

2. Situation

2.a Construction will close 2016 showing growth

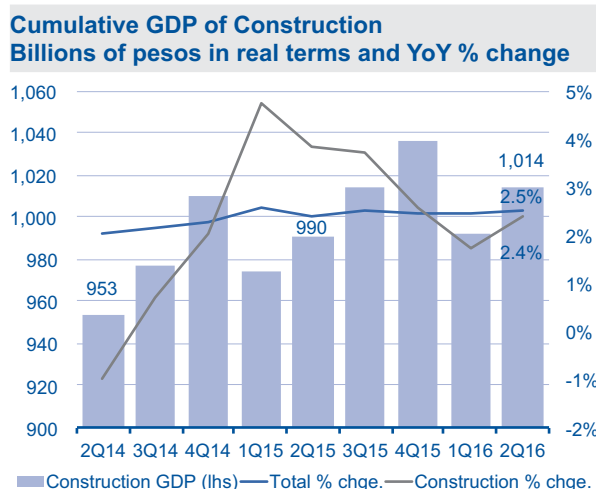
The **sector has been advancing during the first half of 2016, contrary to expectations**, based on a slowdown in building construction and stagnating civil works. Even so, it will be a difficult year-end for the construction sector due to reduced activity in residential building construction and fewer infrastructure developments. Budget cuts to both housing subsidies and infrastructure spending make it unlikely that the downward trend will reverse, meaning that **we could be at the end of the growth path** in the construction sector.

And construction is growing despite the headwinds

Building construction is growing at a rate of 4.5% p.a.

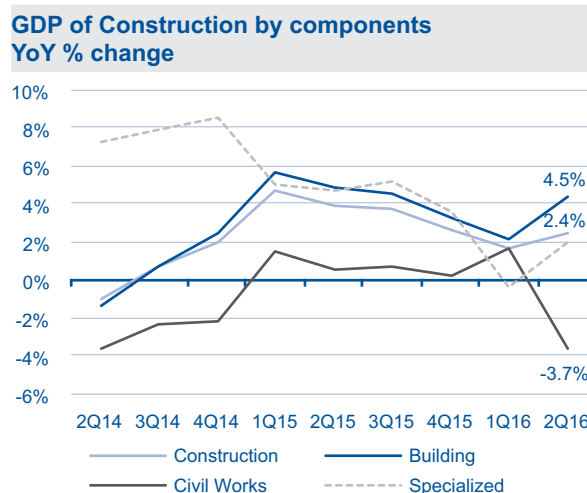
The GDP of the construction sector again outperformed the average for all sectors of the economy. Despite the decline in civil works, the sector continues to advance based on building construction. In the first half of 2016 construction grew at an annual rate of 2.4%, well in excess of what we were expecting a year ago. This result is due to the fact that the GDP of building construction grew by 4.5% year-o year in the second quarter of the year. The contribution of civil works was not positive. In this same period, GDP for this area fell by 3.7% YoY, despite having a low base for comparison due to the poor performance of the past few years.

Figure 2a.1



Source: BBVA Research based on data from SCNM (National Accounts System) and INEGI (National Statistics and Geographical Institute)

Figure 2a.2

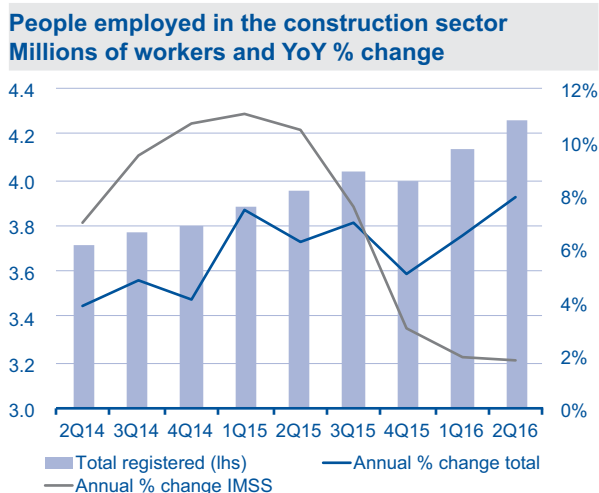


Source: BBVA Research based on data from SCNM (National Accounts System) and INEGI (National Statistics and Geographical Institute)

The increased activity we are seeing in this sector requires more manpower. The number of workers dedicated to construction has increased significantly based on figures from the National Occupation and Employment Survey (ENOE in the Spanish initials) published by the INEGI. During the first two quarters of 2016, the total number of people employed in the sector increased by more than 6% on average; while the number of workers registered with the Mexican Social Security Institute has also continued to increase, although more slowly.

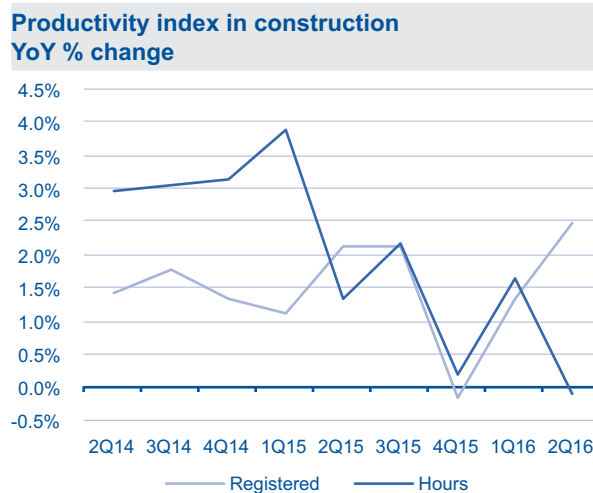
Productivity in construction also remains positive, although the pace has slowed. The labour market usually adjusts quickly to the dynamic of construction.

Figure 2a.3



Source: BBVA Research based on data from ENOE, INEGI

Figure 2a.4

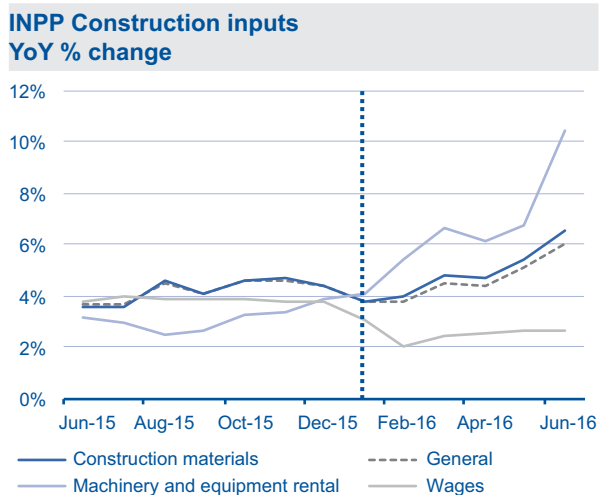


Source: BBVA Research based on data from the INEGI

The cost of inputs for construction on a rising trend

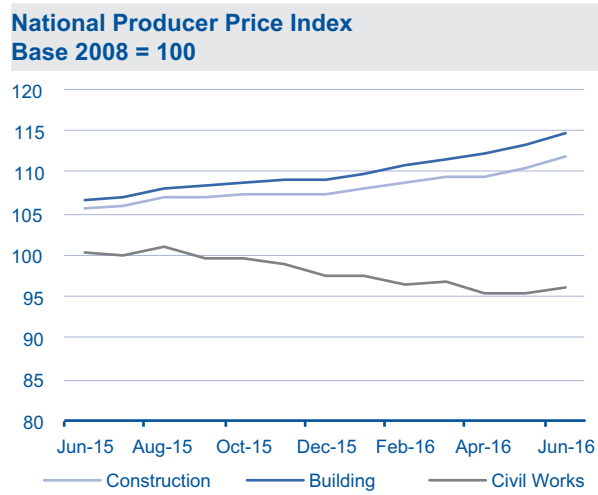
On the other hand, manufactured products and pre-construction processes serving as inputs continue showing a low level of activity. Others, such as lending and trade, continue to grow, but are slowing. This is already affecting prices of inputs to construction, the index of which is rising faster than that of headline inflation. The cost of machinery and equipment increased rapidly in the last quarter, followed by construction materials. The increased effect of these price rises is reflected in building construction, the index for which exceeds the average of the sector, whereas those of civil works are falling, clearly in line with the former's increased level of activity and the latter's stagnation. The increase in the cost of inputs for building construction pushes housing prices and commercial rents up which could affect demand in the medium term.

Figure 2a.5



Source: BBVA Research based on data from the INEGI

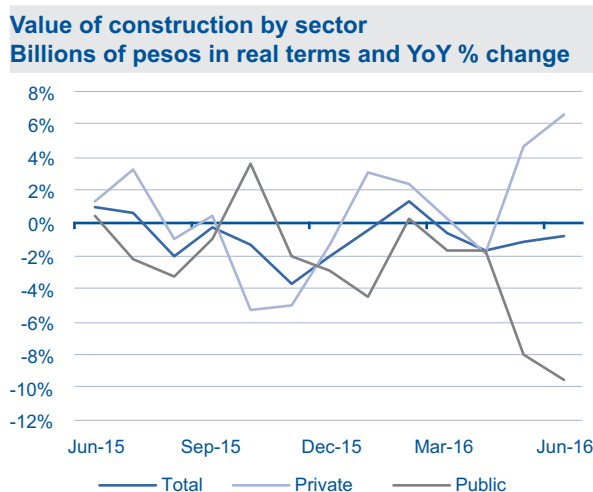
Figure 2a.6



Source: BBVA Research based on data from the INEGI

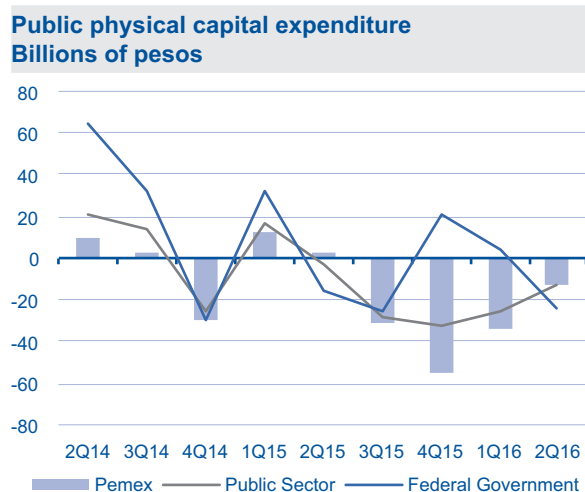
The difference in performance between building construction and civil works extends to the breakdown between public and private construction. This is because the private sector plays a greater role in building construction, whereas government activity is usually channelled more into civil works through infrastructure projects. For this reason the value of private initiative construction has continued to increase so far this year and the public sector has shown exactly the opposite behaviour. This reduced level of activity in construction is due to the fall in physical capital expenditure by the main public constructors, as we had been expecting since last year in view of the reduced allocation of resources to infrastructure in the Federal Expenditure Budget.¹

Figure 2a.7



Source: BBVA Research based on data from the INEGI

Figure 2a.8

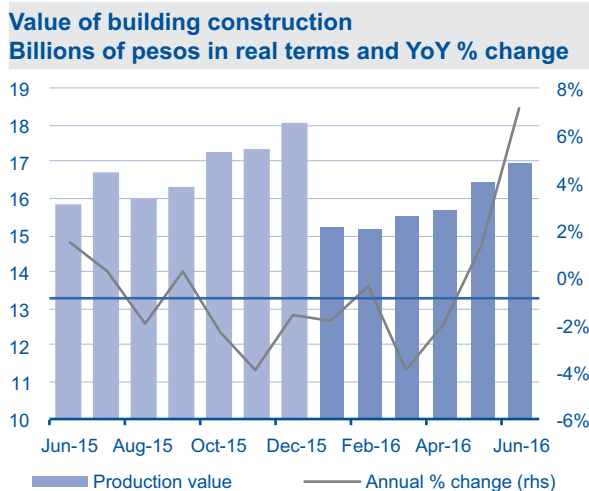


Source: BBVA Research based on data from the INEGI

As mentioned, building construction has increased while civil works have declined. Measured by the gross value of construction in each of these sub-sectors, we see that at the end of the first half of this year the value of building construction had reached 17 billion pesos, nearly 8% more than in the same period of last year. Moreover this value increased constantly month by month. In contrast, the value of infrastructure fell steadily during the first six months of 2016. In 2015, the value of this type of works was around 20 billion pesos, whereas at the mid-point of this year it barely exceeded 15 billion pesos, according to reports from construction companies.

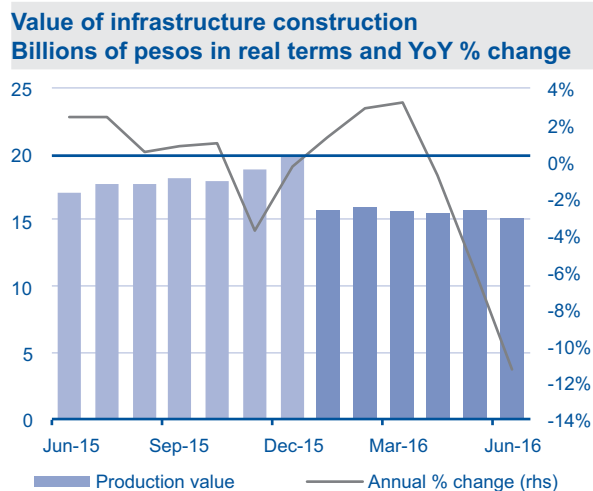
1: Although not all physical capital expenditure goes to public works or infrastructure projects, the greater part does, and this tends to explain changes in the civil works sub-sector.

Figure 2a.9



Source: BBVA Research based on data from the INEGI

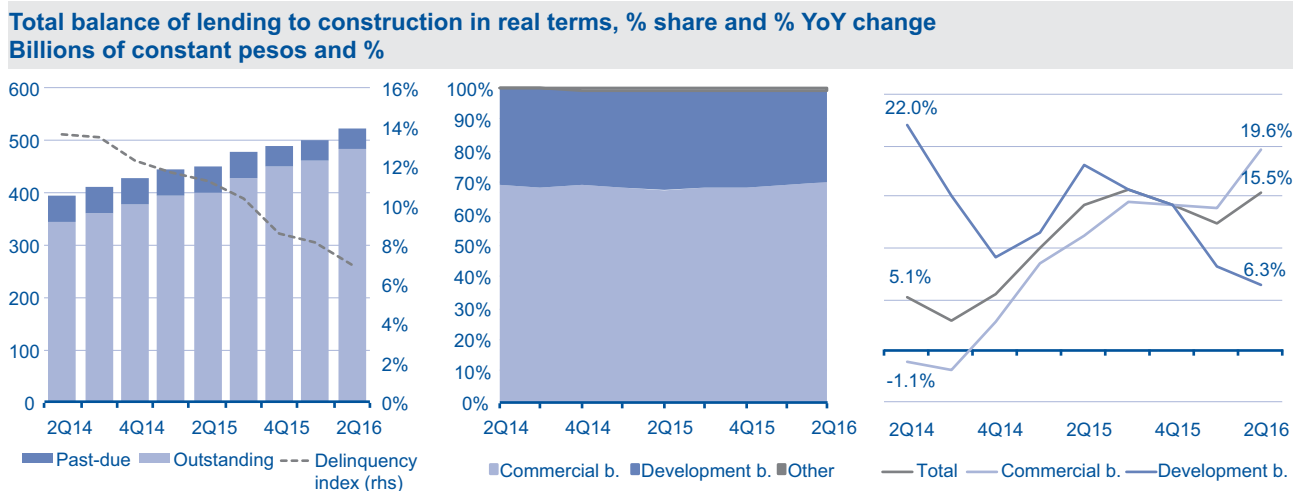
Figure 2a.10



Source: BBVA Research based on data from the INEGI

Turning to financing, bank lending for construction continues to grow and currently exceeds 500 billion pesos in real terms, with declining delinquency or NPLL rates already below 8%. This is largely due to the high rate of origination by commercial banks, which still have a 70% share of the credit market. The NPL rate has declined partly thanks to the credit granted, but also due to a decline in arrears in absolute terms.

Figure 2a.11, 2a.12 y 2a.13



Source: BBVA Research based on Bank of Mexico data

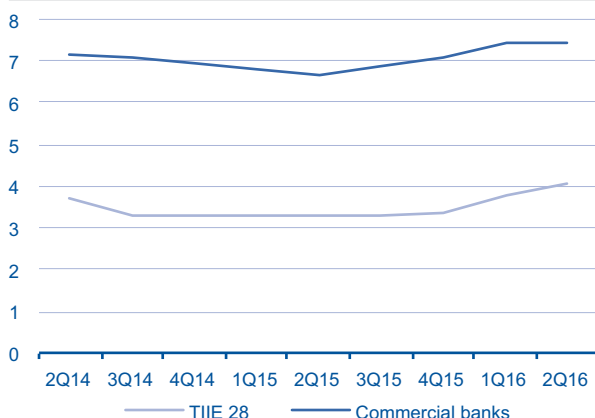
The adjustments to monetary policy have been quickly reflected in interest rates on loans to construction companies. However they have not been reflected in full, which indicates that part of the increases has been absorbed by the banking system, since of the 175 bps increase in the reference rate,² on average only 60 bps have been passed on to the construction sector in the cost of borrowing. These higher rates no doubt have an adverse effect on demand for credit, which seemed to be observable in the first quarter of 2016, but if we

2: As at the cut-off date of this edition..

compare lending with the same quarter of last year we see a slight increase, and the trend strengthens in the second quarter of 2016. We attribute this phenomenon to the increased activity in building construction and to the effect of the change in monetary policy not having been fully passed on due to banks' eagerness to win over customers from other providers of credit.

Figure 2a.14

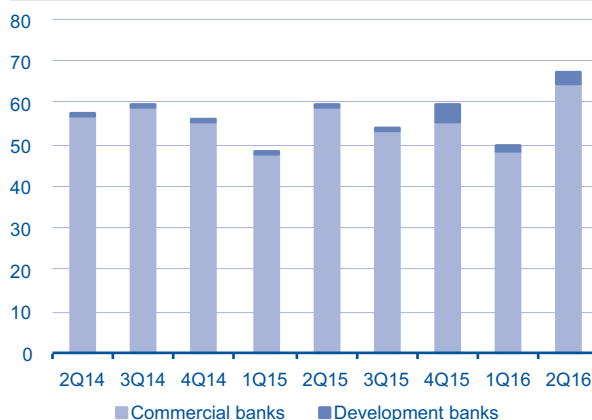
Interest Rate on lending for construction Annual interest rate



Source: Source: BBVA Research based on data from the CNBV (*Comisión Nacional Bancaria y de Valores*, Mexico's banking and securities regulator)

Figure 2a.15

Origination of lending for construction Billions of pesos in real terms



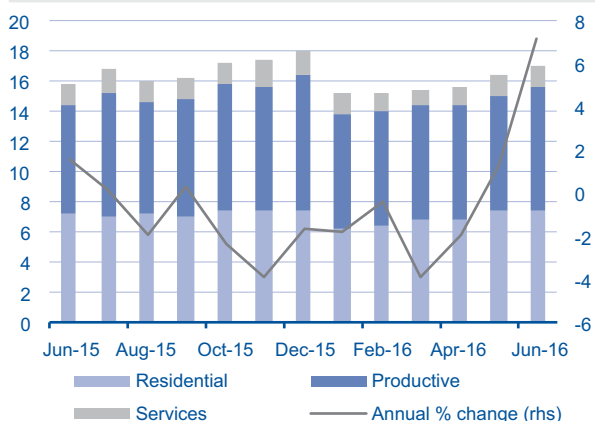
Source: Source: BBVA Research based on data from the CNBV (*Comisión Nacional Bancaria y de Valores*, Mexico's banking and securities regulator)

Building construction continues to be the sole support of the construction sector

Despite slowing down, building construction continues to be the foundation on which the positive result of the construction sector so far is based. GDP for the building construction sector is growing by more than 4% annually. In terms of gross value constructed, building construction surfaced to grow by as much as 7% in June 2016. This is the result of the recovery in commercial building construction towards the end of the half-year, given that the gross value of residential construction continued to perform positively during the first six months of the year.

Figure 2a.16

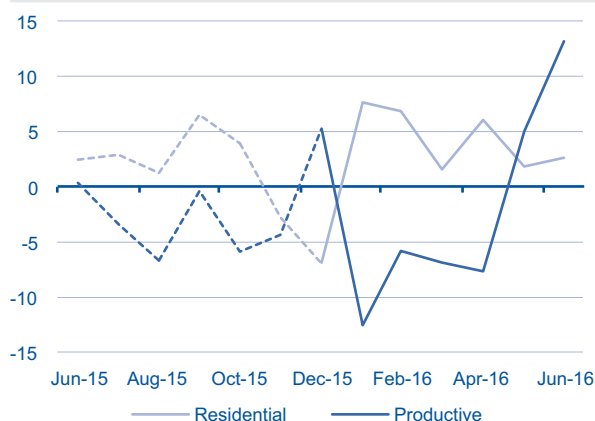
Gross value of building construction Billions of constant pesos



Source: BBVA Research based on data from ENEC (National Survey of Construction Companies), INEGI

Figure 2a.17

Gross value of building construction YoY % change (annualised series)



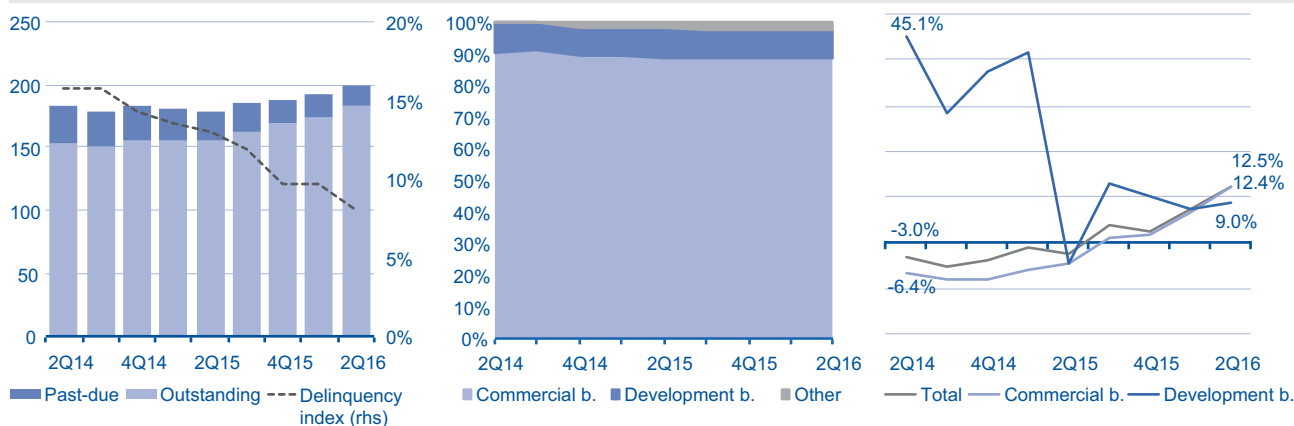
Source: BBVA Research based on data from ENEC (National Survey of Construction Companies), INEGI

We stress once again that the series of gross value of construction reported by construction companies is a good indicator of the behaviour both of the sector and of its component parts. In the case of residential building construction, gross value grew steadily in the first half of the year, thanks largely to price increases which exceeded headline inflation.³ With commercial building construction the story differs slightly, since the price index for these properties has not risen so quickly.⁴ Both components contributed to the growth of the building construction sub-sector, particularly in states such as Jalisco and Chihuahua, for both industrial properties and housing.

Figure 2a.18, 2a.19 y 2a.20

Total balance in real terms of lending for building construction, share % and % YoY change

Billions of constant pesos and %



Source: BBVA Research based on Bank of Mexico data

The balance of bank lending for building construction has maintained its upward trend. In the second quarter of 2016 it grew by more than 12% year-on-year, driven mainly by the commercial banks, although development banks' contribution increased by 9% compared with the same period of last year. Increased loan origination led to the NPL rate continuing to fall, and it is now down to 8%. This reduced delinquency is due not only to the greater volume of new lending but also to a reduction in arrears, from just over 20 to 16 billion pesos. From the point of view of financing, lending for commercial building construction has performed better than that for residential construction. In annual terms, the former grew by 11.9% in real terms while the residential component grew by 8.1% according to figures from Bank of Mexico. We attribute this to the banks' intention to compete more in this segment with an expansive effect than we have seen in the housing segment.

No improvement in civil works, and outlook bleak

GDP of civil works down 3.7% YoY

As we saw in the first section, the civil works sub-sector continues in the doldrums. The deterioration is due to the ever decreasing investment in public works. Usually the public sector builds more infrastructure than the private sector because of the size of the investments, the long-term uncertainty and its economic nature as a public good. This leads to investment in infrastructure being dependent on the resources available to the various levels of government for these types of works. In the past

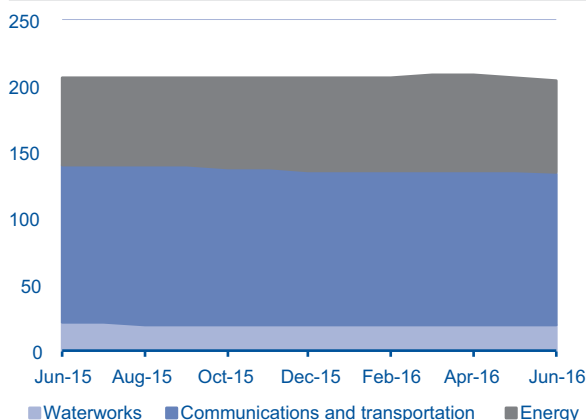
3: See "Mortgage lending still growing" in this number of *Mexico Real Estate Outlook* Second half-year 2016.

4: See "Commercial building construction and its productive cycle" in this number of *Mexico Real Estate Outlook* Second half-year 2016.

few years, despite the government's having increased revenues, resources earmarked for infrastructure have actually decreased. The result is reduced activity in infrastructure such as hydraulic works, communications and transport, which fell steadily from the end of 2015 until the middle of the current year. On the other hand, works associated with the energy sector seem to be recovering this year if we look at the growth in the gross value of construction; however these growth rates are largely due to a base effect caused by the poor results of previous periods.

Figure 2a.21

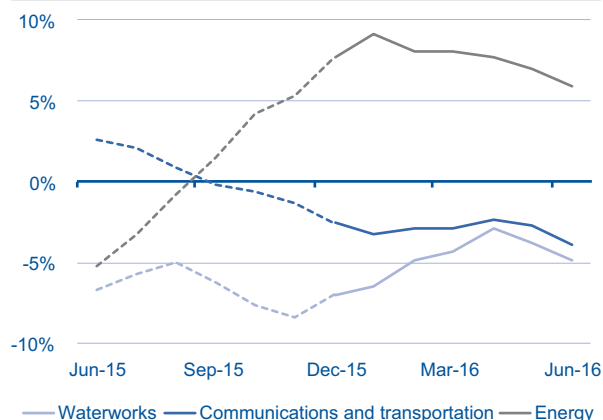
Gross value of infrastructure Billions of pesos in real terms (annualised)



Source: BBVA Research based on data from ENEC (National Survey of Construction Companies), INEGI

Figure 2a.22

Gross value of infrastructure YoY % change (annualised series)

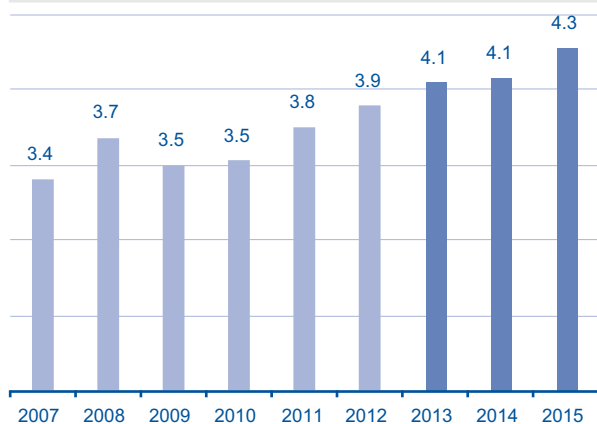


Source: BBVA Research based on data from ENEC (National Survey of Construction Companies), INEGI

Despite the availability of increased financial resources, even at the cost of greater indebtedness, these have not been directed to the construction sector. Increased spending on infrastructure, as well as helping to bring about the conditions in which to increase potential GDP, has been an instrument for boosting economic growth, as was seen in 2009 after the international crisis. In that year, public spending directed to the construction sector and specifically to civil works reversed the negative trend of this component and of the whole sector. Public sector revenues in 2009 were 3.5 trillion pesos, which increased to 4.3 trillion in 2015, an increase of 22% in real terms. Nevertheless the public sector's share in construction, not just in infrastructure, has been declining in recent years despite its having more revenues. In the Federal Expenditure Budget (PEF) that the executive sends to Congress we can see reductions for infrastructure. From 2015 to 2016 the amount budgeted for infrastructure in general was reduced by 3.7%, and for economic infrastructure alone it went from 395 billion pesos to 363 billion pesos, a cut of just over 8% in real terms. According to the PEF for 2017, infrastructure will suffer a bigger cut of around 27%, making it difficult to think in terms of a recovery in the following year.

Figure 2a.23

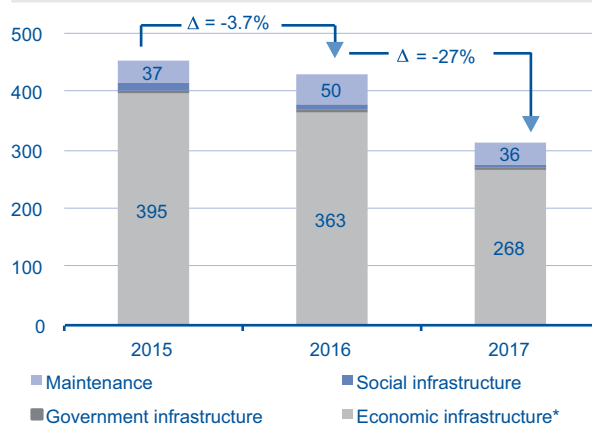
Public sector revenues Trillions of constant pesos



Source: Source: BBVA Research based on data from the SHCP (Secretary of the Treasury and Public Credit)

Figure 2a.24

Federal Expenditure Budget Billions of constant pesos

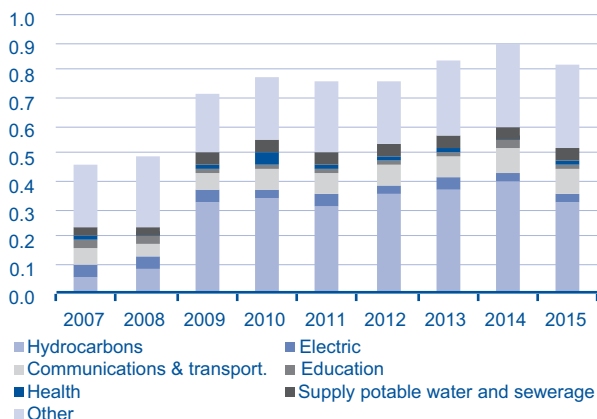


Source: BBVA Research based on data from the PEF for 2017, SHCP
*Includes Pidiregas (PPPs for public works)

In contrast, physical capital expenditure increased until 2014. In 2009, during the international economic crisis, some 700 billion pesos were used for this purpose, whereas for 2014 the amount was 900 billion pesos. In 2015 we saw the first reduction, of around 9.4% in real terms. Resources channelled into civil works as part of a clear countercyclical policy in 2009 helped construction GDP to recover, and that of civil works in particular remained in positive territory despite the crisis. However in recent years, even with greater resources available, the effect of infrastructure on construction GDP has declined. Although not all physical capital expenditure goes on infrastructure, the greater part of it does.

Figure 2a.25

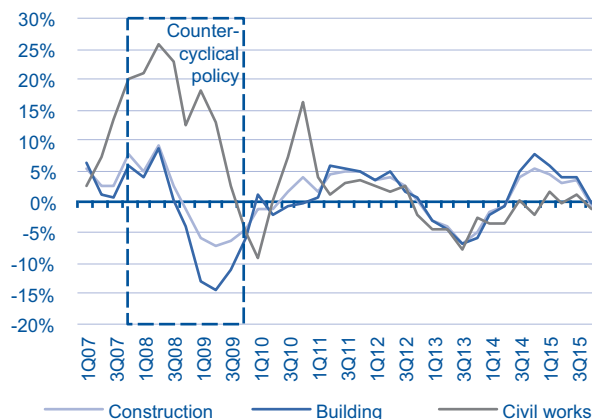
Expenditure on physical investment Trillions of constant pesos



Source: Source: BBVA Research based on data from the SHCP (Secretary of the Treasury and Public Credit)

Figure 2a.26

GDP of Construction YoY % change

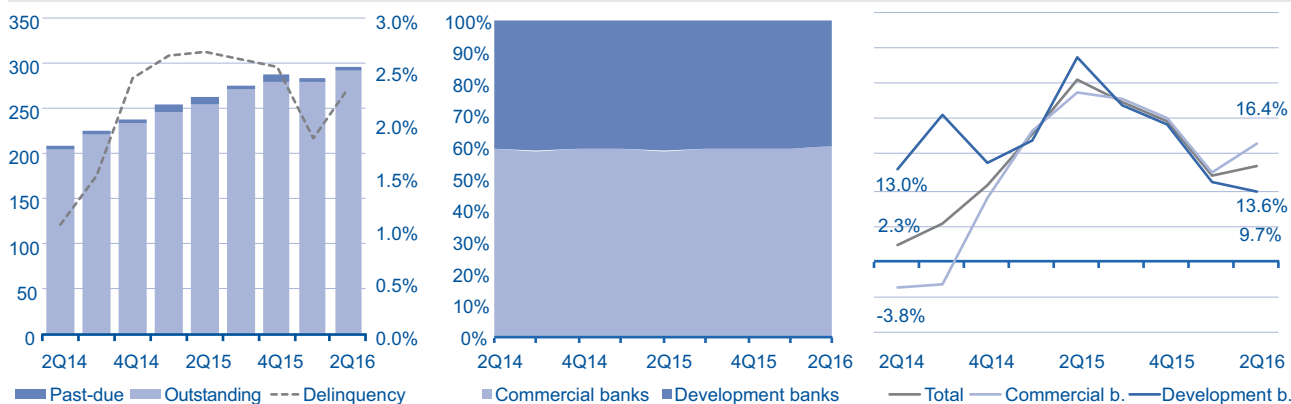


Source: BBVA Research based on data from the INEGI

Financing of the sector, measured by the balance of bank lending, continues to increase in real terms at a rate of more than 12%. In particular, that of the commercial banks is growing at an annual rate of 16.4%, while that of the development banks increased by 9.7% YoY in the second quarter of 2016. In contrast with lending for building construction, lending for physical capital expenditure is more evenly shared between the two types of bank, largely due to the funds made available by Banobras (Banco Nacional de Obras y Servicios Públicos, or 'National Works and Public Services Bank', a state-owned development bank). In this way the total balance has practically reached 300 billion pesos, almost half as much as total private housing loans and nearly 50% more than lending to building construction, but with a much lower NPL rate of just 2.3%, showing that this portfolio is in excellent shape.

Figure 2a.27, 2a.28 y 2a.29

Total balance in real terms of lending for infrastructure, share % and YoY % change Billions of pesos and %



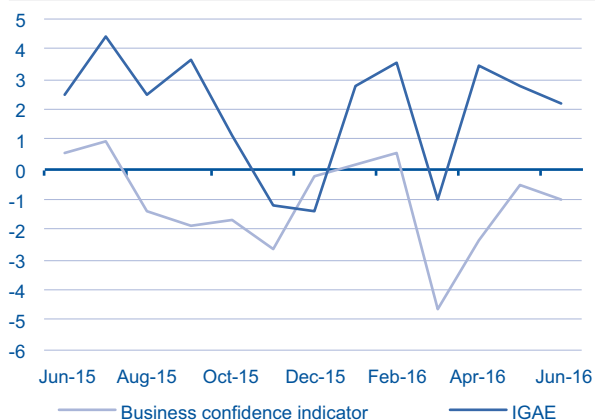
Source: BBVA Research based on Bank of Mexico data

2016 last positive year for construction without infrastructure

In the last edition of *Mexico Real Estate Outlook* we estimated that 2016 would be a difficult year for construction, and especially for civil works. The figures for the first half of the year the forecast seems to be half-confirmed: civil works and infrastructure continue to perform negatively, but the good results of building construction have lifted the sector, albeit not as much as we had been expecting. We do not rule out a revision of the figures as regards the GDP for the construction sector and its component parts, but even if this is not the case, the year looks set to close with a decline. As well as the reduced level of investment in infrastructure, the number of new housing projects registered has fallen, as has business confidence regarding construction. Only the IGAE (Global Economic Activity Indicator) shows a positive outlook, although it must be borne in mind that this is more a coincident than an advance indicator.

Figure 2a.30

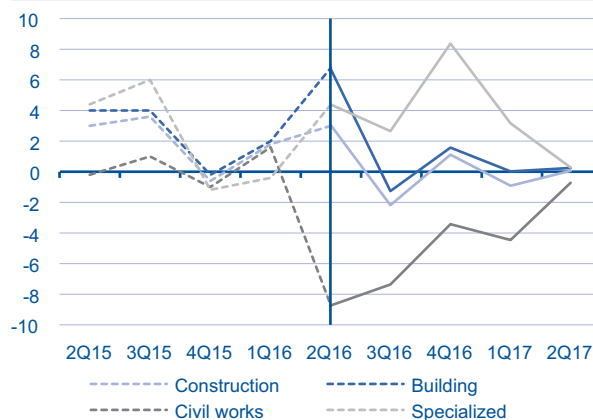
Advance indicators of construction
YoY % change



Source: BBVA Research based on data from the INEGI

Figure 2a.31

GDP of Construction by components
YoY % change



Source: BBVA Research based on data from the INEGI

With a downward adjustment in demand for housing, due, for example, to reduced subsidies, already taken into account by housing constructors, plus a lower budget for public works and increased costs of some inputs, we see the outlook for construction remaining bleak. In 2017 we might even see zero or negative growth.

2.b Mortgage lending still growing

In the previous edition of *Mexico Real Estate Outlook* we forecast that economic conditions would slow the rate of growth of the mortgage lending market. We attributed the slower growth to two factors, namely the passing on of the reference rate hike in lending rates for residential construction, and the slower pace of private sector formal job creation. Both these situations have materialised, and the effect can already be seen in a slowdown of the housing market.

On the one hand, despite the slower pace, **demand continues to grow thanks to job creation and the access it affords to both public and private sector mortgage credit. On the supply side, we expect further adjustment** due to the passing on of the effects of monetary policy, the increase in the cost of certain inputs for construction and the cut in the budget for subsidies for housing purchases, mainly in the regions that most rely on these resources or which are concentrated in the social housing segment.

Table 2b.1

Mortgage lending: number of loans and amounts of financing granted by institution Thousands of loans and billions of 2016 pesos

Mortgage Origination	Number of loans (Thousand)			Loan amount (MXN bn)			Average sum (MXN thousand)		
	Jun-15	Jun-16	Annual % change	Jun-15	Jun-16	Real annual % change	Jun-15	Jun-16	Real annual % change
Public agencies	224.7	214.7	-4.4	86.3	77.5	-10.2	384	361	-6.0
Infonavit	188.9	181.6	-3.9	62.5	56.8	-9.1	331	313	-5.5
Fovissste	35.8	33.1	-7.4	23.8	20.7	-12.9	666	626	-5.9
Private intermediaries ¹	66.2	64.8	-2.2	66.9	69.7	4.2	1,010	1,075	6.5
Banks ²	66.2	64.8	-2.2	66.9	69.7	4.2	1,010	1,075	6.5
Subtotal	290.9	279.5	-3.9	153.1	147.2	-3.9	526	526	0.0
Co-financings ³ (-)	27.0	23.4	-13.3						
Total	263.9	256.1	-3.0	153.1	147.2	-3.9	580	575	-1.0

1: While there are other private credit institutions (such as unregulated agents), not having reliable public information are not included.

2: Includes: credits for self-construction, re-structures, acquisition, credits for former employees of financial institutions and credits for payment of liabilities and liquidity.

3: Credits granted with Infonavit and Fovissste.

Note: It is accumulated.

Source: BBVA Research with Infonavit, Fovissste ABM, Banco de México, CNBV and SHF data

Bank mortgage lending up by 4.2% in real terms

The result for the first half of 2016 is a 3% contraction in the number of mortgage loans and a 3.9% fall in the amount of financing in real terms. Only bank lending is growing as regards the amount of credit granted, by 4.2%. Despite this situation, the banks will end the year with growth ahead of that of the economy as a whole, whereas the mortgage institutions will have lent less than last year.

Public institutions less active than in 2015

In the first half of the year, housing institutions were responsible for 4.4% fewer loans than in the same period of last year while the amount of financing shrank by 10.2% in real terms. While the pace of economic activity has admittedly slowed so far in this year, the fall in new lending also reflects a base effect in that lending was more than expected in 2015, particularly for new-build housing. In the case of Infonavit, total lending (for both purchases and improvements) was more than 37% of the Annual Operating Programme (POA), while the number of home purchase loans was over 13% more than budgeted. FOVISSSTE (*Fondo de la Vivienda del Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado*, the institution that provides

housing mortgages to state employees) made more than 127,000 loans compared with the 114,000 planned. Even so, Infonavit's activity is in line with that envisaged at the beginning of the year, since in the period to the end of June it lent more than 90% of the amount established in its POA, while the number of loans was 5% more than estimated for the period.

Table 2b.2

Annual Operating Programme of Infonavit Thousands of loans and percentage				
Loans	Prog. Jun-2016	Actual Jun-2016	% of target	YoY % change
Mortgage loans	174,065	183,598	105%	-3.5%
New	113,661	123,930	109%	-4.1%
Previously-owned	60,404	59,668	99%	-2.0%
Improvements	83,835	46,063	55%	-64.1%
Total	257,900	229,661	89%	-27.9%

Note: includes "Apoyo Infonavit" (a programme allowing members to leverage their Infonavit savings to obtain market-based mortgage finance), and therefore does not match Table 2b.1.

Source: BBVA Research based on data from Infonavit

Table 2b.3

Annual Operating Programme of Infonavit Millions of pesos and percentage				
Millions of pesos	Prog. Jun-2016	Actual Jun-2016	% of target	YoY % change
Mortgage loans	60,697	55,925	92%	-1.8%
New	40,001	36,074	90%	-2.1%
Previously-owned	20,696	19,851	96%	-1.2%
Improvements	2,533	1,360	54%	-63.4%
Total	63,230	57,285	91%	-5.6%

Note: includes "Apoyo Infonavit" (a programme allowing members to leverage their Infonavit savings to obtain market-based mortgage finance), and therefore does not match Table 2b.1.

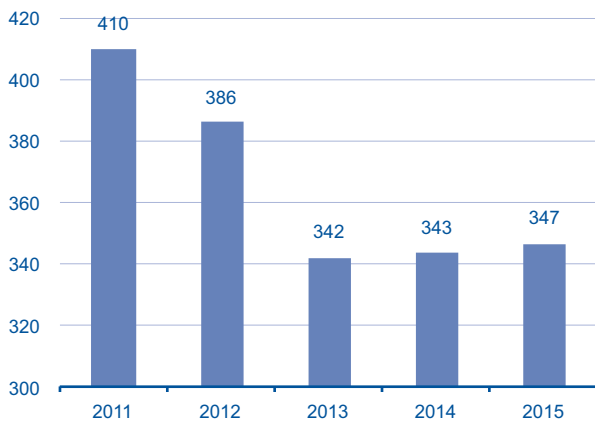
Source: BBVA Research based on data from Infonavit

Infonavit itself acknowledged that it was unlikely to be able to match last year's lending figures, estimating that 350,000 mortgage loans would be applied for in 2016, representing a decline of nearly 50,000. For some time now the figures have confirmed that the Institution is usually accurate in its new lending expectations, the exception being precisely last year, due to changes of which its members sought to take advantage. As commented upon on previous occasions, the increase in the maximum amount and the change of denomination of loans (from multiples of the minimum wage to pesos) stimulated demand exceptionally in 2015, as a result of which the figures for new lending in 2016 show contraction, but this is because they are being compared with the exceptional result as already mentioned. Even so, we can see that the POA is being fulfilled as regards lending for home purchases, and in particular lending for new housing is nine percentage points up on the forecast for the first half-year.

In contrast, the number of loans for improvements was down by 63.4% YoY in the first half-year, due to a temporary suspension in the granting of this product. This was due to a relaunch of loans for improvements and extensions aimed at preventing members from using the credit for purposes other than those established by the programme.

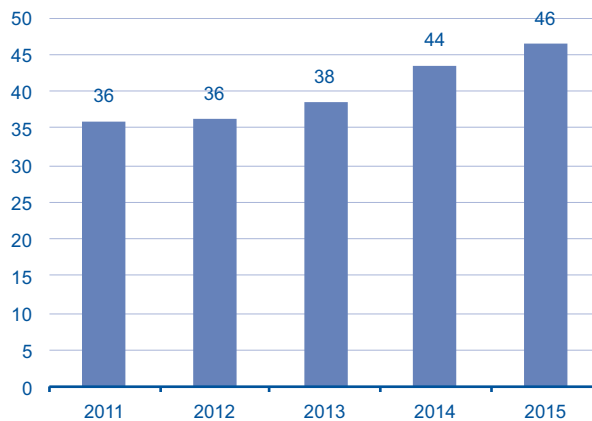
The increase in demand is not the only effect of the decision to raise the maximum loan amount from 483,000 to 850,000 pesos (with terms of up to 30 years) and denominated in pesos. Another consequence of this change is that members are acquiring higher-priced homes, as a result of which middle and residential properties have gained ground relative to the social housing segment. This trend has been evident since as long ago as 2013.

Figure 2b.1

**Infonavit: lending to the social housing segment
Thousands of mortgage loans**

Source: BBVA Research based on data from Infonavit

Figure 2b.2

Infonavit: lending to the middle and residential segment (Thousands of mortgage loans)

Source: BBVA Research based on data from Infonavit

The series of reforms that Infonavit has experienced largely reflect the various stages in the mortgage lending market's path to maturity. However, as a public body, Infonavit was established in order to facilitate access by lower-income workers, which is increasingly difficult in financial terms. In changing the denomination of loans to pesos in 2014 while leaving most of the loans based on a multiple of the minimum wage in force, it ran the risk that its liabilities would grow more than its assets, leading to an overall imbalance (mismatch risk). This is because Infonavit has to assure a positive return on the Housing Sub-Account to members who do not use it to obtain a loan, which used to be covered by a positive real interest rate when the loans were based on a multiple of the minimum wage; but the change of denomination makes this task more difficult.

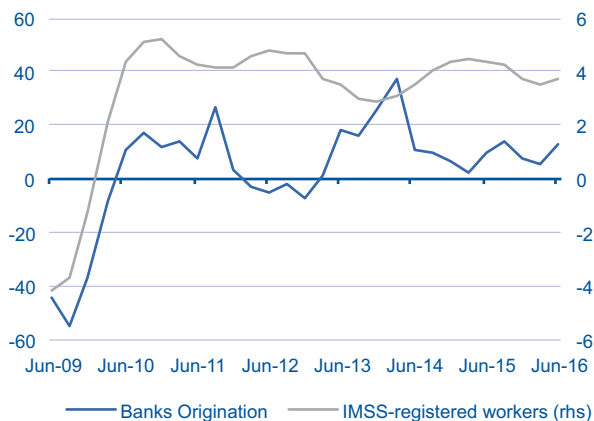
New housing continues to be the central focus of the National Housing Policy, in which subsidies for home purchase play a significant role, even though they have been reduced in the past few years. In the first half of this year Infonavit placed 4.455 billion pesos in subsidies, equivalent to 59% of the budget for this year. However, the 71,000 loans granted under this scheme represented only 38% of all loans in the period.

Bank mortgage lending will end 2016 having grown by more than the economy as a whole

In 2016 the economy has faced several adjustments, both in expectations of economic growth and as regards a possible increase in mortgage lending rates in reaction to adjustments in monetary policy. However, the mortgage lending market has shown strength and continues to grow, albeit more slowly than in the past two years. In the first half of 2016 the amount of mortgage-based financing granted grew by 4.2% YoY in real terms. This includes both loans for the acquisition of new and used housing and loans for paying liabilities and to provide liquidity. Demand for loans for home purchases has kept some of last year's growth impetus, albeit at a slower pace, mainly due to the decline in formal job creation in the private sector. As we have long maintained, employment is the main determinant of effective demand, followed by access to mortgage credit. That is why we are still seeing positive growth, despite the slowdown in economic activity, since the effect of the employment created in previous periods and cheap mortgage credit is carried over.

Figure 2b.3

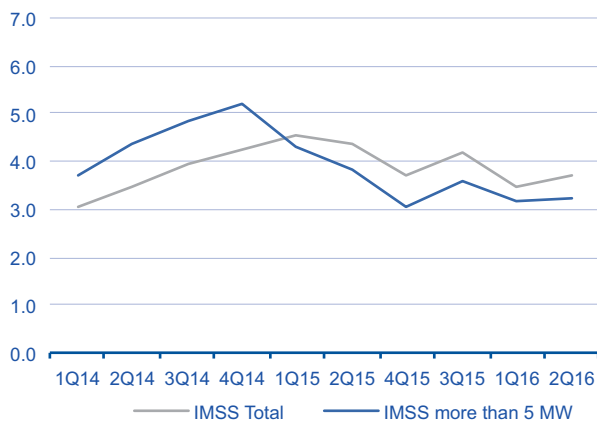
Mortgage loans and private sector formal employment YoY % change



Source: BBVA Research based on data from INEGI and the CNBV

Figure 2b.4

Workers registered with the IMSS (social security system) YoY % change

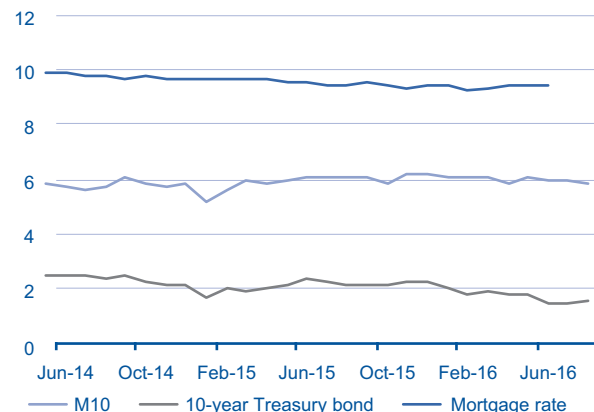


Source: BBVA Research based on data from the IMSS

So far this year the number of workers registered with the IMSS has continued to grow at rates of around 4% YoY on average. However, registration of workers with five times the minimum wage or more has fallen below the total growth rate. The positive effect of this increase in employment will be seen from 2017 on, although trending downward. While employment will sustain demand, mortgage credit will also continue to be a significant factor. Commercial banks' mortgage lending rates have not been affected by the changes in monetary policy. We attribute this to two reasons: 1) the competition among banks for increased market share. 2) the fact that monetary policy has not had much effect on mortgage lending, which seems to depend more on long-term interest rates.¹ Complementing the indicators on the demand side, consumer confidence as regards the housing market has improved slightly during most of the year, but at a declining rate, and the latest figure has turned negative. As with employment, consumer confidence is an advance indicator, and we expect its impact to be reflected in 18 to 24 months' time. Nonetheless, it also points to more modest growth in the housing market.

Figure 2b.5

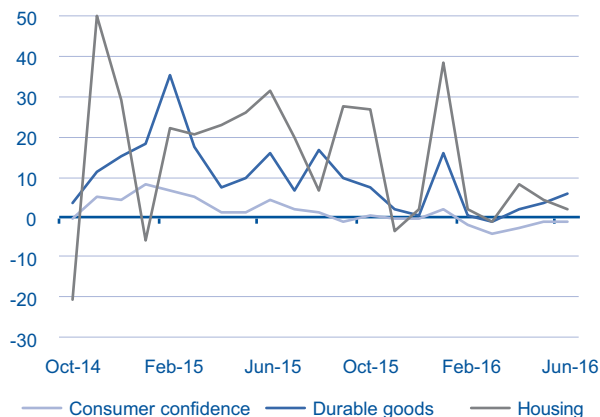
Mortgage loans and private sector formal employment YoY % change



Source: BBVA Research based on data from Bank of Mexico and CNBV

Figure 2b.6

Workers registered with the IMSS (social security system) YoY % change



Source: BBVA Research based on data from the IMSS

1: See "Transmission of monetary policy to the mortgage market" in *Mexico Real Estate Outlook* Second Half 2014, BBVA Research Mexico.

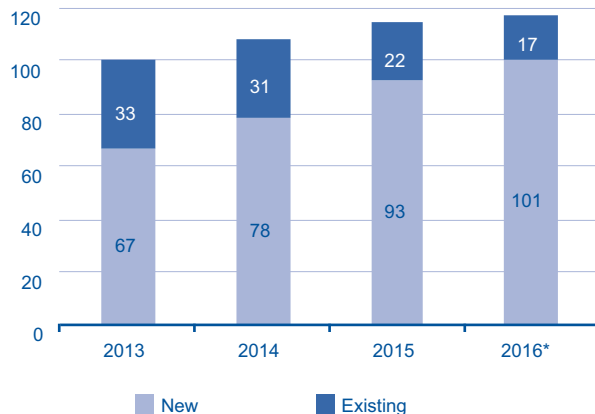
Banks' average mortgage lending rates remain below 10%

Despite these conditions, interest rates remain at historically low levels and will at most show an increase of 50 bps in reaction to Bank of Mexico's key rate hike. The stability of mortgage lending rates, which will barely reflect the change in monetary policy, is an indication that demand for financing will continue to grow, albeit it at a slower pace, for as long as employment

continues to grow. Also, the great variety of products and the intense competition among banks will continue to keep market rates at historically low levels, with continuing growth in loans for paying debts and providing liquidity, offering consumers financing alternatives on better conditions as regards rates and terms. Loans for new housing account for more than 85% of home purchase loans granted by banks nationwide.

Figure 2b.7

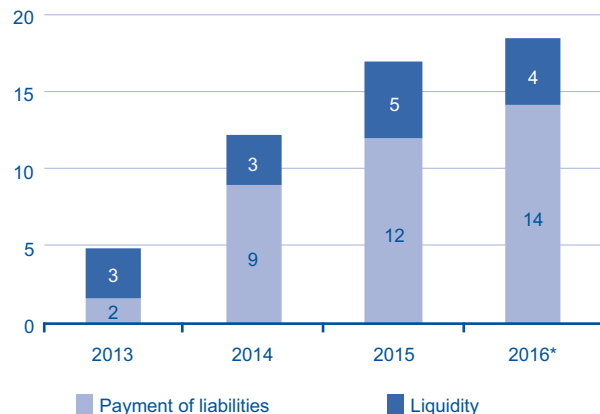
Mortgage loans for home purchase Billions of pesos



Source: Source: BBVA Research based on data from the CNBV (*Comisión Nacional Bancaria y de Valores*, Mexico's banking and securities regulator)

Figure 2b.8

Other mortgage-based bank loans Billions of pesos



Source: Source: BBVA Research based on data from the CNBV (*Comisión Nacional Bancaria y de Valores*, Mexico's banking and securities regulator)

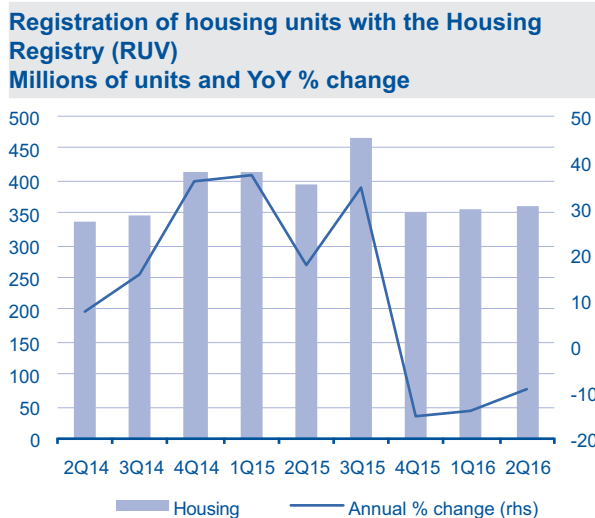
Housing construction adjusts due to reduced subsidies and demand

In 2015 we saw a recovery in the number of residential construction permits to more than 400,000 units, a level not seen for some years, but builders' expectations had improved as a result of the changes made by Infonavit to promote demand and bank lending. However, in the last quarter of 2015 and the first two of 2016 the number of projects registered and even the level of housing stock have fallen. We attribute this to an adjustment in builders' expected sales in line with the slowdown in demand, but also to the passing on of monetary policy to interest rates for construction.² Added to this, the expected and now confirmed cut in housing subsidies contributes to lower expected demand, especially in the social housing segment. These three factors make it very likely that residential building construction will remain on a downward trend.³

2: See "The lower benchmark interest rate could drive residential building" in *Mexico Real Estate Outlook* Second Half 2014, BBVA Research Mexico.

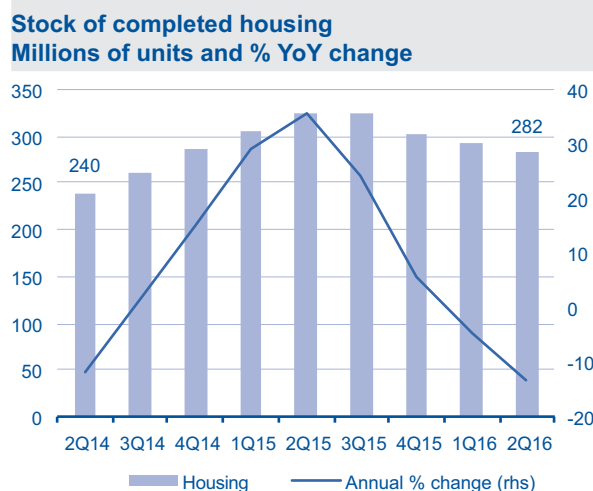
3: It should be borne in mind that the Housing Registry's agreement with the banks on incorporating their information on residential projects may lead to an increase in the number of registrations, but that this does not necessarily denote greater activity as opposed to the inclusion of information not previously taken into account.

Figure 2b.9



Source: BBVA Research based on data from the RUV

Figure 2b.10



Source: BBVA Research based on data from the RUV

For the first half of 2016, the number of housing new-build projects registered was 15% down YoY on the first half of 2015. The stock of finished housing also fell by 13% in the same period, to 286,000 units. A stable housing stock is a sign that units ready to be lived in are being placed in the market, avoiding any build-up of stock and maintaining the rate of appreciation not only in the social housing segment but also in the middle and residential segments where demand has grown in the past few years, not only through the banks but also with the housing institutions as we have already pointed out.

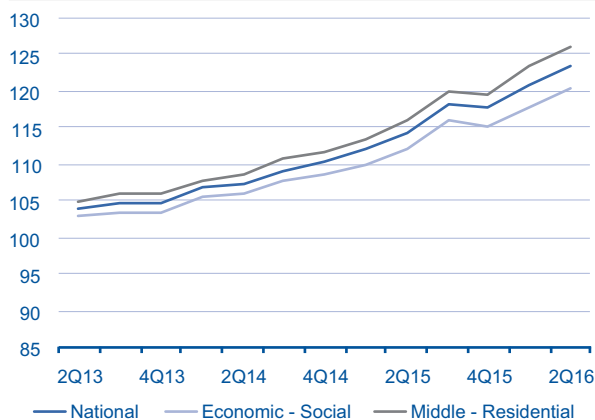
Housing has appreciated by 8% on average

According to data from the Federal Mortgage Company, the housing price index rose by 8% in the first two quarters of the year. Prices in the middle and residential segments rose by close to 9% in the second quarter of 2016, while those in the social housing segment increased by 7.1%, both relative to the same quarter of 2015. Unlike the middle and residential segments, where demand runs ahead of supply, prices in the social housing segments tend to grow less due to greater supply, whether in areas with high levels of economic activity or due to announcements of the receipt of subsidies for home purchases in states such as Nuevo León, Jalisco, the State of Mexico and Guanajuato, among others. In the past few years around 90% of housing subsidies have been for the acquisition of new units, which directly induces demand in the regions receiving them. Another factor driving housing prices is the increase in prices of inputs for residential building construction, which have grown by more than 5% cumulative in the first six months of 2016. This exerts pressure on final housing prices.⁴

4: See "House prices rising due to increased costs" in this issue of *Mexico Real Estate Outlook* Second Half 2016, BBVA Research Mexico.

Figure 2b.11

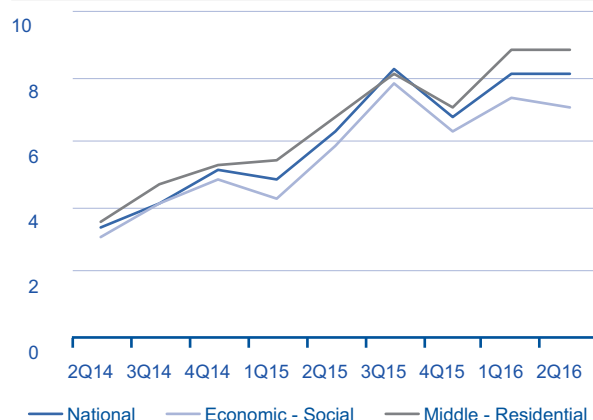
SHF price index Base 2012 = 100



Source: BBVA Research based on data from the SHF

Figure 2b.12

SHF price index YoY % change

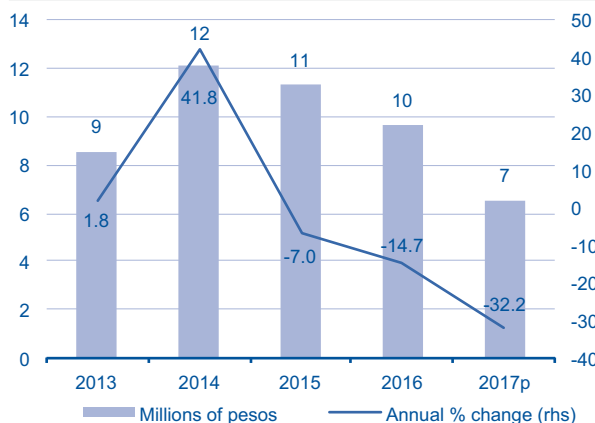


Source: BBVA Research based on data from the SHF

It is important to point out that while around one third of housing subsidies is concentrated in three states (Nuevo León, Jalisco and Quintana Roo), there are states with high levels of economic activity, such as Aguascalientes, Zacatecas, Guanajuato, Querétaro and Puebla, where employment is growing faster than in the country as a whole and therefore have less need of subsidies than other regions where DIY home building and purchase of used housing are more pressing because of the scarcity of land and the low level of economic activity. Therefore the reduced amount of subsidies expected for 2017 could be used less for buying new housing and redirected to other needs.

Figure 2b.13

Amount of housing subsidies Billions of constant pesos

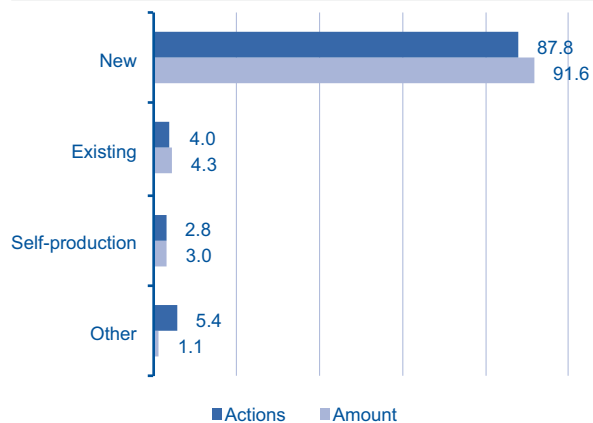


P: preliminary, subject to approval by Congress

Source: BBVA Research based on data from CONAVI (Comisión Nacional de Vivienda or National Housing Agency) and the PEF for 2017

Figure 2b.14

Housing subsidies by purpose Share % 2016



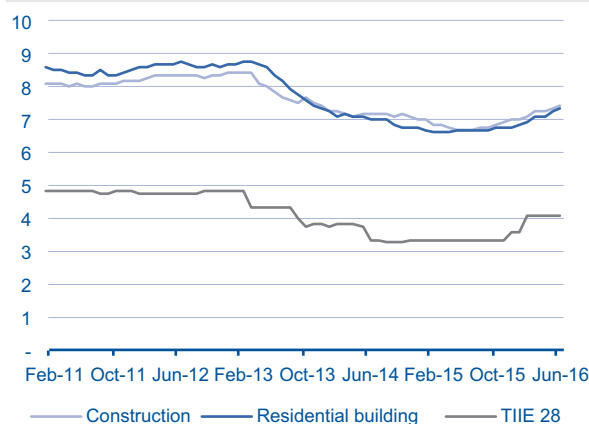
Source: BBVA Research based on data from CONAVI

As already mentioned, the change in monetary policy is in line with lower expectations for housing construction due to its effect on interest rates for construction. Unlike interest rates on mortgage loans, those for financing housing construction are directly related to the TIIE (Equilibrium Interbank Interest Rate). These loans are

usually granted on a floating rate basis, since they are for much shorter terms, with high levels of repayments and therefore more closely reflect the monetary policy decisions of Bank of Mexico.

Figure 2b.15

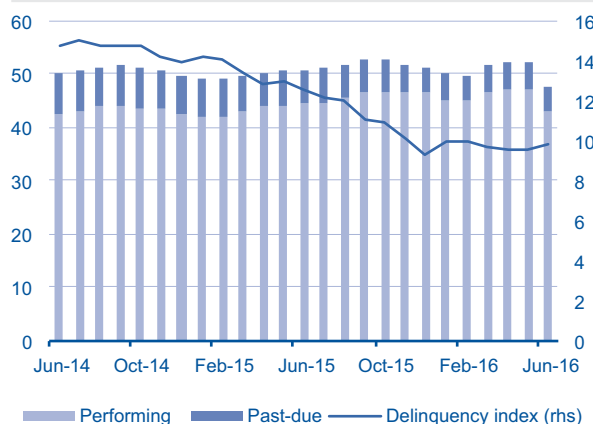
Interest rates on loans to the construction industry and TIIE % 12-month moving average



Source: BBVA Research based on data from the CNBV and Bank of Mexico

Figure 2b.16

Balance of bridging finance Billions of constant pesos and %



Source: Source: BBVA Research based on data from the CNBV

This also explains why at the end of the second quarter of this year the balance of bridging finance was showing a negative rate of growth for the first time. The faster growth of projects in 2015 was due not only to the high volume of subsidies but also to expectations that interest rates would continue to rise, encouraging construction companies to lock in their borrowing in advance. As a result, at the end of the second quarter of 2016 the balance of bridging finance was 3% down on the June 2015 figure. The balance of bridging finance ended up below 50 billion pesos and the NPL rate stabilised at just over 10%.

The mortgage lending market will continue to grow, but its growth will slow

Mortgage lending is starting to show signs of slowing, which will become more visible in 2017. Until now the combination of growth in employment and more favourable financing conditions in the market has been the driving force behind demand for housing. However, the slowdown in economic activity, which implies a slower pace of job creation, and the reduction in subsidies will make themselves felt next year.

The mortgage lending market will grow by more than the economy as a whole in 2016. The major challenge will be to maintain job creation in 2017, since so far there are no signs of further interest rate hikes, which is a key incentive for activating the demand of those needing and able to acquire a home.

On the supply side, stocks are stable, because construction now adjusts more efficiently to changes in demand and increases in interest rates. In 2017 it will also be essential to refocus efforts on redirecting subsidies to those that really need them, strengthening demand for other housing solutions where required. It will also be essential to ensure that the public institutions attend to the segments of the population for whom they were created, especially at the present point in the economic cycle.

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This report has been produced by

Carlos Serrano
carlos.serranoh@bbva.com

Samuel Vázquez
samuel.vazquez@bbva.com

Fernando Balbuena
fernando.balbuena@bbva.com

Itzel Alamillo
itzeldejesus.alamillo@bbva.com

BBVA Research

Group Chief Economist
Jorge Sicilia

Macroeconomic Analysis
Rafael Doménech
r.domenech@bbva.com

Financial Systems and 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

Countries Coordination
Olga Cerqueira
olga.gouveia@bbva.com

United States of America
Nathaniel Karp
Nathaniel.Karp@bbva.com

Argentina
Gloria Sorensen
gsorensen@bbva.com

Global Financial Markets
Sonsoles Castillo
s.castillo@bbva.com

Digital Regulation
Álvaro Martín
alvaro.martin@bbva.hk

Mexico
Carlos Serrano
carlos.serranoh@bbva.com

Chile
Jorge Selaive
jselaive@bbva.com

Global Modelling and Long Term Analysis
Julían Cubero
juan.cubero@bbva.com

Regulation
María Abascal
maria.abascal@bbva.com

Turkey, China & Geopolitics
Álvaro Ortiz
alvaro.ortiz@bbva.com

Colombia
Juana Téllez
juana.tellez@bbva.com

Innovation & Processes
Oscar de las Peñas
oscar.delaspenas@bbva.com

Financial Systems
Ana Rubio
arubiog@bbva.com

Turkey
Álvaro Ortiz
alvaro.ortiz@bbva.com

Peru
Hugo Perea
hperea@bbva.com

Financial Inclusion
David Tuesta
david.tuesta@bbva.com

China
Le Xia
le.xia@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.
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