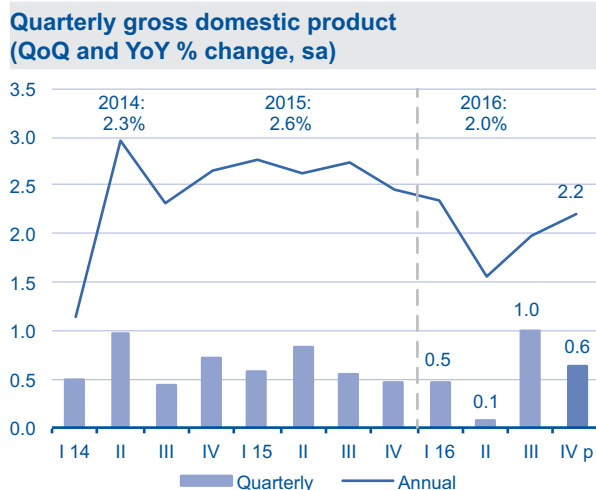


## 3. Growth in GDP of 1% in 2017 due to the expected international backdrop

### 3.1 Growth in GDP in 2017 will also be impacted by the expected weaker momentum in the main macroeconomic variables

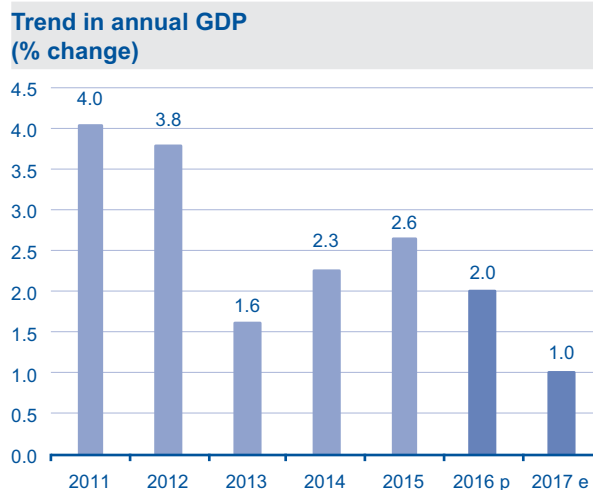
In 2015, annual growth in GDP was 2.6%, and according to the INEGI preliminary estimate, growth will be 2% in 2016. From the standpoint of the GDP time pattern, the more feeble tone in economic activity in 2016 was due to the weak performance of GDP in the second quarter of 2016 (2Q16). QoQ growth in GDP in this period was low at only 0.1% (Figure 1). This low growth rate was due to the quarterly contraction in total gross fixed investment (-0.5%) and the slump in exports (-2.1%), which was not offset by the fall in imports (-0.4%). Meanwhile, the rise in total consumption (0.4%) was not sufficient to offset the weaker performance of the macroeconomic variables, referred to above. In 3Q16, there was an improved performance in components of aggregate demand, and this is also expected to hold true, albeit to a lesser degree, in 4Q16, in order to achieve growth in GDP of 2% in 2016 (seasonally adjusted).

Figure 3.1



p= preliminary; sa = seasonally adjusted  
Source: BBVA Research with INEGI data

Figure 3.2



sa= seasonally adjusted; p = preliminary data; e = estimated data  
Source: BBVA Research with INEGI data

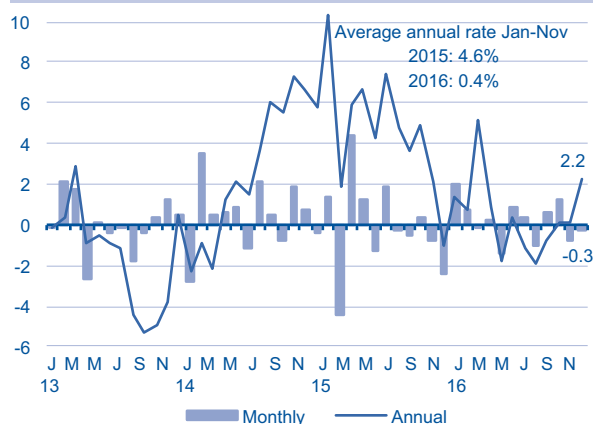
The cooling-off of GDP in 2016 also stems from the trend in the main components of GDP in aggregate demand from the standpoint of its annual performance based on the available data from January to November. For example, over the first 11 months of the year the performance of gross fixed capital formation was unimpressive; over that period of time the annual average growth rate was a mere 0.4%, while over the same period in 2015 it was 4.6% (Figure 3). One of the reasons for the lower growth in investment is that fact that in 2016

the public sector gross fixed investment component contracted and while private sector investment rose, it did so only moderately. The gross fixed investment component in machinery and imported equipment, meanwhile, was affected by the rise in the exchange rate. These factors all played a part in the low annual average rate of growth of only 0.4% in gross fixed investment.

Over the first eleven months of 2016, private consumption posted an annual average growth of 3.2%, better than the equivalent figure for 2015 (2.5%). Nonetheless, this more upbeat tone in consumption, in proportional terms, was outweighed by the impact of the slowdown in investment, and the outcome is that growth in GDP in 2016 was lower than in 2015.

Figure 3.3

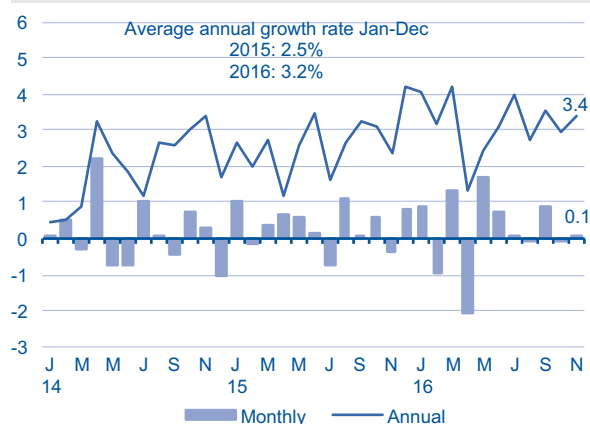
#### Gross fixed capital formation (QoQ, YoY % change, sa)



QoQ = "quarter-on-quarter" (quarterly growth rate); YoY = "year-on-year" (annual growth rate); P = preliminary. Source: BBVA Research with INEGI data

Figure 3.4

#### Private consumption (QoQ % change, sa)



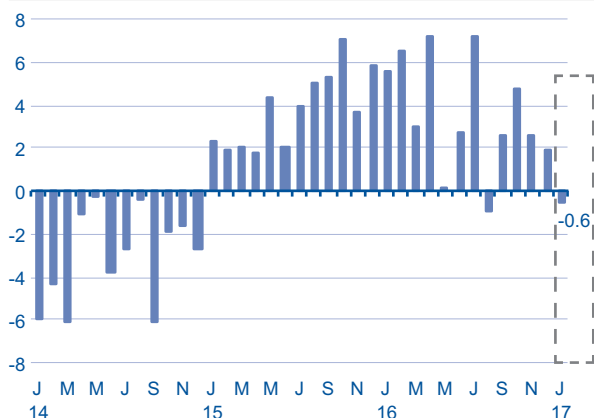
sa = seasonally adjusted; QoQ = "quarter-on-quarter" (quarterly growth rate). Source: BBVA Research with INEGI data

### 3.1.1 Expected growth for 2017 lower than in 2016

As we have said, GDP growth was lower in 2016 than in 2015. This can be explained by the trend in aggregate demand components. In 2017, we expect annual growth in GDP of 1%, still lower than in 2016.

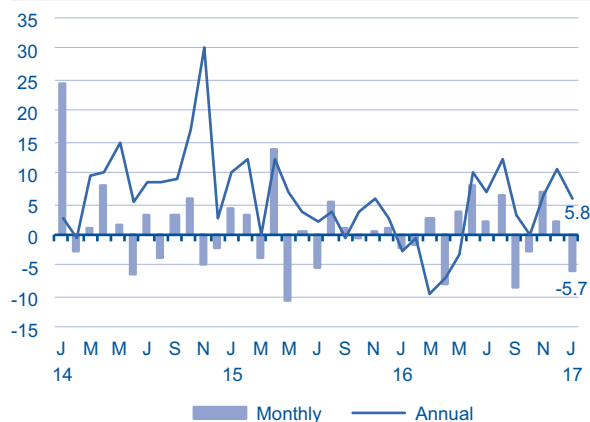
The annual real growth rate in the like-for-like store sales index of the members of the National Association of Self-Service and Department Stores (ANTAD, or Asociación Nacional de Tiendas de Autoservicio y Departamentales), which is one of the few economic activity data available in early 2017, also suggests that GDP in 2017 will be lower than in 2016. In January 2017, this growth rate was negative (-0.6%), and it is possibly already showing the effect of the higher inflation registered in the month over the purchasing power of real wages. This suggests that in 2017 private consumption will be more moderate than in 2016 (Figure 5).

Figure 3.5

**ANTAD like-for-like stores sales index**  
 (Real annual % change)


Source: BBVA Research with INEGI and ANTAD data

Figure 3.6

**Total vehicle production**  
 (MoM and YoY % change,sa)


sa = seasonally adjusted

Source: BBVA Research with AMIA data

Total vehicle production for January 2017 is another important indicator to be taken into account. Annual and monthly seasonally-adjusted growth rates in this series are 5.8% and -5.7% respectively in this month. As January's monthly growth rate is negative, this could also suggest that Mexico's economic activity in 2017 is less buoyant than it was in 2016.

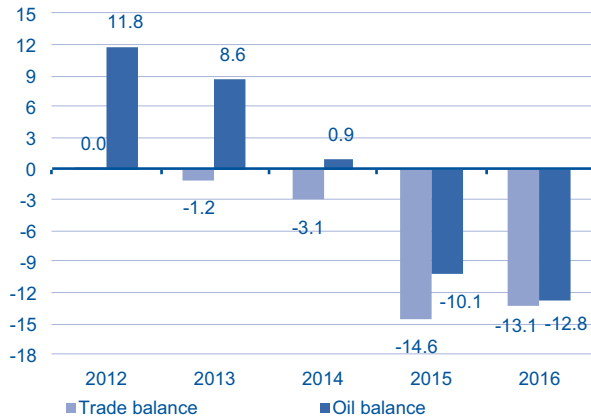
While the above points present the trend in Mexico's economic activity in January, they do not include the events in trade flows and in foreign direct investment (FDI) which could arise due to the new US President's statements and intentions about negotiating the Free Trade Agreement (FTA) between Mexico and the US. In other words, the issue of modifications to Mexico's commercial relationship with the United States is another factor which points towards lower growth in Mexico's economic activity in 2017 compared with 2016.

### 3.1.2 External Sector: in 2016, the deficit in balance of trade was lower than it was in 2015

In 2015, Mexico had a deficit in the balance of trade of US\$14.6 billion, while in 2016 it fell to US\$13.1 billion (Figure 7). It is important to note that exports and imports of goods are divided into oil and non-oil. In 2015, the total balance of trade deficit of US\$14.6 billion was due to a negative petroleum balance of US\$10.1 billion and a deficit of almost US\$4.5 billion in the balance of non-petroleum goods. In 2016, the balance of oil deficit burgeoned to US\$12.8 billion while the non-petroleum balance deficit fell to US\$0.3 billion.

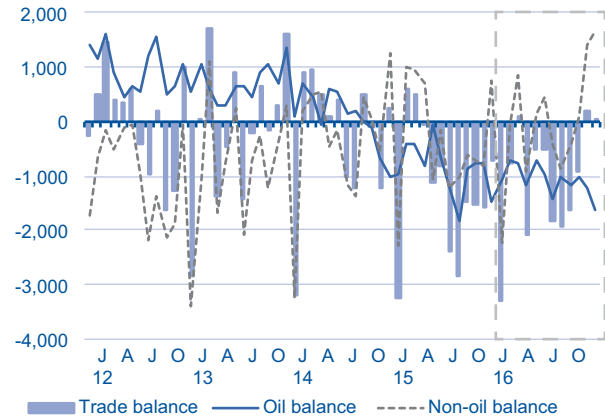
What these figures tell us is that the 2016 balance of trade deficit was due to the oil balance deficit. In 2015, the average price of a crude oil export barrel was US\$43, while in 2016 it fell to US\$35 (Figure 9). The fall in the export oil price became more pronounced from October 2015 on when it reached US\$37.5 per barrel, and by January 2016 it had gone as far down as US\$23.91. From February on, the trend recovered and it stood at US\$40 in June. In the second half of 2016, the average price of an export barrel was almost US\$40, and it rose to US\$45.51 in January 2017.

Figure 3.7

**Balance of trade and  
balance of trade in petroleum  
(US\$ billion)**


Source: BBVA Research with INEGI data

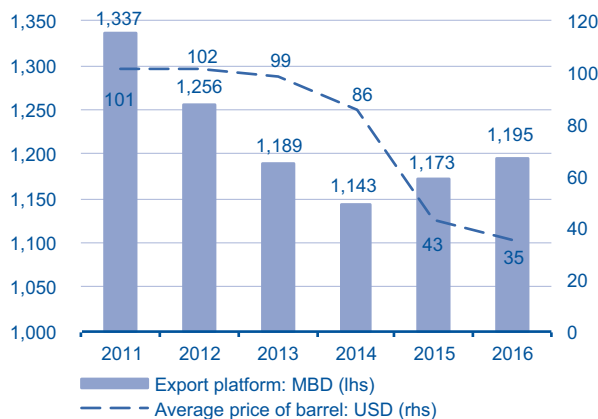
Figure 3.8

**Monthly balance of trade, of the petroleum and  
non-petroleum balance  
(US\$ billion)**


Source: BBVA Research with INEGI data

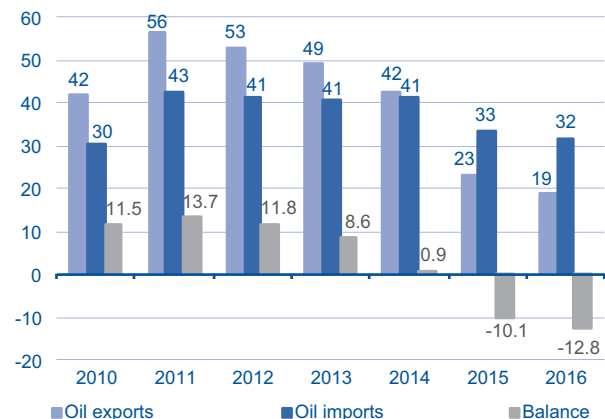
If the international oil market does not receive further pressures due to pronounced imbalances between crude oil supply and demand, then the price of a Mexican crude barrel for export might be expected to be in the region of US\$45. Such a price would indicate that 2017 would have a similar level of deficit in the oil balance to 2015, when the average price for a barrel of crude oil for export was US\$43 and the balance of trade deficit for oil was US\$10.1 billion.

Figure 3.9

**Oil exports  
(figures in US\$ billion and  
thousands of barrels per day)**


Source: BBVA Research with INEGI data

Figure 3.10

**Mexico's petroleum trade balance: petroleum  
exports – petroleum imports  
(US\$ billion)**


Source: BBVA Research with INEGI data

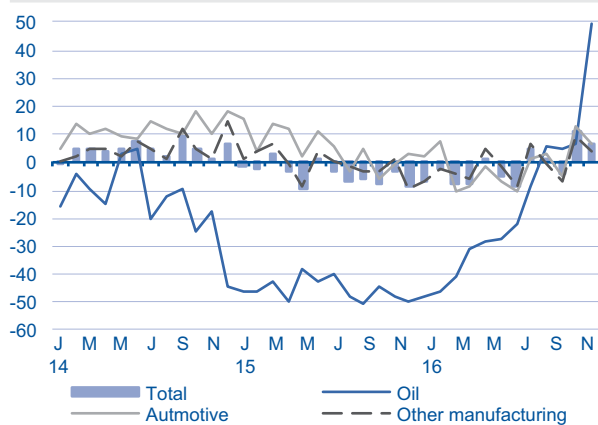
The petroleum balance deficit can largely be explained by growing petrol imports, which have happened for several years (figure 10) and the sharp fall in barrel of crude oil price from 2014 on (Figure 9). In view of these factors, as long as the current levels of petrol imports and export crude oil barrels of lower than US\$80 prevail, then Mexico will continue to have a petroleum trade balance deficit such as it has seen in recent years.

### 3.1.2.1 Exports of goods by type: lower deterioration in 2016 vs. 2015 partly due to a lower fall in petrol exports

In 2015, the slump in total goods exports was shown by a negative growth rate of 4.1%, a situation which was repeated in 2016 but to a lesser degree, as the negative growth rate was -1.8%. Another important difference between the export trends in 2015 and 2016 is that in 2015, non-petroleum exports reported slight annual growth of 0.8% (vehicles, 4.7%; other manufacturing exports, -1.1%), while in 2016 the annual growth rate of non-oil exports was -0.6% (vehicles, -1.0%, other manufacturing exports, -1.2%). In other words, in 2015, the vehicle sector made a positive contribution to the growth in exports, but this was not the case in 2016.

Figure 3.11

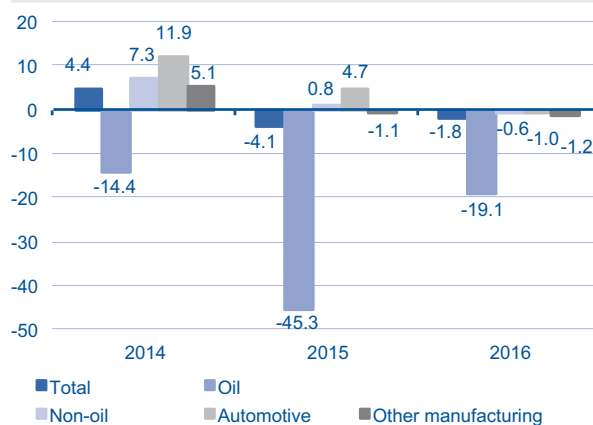
#### Monthly exports of goods by type (YoY % change)



Source: BBVA Research with INEGI data

Figure 3.12

#### Exports of goods by type (YoY % change)



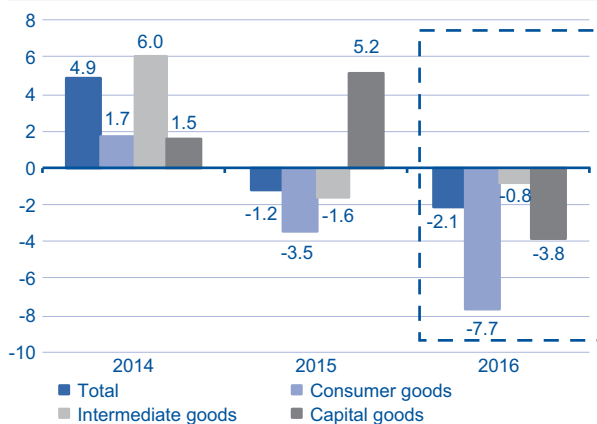
Source: BBVA Research with INEGI data

One of the main reasons for the modest performance in non-petroleum exports has to do with the trend in the US economy, bearing in mind that the target for around 80% of Mexico's non-petroleum exports is the United States. In 2016, annual growth in GDP of the US was 1.6%, and growth in US manufacturing production was close to zero. This feeble growth in GDP and virtually non-existent growth in the US manufacturing sector in 2016 impacted growth in non-petroleum exports in the same year.

### 3.1.2.2 Imports of goods by type: lower imports mirror lower exports

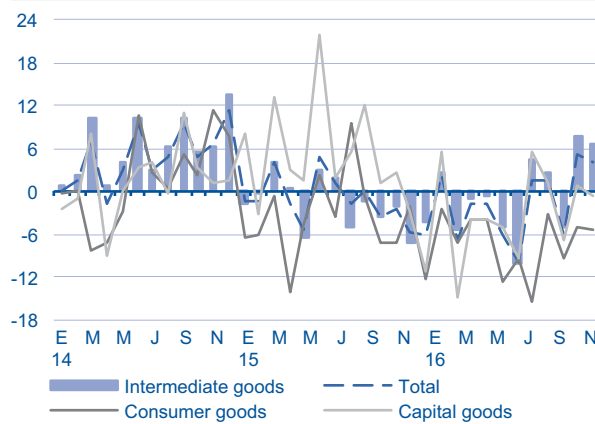
Just as with total goods exports, in 2016 total imports reported negative growth of -2.1%. This trend is because approximately 75% of these types of imports are of intermediate goods or of goods added to final goods which are later sold in the domestic market or are exported. So if exports do not grow, then imports of intermediate goods would not be expected to do so either.

Figure 3.13

**Annual imports of goods by type  
(YoY % change)**


Source: BBVA Research with INEGI data

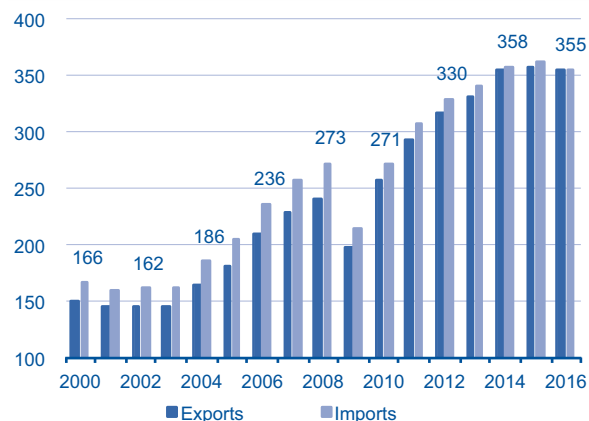
Figure 3.14

**Monthly imports of goods by type  
(YoY % change)**


Source: BBVA Research with INEGI data

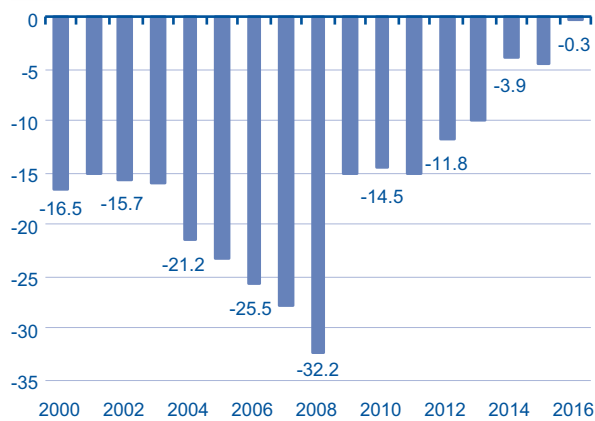
However, in 2016 all types of imported goods were down (Figure 13). The sharpest fall was in consumer goods (-7.7%), followed by imports of capital goods (-3.8%) and the imports of intermediate goods (-0.8%). The case of capital goods imports is interesting, because these type of foreign purchases are associated with gross fixed capital investment/ formation. So the reduction in capital goods imports impacts the reduction in investment volumes which can be entered in the investment in important machinery and equipment heading.

Figure 3.15

**Imports and exports of non-petroleum goods  
(US\$ billion)**


Source: BBVA Research with INEGI data

Figure 3.16

**Balance of trade in non-petroleum goods  
(US\$ billion)**


Source: BBVA Research with INEGI data

The trend in capital goods imports also reflects the overriding trend in gross fixed capital formation; if the latter is not very buoyant, then capital goods imports will be expected to perform similarly. This is an important point because, as we have said, the average annual rate of growth in the gross fixed capital formation index from January to November 2016 was 0.4%. The lack of drive in investment in 2016 also explains why capital goods imports reported a negative growth rate in that year.

### 3.1.2.3 Balance of trade: the deficit in the petroleum trade balance is the current source of external imbalances

As we have said, in 2016 the balance of trade for non-petroleum goods was only US\$0.3 billion (Figure 16). The non-petroleum balance of trade ran large deficits from 2000 to 2013: higher than US\$10 billion, and in 2008 it spiked at US\$32.2 billion. To a large degree, during this period the adverse effect of the trade balance deficit was mitigated or offset by the surplus in the petroleum trade balance.

For example, the petroleum trade balance surplus hit US\$11.5 billion in 2010, and played an important role in offsetting the deficit of US\$14.5 billion that year in the non-petroleum trade balance. In 2016, however, Mexico reported a substantial petroleum trade deficit of US\$12.1 billion, which could not be offset by a large surplus in the non-petroleum trade balance. Not having such a large surplus in the non-petroleum trade balance leads to persistent weakness in the petroleum balance.

The Mexican economy is unlikely to generate a surplus in the non-petroleum trade balance within a relatively short space of time. Hence, it is important to consider the deficit in the petroleum trade balance to be a structural weakness of the Mexican economy, one that not only affects the currency market, but also becomes a heavy burden for Mexico's economy. Hence, in order to improve its external accounts, Mexico needs to improve the petroleum and non-petroleum balances of trade in order to scale down large deficits which have negative impacts on economic activity.

### 3.1.3 Recent trends in formal employment in the private sector (IMSS, Social Security) and in average real wages

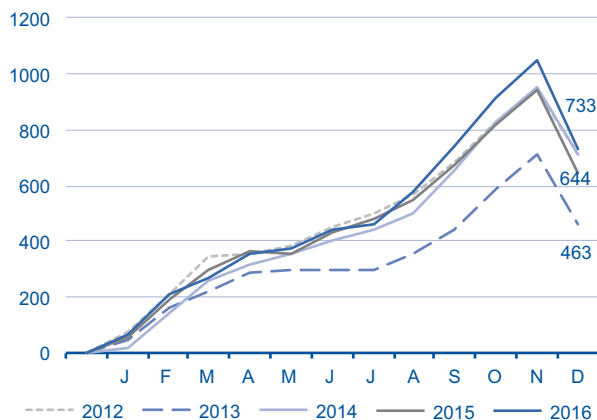
The trend in the number of employees registered in the Mexican Social Security Institute (IMSS) was positive in 2016, with a total of almost 733,000 workers (Figure 17). This figure was higher than in 2015 (644,000) or 2014 (714,000). Since the second half of 2013, the growth in formal employment in the private sector as seen in the rise in the number of workers registered in the IMSS has no longer been closely tied to the pattern of economic activity or with the Global Economic Activity Index (IGAE) (Figure 18).

This is because of the Formal Employment Programme (PFE), which began to operate in July 2013. This programme is aimed at registering any workers in companies who were not registered with the IMSS. It was designed by the Mexican labour authorities in order to address the situation in the first half of 2013, in light of the substantially falls in growth in monthly employment in the IMSS, a sign of a sharp slowdown in economic activity. For example, in June 2012 the monthly increase in the number of registered workers in the IMSS was 75,274 and in June 2013, the number dropped significantly to a mere 2,519 people.

The PFE initially showed good results in its first 24 months, achieving year-on-year increases in registered workers of 463,000 in December 2013 and of 746,000 in June 2015. After that, however, the PFE's results were more modest. The authorities relaunched the programme in May 2016, and it has showed good results even in January 2017, when the year-on-year increase in the number of workers registered in the IMSS was almost 747,000 (Figure 19).

Figure 3.17

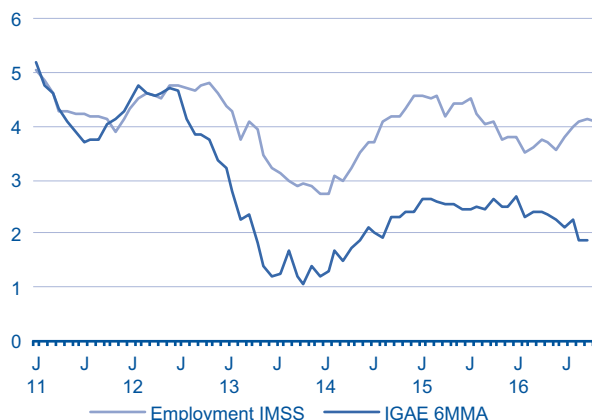
**Increase in total workers registered with the Mexican Institute of Social Security in 12 months (thousands of people)**



Source: BBVA Research with INEGI data

Figure 3.18

**Annual rate of growth in employment IMSS and IGAE 6MMA (% change YoY)**



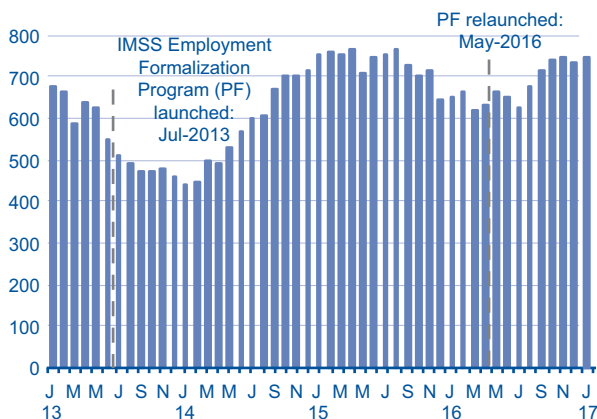
6MMA = 6 month moving average

Source: BBVA Research with INEGI and STPS data

As we have said above, one important consequence of the PFE has been that the IMSS rate of growth in formal employment is higher than the rate of growth in the Global Economic Activity Index (IGAE). So, the growth in the number of employees registered in the IMSS was made to depend on two factors: i) the growth in the Global Economic Activity Index, and ii) the progress made by labour authorities within the framework of the PFE by continuing to apply the programme. It is now estimated that two thirds of the IMSS formal employment stems from the PFE and only one third from the higher economic activity.

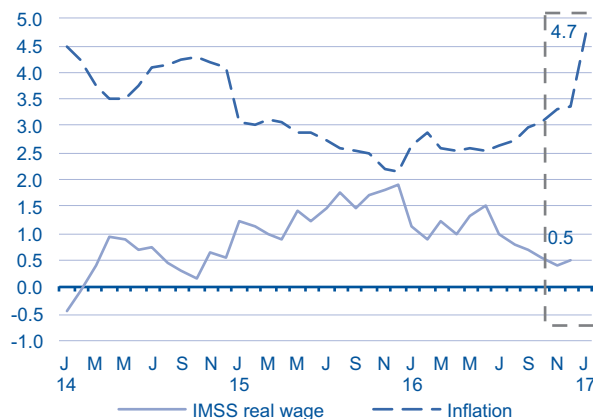
Taking these points into account, it would be expected that when the PFE is no longer applied the IMSS formal employment growth rate will fall and will once again be similar to that in GDP. In 2016, for example, GDP rose 2.3% and IMSS formal employment did so by 3.8%. When the PFE is withdrawn, the IMSS formal employment growth rate will slide back to a level close to that of GDP, approximately 2%, which implies that the PFE really has a temporary and not a permanent effect, while it also depends on the type of policy and the inspections which the Mexican labour authorities decide to carry out in companies.

Figure 3.19

**Increase in the total number of people registered with the IMSS in 12 months (thousands of people)**

Source: BBVA Research with INEGI data

Figure 3.20

**Inflation and average real wages of the IMSS (YoY % change)**

Source: BBVA Research with INEGI and STPS data

Since 2015, the average real wages of workers registered in the Mexican Institute of Social Security reported annual growth in real terms until December 2015, when it stood at 1.9%. It then began to fall and by December 2016 it had reached 0.5%. The positive trend in average real wages of the IMSS was due to the fall in inflation (Figure 20). From December 2016 to January 2017, inflation rose substantially from 3.4% to 4.7% respectively. This increase in inflation is so substantial that the average real wage of the IMSS is expected to show a negative growth rate in early 2017; and assuming that no positive event occurs which could significantly push down inflation over the course of the year, real wages at the end of 2017 will show negative growth.

The fall we are expecting in 2017 in the average real wage of the Mexican Institute of Social Security will also impact the trend in private consumption. We have already discussed the fact that the annual real growth in the like-for-like stores ANTAD indicator was negative (-0.6%) in January due to the possible effect of higher inflation on purchasing power from wages. This is because the higher real wages registered in 2015 and 2016 was a factor which fuelled growth in this variable, and thus also in GDP, and if this is less apparent in 2017 there will be lower growth first in consumption and then in GDP.

### 3.1.4 Public finances: tax revenues further sustained the increase in total budget revenue in the public sector in 2016, while higher financial investment and non-programmable spending drove total public spending

Total public sector budget revenue reported real annual growth of 10.3% in 2016. Importantly, this year-on-year comparison includes the amount of MXN 239.1 billion from the Bank of Mexico operational surplus. If we were to exclude this component from the budgetary revenues, the real rate of growth would be 4.9%.

If we break down total budgetary revenues into components, non-tax income (including the federal government's petroleum revenue) reported real annual growth of 1.0% in 2016. Excluding the Bank of Mexico's operating surplus would imply a decline of 27.4% in this component in real annual terms. There was a 11.9% real annual increase in tax revenues in 2016. This included a 13.5% real annual increase in income tax in the period (23.5% in 2015). With this annual increase in income tax, and given its 51.6% share of total taxes in 2015, income tax contributed around 58% to the real annual growth in tax revenues.

VAT is another major component of tax revenues, accounting for 29.1% in 2016. VAT grew at a real annualised rate of 8.9% in 2016, comparing favourably to the 3.2% annualised growth in 2015.

Public sector oil revenues accounted for 16.3% of total budget revenues in 2016 (19.8% during the same period in 2015). It is important to note that this revenue item fell in annual terms, with a real growth rate of -9.0% in 2016.

Table 3.1

**Total public sector budgetary revenues from January to December (Billions of pesos)**

	2015	2016	Real % chge.	% struc.
<b>Total</b>	<b>4,267.0</b>	<b>4,840.9</b>	<b>10.3</b>	<b>100.0</b>
Federal Government	3,180.1	3,566.2	9.1	73.7
Tax	2,361.2	2,716.0	11.9	56.1
Income Tax	1,217.3	1,420.3	13.5	29.3
VAT	707.2	791.7	8.9	16.4
Non-tax	818.8	850.3	1.0	17.6
Agencies & companies	314.1	328.9	1.8	6.8
Gvmnt. productive co.	772.8	945.8	19.0	19.5
Pemex	429.0	481.5	9.1	9.9
CFE	343.8	464.3	31.4	9.6
<b>Total</b>	<b>4,267.0</b>	<b>4,840.9</b>	<b>10.3</b>	<b>100.0</b>
Oil revenue	843.4	789.6	-9.0	16.3
Non-oil revenue	3,423.6	4,051.3	15.1	83.7

Source: BBVA Research with Finance Ministry (SHCP) data

Table 3.2

**Net public sector spending in January to December (Billions of pesos)**

	2015	2016	Var. % real	Estr. %
<b>Total</b>	<b>4,892.9</b>	<b>5,343.8</b>	<b>6.2</b>	<b>100.0</b>
Projected expenditure	3,826.6	4,160.4	5.7	77.9
Current expenditure	2,890.6	2,978.1	0.2	55.7
Capital expenditure	936.0	1,182.3	22.8	22.1
Non-projected expen.	1,066.3	1,183.4	7.9	22.1
Investments in states	629.1	693.7	7.2	13.0
Borrowing cost	408.3	473.0	12.7	8.9
Adefas* and other	28.9	16.6	-43.9	0.3

Adefas: Liabilities carried over from previous years.

Source: BBVA Research with Finance Ministry data

Net public sector spending increased by 6.2% in 2016 (real annual rate/annualised). This was mainly due to the programmable spending item (accounting for 78.2% of total net public sector spending in 2015), with real annualised growth of 5.7% in 2016. Capital expenditure, within programmable expenses, reported a real annual change of 22.8%, driven by financial investment which consisted of: i) equity contributions to Pemex and CFE of MXN 160.7 billion and MXN 161.1 billion, respectively; and ii) MXN 70 billion of contributions to the Budgetary Revenue Stabilisation Fund with funds from the Bank of Mexico's operational surplus. Current expenditure rose 0.2% in real annual terms.

Although total public sector net expenditure increased by 6.2% in real terms in 2016, a large part of this increase is due to the federal government's equity contributions to Pemex and CFE. These contributions form part of the financial investment item, which in traditionally economic terms cannot be considered to be an expense. If we omit financial investment from total net expenditure, the calculations show growth of 0.6% in real terms. In other words, even without taking financial investment into account, public spending increased in real annualised terms in 2016.

Importantly, the public accounts came under further pressure from participations granted to federal entities, public pensions and the financial cost of public debt in 2016. Our own calculations show that without financial investment and federal participations, other expenses were kept in check, with a real reduction of 0.5% in 2016. And if we omit the public pensions and financial cost of public debt, then the fall in expenditure is even more significant, with a reduction of around 3.7% in real annualised terms.

The real annualised reductions in these more limited items of spending show the federal government's efforts to have some measure of financial discipline in the items which are more directly under its control. These efforts do not appear to have been enough in 2016, however, given the real annual increase in total net spending without financial investment. The federal government will have to step up its efforts to rein in spending in 2017 so as to reach its primary surplus targets and to stabilise public debt as a percentage of GDP from that year on.

Table 3.3

Public spending indicators (Billions of pesos)				
	2015	2016		
	Nominal	Nominal	Real	Var. % real
<b>Total net expenditures</b>	<b>4,892.9</b>	<b>5,343.8</b>	<b>5,197.1</b>	<b>6.2</b>
Without financial investment	4,729.4	4,889.8	4,755.6	0.6
Without financial investment and participations	4,100.3	4,196.1	4,081.0	-0.5
Without financial investment, participations and pensions	3,511.7	3,547.5	3,450.1	-1.8
Without financial investment, participations, pensions and financial cost	3,103.4	3,074.4	2,990.1	-3.7

Source: BBVA Research with Finance Ministry data

Table 3.4

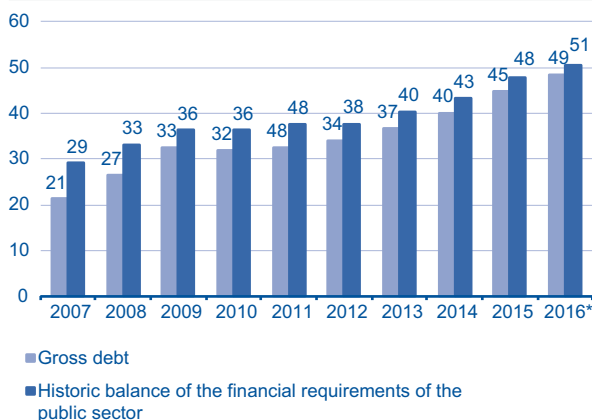
Financial situation of the public sector January to December (Billions of pesos)			
	2015	2016	Var. % real
Public Balance	-637.7	-503.7	-23.2
Pub. Bal. w/o Prod. investmnt.	-181.6	-18.7	-90.0
Budget Balance	-625.9	-502.9	-21.9
Budget Revenue	4,267.0	4,840.9	10.3
Net Budget Expenditure	4,892.9	5,343.8	6.2
Federal Govnmt. Balance	-549.0	-609.0	7.9
Agencies & Co. Balance	-76.9	106.1	n.s.
Primary Balance	-218.5	-24.0	-89.3
Budget Balance	-217.6	-29.8	-86.7
Federal Government	-226.8	-238.9	2.4
Agencies & Companies	9.2	209.1	2,109.6
Pemex	-74.4	-15.1	-80.3
Other institutions	83.6	224.1	160.7
Indirectly-controlled institut.	-0.9	5.8	n.s.

n.s. = not significant

Source: BBVA Research with Finance Ministry data

Although the public sector primary balance was still negative in 2016, the primary deficit was MXN 24 billion vs. MXN 218.5 billion in 2015. The fact that this deficit was reduced in 2016 was largely due to agencies and companies, in particular the positive contributions to the CFE primary balance. This government production company reported a positive balance of MXN 176.7 billion. It will be crucial to keep a tighter rein on the government's production companies and the federal government's finances in order to meet the target of a primary surplus of 0.4% of GDP for the entire public sector in 2017.

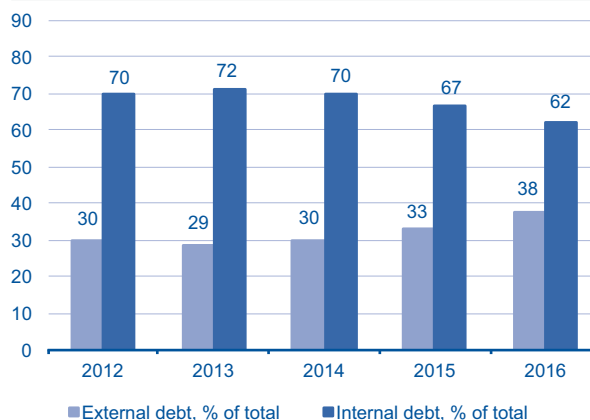
Figure 3.21

**Gross debt and public sector financing requirement\* (as % of GDP)**

\* The public sector financing requirement was calculated using average quarterly GDP for the year, considering the preliminary GDP data for the fourth quarter.

Source: BBVA Research with Finance Ministry data

Figure 3.22

**Percentage structure of internal and external public sector debt (% of the total debt)**

Source: BBVA Research with Finance Ministry data

Gross public debt stood at 49.1% of GDP at the close of 2016. This is 4.4 percentage points higher than at the end of 2015. The peso's depreciation in 2016 is a factor that largely explains this increase in the level of public debt as a proportion of GDP. This situation is also reflected in the larger share of external public debt in total public debt, which rose from 33.1% at year-end 2015 to 37.8% at the end of 2016.

In the fourth quarter of 2016, the public sector financing requirement was 22 percentage points of GDP higher than its level in 2007. For the ratio of public sector financing requirements to GDP to begin to fall, the public sector net cash requirement as a percentage of GDP has to be less than real annualised GDP growth. Importantly, the annual deficit in the public sector net cash requirement fell to 2.9% of GDP in 2016 (from 4.1% of GDP in 2015). For 2017 and 2018, the Ministry of Finance expects this indicator to be at 2.9% and 2.5%, respectively.

Our own and Ministry of Finance calculations show that the public sector financing requirement stood at 50.5% of GDP at the close of last year. This is in line with the Ministry of Finance's forecast published in the 2017 General Economic Policy Criteria. Thus, the balance shows a downward trend from 2017 onwards; assuming a 2.9% annual deficit for the public sector net cash requirement and considering a GDP deflator of 3.3%, the Mexican economy would have to grow by at least 3.0% this year. However, our forecast for 2017 puts GDP growth at 1.0%. If our forecast proves correct, the public sector financing requirement as a percentage of GDP would be 51.4%.

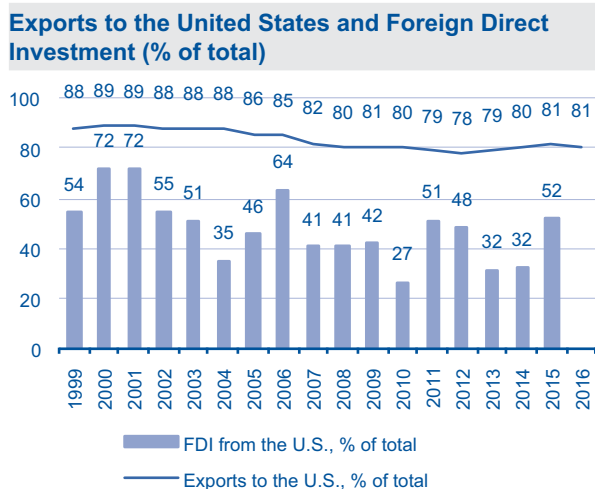
### 3.1.5 Outlook for the Mexican economy in 2017

The 1% expected growth in GDP in 2017 is based on a number of different factors, including the complicated external setting which Mexico is expected to face over the course of the year, as a result of the new economic and trade policies announced by the new US administration and other causes. One of the core measures adopted by the US administration will be to renegotiate the Free Trade Agreement (FTA) between it and Mexico, and another is the possible introduction of a border tax on imports entering the US. Either of these measures, or both of them, could affect the country's exports, which would impact GDP.

Regardless of how the FTA renegotiation would be conducted, revising and modifying the FTA introduces factors of uncertainty not only for trade flows between the two countries but also with regard to foreign direct investment. United States is Mexico's main trade partner, and between 1999 and 2015 almost 50% of foreign direct investment was from the US (Figure 21). Renegotiating the FTA might discourage and even halt FDI channelled into Mexico which might be channelled into Mexico in order to take advantage of the FTA's benefits until it becomes more clear what effects the renegotiation of the Agreement will have.

Taking these points into account, the lower FDI which takes place through the FTA renegotiation process, coupled with the less buoyant mood in consumption and lower activity, as is apparent in the real annualised growth data at January 2017 in the ANTAD like-for-like sales index and the contraction in the monthly total vehicle production rate, are factors which suggest that 1% growth in GDP this year is highly likely. If the external setting were to improve and the FTA renegotiation had positive and significant effects on trade flows and associated FDI, then it would be more reasonable to expect higher growth in Mexico's GDP in 2017.

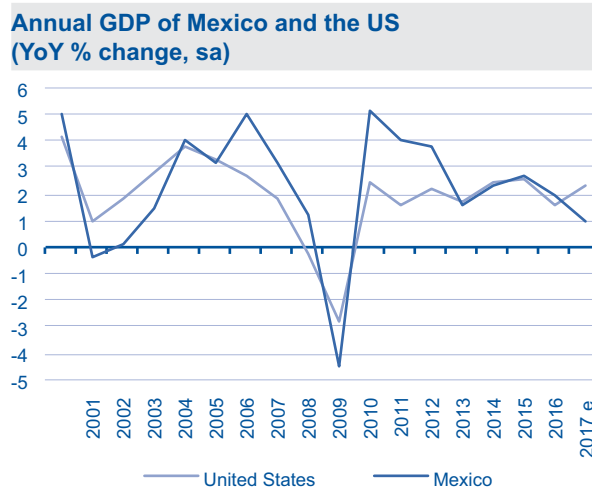
Figure 3.23



Note: FDI for 2016 is not available

Source: BBVA Research with INEGI data

Figure 3.24



sa = seasonally adjusted. YoY = year on year: e = estimated

Source: BBVA Research with INEGI and BEA data

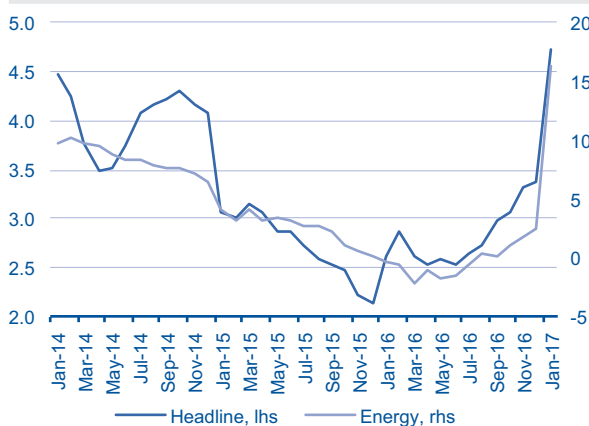
### 3.2 Rebound in inflation due to higher pass-through rate and increased energy prices

Annual headline inflation remained low and stable over the first two years (2015-2016), with an average of 2.8% (2.7% in 2015 and 2.8% in 2016) and was slightly above 3.0% in only two quarters over this two-year period (1Q15 when it averaged 3.1% and 4Q16, 3.2%). In January 2017, however, it rebounded sharply, as we expected, due mainly to the higher rate of pass-through and the hefty rise in energy prices (gasoline and LP gas), but also as the result of an arithmetical effect given an unfavourable base for comparison (i.e. inflation in January 2016 had an MoM contraction of 0.09%). Having remained below the permanent target of 3.0% during 17 successive months, and with a trend of gradual growth in the second half of 2016, it rebounded by 1.36% in January 2017, after the annual rate of 3.36% in December 2016 rose to 4.72% in January 2017 having reported a monthly rise of 1.7%.

The sharp increase in January 2017 is the result of the 12.7% increase in the energy prices component (see Figure x) which had a monthly impact of 1.2 pp on headline inflation and the significant increase of 0.93% MoM in goods (see Figure x) in a month which is seasonally strong for this sub-index due to the winter markdowns season. The effect of the first increase, in energy prices, could be temporary taking into account that the government has decided not to increase gasoline prices thus far in February, and also given that the peso's appreciation by roughly 8% over the last month was not expected and has prompted a fall in import prices. The gasoline benchmark price has shown a positive trend over the last month and the government decided not to reflect an increase in the first half of February, stating that this was possible at a moderate fiscal cost. Looking ahead, if the exchange rate kept at more moderate levels, then the increases following the liberalisation of prices by regions should be gradual and we will not see such sharp increases as we did in January.

Figure 3.25

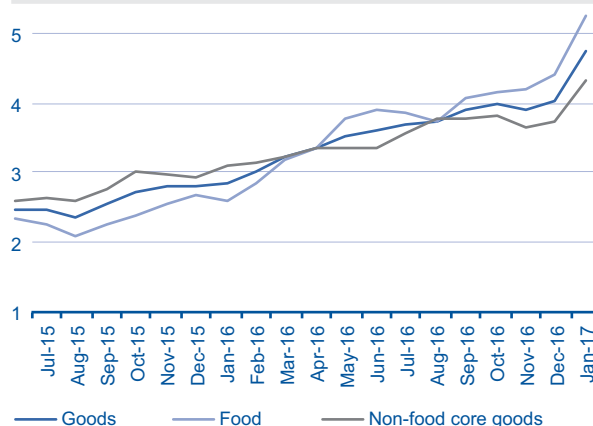
#### Headline inflation and energy prices (YoY % change)



Source: BBVA Research with INEGI data

Figure 3.26

#### Goods and components inflation (YoY % change)



Source: BBVA Research with INEGI data

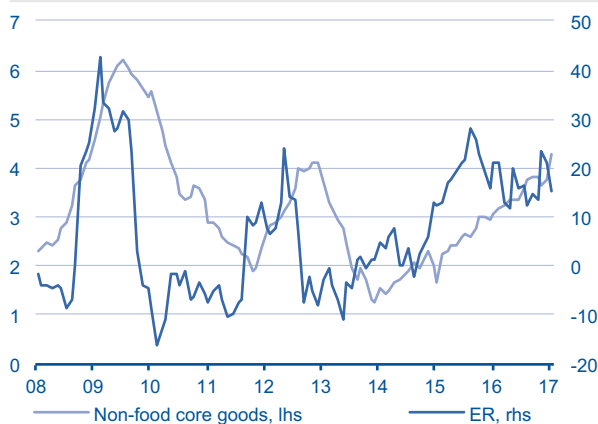
The effect of the second increase, in goods, is more relevant for the trend in inflation. As shown in Figure x, the increased slope in the core inflation trend for goods and that of its components suggests that, as we had envisioned, the pass-through rate increased in the early part of the year. This situation was foreseeable not only because of the additional depreciation of the peso in the wake of the US election but also because despite the economic slack and the related companies' lower pricing power, we expected that it would be difficult

to keep absorbing the increase in costs through lower margins. Another factor which contributed towards the higher rate of pass-through to prices was surely the sharp rise in energy prices, particularly gasoline. We believe that there is still further room for passing through the exchange rate to goods prices. The higher rate of pass-through in 2017 was driven not only by the peso's level of depreciation but the currency's persistent weakness. As shown in Figure x, the current bout of weakness is unlike the two previous periods of peso weakness (2008-2009 and 2011-2012) in that it has lasted from 4Q14 up to the present point, i.e. the others were brief and quickly faded while the latest one has gone on for over two years. Even if the exchange rate were to remain at its current level until year end or even strengthened to some degree, the annual depreciation rate will be positive at least until November 2017. As shown in Figure x, the annual peso depreciation rate has been higher than 10% for 26 successive months (from December 2014 to January 2017), with an average of 18% over the entire period.

The factors that have enabled a favourable performance in inflation include the credibility of the monetary policy applied by the Bank of Mexico (Banxico), slack in the economy and falls in some prices, prompting an effect to offset the pass-through effect from the exchange rate to inflation. With regard to the latter factor, this was firstly influenced by lower prices for telecommunication services. These were mainly the result of reforms to the sector, which eliminated some charges (e.g. long distance) but also triggered stronger competition in the sector, leading to lower consumer prices. Consequently, the pass-through effect only entailed a change in goods prices, and the lack of knock-on effects was evident both in the trend in services prices and in headline inflation. Thus, what was observed was a change in relative prices –with an upward trend in the underlying component of goods deriving mainly from increased costs due to the depreciation of the peso (MXN) – and a low pass-through effect to general inflation, deriving mainly from the absence of the aforementioned knock-on effects (see Figure x).

Figure 3.27

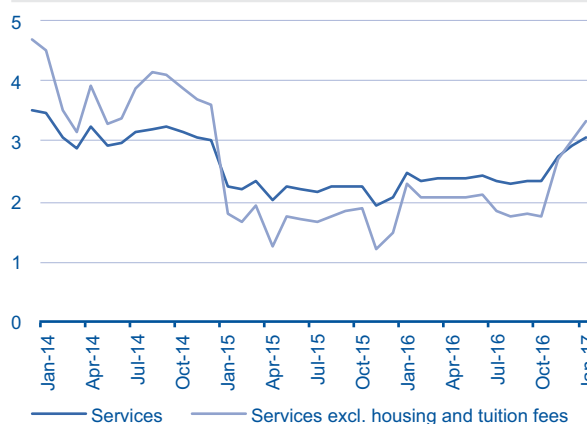
#### Non-food inflation and rate of depreciation of the peso (YoY % change)



Source: BBVA Research with INEGI and Bloomberg data

Figure 3.28

#### Annual inflation for the core services sub-index (%)



Source: BBVA Research with INEGI data

The adjustment to the relative prices of goods compared to services explains the dynamics of core inflation. The average annual variation in core inflation increased from 2.40% in the fourth quarter of 2015 to 3.28% in the fourth quarter of 2016, subsequently increasing further to 3.84% in January 2017. Within headline inflation, the sub-index for goods continues to reflect the pass-through effect of the depreciation of the peso. Annual inflation for this sub-index increased from an average of 2.78% in the fourth quarter of 2015 to 3.98% in the

fourth quarter of 2016, with a further increase to 4.75% in January 2017. In contrast, inflation in the services sub-index remains low, benefiting from slack in the economy and increased competition in the telecoms sector (Chart 4) although it is beginning to rebound. The average annual variation for this sub-index rose from 2.09% in the fourth quarter of 2015 to 2.68% in the first quarter of 2016, hitting 3.07% in January this year. (see Figure 4). However, prices of services without housing or school fees have increased at an annual rate of 1.74% in October 2016 to 3.33% in January 2017. What this shows is that although services prices are still increasing at a moderate rate, the positive effects which offset the pass-through effect over the last two years have begun to run out of steam, and it also shows the risks of second round effects which are now the most important upside risk for inflation.

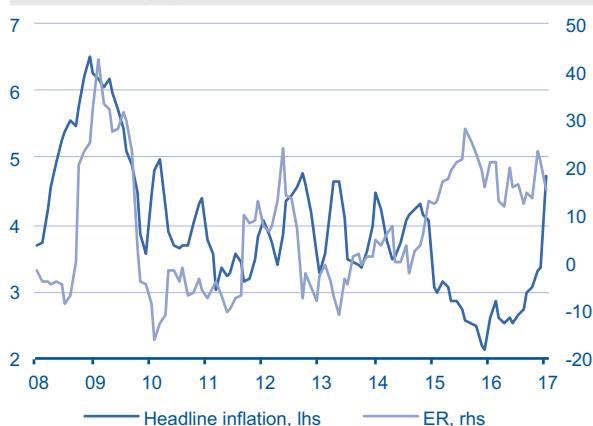
### The upturn in annual inflation will continue for most of the year, averaging over 5% from 2Q to 4Q17

Bearing in mind that the context for inflation has become more adverse than it was over the last two years, that the higher rate of increase in goods prices is expected to continue, and that the risks of knock-on effects have increased, we expect annual headline inflation to keep a long way above the target range of 3.0% over the whole of the year, and to average about 5.5% in 2017. We envision a rate of 6.0% by the end of the year, although we currently have a small downward bias given that the government has decided to transfer international benchmark prices (mainly because of the trend in international prices and the exchange rate) much more gradually than it did in January.

Our forecasts are subject to both upside and downside risk. The main downside risks are further strengthening of the peso and the economy's lower-than-expected momentum, which is resulting in an additional increase in the output gap and the possibility of further reductions in prices for mobile-phone services if competition in the sector continues to increase. The main upside risks are now associated with the higher probability of observing knock-on effects and the rise in inflationary expectations.

Figure 3.29

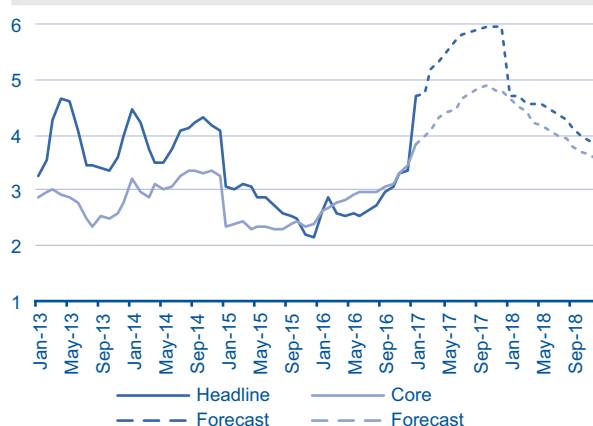
#### Annual headline inflation and rate of depreciation of the peso (%)



Source: BBVA Research with INEGI and Bloomberg data

Figure 3.30

#### BBVA Bancomer inflation outlook (YoY % change)



Source: BBVA Research with INEGI data

### 3.3 Restrictive monetary policy given the rise in inflationary expectations and further depreciation in the exchange rate

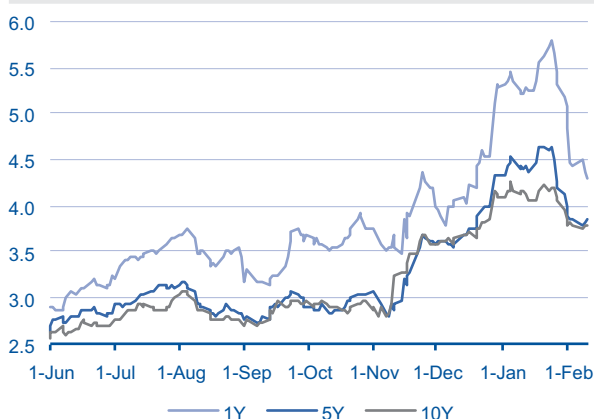
The unexpected result of the US election has ushered in an adverse economic scenario for the Mexican economy, although the scale of the effects are uncertain. On this occasion inflationary expectations were significantly impacted - which was not the case in recent bouts of depreciation - and this was the most important justification for the central bank in adopting its restrictive monetary policy.

In its February statement, Banxico raised the official policy rate by 50 bp and adopted a more restrictive tone. The central bank was concerned for two reasons. First, the rise in inflationary expectations. The further weakening of the Mexican currency, by up to 20% following the US election, prompted increases of 1.8% and 1.3% in implicit mid and long term expectations in the fixed income market, respectively, pushing them above 4.0%. This increase is extremely important given that in its Inflation Targets the central bank sets out the movements of its monetary policy instrument (the official policy rate) to make inflationary expectations converge upon their target.

Second, the increased risks of knock-on effects arising from currency depreciation and rise in petrol prices. For the time being the transfer of the stronger dollar against the peso has been limited to the National Consumer Price Index goods component, as was the case in 2016. However, there has now been a total depreciation of approximately 40% since early 2015, making it increasingly difficult for companies to maintain their prices as their margins narrow; particularly bearing in mind that because of the question marks about US trade policies, economic agents believe that the exchange rate may remain at current levels for an extended period of time. The liberalisation in petrol prices announced in late 2016 also triggered a significant rise in inflation in early 2017. Although both the currency depreciation and the rise in petrol prices may be considered to be a change in relative prices and temporary supply shocks, there is no doubt that there is a higher risk of knock-on effects on prices taking hold.

Figure 3.31

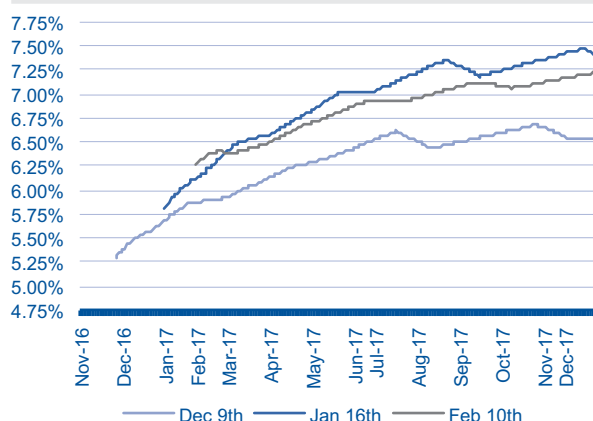
#### Implicit inflationary expectations in government fixed income instruments\* (%)



Source: BBVA Research with Bloomberg data. \*Note: Mid and long term expectations were adjusted downward by 40 basis points to reflect the compensation for inflationary risk

Figure 3.32

#### Expectations of the official policy rate implicit in the IRS curve (%)



Source: BBVA Research with Bloomberg data

On top of these concerns, the central bank also has to consider the possibility that the Federal Reserve might accelerate monetary normalisation, given that the US economy has peak employment levels and also due to the possible increases in inflation from the new administration's fiscal changes.

The Central Bank acknowledges the downside risks in terms of economic growth, taking into account that the uncertainty about the new US administration's policies is already having adverse effects on foreign investment, remittances and consumer confidence. This factor, however, has less importance in the Central Bank's reaction function, based on its single mandate, and particularly so in the present situation. For example, in 2008, which is the last occasion when inflation was above the higher range of the interval around the 3.0% target, Banxico continued to raise its official policy rate until inflation stopped climbing, even when economic growth was expected to slump.

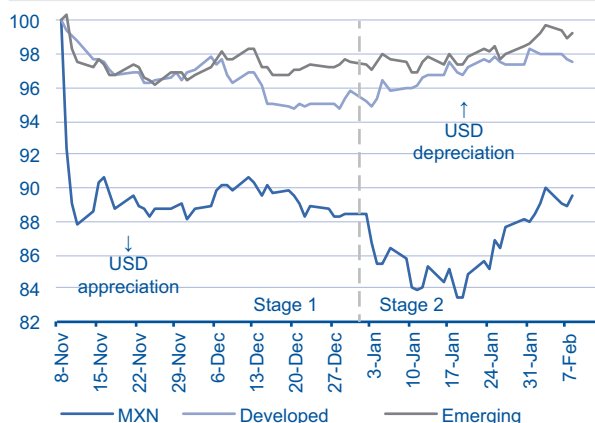
Looking forward, we expect the central bank to further increase the official policy rate by another 125 basis points up to a level of 7.50% by the end of 2017. This more restrictive policy is consistent with the current setting of higher observed inflation, increases in mid and long term inflationary expectations and deterioration in the balance of inflation risks.

### 3.4 Movements in financial markets dominated by expectations about the Trump administration's economic policy

After the unexpected result of the US election, investors have spent a long time weighing up the possible economic policy decisions of the Trump administration and its effects on asset prices. There have been two main stages during this period. In the first stage, from the election result up to the end of 2016, the new US President's campaign promises about cutting corporate income tax, deregulation and an ambitious infrastructure plan appear to have outweighed the threats of protectionism and anti-migration rhetoric in investors' expectations, prompting significant gains on US assets and clearly differentiating Mexican assets which were viewed more negatively. In tune with these campaign promises, markets factored in a scenario of higher growth, greater inflation and higher interests rates than were previously expected. A clear example of this upward trend in US assets has been the rise in the value of the dollar. From election day until the end of 2016, the dollar strengthened by 4.4% and 2.5% against developed countries' and emerging markets' (EM) currencies, respectively. In fact, in December the dollar rose to heights which had not been seen since 2002.

Figure 3.33

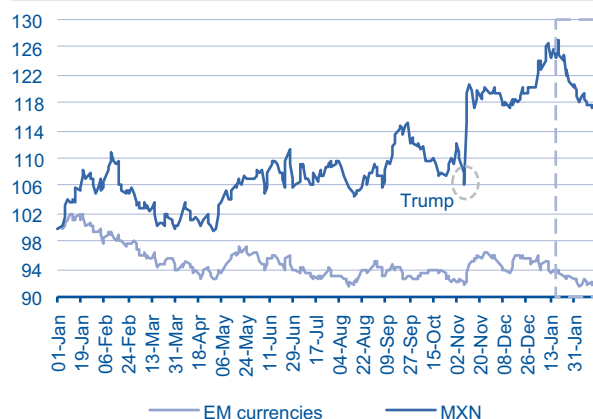
**US dollars vs. currencies of emerging markets and developed countries (indices 8/11/2016=100)**



Source: BBVA Research with Bloomberg data

Figure 3.34

**Mexican peso and emerging currencies against the dollar (index 1 January 2016 = 100)**



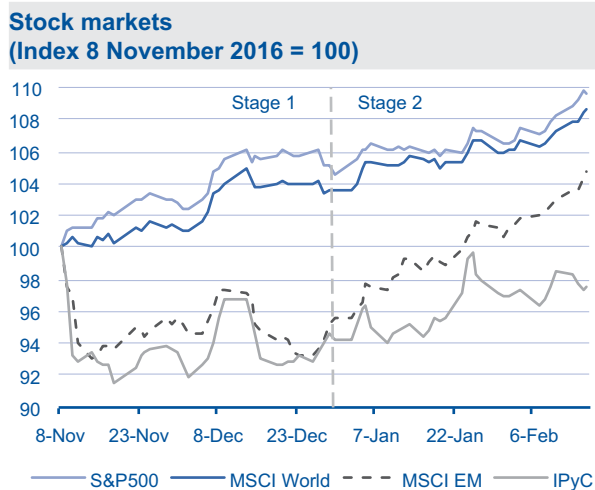
Source: BBVA Research with Bloomberg data

These levels of appreciation are significant, but they are small when compared to the Mexican peso's depreciation by over 13%. As Mexico was the country which would be hit hardest by Trump's threats of protectionism and anti-migration talk, the peso was the second most affected currency worldwide, and in fact three days after the election the dollar was trading at all-time highs of up to 20.85 pesos. The higher demand for US assets was not seen only in the currencies market, however. Expected increases in business sales, albeit in a setting of higher interest rates, prompted a 4.64% rise in the S&P500 during this period, growth which was higher than the 3.52% increase in the MSCI World global stock benchmark, taking it to new historical highs. As happened with the currencies, the Mexican stock market offered a more negative performance, falling 5.8%, worse than the fall of 4.45% registered in the MSCI Emerging Markets (EM) stock benchmark index. Lastly, the oil price

pushed above US\$55 per barrel for the first time since 2015 when news broke of the OPEC agreement to cut back on oil production. The idea with this agreement is to reduce volatility in energy prices and to keep on track towards US\$60 per barrel in coming years.

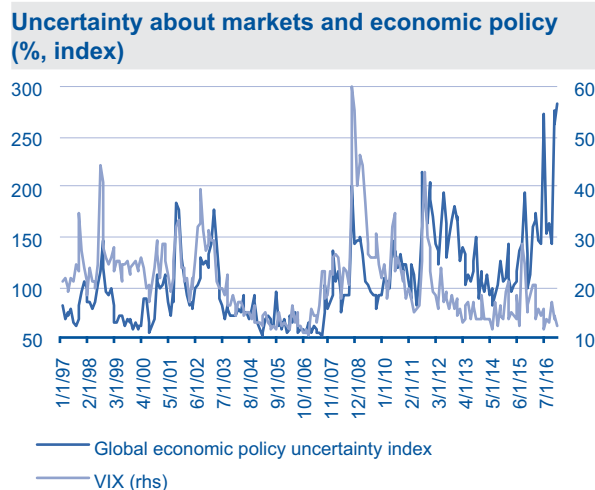
Early 2017 marks the start of the second stage of this period in which investors have weighed up expectations. The Trump administration took office on 20 January and its first measures and the comments it made stirred the financial markets. The most significant effect was the change in the dollar's trend of appreciation after both Trump and his future secretaries said that the US dollar was too strong. The dollar reacted by beginning a downward trend, and by mid February it had already slipped 5.23% against developed countries' currencies and 2.45% against EM currencies. Unlike in the first phase, the peso has stood out against the other currencies in its appreciation vs. the dollar. The Mexican currency gained almost 9.0% from the start of the year, and the dollar has stabilised at around 20.3 pesos, after it momentarily went over 22 pesos in the first week of 2017 due to the cancellation of vehicle plant investments connected with President Trump's threats of new border taxes. Caution prevailed on the fixed income markets in the first month of the year; however, the announcement of the executive order to speed up the building up of the Dakota pipeline; a better-than-expected season of business results, and President Trump's repeated mention of an ambitious infrastructure and tax cut plan created a mood of optimism. The S&P 500 hit a new all-time high after having risen by almost 5.0% over the year so far, slightly higher than the 4.7% increase in the global stock benchmark. In this phase of optimism about the US economy, demand for EM countries' shares also rose, heightened by the rise in commodity prices associated with the depreciation of the dollar. So EM stock markets have risen by over 9.0% over the year so far, while the Mexican Stock Market Index (IPC) has also reported gains, though in the region of 3.3%.

Figure 3.35



Source: BBVA Research with Bloomberg data

Figure 3.36



Source: BBVA Research with Bloomberg data. The global Economic Policy Uncertainty Index, produced by Baker, Bloom and Davies is weighted using the weight of each country's GDP over global GDP. Its long-term level is equal to 100

All these movements of higher demand for assets with highest return on markets since the US election have taken place against a background of historically low levels of traditional risk aversion measures. The VIX volatility index stands slightly above 11%, a level not seen since 2014, almost 12 points down against the level reached on the days running up to the election last November. This is in stark contrast to the measures of economic policy expectations worldwide and in the US, which show a high degree of uncertainty. In fact, uncertainty about economic policy at global level is at all time highs, and the difference in signals against the VIX had never been so large.

As we have explained above in great detail, the performance of the financial markets is aligned with the materialisation of expectations about the economic policy of the new administration in the US. Given the high degree of uncertainty about these measures, we believe we have to be cautious about the possible trend in domestic financial variables from now on, in particular regarding the exchange rate. Although the peso has strengthened considerably in recent weeks, the proposed tax on imports in the US as part of the fiscal reform process, and the renegotiation of the Free Trade Agreement pose significant risks for the economy, and, by extension, for the Mexican economy. Hence, we maintain our estimate of 22.9 pesos per dollar for the end of the year, although if the risks we have mentioned do not materialise there is margin for the peso to appreciate towards levels of 19.5 pesos per dollar.

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This report has been produced by the macroeconomic unit of Mexico:

**Chief Economist**

Carlos Serrano  
carlos.serranoh@bbva.com

Javier Amador  
javier.amadord@grupobbva.com

Iván Martínez  
ivan.martinez.2@bbva.com

Fco. Javier Morales  
francisco.morales@bbva.com

Arnulfo Rodríguez  
arnulfo.rodriguez@bbva.com

With the collaboration of:  
Economic Scenarios

## BBVA Research

**Group Chief Economist**

Jorge Sicilia

**Macroeconomic Analysis**

Rafael Doménech  
r.domenech@bbva.com

**Financial Systems & Regulation**

Santiago Fernández de Lis  
sfernandezdelis@bbva.com

**Spain and Portugal**

Miguel Cardoso  
miguel.cardoso@bbva.com

**South America**

Juan Manuel Ruiz  
juan.ruiz@bbva.com

**Global Macroeconomic Scenarios**

Miguel Jiménez  
mjimenezg@bbva.com

**Global Financial Markets**

Sonsoles Castillo  
s.castillo@bbva.com

**Global Modelling & Long Term Analysis**

Julián Cubero  
juan.cubero@bbva.com

**Innovation & Processes**

Oscar de las Peñas  
oscar.delaspenas@bbva.com

**Countries Coordination**

Olga Cerqueira  
olga.gouveia@bbva.com

**Digital Regulation**

Álvaro Martín  
alvaro.martin@bbva.hk

**Regulation**

María Abascal  
maria.abascal@bbva.com

**Financial Systems**

Ana Rubio  
arubiog@bbva.com

**Financial Inclusion**

David Tuesta  
david.tuesta@bbva.com

**United States**

Nathaniel Karp  
Nathaniel.Karp@bbva.com

**Mexico**

Carlos Serrano  
carlos.serranoh@bbva.com

**Turkey, China & Geopolitics**

Álvaro Ortiz  
alvaro.ortiz@bbva.com

**Turkey**

Álvaro Ortiz  
alvaro.ortiz@bbva.com

**China**

Le Xia  
le.xia@bbva.com

**Argentina**

Gloria Sorensen  
gsorensen@bbva.com

**Chile**

Jorge Selaive  
jselaive@bbva.com

**Colombia**

Juana Téllez  
juana.tellez@bbva.com

**Peru**

Hugo Perea  
hperea@bbva.com

**Venezuela**

Julio Pineda  
juliocesar.pineda@bbva.com

**BBVA Research Mexico**

Paseo de la Reforma 510  
Colonia Juárez  
C.P. 06600 México D.F.  
Publications:  
email: bbvaresearch\_mexico@bbva.com

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