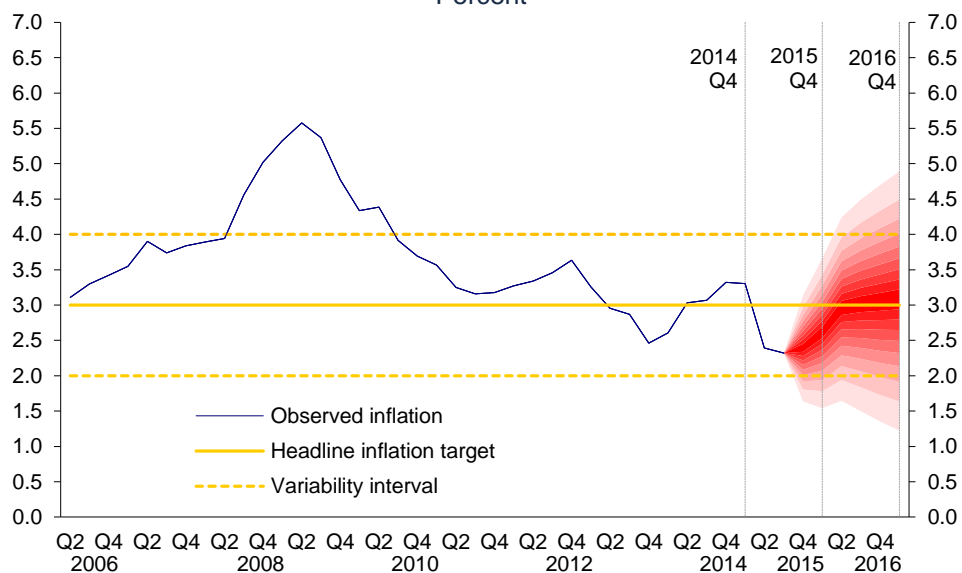


Chart 44
Fan Chart: Annual Core Inflation ^{1/}
 Percent



Considering the facts presented in this Report, in the future Banco de México's Board of Governors will continue to monitor the performance of all inflation determinants and its medium- and long-term expectations, in particular, the exchange rate performance, the monetary policy stance of Mexico relative to the U.S., as well as the evolution of the degree of slackness in the economy. All this in order to be able to take the necessary decisions in a flexible manner and whenever

conditions demand it in order to consolidate the convergence of inflation to the 3 percent target.

In the face of the complex international environment and the expectations that it will persist in the future, it is fundamental to strengthen the macroeconomic framework, which will contribute to maintain confidence in the Mexican economy. Therefore, in addition to the timely adjustment of the monetary policy stance, the structural strengthening of public finances is required, gaining more relevance in light of the important decrease of oil prices and oil production. Particularly, it is necessary that the public debt to GDP ratio stabilizes at levels which are sustainable in the medium and long run. Thus, it is fundamental to meet the fiscal consolidation targets announced by the Federal Government, as well as to back ongoing efforts to maintain sound public finances.

On the other hand, confidence in the Mexican economy should also be strengthened by means of higher growth rates in a sustainable manner. Hence, the country's productivity should expand at a greater rate, which in turn requires reaching clear progress in the implementation of structural reforms. Indeed, the correct implementation of educational, economic competition, telecommunication, energy and financial reforms is expected to lead to an incentive scheme which leads to productivity gains that are reflected in greater welfare for society in general. For instance, the competition policy, whose application to specific markets could generate lower prices and have an important effect on households' welfare, in particular, on low-income persons and/or those living in conditions of poverty (see Box 2).

Finally, international evidence and in particular the recent development of the political and economic crisis in Greece and the Euro zone have made clear that the strength of institutions is crucial in order to support the proper functioning of the economy. Thus, Mexico must make additional efforts aimed at strengthening institutions and the rule of law, since, for example, the lack of public security has negative effects on confidence, inhibits an efficient allocation of resources in the economy and hinders the growth of economic activity. To the extent that Mexico moves in this direction, it will be possible to trigger the potential of the Mexican economy to achieve faster economic growth in an environment of low inflation and financial stability.

Box 2 Price Dynamics, Welfare and Poverty

1. Introduction

A common finding about price dynamics of a numerous goods in Mexico is that, reductions in producer prices – which is the wholesale price of the good and whose transactions typically imply high volumes- are not necessarily reflected in consumer prices. In contrast, it seems to be the case that increments in producer prices typically lead to increases in the respective consumer prices. In this Box, this phenomenon will be called “upward asymmetry in the pass-through onto consumer prices”.

Over time, this pattern creates higher levels of consumer prices, which, in turn, imply higher inflation and affect households’ purchasing power. When this phenomenon is present in food items of basic consumption, it has important repercussions in the well-being of low income households, since they spend a greater share of their income on these goods. Thus, eliminating these upward asymmetries implies lower price levels, less inflation and higher welfare for society through increases in consumers’ purchasing power, as well as less people in food poverty.¹

This Box documents the presence of upward asymmetries in the pass-through onto consumer prices for a considerable number of goods of the Consumer Price Index (CPI) basket, particularly food items. Based on this analysis, households’ welfare gains, that could have been obtained if these positive asymmetries were not present during the period of 2006 – 2014, are explored. The results show that if during the referred period no upward asymmetries were observed in the pass-through to consumer prices: i) the price level of a large group of food items would have been lower, and thus, the annual CPI inflation would on average been 13 basis points lower each year; ii) the purchasing power of personal disposable income for urban households of the first income quintile would have been approximately 686 MXN higher in 2014; and iii) lower prices levels in food products would have meant a reduction of 5.1 percent in the cost of CONEVAL’s urban food basket, what would have implied approximately 1.7 million people less living in food poverty in urban areas in 2014 (11 percent of the urban population observed in that condition in the same year).

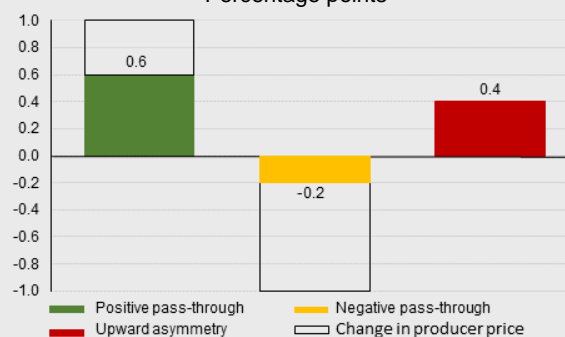
¹ In this Box, food poverty refers to the poverty calculated as the percentage of the population whose income is below the minimum welfare line, defined by the National Council for Evaluation of Social Development Policy (*Consejo Nacional de Evaluación de la Política de Desarrollo Social*). (CONEVAL, 2014).

The analysis consists of three parts. First, the presence of asymmetries for a large group of CPI food items is analyzed. Second, a counterfactual exercise is carried out to simulate the price dynamics between 2006 and 2014 of the goods, for which evidence of an upward asymmetry was found, assuming that this bias would not have been existed. Based on this exercise the counterfactual price indices are calculated and are used to quantify some of the benefits on households’ welfare. Third, examples are given about markets, where it could be interesting to analyze price dynamics in segments of the production chain, before commercialization.

2. Upward Asymmetries in the Price Pass-through

By concept, upward asymmetries for a hypothetic good are shown in Chart 1. The example shows the pass-through onto consumer prices, given a 1 percent change in producer prices.

Chart 1
Upward Asymmetries in the Price Pass-through
Percentage points



- **Positive Pass-through:** A 1 percent increase in producer price leads to a 0.6 percent increase in consumer prices (green bar).
- **Negative Pass-through:** A 1 percent decrease in producer price leads to a 0.2 percent decline in consumer prices (yellow bar).
- **Upward asymmetry:** Difference between positive and negative pass-through, 0.4 percentage points (red bar).

This pattern in prices imposes an upward bias in the price level over time, what eventually leads to higher inflation and, as shown below, negatively affects population’s well-being.

3. Identification of Food Items with Upward Asymmetries in Price Pass-through

The price series of 80 food items (food merchandise and agricultural products) are analyzed, belonging to the CPI as well as the Producer Price Index (PPI), because for these goods there are corresponding series defined in both indices. In total, the analyzed goods represent 18 percent of the CPI and 79.2 percent of the CPI food item group. To estimate the pass-through of producer to consumer prices a distributed-lag econometric model is used, which allows to estimate the referred bias using time series of monthly changes of CPI and PPI from 1996 to 2013.^{2, 3}

In the sample of goods studied, 41 food items are identified –representing 65 percent of the analyzed basket and 11.7 percent of the CPI– with statistical evidence of an upward bias of the pass-through onto consumer goods.⁴ Table 1 presents the estimates of the magnitude of the upward asymmetries for the 41 goods. Among them, the following goods stand out due to their upward asymmetries and their large weight in the CPI: beef meat, chicken, pork, eggs, milk, bread and soft-drinks.

4. Potential Effects of Eliminating Upward Asymmetries in the Pass-through onto Consumer Prices

In order to estimate the effects of the upward asymmetries on the pass-through onto consumer prices, counterfactual price indices are calculated, simulating their dynamics between 2006 and 2014, assuming the absence of these asymmetries in the 41 goods identified before. Intuitively, these counterfactual indices generate the price level that would have existed if the reductions in producer prices were passed to the consumer prices in the same magnitude as the price increases did, i.e., assuming an upward asymmetry of 0.0 For the rest of the goods and services of the CPI, the observed price indices are used.

² The used model is based on Peltzman (2000). The details of model specification are presented in Guerrero, Juárez, Kochen, Puigvert and Sámano (2015). Unit root test are applied for the series of each good for the study period. The results suggest that the series are stationary. Likewise, other tests of stationarity like Ng and Perron (2001) for the monthly changes of the price index of the analyzed goods in the study period suggest that the aggregate price indexes are stationary.

³ In order to avoid that the price increase based on the fiscal modifications that were introduced in 2014 bias the results of the asymmetries in the pass-through to consumer prices, the estimation is realized using data up to 2013.

⁴ The 39 analyzed goods for which no evidence of positive asymmetries, statistically different from zero, was found, are: edible vegetable oils and fats; avocado; canned tuna and sardines; dried chili; canned chiles, moles and sauces; soft drink concentrates; cream; peach; processed beans; biscuits; guava; ices; Ham; tomato; milk powder; lettuce and cabbage; butter; Corn dough and flour; melon; orange; other fruits; other legumes; other seafood; potatoes and other tubers; papaya; noodles, cucumber; fish; pineapple; bananas; fresh cheese; watermelon; green tomato; yogurt; mayonnaise and mustard; corn tortilla; other cheeses; Manchego cheese or Chihuahua; Asadero and Oaxaca cheese.

Table 1
Results of the Estimation of Upward Asymmetries in the Price Pass-through^{1/}

Good	CPI weight	Asymmetry
	Percent	Percentage points
Meat	4.43	
1 Beef	1.78	0.64
2 Chicken	1.32	0.27
3 Pork	0.69	0.21
4 Chorizosausage	0.45	0.40
5 Sausages	0.12	0.38
6 Dry meat and cold cuts	0.05	0.38
7 Bacon	0.02	0.38
Eggs, milk and dairy products	2.13	
8 Eggs	0.61	0.14
9 Pasteurized and fresh milk	1.43	0.56
10 Evaporated, condensed milk	0.06	0.68
11 American cheese	0.02	0.50
Soft-drinks and prepared water	1.69	
12 Bottled soft-drinks	1.09	2.53
13 Bottled water	0.40	0.33
14 Packaged juices or nectars	0.20	1.13
Fruit and vegetables	1.39	
15 Bean	0.28	0.48
16 Apple	0.23	0.42
17 Lemon	0.21	0.32
18 Onion	0.17	0.21
19 Zucchini	0.13	0.15
20 Other fresh chillies	0.09	0.22
21 Grape	0.07	1.37
22 Carrot	0.07	0.26
23 Nopal	0.07	0.12
24 Other dry legumes	0.06	0.30
25 Other canned fruit	0.02	0.46
Bread	1.08	
26 Pastry/Bakery	0.53	0.65
27 White bread	0.29	0.72
28 Sliced bread	0.20	0.56
29 Packed pastries, cakes	0.06	0.54
Cereal, cereal products and others	0.50	
30 Cereal flakes	0.21	0.69
31 Rice	0.15	0.52
32 Potato chips and similar	0.07	0.39
33 Wheat flour	0.03	0.67
34 Instant soups and tomato puree	0.02	1.80
35 Other condiments	0.02	5.59
Sugar and desserts	0.38	
36 Sugar	0.18	0.35
37 Instant coffee	0.12	1.20
38 Roasted coffee	0.03	0.43
39 Chocolate	0.05	1.18
Fish and seafood	0.12	
40 Shrimp	0.09	0.35
41 Canned fish and seafood	0.04	0.59

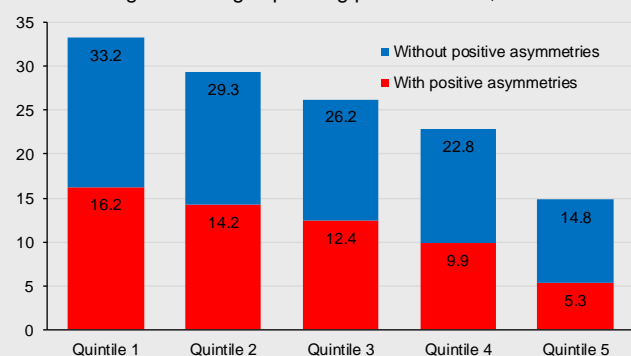
^{1/} Estimates of the highest accumulated upward asymmetry within three months of the producer price change is reported.

Source: Prepared with data from Banco de México and INEGI.

The period 2006 – 2014 is of special interest, because it is characterized by high volatility in domestic food prices, mainly driven by international food commodity prices. During episodes of high volatility, the presence of upward asymmetries has greater implications for price levels, as compared to low volatility periods. This is because price variations and the adverse effects of asymmetries on the price levels are more frequent. The counterfactual exercise yields the following results:

- i. **Effects on CPI.** If there had not been upward asymmetries in the 41 identified products in the period 2006 – 2014, annual CPI inflation would have been 13 basis points lower each year.
- ii. **Mixed Impacts on Population.** It is to be expected that the effects on food consumption, when eliminating the upward asymmetries in the pass-through onto prices, might potentially be larger for urban households of the lower income group. These households spend 33 percent of their total expenditure for food and almost half of the resources for goods identified with upward asymmetries (Chart 2). In contrast, households of the last income quintile spend almost 15 percent of the expenditure in food items, but only around a third part of this spending is for goods with upward asymmetries.

Chart 2
Share of Expenditure in Food Items for Urban Households
Percentage of average spending per household, 2006-2014 ^{1/}



^{1/} Percentages are calculated based on the adjusted quarterly expenditure of average household, by income quintile, using data from National Income and Expenditure surveys (ENIGH).

Source: Elaborated with data from INEGI.

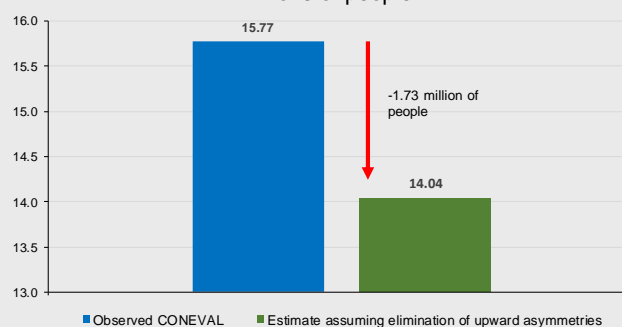
- iii. **Effects on Urban Households' Welfare.** Lower price levels of the 41 goods would have implied welfare gains through a higher purchasing power of their disposable income.⁵

⁵ Welfare gains were calculated as the difference between the equivalent variation calculated using observed prices vs. the one calculated using counterfactual prices, derived from the elimination of the upward asymmetries. The calculation of equivalent changes is based on the methodology described in Juárez (2015).

In particular, if during the period 2006 – 2014 the upward asymmetries of the identified food items were eliminated, the average household in the first income quintile would have increased its purchasing power of their disposable income by approximately 686 MXN in December 2014, which is equivalent to an increase of 1.6 percent of its total annual income.

- iv. **Effects on CONEVAL's Urban Food Basket.** If upward asymmetries of the identified food items were eliminated, the monthly cost of this urban food basket would have been 5.1 percent lower than that observed in August 2014, the most recent month at which poverty was measured.
- v. **Effects on Food Poverty.** The lower cost of the food basket, defined by CONEVAL, would have implied approximately 1.7 million people less living in food poverty, equivalent to 11 percent of the people living in that condition in 2014 (Chart 3).⁶

Chart 3
Change in Urban Food Poverty
in Absence of Asymmetries, 2014
Millions of people



Source: Elaborated with data from CONEVAL and INEGI.

5. Other Goods with Upward Asymmetry in Price Pass-through

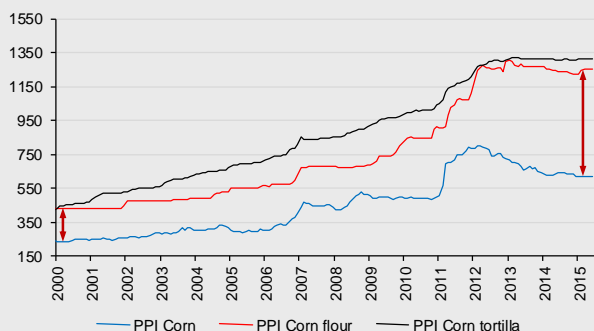
Two thirds of the expenditure of the households in the first income quintile goes to non-food items and services. Thus, if there were upward asymmetries in the consumer prices of these sectors, the potential welfare gains of eliminating these asymmetries would be even higher than those presented previously.

Additionally, it is possible that the upward asymmetries are not only present in the commercial sector (as estimated in the previous exercise), but also in other segments of the production chain.

⁶ It is important to mention that this exercise does not consider general equilibrium effects due to which, the results might present a slight upward bias. For example, it could be the case, given lower price levels that the increase in wages and/or government transfers would have been lower than observed, and thus, the reduction in the number of people living in poverty would have been slightly less than estimated.

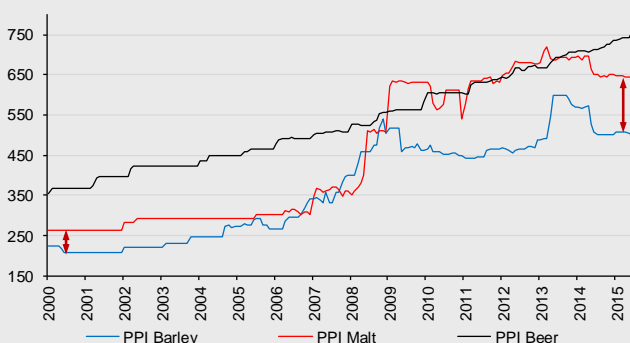
Particularly, it could be the case in the pass-through of inputs to producer prices. For example, Chart 4 shows that in the case of the corn-tortilla chain, the gap between some of the input prices and producer prices of corn flour has widened during the last 15 years. Moreover, since 2011, it is observed that the drop in corn prices has not led to lower corn flour or tortilla prices. A similar case is presented in the barley-beer chain. In Chart 5 it is shown that since 2009, the gap between barley and malt has widened, as in the case of beer prices.

Chart 4
Selected Prices of the Corn-Tortilla Chain
Index, Jan 1994=100



Source: Elaborated with data from INEGI.

Chart 5
Selected Prices in the Barley-Beer Chain
Index, Jan 1994=100



Source: Elaborated with data from INEGI.

6. Final Considerations

The results presented in this Box indicate that welfare gains derived from eliminating upward asymmetries in the pass-through onto consumer prices of some food items would be reflected via lower price levels and less inflation, which would favorably affect households' welfare, particularly that of the lower income group. Moreover,

these gains could be potentially larger as those calculated in this Box, as the analyzed price pattern could also prevail in other goods and services in the economy, as well as in different segments of the production chain.

The results show that the study of the factors that generate the upward asymmetries in the pass-through onto prices and the identification of effective ways to take action to eliminate these asymmetries is a step of fundamental importance in order to improve society's welfare. A factor that could cause that inadequate functioning of markets, for example, are the lack of market competition.

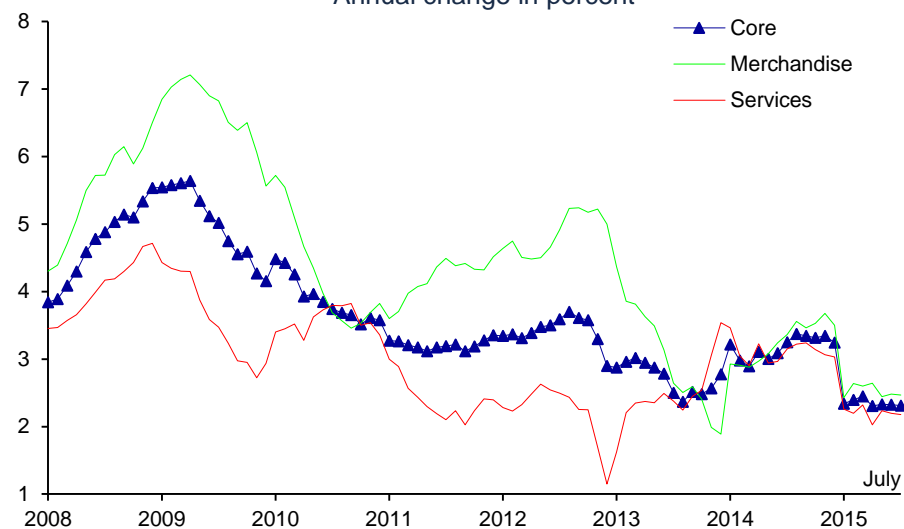
Indeed, international evidence has shown that there is a positive relation between the presence of upward asymmetries in the pass-through to consumer prices and the lack of market competition (Lloyd et al. 2006; Borenstein et al. 1997). In sum, a natural step to identify actions that would allow to eliminate these asymmetries in the pass-through onto consumer prices and thereby, to improve population's welfare consists in analyzing the conditions of competition in the markets for which evidence of an upward asymmetry was found.

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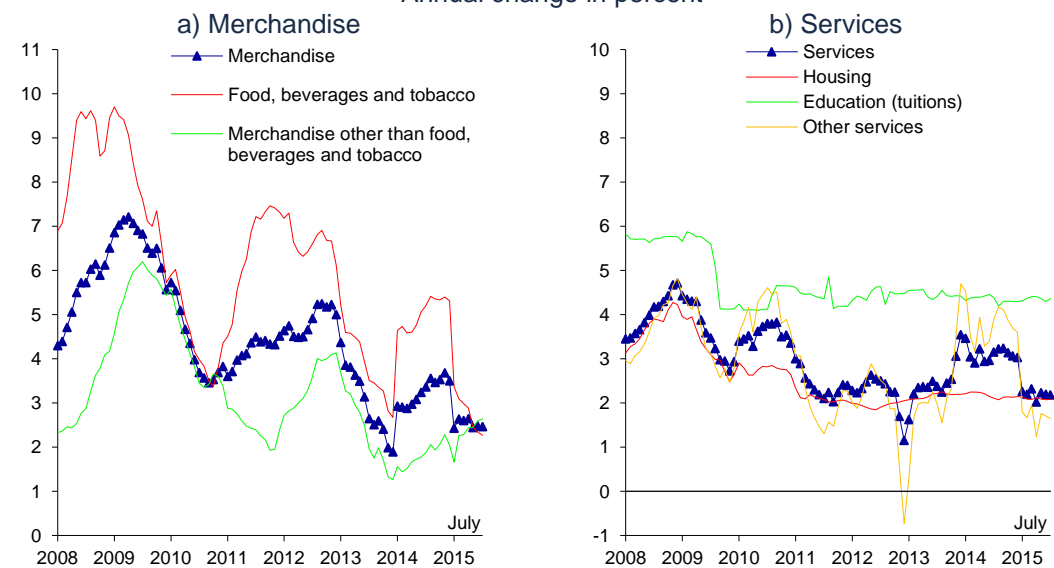
Annex 1: Complementary Charts of the Recent Development of Inflation

Chart A1
Core Price Index
Annual change in percent



Source: Banco de México and INEGI.

Chart A2
Core Price Index: Merchandise and Services
Annual change in percent



Source: Banco de México and INEGI.

Chart A3
Non-core Price Index
 Annual change in percent

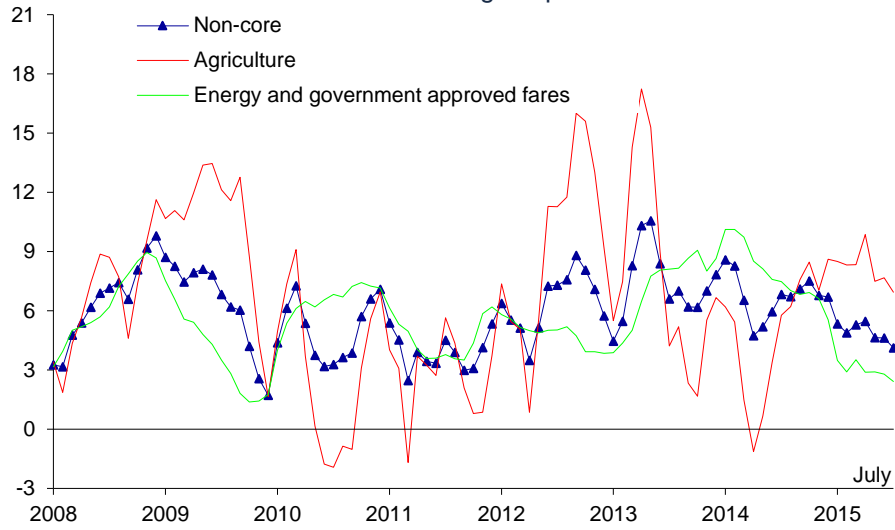


Chart A4
Non-core Price Index
 Annual change in percent

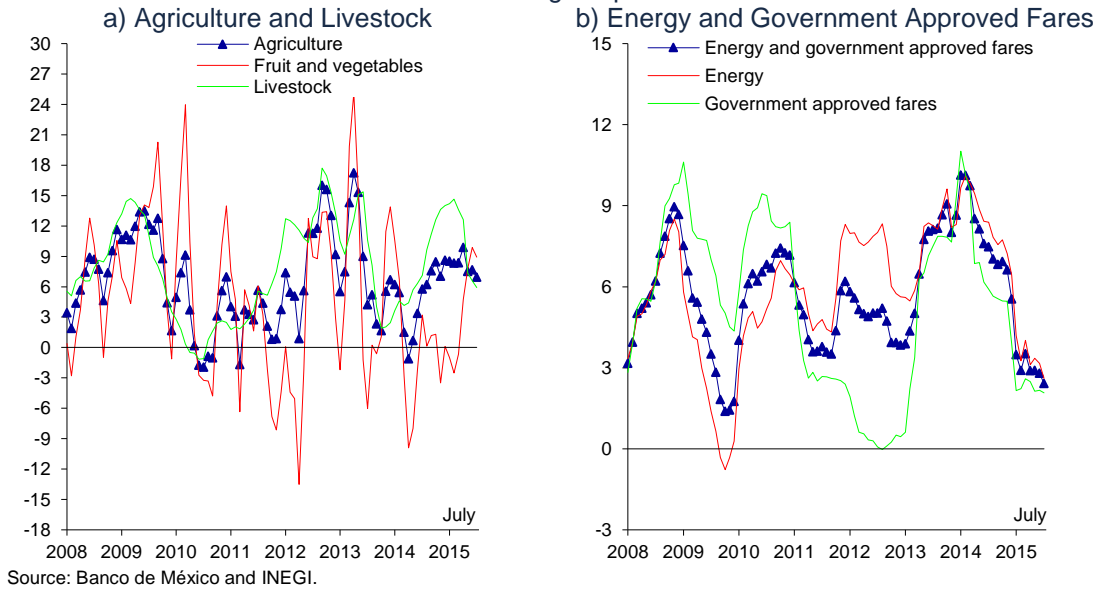


Chart A5
Agriculture and Livestock Price Index
 Annual change in percent

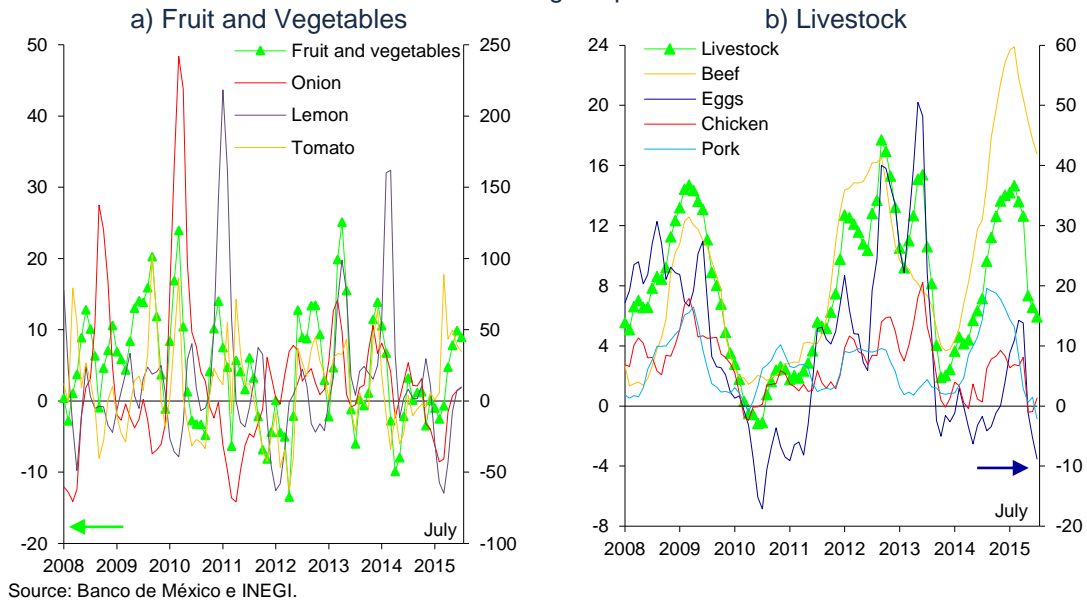
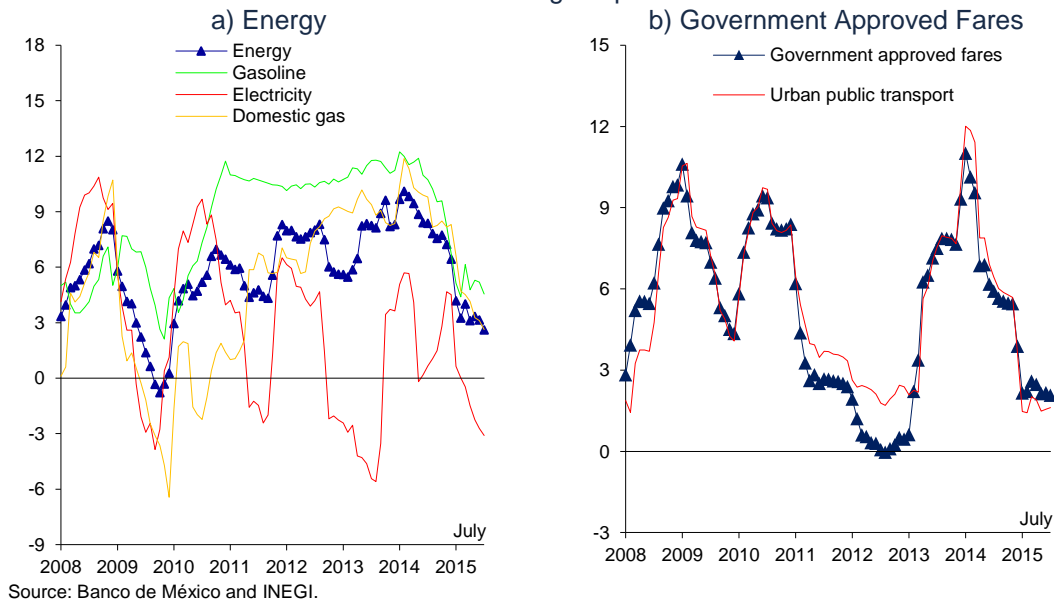


Chart A6
Energy and Government Approved Fares Price Index
 Annual change in percent





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