BBVA | RESEARCH

Regional Sectorial Outlook

Mexico

November 2012
Economic Analysis

- Strengthening the external drive through greater domestic value added
- Favorable sectorial perspectives for 2012 and 2013 despite an uncertain global environment
- Sub-national public debt: proposals to consolidate progress in fiscal regulations
- State and municipal pensions: facing the challenge of financial sustainability
- Energy: structural backlog and new technological challenges

BBVA Bancomer

Index

Closing date: November 9, 2012

1. Summary

Mexico's GDP advances in a complicated global environment

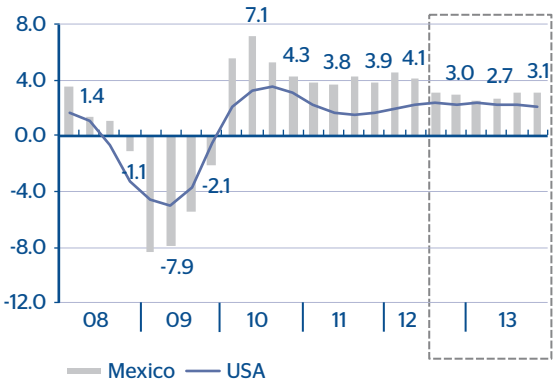
After the 2008-2009 crisis, GDP in Mexico has risen more rapidly than that of the U.S., allowing for a more generalized recovery. Growth in the U.S. favors that of Mexico through manufacturing imports. In this manner one of the main driving forces for growth in Mexico are its manufacturing exports, of which approximately 80% go the U.S.

Mexico's manufacturing production grows faster than that of our main trading partners. For example, the U.S. has not yet reached its maximum levels before its recession, while Mexico in turn has been able to surpass its maximum levels before the crisis. This indicates the greater penetration of its manufacturing exports in the U.S. market.

Expanding and improving Mexico's production capacity has required continuous investment flows

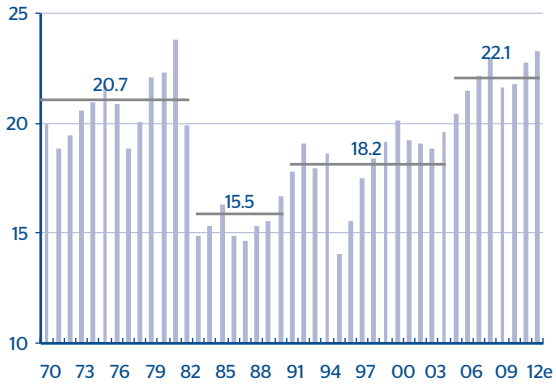
Mexico's appeal to attract investment continues to grow, despite global economic uncertainty. In the last eight years gross fixed investment as a percentage of GDP has maintained levels surpassing 20%, an unprecedented performance since the decade of the 70's. Moreover, as of January 2011 not only has there been a modernization but also a net expansion of the manufacturing production capacity as well, with high capacity utilization rates.

Graph 1
Mexico-U.S. GDP
(Annual % change, sa, seasonal adjustment)



sa=seasonal adjustment
Note: Estimated figures as of 3Q12
Source: BBVA Research with INEGI and U.S. Federal Reserve data.

Graph 2
Gross Fixed Investment
(% del PIB)



Source: BBVA Bancomer with INEGI and Banxico (Mexico's central bank) data
Note: 2012 estimated
Average of the following years: 1970-1982: 20.7%; 1983-1990: 15.7%; 1991-2004: 18.2%; 2005-2012: 22.1%

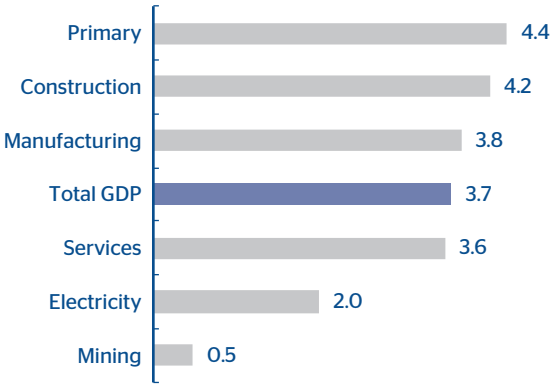
Strengthening the external drive with greater domestic value added in manufacturing exports

For a better use of the external driving force for growth in Mexico, we suggest strengthening the incentives to enhance the productive chains in at least the three main manufacturing export sectors: transportation equipment, electronic products and computers, and electrical equipment. A greater share of domestic inputs in the total value added of manufacturing exports of these sectors would strengthen the country's competitive position, leading to a better growth perspective.

Favorable perspectives for 2012 and 2013

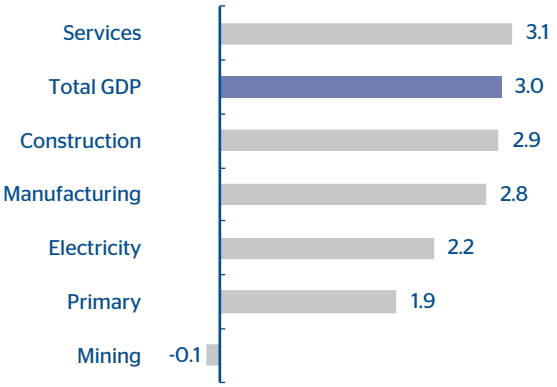
In 2012 the primary sector and construction were the growth leaders, with 4.4% and 4.2% respectively. Manufacturing will grow 3.8% and services 3.6%. In 2013, it is expected that the services sector will compensate, although not completely, lower growth in manufacturing and construction. Also, the domestic economy could benefit due to better expectations derived from the approval of some reforms (energy, labor, and fiscal) that will allow Mexico to improve its potential growth. In this context, the factors of uncertainty are of external origin; the crisis in the European Union continues to be the greatest risk for global activity.

Graph 3
GDP forecast for major sectors, 2012
(Annual % change)



Source: BBVA Research

Graph 4
GDP forecast for major sectors, 2013
(Annual % change)



Source: BBVA Research

Special topics: sub-national liabilities and the energy sector in Mexico, key factors for growth

In this edition of ***Regional Sectorial Outlook,*** an analysis is done with regard to three fundamental topics to achieve greater economic growth: the long-term sub-national debt; the state and municipal pension systems and the energy sector. Of significance are proposals that seek to establish a better regulatory framework for the administration of the sub-national debt, sustainable state and municipal pension systems and a more efficient and modern energy sector.

Although the states' long-term public debt in Mexico is not a systemic risk, since it represents 2.7% of national GDP, the growth observed in debt levels as of 2008 has caught the attention of various actors of society. In this context, another issue of interest, are state and municipal pensions, due to their diversity. To contribute to the strengthening of sub-national public finances, BBVA Research presents three proposals to expand transparency and accountability by the state governments; extend the rule of the "zero" budget deficit for states and consolidate a national pension system with defined contributions that will allow for the portability of resources and rights of pensioners with the reformed federal plans (IMSS and ISSSTE). The implementation of these proposals will have a positive effect on economic performance through a better operation of financial markets, derived from a greater quality of information and more limited risks.

Finally, regarding the need to make a better use of the potential in the energy sector, we present a series of proposals by specialists on the subject in regard to the institutional and operational changes that would allow PEMEX and the CFE (the National Electricity Commission) to face the challenges of their respective industries in a better way. Undoubtedly, greater modernization in the sector would help to increase the competitiveness of the country and to better diversify, improve and increase the national supply of energy for the benefit of companies and families.

2. Sectorial Regional Analysis

2.a Mexico presents high growth, due to gains in competitiveness and the strengthening of the domestic market, the main driving forces

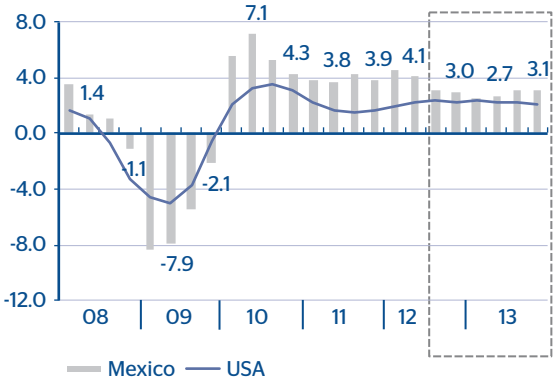
High uncertainty continues to dominate in Europe and the U.S.

The perspectives for economic growth in the world continue to maintain a certain degree of uncertainty due to various factors. In the short term, the main risks are a sharpening of the crisis in the euro zone–which for the moment is not perceived, and in fact, the probability of extreme scenarios has diminished–the "fiscal cliff"[1] in the U.S. and a delay in increasing its debt ceiling. In the medium term, the greatest risk is the possibility that the weakening of the Chinese economy will be greater than expected. BBVA Research forecasts economic growth for the U.S. of 2.1% and 1.8% in 2012 and 2013, respectively. For the euro zone[2] growth will continue to be heterogeneous, with expected rates of –0.3% and 0.3% in the same years.

Despite the adverse conditions in the global environment, GDP in Mexico continues to grow, even at a faster pace than in the U.S.

Following the 2008-2009 crisis, Mexico's GDP has grown more rapidly than that of the U.S., allowing for a more generalized recovery. The U.S. growth drives that of Mexico through manufacturing imports. In this manner, one of the main driving forces for growth in Mexico are its manufacturing exports, of which approximately 80% go the U.S.

Graph 5
Mexico U.S. GDP
(Annual % change, sa or seasonal adjustment)



sa=seasonal adjustment
Note: estimated figures as of 3Q12
Source: BBVA Research with INEGI and U.S. Federal Reserve data

Graph 6
Mexico U.S. GDP
(Índex 1Q08=100, sa or seasonal adjustment)

sa=seasonal adjustment
Note: estimated figures as of 2Q12
Source: BBVA Research with INEGI and U.S. Federal Reserve data

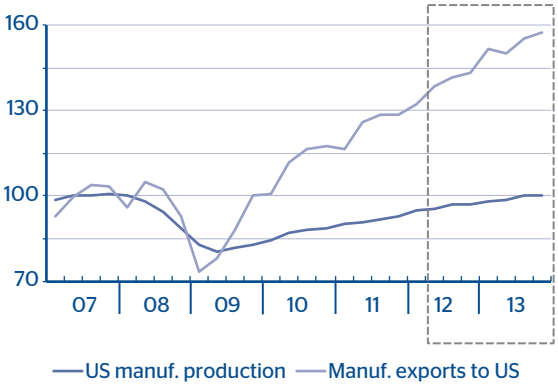
[1] "Fiscal cliff" in the U.S. - Tax deductions that expire at the beginning of 2013 and cuts in federal public expenditures (US$670 billion).
[2] The euro zone is formed by 17 countries: Germany, Austria, Belgium, Cyprus, Slovakia, Slovania, Spain, Estonia, Finland, France, Greece, Ireland, Italy, Luxemburg, Malta, the Netherlands, Portugal.

Manufacturing production in Mexico grows more radidly than that of the United States

Manufacturing production in the U.S. has not yet returned to its maximum levels observed before its recession. In turn, Mexico has surpassed, since last year, its maximum levels prior to the crisis. Mexico has shown a faster recovery, the result of a greater penetration of its manufacturing exports in the U.S. market.

Graph 7

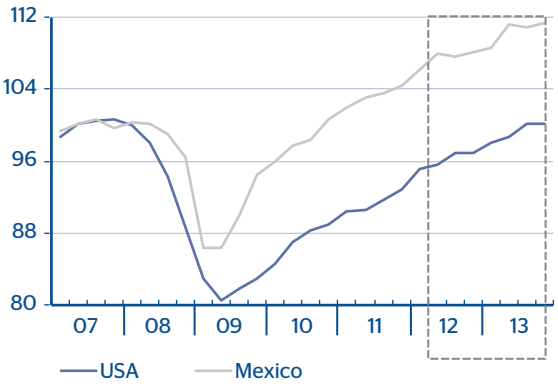
Manufacturing exports from Mexico to the U.S. and Manufacturing Production in the U.S. (Index 2007=100, sa, seasonal adjustment)



Note: Estimated figures as of 2Q12.
Source: BBVA Research with INEGI and Haver data
sa=seasonal adjustment

Graph 8

Manufacturing production in Mexico and the U.S. (Index 2007=100, sa, seasonal adjustment)



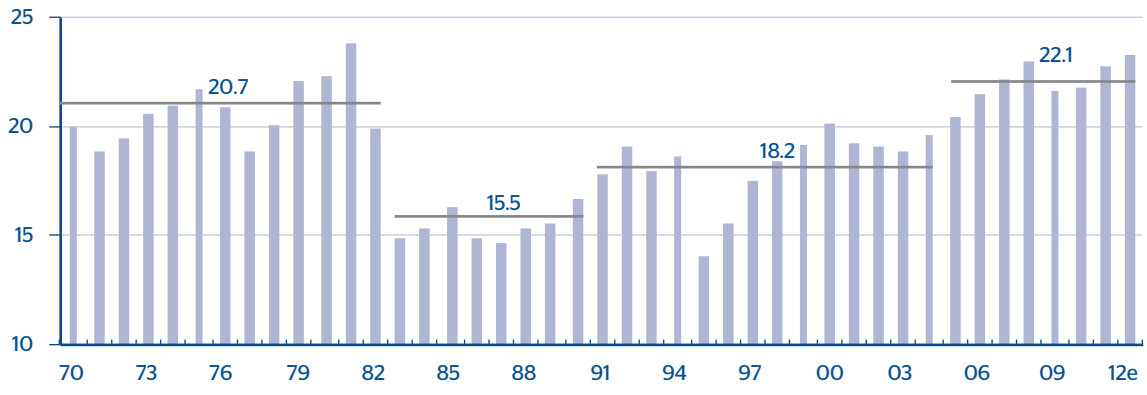
Note:.Estimated figures as of 2Q12
Source: BBVA Research with INEGI data

Expanding and improving Mexico's production capacity has required continuous investment flows

Mexico's appeal in attracting investment continues to grow despite global economic uncertainty. In the last eight years gross fixed investment as a percentage of GDP has maintained levels of over 20%, an unprecedented figure since the decade of the 70's. Moreover, since January 2011, not only has there been a modernization but a net expansion of manufacturing production capacity as well and high capacity utilization rates. This appeal for investment occurs in strategic sectors (the automotive industry, aeronautics, machinery and equipment, etc.), more competitive in terms of production costs, transportation, consumer potential, operation, investment risk and ease in resource management.[3]

Graph 9

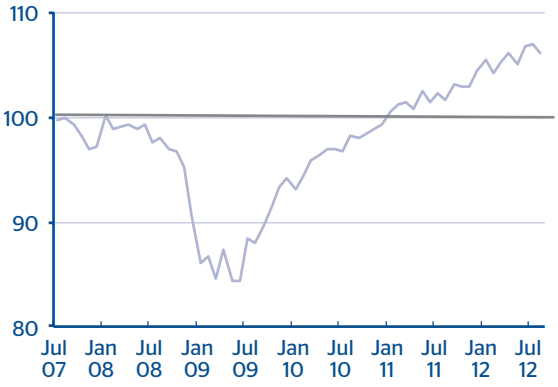
Gross Fixed Investment (% of GDP)



Source: BBVA Bancomer with INEGI and Banxico (Mexico's central bank) data
Note: 2012 estimated. Average for the following years: 1970-1982: 20.7%; 1983-1990: 15.7%; 1991-2004: 18.2%; 2005-2012: 22.1%

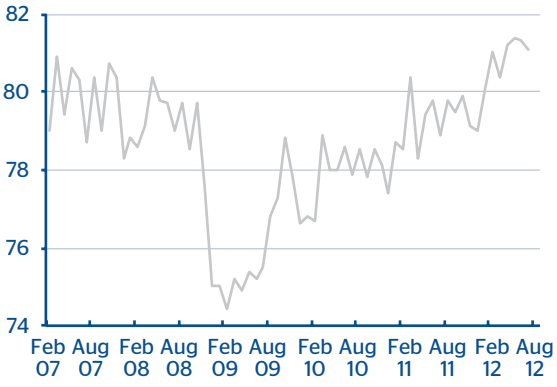
[3] For more details on Mexico's strength factors, see page 21 of ***Regional Sectorial Outlook October 2011.***

Graph 10
Production capacity of the manufacturing industry
(Index July 2007=100, sa, seasonal adjustment)



sa: seasonal adjustment
Source: BBVA Research with INEGI data

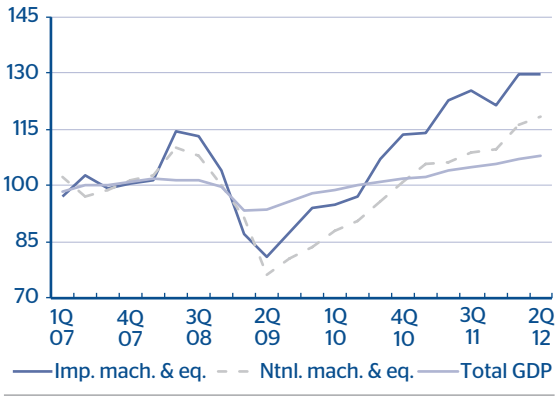
Graph 11
Use of installed manufacturing capacity
(%)



Source: BBVA Research with INEGI data

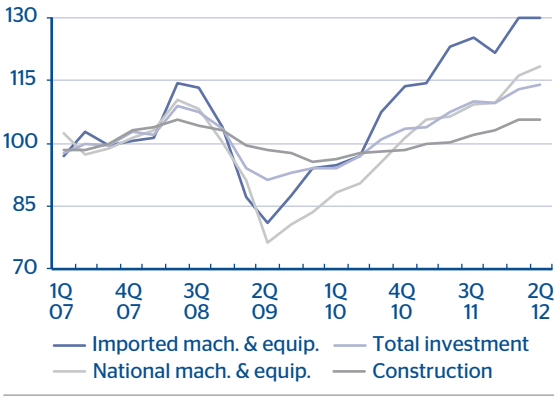
By component, investment in imported machinery and equipment has shown the greatest growth, followed closely by that of domestic origin. This, together with the net increase in manufacturing production capacity reinforces the perception of sustained growth of manufacturing competitiveness, leading to a more rapid growth of GDP.

Graph 12
GDP supported by investment in machinery and equipment
(Index 2007=100, sa, seasonal adjustment)



sa= seasonal adjustment
Source: BBVA Research with INEGI data

Graph 13
Total investment by component
(Index 2007=100, sa, seasonal adjustment)



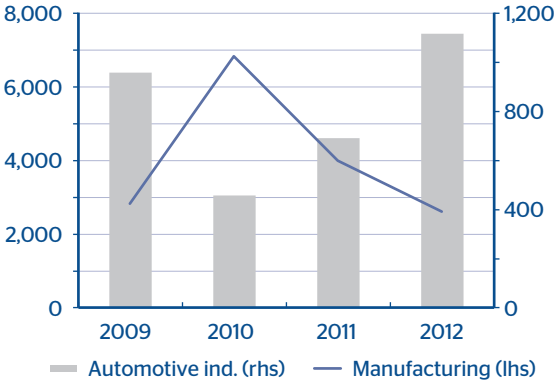
Source: BBVA Research with INEGI data

The automotive industry in Mexico, the most benefited due to high investment levels

As a result of the restructuring of the automotive industry in the U.S., one of the main measures was the relocation of production lines from the U.S. and Canada to different destinations, among which Mexico was one. With this, Mexico obtained a major part of the production in the area of the North American Free Trade Agreement (NAFTA) in a smaller-sized market. This led to an increase in production for export, not only toward the U.S. but also to other destinations. This relocation process will continue, not only by U.S. companies but also by European ones. In this year, the investments announced by

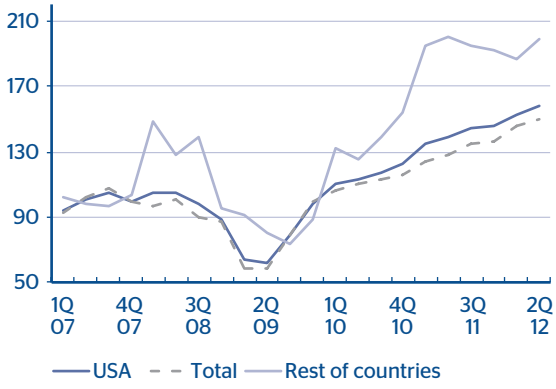
Ford, Nissan and GM totaled US$3.72 billion, on top of the US$2 billion pertaining to the Audi project. To this flow of foreign direct investment in the auto assembly industry, we must consider US$8.78 billion[4] that entered Mexico since the restructuring of the auto industry in the U.S. (2008-2011). These growing investment flows are making it possible to build a solid chain of auto part suppliers which continue to consolidate. Hyundai will establish its facilities in Baja California North to send auto parts to the U.S. To summarize, a strategic cluster of the automotive sector is strengthening, but also that corresponding to the electric, electronic, and major household appliance sectors.

Graph 14
Foreign direct investment in manufacturing* (Millions of dollars)



*first half of each year
Source: BBVA Research with data from the Department of the Economy

Graph 15
Manufacturign exports in the automotive industry (Índex 2007=100, sa, seasonal adjustment)

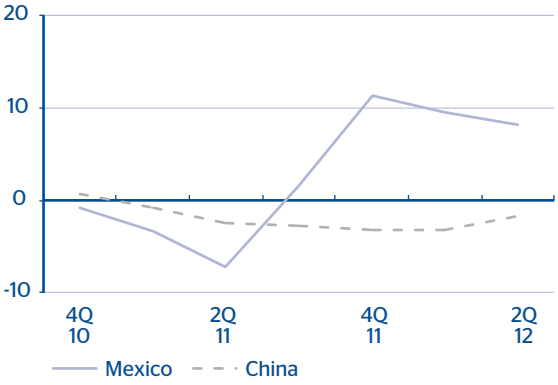


sa= seasonal adjustment
Source: BBVA Research with INEGI data

The exchange rate and relative labor costs help in the short term

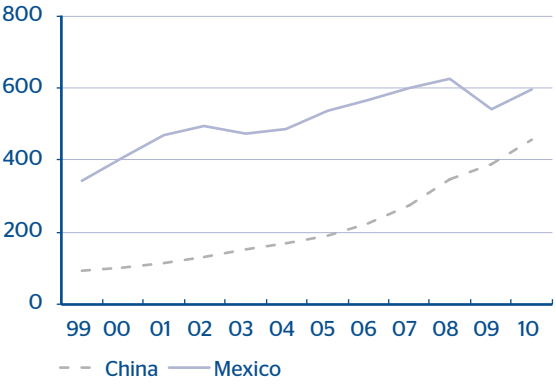
In the last year, the depreciation of the Mexican peso against the U.S. dollar and an appreciation of the Chinese currency, Mexico's main competitor in the U.S. market, has favored Mexican exports. In turn, labor costs in China are not so diametrically different from those in other countries such as Mexico. These factors along with with high energy and transportation costs are relevant to deciding the geographical location of suppliers to large consumer markets.

Graph 16
Real exchange rate of the peso vs. the U.S. dollar (Annual % change)



Source: BBVA Research with Haver data

Graph 17
Manufacturing wages: Mexico - China (monthly dollars, current prices)



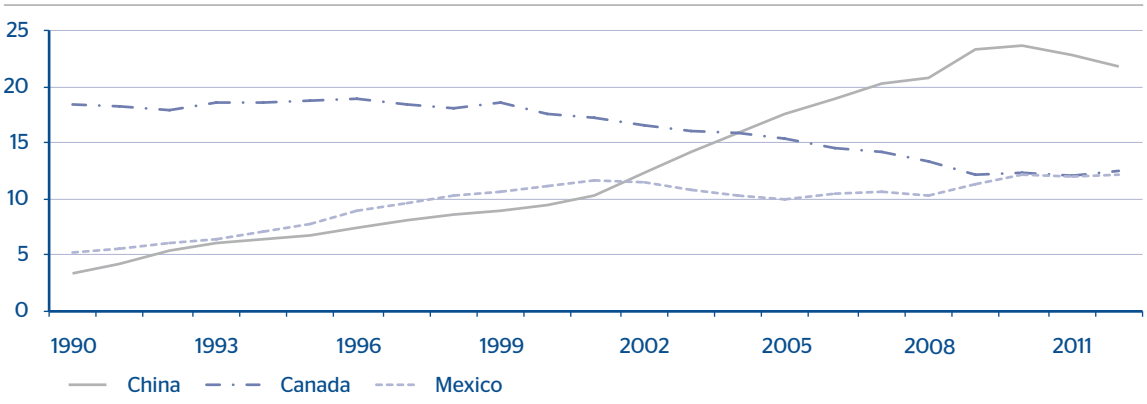
Source: Haver, STPS, SMC and IMSS

[4] BBVA Research with newspaper sources. Refers to announcement date of the investment.

2.b Strengthening the competitiveness of exports through greater domestic value added

Mexican manufactured exports have increased around 6.8 times in the period from 1993 to 2011. With this considerable growth in the manufacturing exports sector, its share of GDP rose from 9.3% to 24.5% during the same period. In 2011, according to information from the World Trade Organization, Mexico was in eleventh place (excluding trade interchange within the European Union) among merchandise exporting powers.[1] It should be noted that, as of the recent global economic recession, there is evidence in the Mexican export sector that some sectors have shored up their competitiveness due to both a vertical restructuring of manufacturing production as well as a gain in market share against that of exports from other countries in the U.S. manufacturing import market.[2]

Graph 18
Share in U.S. manufacturing imports market (% of total value)



Source: BBVA Research with U.S. Department of Commerce data.

In the previous issue of ***Regional Sectorial Outlook Mexico*** we analyzed the competitiveness of durable and non-durable goods exports in U.S. manufacturing imports for the period from 2008 to 2011. Upon analyzing the most recent information, it was confirmed that manufactured exports have continued to gain share. Between January and June of 2008, and January and June of 2012, the percentage of durable goods exports rose from 13.1% to 16.1%, while that of non-durable goods went from 5.0% to 5.2%, as shown in Graphs 19 and 20.

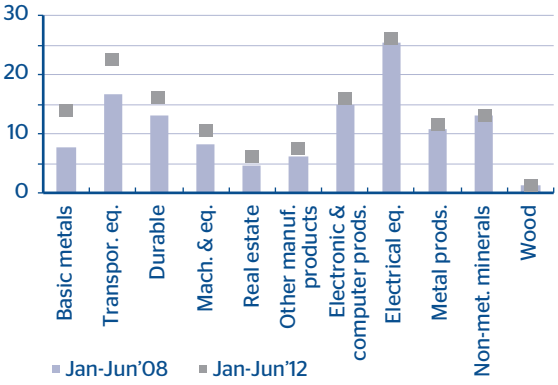
Despite the advance in market share in most manufacturing sectors, this concept of competitiveness is limited solely to the products market and not that of inputs. That is, the earnings in national production that could be derived from a greater share of domestic inputs in the value added to manufactured exports is not taken into account.

Among other things, to determine with greater accuracy which regional or industrial development policies would be convenient to be implemented, in the recent economic literature on foreign trade the domestic content in exports has been evaluated, as well as the benefits of participating in the global segmentation of production.[3] Estimates of this domestic content indicate that in China such figure is

[1] *See Press Release 658: Trade growth to slow in 2012 after strong deceleration in 2011. 2012 Press Releases, WTO.*
[2] Van Biesebroeck and Sturgeon (2010) mention that the global economic recession of 2008 - 2009 will serve to accelerate some long-term trends in the automotive industry such as the relocation of production lines toward developing countries. In turn, between 2009 and 2011 Mexican manufactured exports increased their share from 11.4% to 12.0%, while those of China and Canada showed a loss, dropping to 22.8% from 23.4% and to 12.0% from 12.2%, respectively during the same period. It is important to note that, since 2005, Mexican manufactured exports have shown a positive trend in competitiveness in the U.S. import market.
[3] Koopman, Wang and Wei (2008) present a review of some of those studies and others where the effect of the exchange rate on the volume of exports or on the impact of commercial trade on economic inequality is analyzed.

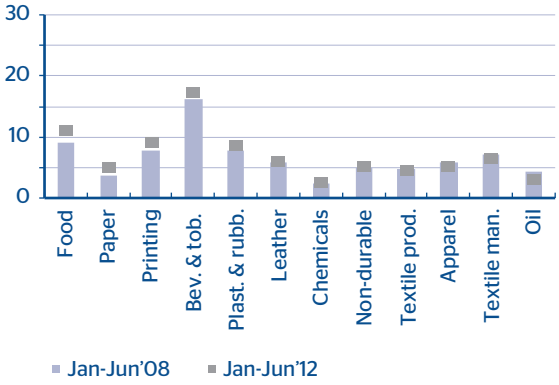
51.3% of the total value of manufactured exports, vs. 33.8% in Mexico.[4] Therefore, to have a broader baisis for comparison between Mexico's manufacturing performance and. that of other countries, we suggest that the competitiveness of domestic inputs to produce the exports of this industry also be considered. A greater integration of these with domestic inputs will yield a greater domestic added value, strengthening the country's competitive position and offering a better perspective for growth.[5]

Graph 19
Share of durable goods in manufacturing imports in the U.S. (% of total value)



Source: BBVA Research with data from the U.S. Department of Commerce

Graph 20
Share of non-durable goods in manufacturing imports in the U.S. (% of total value)



Source: BBVA Research with data from the U.S. Department of Commerce

Dimensioning the potential impact of greater domestic value added

To have a better idea of the potential impact on national economic growth by substituting away from imports of inputs for manufacturing export production, the following indicates the percentage of GDP represented by domestic added value in manufactured exports. During 2011 manufactured exports (excluding food, beverages and tobacco) represented 23.5% of GDP (US$267.09 billion). De La Cruz, Koopman, Wang and Wei (2011) estimate that 33.8% of the value of manufactured exports (excluding food, beverages and tobacco) is added in Mexico. Therefore, an approximation of the domestic value added in manufactured exports during 2011 (excluding food, beverages and tobacco) would be 7.9% of GDP (US$90.28 billion) That is, an increase of 10% in domestic value added would represent an additional 0.8% of national GDP.

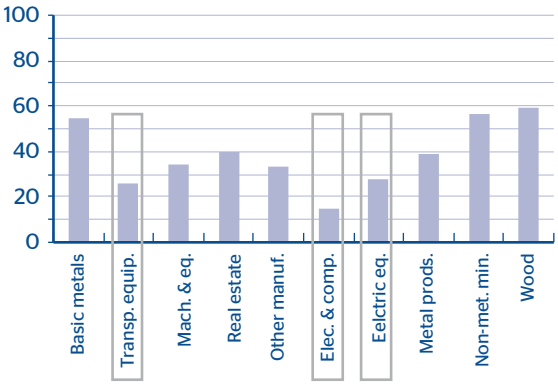
Identifying the manufacturing sectors that could incorporate greater domestic added value

The three sectors with a greater share in total manufactured exports (transportation equipment, electronic and computer equipment and electrical equipment) coincide with being those with the lowest domestic share in the value of its exports (see Graphs 21 and 22). In the period from January to June 2012, these sectors represented 31.4%, 24.1% and 9.2%, respectively, of total Mexican manufactured exports in the United States. From the perspective of regional or industrial development policies, it would be advisable to create economic incentives to develop productive chains at least around these sectors. Lederman and Maloney (2012) comment that externalities in the production of goods are what justifies classifying them according to how desirable they are. In particular, those that refer to the transfer

[4] Koopman, Wang and Wei (2008) made an estimate of the domestic share in the total value of Chinese manufactured exports for 2002, while De la Cruz, Koopman, Wang and Wei (2011) estimated this value for Mexico corresponding to 2003, as well as the share at the sectorial level at three and four digits from the NAICS. These authors find that approximately 80% of Mexican manufacturing exports register a domestic content lower than 50%. It is important to note that the estimates of the latter authors exclude food, beverages and tobacco. Moreover, it is probable that an estimate with more current figures would be above that obtained with the 2003 product input matrix, due to the greater integration of national suppliers, particularly in automotive production.
[5] For more information on the current relevance of the topic, see Article "Piden impulso a contenido nacional en las exportaciones". September 2012, Internet portal of El Economista newspaper.

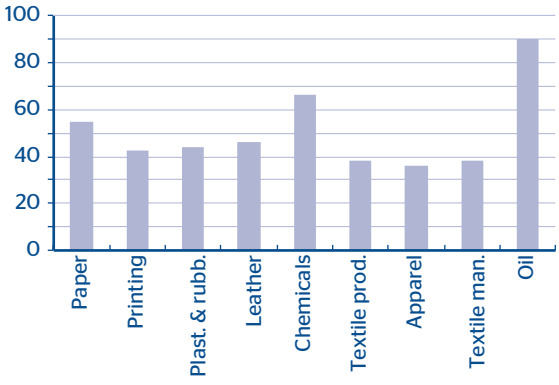
of technology and know-how from one sector to another.[6] In turn, Harrison and Rodriguez-Clare (2010) have a better approximation for this type of externalities through sectors located in neighborhoods close to others.

Graph 21
Domestic value added to exports of manufactured durable goods (% of total value)



Source: BBVA Research with data from De La Cruz, J., Robert B. Koopman, Zhi Wang and Shang-Jin Wei (2011)

Graph 22
Domestic value added to exports of manufactured non-durable goods (% of total value)



Source: BBVA Research with data from De La Cruz, J., Robert B. Koopman, Zhi Wang and Shang-Jin Wei (2011)

Considering what was mentioned before, it is advisable to generate incentives to create productive chains around the three main sectors of the Mexican manufacturing export industry, regardless of the degree of difficulty that this represents in practice.[7] Moreover, within each of those sectors, it is possible to identify the share of the domestic component in the value added to exports of sub-sectors and, with this, the opportunities for their potential growth.

Pietrobelli and Rabellotti (2004) point out that, despite the limited opportunities to create externalities in the case of those sectors that involve systems of complex products (automotive, electronic, aeronautic, information technology and communications, etc.) certain policies could help to improve the products, processes and operations of local suppliers. For these purposes those authors identify two main strategies: 1) support for the promoters of relations between anchor companies (typically the transnationals) and local suppliers; and 2) creating a framework of incentives so that large companies look for inputs and personnel services from local companies, in addition to collaborating with the improvement of the latter.[8, 9]

Conclusions: a better integration of the productive chains is desirable

Although there are important technical, administrative and financial challenges to increase the domestic value added in the manufacturing sectors of transportation equipment, electronic and computer products and electrical equipment, the margins for doing so are high. For this reason, and given the current context of global suppliers, it is advisable to design programs to assist local producers to acquire the knowledge necessary to supply the transnational companies inside and outside Mexico. A greater participation by the national productive chains in the segmentation of global production, would undoubtedly have a positive effect on the economy as a whole.

[6] Hidalgo et al. (2007) refer to the analogy of "The Monkey and the Tree" to model this type of externalities. In its abstract conception of the production space, "trees" represent sectors, while "monkeys" personify the entrepreneurs of an industry. In turn, climbing "trees" would represent gains in the productivity of a sector, while the leaps of "monkeys" from one "tree" to another would represent technological transfer and the emergence of new goods. In particular, the leaps from "trees" bearing little fruit to others with greater levels of production would lead to greater economic growth.
[7] Koopman, Wang and Wei (2008) warn that domestic value added varies inversely with the intensity of the sector in the use of more specialized factors.
[8] McCann, P. (2010) mentions that it is necessary to develop long-term stable and predictable relations between local suppliers and recently located companies so that regional development policies that provide localization incentives be successful in the long term.
[9] For more information on support programs for national suppliers, see Article "Amplía IQOM con Economía programa para empujar a Pymes a exportar, México sólo 34% de valor agregado y el reto para EPN," October 3, 2012, Internet portal of Milenio newspaper. Jalisco edition.

Table 1

Domestic value added in manufactured exports of durable goods

Manufacturing sector	Domestic value added (% of total value)
Transportation equipment	**26.2**
Parts for automotive vehicles	26.7
Ships	28.0
Automobiles and trucks	35.2
Aerospace equipment	37.6
Railroad equipment	62.5
Auto bodyworks and trailers	63.3
Electronic and computer products	**15.0**
Computers and peripheral equipment	9.1
Audio and video equipment	13.5
Communication equipment	16.0
Electronic components	16.4
Measurement, control, navegation instruments and electronic medical equip.	25.4
Magnetic and optical media	26.4
Electrical equipment	**27.6**
Other electrical equipment and accessories	25.9
Lighting accessories	33.1
Electrical appliances for home use	34.3
Basic metals	**54.6**
Basic aluminum industry	33.4
Basic iron and steel industy	45.9
Iron and steel products	58.1
Molds for casting metal parts	61.1
Non-ferrous metals, except aluminum	61.9

Source: BBVA Research with data from De La Cruz, J., Robert B. Koopman, Zhi Wang and Shang-Jin Wei (2011)

Table 2

Domestic value added in manufactured exports of other durable goods and oil

Manufacturing sector	Domestic value added (% of total value)
Machinery and equipment	**34.4**
For retailing and services	18.7
Machinery and equipment for agriculture, livestock, construction and industry	36.9
Internal combustion engines, turbines and transmissions	37.3
Air conditioning, heating and industrial and commercial refrigeration	38.7
For the manufacturing industry, except metal mechanical	57.0
For the metal mechanical industry	59.4
Other manufactured products	**33.0**
Non-electronic equipment and disposable material for medical, dental, laboratory use, and ophthalmic articles.	27.0
Other manufacturing industries	38.6
Metallic products	**38.7**
Other metallic products	37.9
Non-metallic minerals	**56.8**
Furniture and facilities	**40.1**
Wood products	**59.7**
Oil and coal by-products	**89.9**

Source: BBVA Research with data from De La Cruz, J., Robert B. Koopman, Zhi Wang and Shang-Jin Wei (2011)

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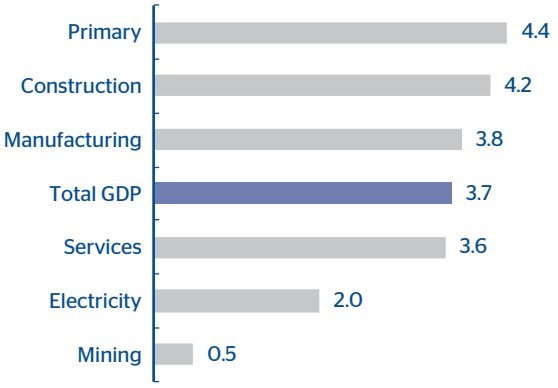
2.c Positive outlook for 2012 and lower sectorial growth in 2013

In the third quarter of 2012 the slowdown in external demand intensified, but domestic demand strengthened

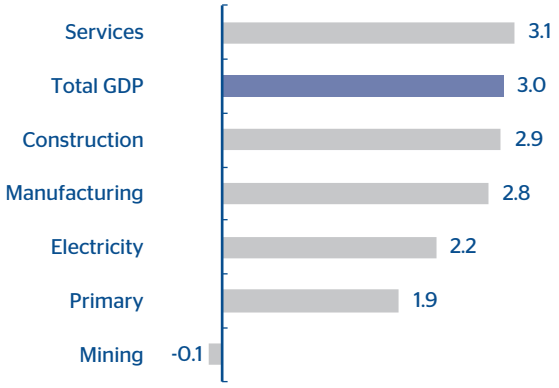
In 2012 the primary sector and construction will lead growth, with 4.4% and 4.2% increases, respectively. Growth of 3.8% is expected in manufacturing and 3.6% in services. In 2013 it is projected that the service sector will offset, albeit not completely, the slowdown in manufacturing and construction. In addition, the domestic economy could benefit from enhanced expectations following the approval of some of the reforms (energy, labor, and fiscal) since Mexico needs to improve its global competitiveness.

Graph 23
Output projections for major economic sectors 2012 (annual %change)



Source: BBVA Research

Graph 24
Output projections for major economic sectors 2012 (annual %change)



Source: BBVA Research

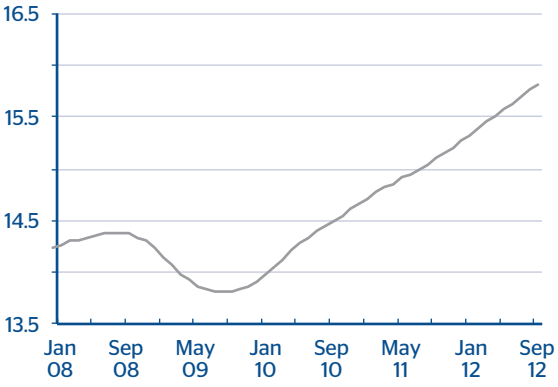
In manufacturing, progress in competitiveness continues

Despite the modest growth in exports in July and August 2012, including overseas sales by the automotive sector, it still cannot be said that the downturn has deepened because the numbers are very irregular and often undergo drastic changes. Among the factors that explain this phenomenon is the adaptation to new production lines due to changes in models and inventory depletion, and therefore we estimate that in the second half of 2012, manufacturing output could post 3.4% annual growth, which although less than 4.2% in the first six months, could bring the yearly rate to 3.8%. In 2013, manufacturing output is expected to grow 2.8%. By the same token, the activities most coupled to both the external as well as the internal market are projected to display a more balanced growth in both 2012 and 2013 (see Graphs 23 and 24).

The boost to activity from external demand subsides, but domestic demand keeps growing

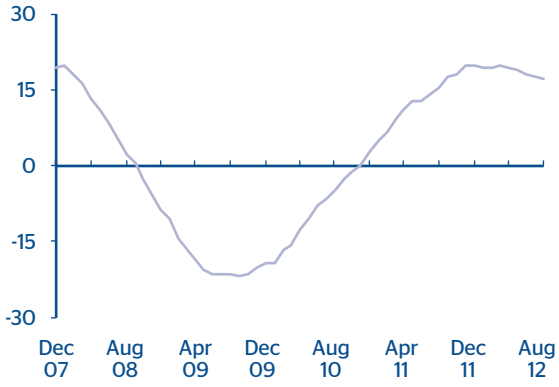
Domestic demand performed well, bolstered by the positive evolution in formal employment, modest improvements in real wages, and the availability of financing, particularly consumer credit (see Graphs 25 and 26).

Graph 25
Formal private employment (workers affiliated with the IMSS, millions of persons, sa 3mma)



sa: seasonally adjusted; 3mma: 3 month moving average
Source: BBVA Research with STPS data

Graph 26
Consumer credit from banks (real annual % change)

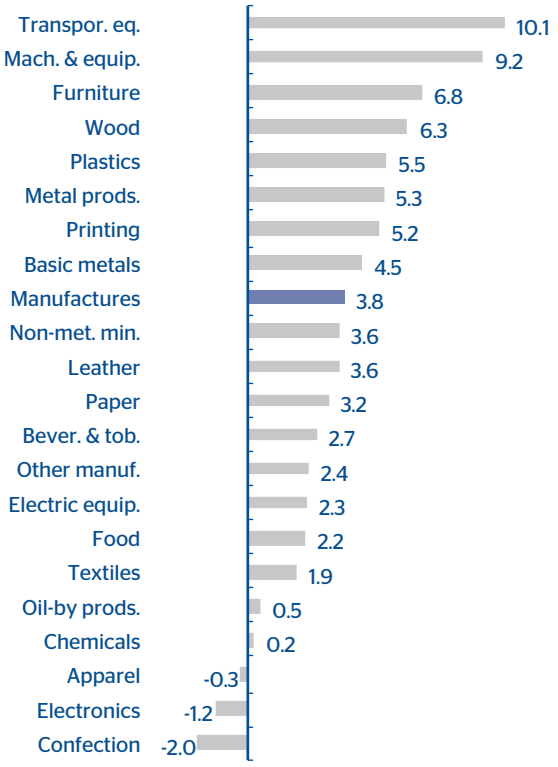


Source: BBVA Research with Banxico (central bank) data

Service sector output will continue to increase in 2013, partially offsetting the lower growth in manufacturing

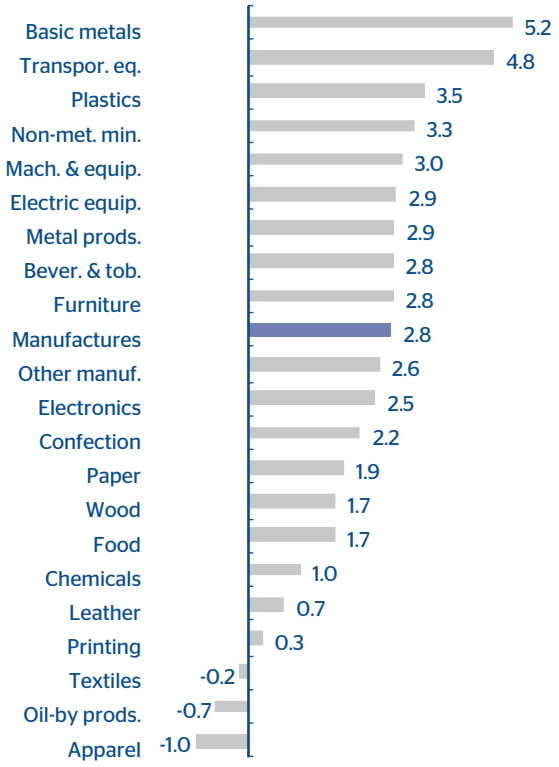
It is still too early to determine the scope of the impact of the external environment on Mexico. However, the manufacturing sector–which is the industry most coupled to the U.S. cycle–will be the most exposed through export performance (see Graphs 27 and 28). Services, retail trade, and the transportation of goods are expected to be the most sensitive to the external cycle.

Graph 27
Production forecasts of major sectors in 2012 (annual % change)



Source: BBVA Research

Graph 28
Production forecasts of major sectors in 2013 (annual % change)



Source: BBVA Research

The main risks come from abroad; time to promote structural reforms

The BBVA Research baseline scenario projects global average growth of 3.5% in 2012-2013 with measures that could dispel uncertainty regarding the future of the euro zone, and avoid a severe automatic fiscal adjustment in the United States. The crisis in the European Union remains the biggest risk to global productive activity. Mexico's GDP is expected to grow 3.7% in 2012 and 3.0% in 2013, with an upward bias.

The lower U.S. industrial activity means less demand for Mexican manufactured goods. However, since the restructuring of the U.S. automotive industry and the 2008 crisis, the continuing gains in competitiveness have allowed for a more gradual slowdown of manufacturing production in Mexico. In 2012, manufacturing output is expected to grow 3.8% and in 2013, 2.8%.

Following the growth in external demand, domestic demand has also strengthened. This can be attributed to increased investment, which coupled with an improvement in job numbers, families' disposable income, and financing to households and companies, has allowed for an upward trend in service output and growth in all its components. In 2012 and 2013 the service sector could post 3.6% and 3.1% growth, respectively.

The improved competitiveness and the greater relative strength of the domestic market could partially offset the lower growth in external demand in 2013. Therefore it is advisable to move forward in the pending structural reforms in order to raise productivity and thus the economy's growth potential. The challenge is to move faster in both job creation and family income improvement.

2.d Sectorial Outlook

Table 3

Mexico, Indicators and sectorial projections, GDP, sa

	Annual % change													
	2008	2009	2010	2011	2012	2013	1T11	2T11	3T11	4T11	1T12	2T12	3T12	4T12
Total GDP	1.2	-6.0	5.6	3.9	**3.7**	**3.0**	3.9	3.8	4.2	3.9	4.6	4.1	**3.1**	**3.0**
Primary	1.1	-3.1	3.0	-2.9	**4.4**	**1.9**	-2.6	-9.3	0.1	0.3	5.6	9.5	**1.8**	**1.0**
Secondary	-0.2	-7.7	6.2	4.0	**3.5**	**2.4**	4.8	4.2	3.6	3.4	4.4	3.6	**3.2**	**2.7**
Mining	-1.7	-2.9	1.2	-1.9	**0.5**	**-0.1**	-2.6	-2.0	-3.5	0.6	0.3	-0.4	**2.0**	**0.1**
Electricity, water, and supply of gas	-1.8	2.1	10.1	5.5	**2.0**	**2.2**	9.9	7.6	2.9	2.2	2.1	1.2	**2.5**	**2.4**
Construction	3.0	-7.3	-0.1	4.8	**4.2**	**2.9**	5.6	3.9	5.3	4.7	4.9	5.1	**3.6**	**3.0**
Manufacturing	-1.0	-9.8	10.0	5.2	**3.8**	**2.8**	6.2	5.4	5.3	3.7	4.0	4.4	**3.5**	**3.2**
Tertiary	2.1	-4.5	5.5	4.2	**3.6**	**3.1**	4.2	3.7	4.8	4.2	4.0	4.5	**3.2**	**2.9**
Retail trade	1.0	-14.3	13.1	7.7	**4.9**	**4.5**	8.1	8.4	8.2	6.1	6.6	5.4	**4.2**	**3.3**
Transportation, mail and storage	0.0	-6.0	7.6	3.4	**3.8**	**3.7**	3.3	3.2	3.8	3.4	5.0	3.8	**3.0**	**3.4**
Information in mass media	8.0	0.8	1.6	6.6	**4.8**	**3.7**	5.3	6.0	8.0	7.1	4.7	6.5	**3.3**	**4.7**
Insurance and financial services	12.8	1.7	13.1	5.4	**8.6**	**5.8**	4.8	1.3	8.0	7.3	12.2	12.4	**5.7**	**4.4**
Real estate and leasing services	2.7	-1.5	1.9	2.1	**1.9**	**0.9**	1.8	1.9	2.1	2.4	1.3	2.4	**2.0**	**1.9**
Prof., scientific, and technical serv.	3.1	-4.7	-1.0	5.8	**2.9**	**2.7**	3.6	7.2	5.4	7.0	4.7	0.4	**3.4**	**3.3**
Corporate and company leadership	13.9	-7.8	4.9	5.8	**6.5**	**5.0**	4.4	7.3	4.4	7.1	6.8	4.2	**7.4**	**7.4**
Business support serv.	1.7	-4.7	1.5	4.2	**4.1**	**3.5**	3.8	4.4	4.6	4.1	2.6	5.3	**4.5**	**4.1**
Educat. serv.	0.8	0.5	0.2	1.5	**1.7**	**1.9**	-0.2	1.2	2.7	2.5	1.4	0.8	**2.3**	**2.3**
Health and social welfare services	-1.6	0.8	0.7	1.7	**1.8**	**1.4**	1.0	2.9	2.8	0.0	2.2	1.7	**1.8**	**1.5**
Leisure and relaxation, cultural, & sports serv.	1.3	-4.7	5.9	6.6	**3.0**	**3.2**	8.2	7.3	5.9	5.2	2.0	4.1	**3.0**	**2.8**
Hotel, motel, lodging serv. & prep. of food & bev.	0.8	-7.7	3.2	2.6	**3.4**	**2.0**	0.6	2.4	3.1	4.3	4.5	4.4	**3.0**	**1.8**
Other serv. except gov't activities	0.7	-1.0	1.0	4.0	**4.1**	**2.3**	3.0	4.5	4.2	4.2	5.0	4.7	**3.4**	**3.3**
Gov't activities	1.1	3.8	3.1	-0.8	**1.1**	**0.8**	0.3	-5.1	-0.8	2.6	3.2	2.0	**-0.3**	**-0.5**

	% breakdown							Contribution to growth, pp					
	2003	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
Total GDP	100.0	100.0	100.0	100.0	100.0	**100.0**	**100.0**	1.2	-6.0	5.6	3.9	**3.7**	**3.0**
Primary	3.8	3.5	3.6	3.5	3.3	**3.3**	**3.3**	0.0	-0.1	0.1	-0.1	**0.1**	**0.1**
Secondary	30.5	30.4	29.8	30.0	30.0	**29.9**	**29.8**	-0.1	-2.3	1.9	1.2	**1.0**	**0.7**
Mining	6.1	5.0	5.2	5.0	4.7	**4.5**	**4.4**	-0.1	-0.1	0.1	-0.1	**0.0**	**0.0**
Electricity, water, and supply of gas	1.1	1.3	1.4	1.5	1.5	**1.5**	**1.5**	0.0	0.0	0.1	0.1	**0.0**	**0.0**
Construction	6.2	6.7	6.6	6.2	6.3	**6.3**	**6.3**	0.2	-0.5	0.0	0.3	**0.3**	**0.2**
Manufacturing	17.1	17.4	16.6	17.3	17.6	**17.6**	**17.5**	-0.2	-1.7	1.7	0.9	**0.7**	**0.5**
Tertiary	62.4	63.7	64.7	64.7	64.9	**64.8**	**64.9**	1.3	-2.8	3.6	2.7	**2.4**	**2.0**
Retail trade	11.8	15.5	14.1	15.1	15.7	**15.9**	**16.1**	0.2	-2.2	1.9	1.2	**0.8**	**0.7**
Transportation, mail and storage	6.5	6.9	6.9	7.1	7.0	**7.0**	**7.1**	0.0	-0.4	0.5	0.2	**0.3**	**0.3**
Information in mass media	2.2	3.6	3.9	3.7	3.8	**3.9**	**3.9**	0.3	0.0	0.1	0.2	**0.2**	**0.1**
Insurance and financial services	4.0	4.4	4.7	5.1	5.1	**5.4**	**5.5**	0.5	0.1	0.6	0.3	**0.4**	**0.3**
Real estate and leasing services	10.0	10.5	11.0	10.6	10.4	**10.2**	**10.0**	0.3	-0.2	0.2	0.2	**0.2**	**0.1**
Prof., scientific, and technical serv.	3.7	3.4	3.5	3.3	3.3	**3.3**	**3.3**	0.1	-0.2	0.0	0.2	**0.1**	**0.1**
Corporate and company leadership	0.4	0.4	0.4	0.4	0.4	**0.5**	**0.5**	0.1	0.0	0.0	0.0	**0.0**	**0.0**
Business support serv.	2.9	2.5	2.6	2.5	2.5	**2.5**	**2.5**	0.0	-0.1	0.0	0.1	**0.1**	**0.1**
Educat. serv.	4.8	4.5	4.8	4.5	4.4	**4.3**	**4.3**	0.0	0.0	0.0	0.1	**0.1**	**0.1**
Health and social welfare services	3.6	2.8	3.0	2.8	2.8	**2.7**	**2.7**	0.0	0.0	0.0	0.0	**0.1**	**0.0**
Leisure and relaxation, cultural, & sports serv.	0.5	0.4	0.4	0.4	0.4	**0.4**	**0.4**	0.0	0.0	0.0	0.0	**0.0**	**0.0**
Hotel, motel, lodging serv. & prep. of food & bev.	3.5	2.6	2.6	2.5	2.5	**2.5**	**2.4**	0.0	-0.2	0.1	0.1	**0.1**	**0.1**
Other serv. except gov't activities	3.0	2.6	2.7	2.6	2.6	**2.6**	**2.6**	0.0	0.0	0.0	0.1	**0.1**	**0.1**
Gov't activities	5.5	3.7	4.1	4.0	3.8	**3.7**	**3.6**	0.0	0.1	0.1	0.0	**0.0**	**0.0**

Note: projections appear in boldface. All figures are subject to review by the Institute
sa Seasonally-adjusted; pp: Poorcentage points
Source: BBVA Research with INEGI data

Table 4

Mexico: Indicators and sectorial forecasts, manufactured production, sa

Annual % change

	2008	2009	2010	2011	2012	2013	1T11	2T11	3T11	4T11	1T12	2T12	3T12	4T12
Total	-1.0	-9.8	10.0	5.2	**3.8**	**2.8**	6.2	5.4	5.3	3.7	4.0	4.4	**3.5**	**3.2**
Food	1.4	-0.6	2.1	1.7	**2.2**	**1.7**	2.2	0.5	2.2	1.8	2.4	2.3	**2.1**	**2.1**
Beverages and tobacco	2.6	-0.1	-0.5	4.7	**2.7**	**2.8**	7.6	6.8	2.3	2.5	3.8	0.8	**3.0**	**3.3**
Textile inputs	-6.9	-9.9	10.0	-5.2	**1.9**	**-0.2**	-0.8	-7.7	-5.9	-6.4	-3.8	4.2	**6.3**	**1.2**
Production of textile products	-8.4	-6.6	1.7	-2.6	**-2.0**	**2.2**	2.7	-2.3	-4.3	-6.4	-6.6	-1.5	**-1.8**	**2.4**
Apparel	2.2	-11.6	5.5	-2.7	**-0.3**	**-1.0**	-1.9	-4.7	-1.2	-2.8	1.5	-2.2	**0.9**	**-1.5**
Leather and fur products	-3.1	-6.2	10.1	0.0	**3.6**	**0.7**	1.0	-2.4	-0.6	2.1	6.0	2.6	**2.6**	**3.0**
Lumber ind.	-7.6	-4.5	6.4	6.4	**6.3**	**1.7**	9.2	8.4	8.1	0.4	5.3	5.6	**10.6**	**3.3**
Paper ind.	2.5	-0.5	4.7	-0.8	**3.2**	**1.9**	0.0	-2.0	-1.5	0.3	2.3	3.5	**4.8**	**2.1**
Printing and related ind.	5.2	-6.8	9.6	2.3	**5.2**	**0.3**	-0.9	-3.7	7.6	6.8	4.3	10.7	**6.0**	**-0.1**
Oil deriv. prod.	0.7	-1.6	-3.4	-4.8	**0.5**	**-0.7**	-4.9	-9.6	-7.3	3.0	-1.5	4.3	**2.8**	**-3.4**
Chemicals	-2.2	-3.9	-1.1	0.6	**0.2**	**1.0**	-0.4	0.7	2.6	-0.3	1.0	-0.8	**-1.1**	**1.9**
Plastic and rubber prod.	-1.7	-9.8	9.3	8.5	**5.5**	**3.5**	9.9	8.1	8.2	7.9	8.5	5.5	**4.4**	**3.5**
Non-metal mineral prod.	-3.7	-8.4	3.4	3.5	**3.6**	**3.3**	6.2	3.6	2.7	1.8	5.2	2.2	**3.7**	**3.3**
Basic metal prod.	-0.6	-17.1	12.9	4.7	**4.5**	**5.2**	2.8	4.6	5.1	6.5	4.8	4.5	**3.2**	**5.4**
Metallic prod.	1.0	-15.8	10.2	11.9	**5.3**	**2.9**	18.2	10.2	10.5	9.1	5.1	8.0	**3.0**	**5.4**
Machinery and equipment	-0.4	-16.6	33.1	11.0	**9.2**	**3.0**	15.7	12.2	8.8	8.3	15.2	6.5	**7.7**	**7.9**
Computers and electronics	-12.0	-12.0	8.9	3.2	**-1.2**	**2.5**	9.4	1.0	1.1	1.5	-4.4	-5.4	**2.5**	**2.4**
Electrical equip.	-0.1	-14.4	10.5	-0.6	**2.3**	**2.9**	3.2	-2.0	-2.0	-1.5	3.0	1.8	**2.0**	**2.5**
Transport. equip.	0.6	-28.2	42.7	17.1	**10.1**	**4.8**	24.5	18.9	16.7	9.5	14.2	14.2	**6.5**	**5.4**
Furniture and related prod.	-2.7	-6.8	7.0	-0.7	**6.8**	**2.8**	-0.1	-3.5	-8.6	9.7	6.2	6.0	**9.9**	**5.5**
Other manufacturing ind.	1.6	-0.6	2.6	3.0	**2.4**	**2.6**	1.4	2.9	3.4	4.1	3.8	1.4	**2.1**	**2.2**

	% Breakdown							Contribution to growth, pp					
	2003	2008	2009	2010	2011	2012	2013	2008	2009	2010	2011	2012	2013
Total	100.0	100.0	100.0	100.0	100.0	**100.0**	**100.0**	-1.0	-9.8	10.0	5.2	**3.8**	**2.8**
Food	23.0	21.8	24.1	22.3	21.6	**21.2**	**21.0**	0.3	-0.1	0.5	0.4	**0.5**	**0.4**
Beverages and tobacco	5.7	6.4	7.1	6.4	6.4	**6.3**	**6.3**	0.2	0.0	0.0	0.3	**0.2**	**0.2**
Textile inputs	1.6	1.0	1.0	1.0	0.9	**0.8**	**0.8**	-0.1	-0.1	0.1	0.0	**0.0**	**0.0**
Production of textile products	0.6	0.4	0.4	0.4	0.4	**0.3**	**0.3**	0.0	0.0	0.0	0.0	**0.0**	**0.0**
Apparel	3.9	2.6	2.6	2.5	2.3	**2.2**	**2.1**	0.1	-0.3	0.1	-0.1	**0.0**	**0.0**
Leather and fur products	2.2	1.3	1.3	1.3	1.3	**1.3**	**1.2**	0.0	-0.1	0.1	0.0	**0.0**	**0.0**
Lumber ind.	1.7	1.1	1.1	1.1	1.1	**1.1**	**1.1**	-0.1	0.0	0.1	0.1	**0.1**	**0.0**
Paper ind.	1.9	2.2	2.4	2.3	2.2	**2.2**	**2.2**	0.1	0.0	0.1	0.0	**0.1**	**0.0**
Printing and related ind.	1.1	0.9	0.9	0.9	0.9	**0.9**	**0.9**	0.0	-0.1	0.1	0.0	**0.0**	**0.0**
Oil deriv. prod.	3.0	2.9	3.2	2.8	2.5	**2.4**	**2.4**	0.0	0.0	-0.1	-0.1	**0.0**	**0.0**
Chemicals	11.1	9.6	10.3	9.2	8.8	**8.5**	**8.4**	-0.2	-0.4	-0.1	0.1	**0.0**	**0.1**
Plastic and rubber prod.	2.9	2.7	2.7	2.7	2.8	**2.8**	**2.8**	0.0	-0.3	0.3	0.2	**0.2**	**0.1**
Non-metal mineral prod.	7.1	6.6	6.7	6.3	6.2	**6.2**	**6.2**	-0.3	-0.6	0.2	0.2	**0.2**	**0.2**
Basic metal prod.	5.1	5.7	5.2	5.4	5.3	**5.4**	**5.5**	0.0	-1.0	0.7	0.3	**0.2**	**0.3**
Metallic prod.	3.0	3.4	3.2	3.2	3.4	**3.5**	**3.5**	0.0	-0.5	0.3	0.4	**0.2**	**0.1**
Machinery and equipment	2.8	2.4	2.2	2.7	2.8	**3.0**	**3.0**	0.0	-0.4	0.7	0.3	**0.3**	**0.1**
Computers and electronics	3.9	4.8	4.6	4.6	4.5	**4.3**	**4.3**	-0.6	-0.6	0.4	0.1	**-0.1**	**0.1**
Electrical equip.	2.5	3.4	3.2	3.2	3.1	**3.0**	**3.0**	0.0	-0.5	0.3	0.0	**0.1**	**0.1**
Transport. equip.	13.0	17.5	13.9	18.1	20.1	**21.4**	**21.8**	0.1	-4.9	6.0	3.1	**2.0**	**1.0**
Furniture and related prod.	1.7	1.3	1.4	1.3	1.3	**1.3**	**1.3**	0.0	-0.1	0.1	0.0	**0.1**	**0.0**
Other manufacturing ind.	2.1	2.2	2.4	2.3	2.2	**2.2**	**2.2**	0.0	0.0	0.1	0.1	**0.1**	**0.1**

Note: projections appear in boldface. All figures are subject to review by the Institute
sa Seasonally-adjusted; pp: Poorcentage points
Source: BBVA Research with INEGI data

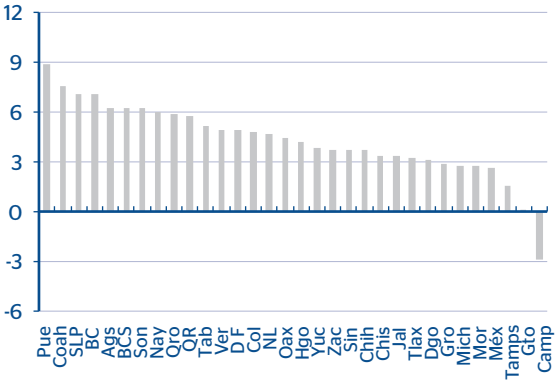
2.e Regional Analysis

Recovery in the predominantly industrial regions and less disparity in growth

During the second quarter of 2012, most of Mexico's states--30 out of 32--posted economic growth. This indicates an expanding economy with less uneven growth between the states. In this period, GDP grew at an annual seasonally adjusted rate of 4.1%. The states with the best economic performance were Puebla, Coahuila, San Luis Potosi, Baja California Norte, Aguascalientes, Baja California Sur, and Sonora. These states were characterized by their industrial activity, in particular manufacturing, and in some cases their economies were underpinned by a recovery in the primary sector. Meanwhile, states whose economies did not perform as well were Campeche, Guanajuato and Tamaulipas, the first due to oil and all three as a result of a contraction in the industrial sector.

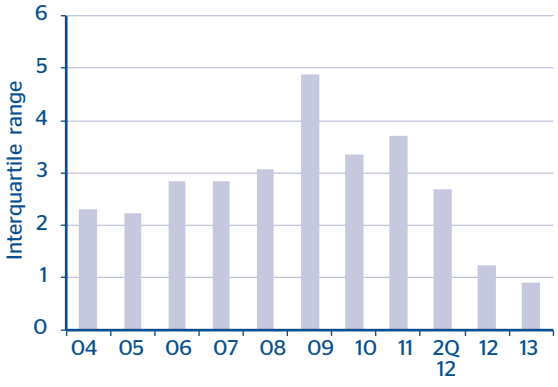
The stark differences between the states posting higher and those with lower growth are normal in a country with a vast territory, a diversity of climates, different productive activities, etc. In order to measure the variation in state economic growth rates, but without factoring in the impact of extreme values (which are often short-term), we estimated the interquartile range (length of the interval in which 50% of the states are to be found). With this indicator, the disparity due to domestic factors can be confirmed; concretely, the 2009 recession increased the differences between state GDP growth rates, while the recovery reduced the gap. In this context, the prospects are favorable in an environment of moderate growth but in an economy with strong fundamentals.

Graph 29
Strength of economic activity in the second quarter of 2012 (%)



Source: BBVA Research with SHCP data

Graph 30
Disparities in economic growth (Differences in annual % growth: third vs. fourth quartile)



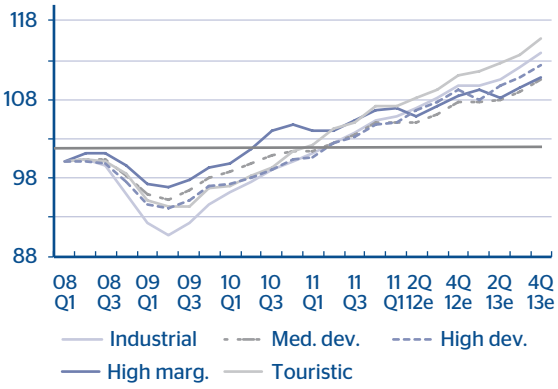
Source: BBVA Research with SHCP data

To reduce regional socioeconomic differences is one of the great challenges facing the Mexican economy. In very general terms, we can speak of the backwardness of southern Mexico, this despite its natural resources such as oil, or in certain states in the center of the country, notwithstanding their access to the largest regional market, namely, that of the Mexico City metropolitan area, and the economic potential of its population. To the extent that some states tend to continue to lag behind others, it is necessary to double efforts in the most disadvantaged states to improve the general conditions of the population, such as, for example, social cohesion.

Regional Evolution:[1] With the crisis overcome, economic strength is being consolidated with a trend toward potential GDP growth

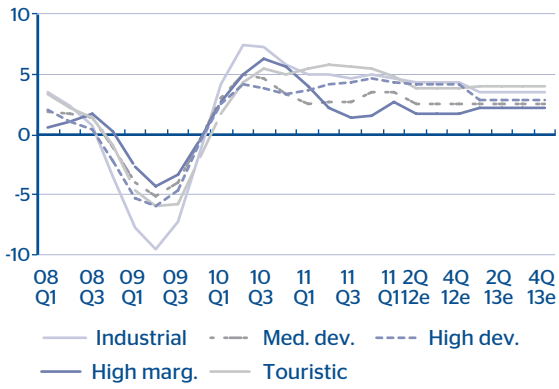
When the states are placed in categories according to productive activity,[(1)] the evolution of their economic growth is positive in all cases, albeit each with its own characteristics. What is important to emphasize is that, following the 2009 recession, all the categories and regions have maintained an upward trend and have exceeded the levels of activity posted in 2008. However, to the extent that the contraction was uneven among them, the same can also be said in the case of the recovery. For example, the states with major industrial export activity were those that posted the greatest contraction during the recession, but they were also those that subsequently recovered more rapidly. Their economies have high income elasticity, mainly due to their exports, their high competitiveness, and as a result of a lower comparison base. In general, it can be stated that the stages of the economic cycle –contraction, strong recovery, moderate growth, stability around potential GDP– were repeated in all regions and categories.

Graph 31
GDP by category [(1)]
(1993 index = 100)



Source: BBVA Research with SHCP data

Graph 32
GDP by category [(1)]
(annual % change, sa, 3m moving average)



sa: seasonally adjusted, 3m – 3 month moving average
Source: BBVA Research with SHCP data

Even though each category or region had a different experience in terms of contraction and recovery, it is estimated that in 2012 the total level of economic activity will be 7% higher than in 2008, with variations between them of two percentage points around the median figure.

While these results are important, given the economic environment, it is also true that once the short term situation was overcome, the structural differences between the regional economies again became evident. In 2011 and the first half of 2012, the states with the most dynamic economic growth were those marked by high levels of development, industry, and tourism, with those characterized by average and very low levels of development areas lagging relatively behind.

Regional Outlook: generalized growth with differences among categories and regions in an international environment marked by caution

Growth expectations for the Mexican economy point to good growth rates in 2013 (3.0% per year with a positive bias) but slightly below what is estimated for 2012. Therefore, this will be reflected in the country's economic development and in activity categories and regions, with trends in the same direction but not necessarily of the same magnitude.

For 2013, BBVA Research's real growth expectations placed the states with tourism activity as the most dynamic, followed by those with industrial activity, high levels of development, average levels of development, and very low levels of development. These results are associated with or imply the following:

[1] For a detailed description of this classification, see ***Regional Sectorial Outlook Mexico***, "Agrupamiento Regional, Cómo y Para Qué", November 2007. BBVA Bancomer. The categories based on their economic activity and level of development are: high level of development: Federal District; tourism: Baja California Sur and Quintana Roo; industrial: Aguascalientes, Baja California Norte, Coahuila, Chihuahua, Jalisco, State of Mexico, Nuevo Leon, , Queretaro, Sonora, Tamaulipas; average level of development: Campeche, Colima, Durango , Guanajuato, Hidalgo, Michoacan, Morelos, Nayarit, Puebla, San Luis Potosi, Sinaloa, Tabasco, Sin, Tab, Tlaxcala, Veracruz, Yucatan, and Zacatecas; very low level of development: Chiapas, Guerrero, and Oaxaca.

States with tourism activity will maintain their economic growth and the trends at the close of 2012 point toward recovery. A formal campaign is underway to boost tourism in these states and Mexico has natural resources that are competitive in a growing global tourism market.

States with industrial activity will see their growth adjusted downward by 0.8 percentage points, given their economies' close relationship with the external cycle, particularly exports.

The region marked by a high level of development will see its economic dynamism move beyond the metropolitan area and it would appear difficult to maintain growth rates above the national average for the third consecutive year. Growth will resume its historical trend.

States marked by an average and very low levels of development will see a marginal or no impact at all of the decline in overall growth, with economies more tied to the internal than to the external market.

In relation to 2008, four regions increased their percentage share in national GDP, while one posted a decline, namely, those states with average levels of development. It should be recalled that this category includes states with oil production, which felt a real impact from the decline in extraction.

Table 5
GDP by category*

Real annual growth, %

	2008	2009p	2010p	2011p	2012e	2013e
Total	1.2	-6.0	5.6	3.9	**3.7**	**3.0**
Tourism	1.9	-5.9	4.8	5.9	**4.1**	**4.1**
Industrial	1.4	-7.9	7.2	5.0	**4.4**	**3.6**
High level of development	0.5	-4.9	4.1	4.4	**4.2**	**2.9**
Average level of development	1.3	-4.7	4.5	2.6	**2.8**	**2.6**
Very low level of development	1.4	-3.3	5.7	2.2	**2.0**	**2.2**

% share in the total

	2008	2009p	2010p	2011p	2012e	2013e
Total	100.0	100.0	100.0	**100.0**	**100.0**	**100.0**
Tourism	2.0	2.0	2.0	**2.1**	**2.2**	**2.2**
Industrial	40.8	40.0	40.6	**41.0**	**42.9**	**43.2**
High level of development	17.3	17.5	17.3	**17.4**	**18.1**	**17.9**
Average level of development	35.1	35.6	35.3	**34.8**	**32.1**	**32.0**
Very low level of development	4.7	4.9	4.9	**4.8**	**4.8**	**4.8**

Aportación al crecimiento

	2008	2009p	2010p	2011p	2012e	2013e
Total	1.2	-6.0	5.6	3.9	**3.7**	**3.0**
Tourism	0.0	-0.1	0.1	0.1	**0.1**	**0.1**
Industrial	0.6	-3.2	2.9	2.1	**1.9**	**1.5**
High level of development	0.1	-0.9	0.7	0.8	**0.8**	**0.5**
Average level of development	0.4	-1.7	1.6	0.9	**0.9**	**0.8**
Very low level of development	0.1	-0.2	0.3	0.1	**0.1**	**0.1**

Índice 2008 = 100

	2008	2009p	2010p	2011p	2012e	2013e
Total	100.0	94.0	99.3	103.2	**107.0**	**110.2**
Tourism	100.0	94.1	98.6	104.4	**108.9**	**113.5**
Industrial	100.0	92.1	98.8	103.7	**108.5**	**112.5**
High level of development	100.0	95.1	99.0	103.4	**107.9**	**110.9**
Average level of development	100.0	95.3	99.6	102.2	**104.8**	**107.4**
Very low level of development	100.0	96.7	102.3	104.5	**106.8**	**109.3**

* States according to their economic activity and level of development: High level of development: Federal District; Tourism: BCS y QR; Industrial: Ags, BC, Coah, Chih, Jal, Méx, NL, Qro, Son, Tamps; Average level of development: Camp, Col, Dgo, Gto, Hgo, Mich, Mor,Nay,Pue, SLP, Sin, Tab, Tlax, Ver, Yuc, Zac; Very low level of development: Chis, Gro and Oax.
Source: BBVA Research with INEGI data

Risks associated with the global scenario, especially the European situation

The current scenario is not risk free. The regional or state economic activity scenarios depend on both the national picture as well as specific state or regional factors. On a global level, in an open economy such as in Mexico, the external environment poses a potential risk despite the strengths of the national economy. At the same time, global growth, particularly of the U.S. economy, is undeniably reflected on Mexican exports and therefore on the economy's growth rates, even though internally, natural disasters or unforeseen developments can alter the normal evolution of the states' economies. Nevertheless, in general, growth is foreseen in all regions.

Table 6
GDP by state

	2007	2008	2009p	2010p	2011e	2007	2008	2009p	2010p	2011e	2007	2008	2009p	2010p	2011e
	(Billions of 2010 pesos)					(Real annual % growth)					(Percentage contribution to growth, pp)				
National total	**12,446.6**	**12,598.3**	**11,842.8**	**12,504.7**	**12,997.4**	**3.4**	**1.2**	**-6.0**	**5.6**	**3.9**	**3.4**	**1.2**	**-6.0**	**5.6**	**3.9**
Aguascalientes	133.2	133.9	128.5	137.5	144.0	5.8	0.6	-4.1	7.1	4.7	0.1	0.0	0.0	0.1	0.1
Baja California	357.3	356.3	326.7	339.5	357.9	2.4	-0.3	-8.3	3.9	5.4	0.1	0.0	-0.2	0.1	0.1
Baja California Sur	71.1	73.4	74.6	75.4	79.2	7.7	3.3	1.5	1.1	5.0	0.0	0.0	0.0	0.0	0.0
Campeche	765.5	743.2	672.9	645.3	615.9	-5.3	-2.9	-9.5	-4.1	-4.6	-0.3	-0.2	-0.5	-0.2	-0.2
Coahuila	389.4	396.5	343.7	388.5	413.1	1.8	1.8	-13.3	13.0	6.3	0.1	0.1	-0.4	0.4	0.2
Colima	63.7	64.3	61.1	69.6	78.4	4.6	0.9	-5.0	13.9	12.8	0.0	0.0	0.0	0.1	0.1
Chiapas	213.2	222.1	215.3	229.4	237.4	-1.9	4.1	-3.1	6.6	3.5	0.0	0.1	-0.1	0.1	0.1
Chihuahua	398.7	402.4	362.8	371.0	379.1	3.3	0.9	-9.9	2.3	2.2	0.1	0.0	-0.3	0.1	0.1
Distrito Federal	2,170.4	2,181.6	2,074.0	2,160.0	2,255.5	3.0	0.5	-4.9	4.1	4.4	0.5	0.1	-0.9	0.7	0.8
Durango	154.0	156.9	150.2	156.9	163.1	1.9	1.9	-4.3	4.5	4.0	0.0	0.0	-0.1	0.1	0.0
Guanajuato	463.1	467.5	445.9	491.4	514.2	1.4	1.0	-4.6	10.2	4.6	0.1	0.0	-0.2	0.4	0.2
Guerrero	186.8	182.3	174.9	186.0	188.0	4.9	-2.4	-4.1	6.4	1.1	0.1	0.0	-0.1	0.1	0.0
Hidalgo	188.7	202.3	185.4	194.4	205.8	4.7	7.2	-8.4	4.9	5.9	0.1	0.1	-0.1	0.1	0.1
Jalisco	795.6	799.1	739.0	787.1	828.2	3.9	0.4	-7.5	6.5	5.2	0.2	0.0	-0.5	0.4	0.3
México	1,112.9	1,132.7	1,073.4	1,172.5	1,219.1	4.3	1.8	-5.2	9.2	4.0	0.4	0.2	-0.5	0.9	0.4
Michoacan	297.5	308.3	289.9	300.8	313.0	4.1	3.6	-6.0	3.8	4.0	0.1	0.1	-0.1	0.1	0.1
Morelos	135.9	131.4	131.0	138.9	144.6	3.1	-3.3	-0.4	6.0	4.2	0.0	0.0	0.0	0.1	0.0
Nayarit	71.8	74.9	72.2	74.3	75.9	-4.1	4.3	-3.7	3.0	2.2	0.0	0.0	0.0	0.0	0.0
Nuevo Leon	931.2	943.7	859.3	938.0	998.8	6.3	1.3	-8.9	9.2	6.5	0.5	0.1	-0.7	0.7	0.5
Oaxaca	187.7	191.8	186.4	194.2	197.6	1.6	2.2	-2.8	4.2	1.7	0.0	0.0	0.0	0.1	0.0
Puebla	413.1	423.1	384.1	423.9	449.0	3.9	2.4	-9.2	10.4	5.9	0.1	0.1	-0.3	0.4	0.2
Queretaro	227.8	236.6	216.7	232.2	247.8	7.7	3.9	-8.4	7.1	6.7	0.1	0.1	-0.2	0.1	0.1
Quintana Roo	180.0	182.3	166.0	176.8	187.9	9.4	1.3	-9.0	6.5	6.3	0.1	0.0	-0.1	0.1	0.1
San Luis Potosi	233.9	242.1	226.9	238.7	253.9	1.9	3.5	-6.3	5.2	6.4	0.0	0.1	-0.1	0.1	0.1
Sinaloa	255.9	261.6	248.2	264.4	266.0	5.9	2.2	-5.1	6.5	0.6	0.1	0.0	-0.1	0.1	0.0
Sonora	318.2	319.4	303.3	320.9	345.4	3.0	0.4	-5.0	5.8	7.6	0.1	0.0	-0.1	0.1	0.2
Tabasco	410.0	427.2	436.6	462.5	485.3	2.9	4.2	2.2	5.9	4.9	0.1	0.2	0.1	0.2	0.2
Tamaulipas	402.5	417.6	379.1	387.5	395.6	6.6	3.7	-9.2	2.2	2.1	0.2	0.1	-0.3	0.1	0.1
Tlaxcala	67.1	67.4	64.0	67.9	69.3	1.9	0.4	-5.1	6.0	2.1	0.0	0.0	0.0	0.0	0.0
Veracruz	579.5	577.5	576.0	590.3	594.4	3.2	-0.3	-0.3	2.5	0.7	0.2	0.0	0.0	0.1	0.0
Yucatan	170.7	170.9	166.8	175.0	178.8	6.1	0.1	-2.4	4.9	2.2	0.1	0.0	0.0	0.1	0.0
Zacatecas	100.3	107.8	108.0	114.0	115.3	2.4	7.5	0.2	5.5	1.2	0.0	0.1	0.0	0.1	0.0

FSource: BBVA Research with INEGI data and own estimates.

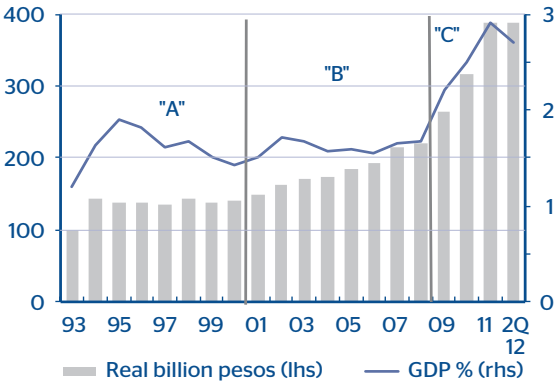
3. Topics of Analysis

3.a Toward a better management of Mexican subnational public debt

3.a.1 Evolution and trends in state debt, an issue of increasing interest

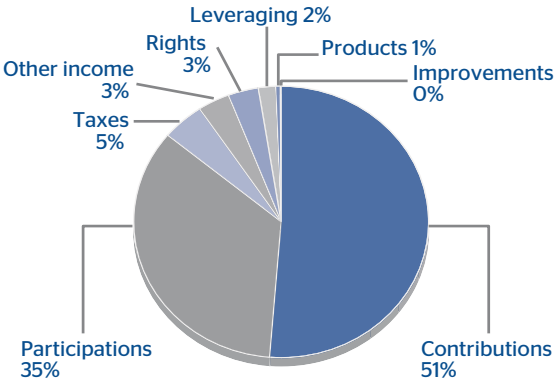
In recent years and particularly in recent months, state and municipal debt has been an issue of public interest and the subject of new regulations, some already implemented and others in the process of being adopted. The aim of such legislation is both to strengthen and extend the current regulations. In this section of Mexico Regional Sectorial Outlook we will review the topic from various angles, addressing questions such as: why state and municipal debt became an important issue?, is the debt high?, is it sustainable?, and what can or should be done to improve the profile of state and municipal debt?

Graph 33
Long term financial liabilities of states and municipalities (billions of real pesos, balance at June 2012 and % of GDP)



Source: BBVA Research with data from the SHCP website

Graph 34
States' revenue structure (%, 2010)



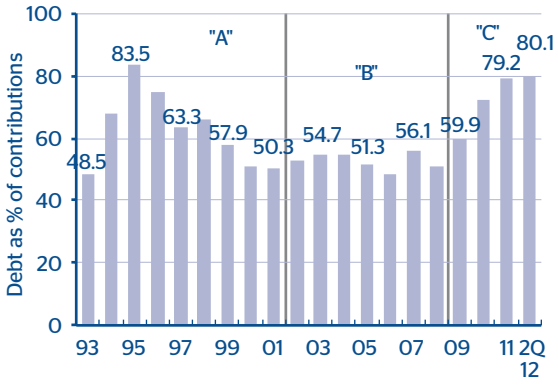
Source: BBVA Research with data from the SHCP website

Some of the main factors associated with the interest in analyzing subnational debt are the more rapid increase in such liabilities as of 2008, the limited amount of state and municipal government resources and the lack of clarity and transparency in the corresponding information. Between 2008 and the second quarter of 2012, the financial liabilities of the country's states and municipalities rose from 203 billion pesos to 404 billion pesos, an increase of almost 100%, or 76% in real terms in just three and a half years. In terms of percentage of GDP, from 2000 to June 2012, the long term debt of the states and municipalities increased from 1.5% to 2.7% and could approach 3% of GDP by year end.

From a historical perspective, the evolution of the debt between 1993 and the second quarter of 2012 can be divided into three periods. In the first period, the debt rose in 1994 to remain stable until 2000; in the second, liabilities gradually increased until 2008; and in the third period, the debt experienced rapid growth. This suggests an increase in financing in times of crisis but with a different behavior as of 1995 vs. 2009. In the latter period, the economy resumed its growth, but the debt continued to increase due to different factors. In some cases, local governments were pressured by unexpected expenditures resulting from natural disasters; in others, major spending was undertaken on public projects and in general, the market was characterized by improved access to financing with lower rates and longer maturities.

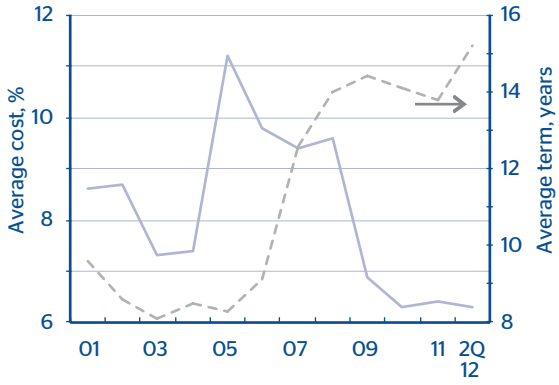
The main sources of the states' revenue are federal government resources of which a considerable share is specifically earmarked, that is, being channeled to explicit items. Therefore, this could reduce the maneuvering room available for state governments, simply because debt is growing faster than the available resources. The debt to participations ratio is a clear indicator of the increase in relative indebtedness and its upward trend.

Graph 35
Long term financial liabilities of states and municipalities (% of participations)



Source: BBVA Research with data from the SHCP website

Graph 36
Cost and maturity of long term state debt (% and years)



Source: BBVA Research with data from the SHCP website

In addition, the regulatory framework limited the state and municipal debt registered with the Finance Ministry (SHCP) to long-term liabilities. The prevailing regulations did not require an overall registration of the entire debt, such as short-term liabilities, both financial as well as to suppliers, or debt accumulated in the form of pension liabilities.

Under these circumstances the authorities adopted several measures, for example, the SHCP incorporated a comparison between debt registered and channeled through the financial system plus liabilities accrued via other creditors, into the information on state and municipal debt at the first quarter of 2011, which indicated a 15.6% difference (of course, it is necessary to add financing with creditors and other deficiencies in the accounting ledgers). Furthermore, at the June 23, 2011 meeting of the Financial System Stability Board, participants." studied the recent evolution of state debt and proposed measures to strengthen transparency and encourage prudent fiscal policies."[1] Among the other measures were changes to banking regulations in relation to the creation of loan loss provisions and reserves. The section of the report entitled "Fiscal sustainability will be bolstered through further progress in fiscal regulations" delves into some of the efforts in the field of transparency that are being implemented as well as some suggestions. Transparency and accountability are undeniable values for the healthy development of the states.

Due to their amount and structure, it can be affirmed that state and municipal liabilities do not pose a systemic risk

The long term debt of states and municipalities is relatively low, and therefore does not represent a "systemic" risk, but it has drawn the attention of different players in society. As a percentage of GDP, such debt was 2.7% in the second quarter of 2012, of which 80% of the liabilities corresponded to state governments; 11% to municipalities; 8% to decentralized state agencies; and 1% to municipal agencies. In addition, the debt compares favorably with that of other countries, but given that the administrative and fiscal political structures are different, this comparison cannot be considered to be even and consistent.

[1] Press release Financial System Stability Board, June 23, 2011.

The amount of debt is very uneven between states, both in pesos as well as in relative terms. In general, there is a relationship between the size of the states and their debt, with size being understood as the value of state GDP. From this standpoint, the largest states are those with the most capacity to incur debt but the decision to do so depends on specific needs, political commitment, internal regulations, and of course, the projects that the authorities wish to develop in each state.

Box 1: Measuring state fiscal sustainability with the Blanchard Indicator

To determine whether the increase in state debt in recent years is sustainable, Blanchard's Fiscal Consistency Indicator can be applied to state government public finances.[1] This indicator is based on the concept of sustainable revenue, which is defined as the income necessary to fully comply with the commitments of average primary expenditures and average financial costs.[2]

Blanchard's Fiscal Consistency Indicator is obtained by subtracting the primary revenue of a given year from sustainable income. Depending on the relation of the former with regard to the latter, three possible case scenarios may emerge:

- When the indicator is positive for a given year, then the debt to GDP ratio will increase.
- In contrast, if the indicator is negative for a given year, it is estimated that the debt to GDP ratio will decline.
- Finally, when the indicator is zero, then the debt to GDP ratio will remain constant.

It is important to note that we have decided to express the Blanchard indicator applied to state governments also in terms of GDP. Nevertheless, it must be recognized that this indicator will better reflect debt sustainability the greater the relation between state GDP and state government primary revenue.

The calculation of the Blanchard is Fiscal Consistency Indicator applied to state governments was obtained as follows:

1. To obtain state sustainable revenue, annual data were used for the period between 2004 and 2010. It should be noted that for the calculation of averages, data from 2009 was not taken into account given that the year was atypical because of the severe recession that occurred at that time.
2. For 2011, primary revenue for each state and the Federal District (D.F.) was calculated as a percentage of GDP.[3]
3. For each sustainable state revenue obtained in step 1, the corresponding primary state revenue from step 2 is subtracted.

The main results from having applied the Blanchard indicator to state governments are as follows:

a) All the states exhibited fiscal sustainability in 2011.

b) The estimate of this indicator shows that there were nine states with a lesser degree of fiscal sustainability in 2011.

While the application of the Blanchard Fiscal Consistency Indicator is not a common practice in the analysis of subnational debt sustainability, it remains a useful option as a methodological tool to analyze the phenomenon of the sustainability of state government debt over time. Furthermore, a measure of the reliability of this indicator could be derived from the comparisons of its results with risk perception on the subnational debt undertaken by the rating agencies.

Bibliographical references

Blanchard, O.J. (1990). "Suggestions for a new set of Fiscal Indicators," OECD Working Paper No. 79.

Talvi, E. and C. Vegh (1998). "Fiscal Policy Sustainability: A Basic Framework," IDB Working Paper No. 107.

[1] See Blanchard (1990). The use of the Talvi and Vegh indicator (1998) was also considered for purposes of analyzing state government fiscal sustainability. However, this indicator is very sensitive to the initial conditions in the primary balance, and could imply a highly explosive debt behavior. In addition, its calculation requires making assumptions about the future behavior of the primary balance.
[2] The equation that defines this concept is (sustainable income) / GDP = (average primary expenditures) / GDP + (average financial costs) / GDP. It only includes long-term debt for the calculation of financial costs.
[3] The primary revenue for 2011 corresponding to six states was estimated using the elasticity of such revenue to national GDP.

Box 2: Municipal debt: highly concentrated among many debt holders

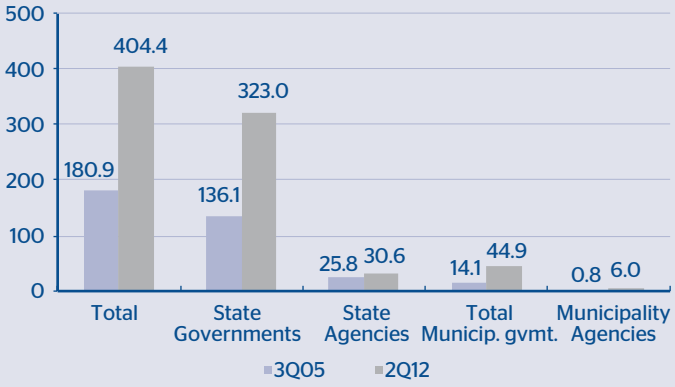
At the close of the second quarter of 2012, the long-term debt held by Mexican municipalities reached 50.9 billion pesos, with 44.9 billion pesos in municipal government debt and 6.0 billion pesos in liabilities of municipal agencies. This is equivalent to:

- 12.6% of the states' total liabilities.
- 3.5 times the nominal debt in mid-2005.
- Average annual growth of 19.1% in real terms over the past seven years. Municipal government debt increased 17.9% in this period, and that of municipal agencies rose 33%.

This implies that municipal debt has been growing faster than the liabilities of state governments. Naturally, every municipality has its own characteristics; for example, not all municipalities have debt, liabilities, and these are not distributed equally, nor is their growth rate the same.

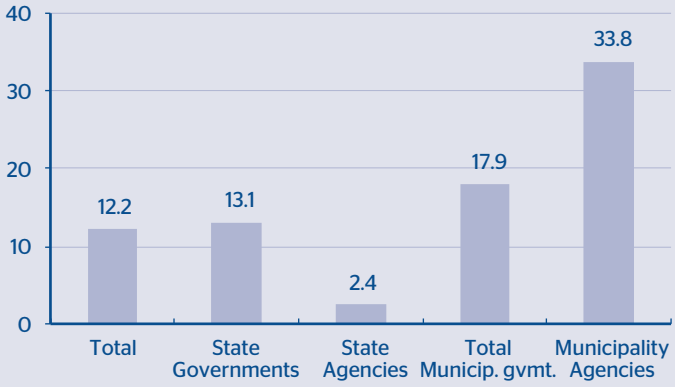
Just as among the states, among the municipalities there are major differences in terms of size, productive activity, or whether they are the state capital or a part of the latter's metropolitan area or locatedat a distance from it. But, as common characteristics all share a dependence on federal government revenue, limits in their own revenue, and the impact of the economic cycle. In this context, the growing indebtedness necessarily has an impact on municipal finances. The purpose of this article is to review some of the characteristics of municipal debt.

Graph 37
State and Municipal Debt
(Billions of real 2012 pesos)



Source: BBVA Research with data from the SHCP (Department of Finance) web page and our own estimates

Graph 38
State and Municipal Debt, in real terms
(Annual average growth rate, 3Q 2005 - 2Q 2012)



Source: BBVA Research with data from the SHCP web page and our own estimates

The commercial banks are the main source of long-term municipal financing

Long-term financing to municipalities is somewhat more diverse than the resources allocated to the states. In both cases, commercial banks are the main source of such resources, accounting for 58% of the total in the case of state governments and 49% for municipalities: Development banks provide 22% and 42% of such financing, respectively. Stock market debt issues account for 15% for state government revenue and 3% in the case of municipalities, while other sources of financing represent 5% and 6%, respectively.

Although commercial banks channeled more resources, more municipalities were granted credit from development banks. Out of a total of 956 municipalities with long-term debt, 172 received financing from commercial banks, 762 from development banks, and 226 from other sources.[1]

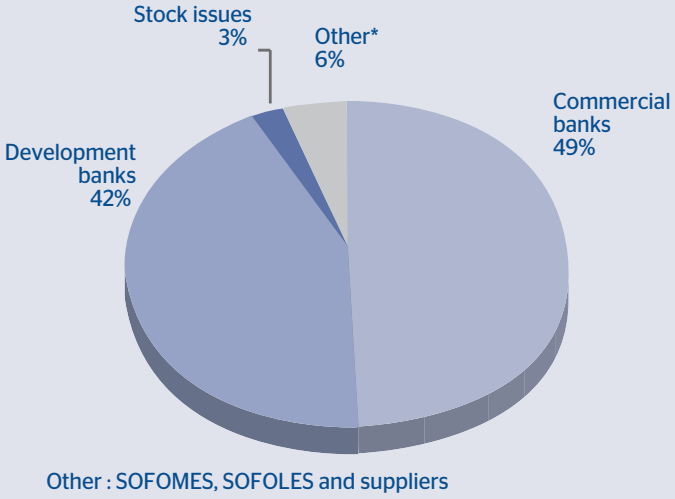
Among the debtor municipalities, the average debt was 46.9 billion pesos in the above mentioned period, but with a very considerable difference between the large and small debt holders. For example, there are three municipalities whose debts exceed two billion pesos and there are 144 municipalities with liabilities of less than one million pesos. This is normal, since it depends on the size of the municipalities and, in Mexico, municipalities as a result of their size and in some cases due to their being the capital of

[1] La suma es mayor que el total porque algunos han recibido créditos de más de una fuente.

large states have the economic and administrative capacity to use financing. According to data from the 2010 Census, the municipalities of Tijuana, Guadalajara, Zapopan, and Monterrey have a population greater than some states in the country.

Long-term municipal debt is concentrated in a small number of municipalities, despite the large number of municipalities with liabilities. In municipalities with debt, 2% (19 municipalities) account for 47% of total liabilities and 4.4% (42) of the municipalities hold 56% of the debt. The debt can be attributed to financial and management capacity, not to over-indebtedness, since, as a general rule, the municipalities with higher debts are also large municipalities in terms of population, economic activity, income, etc.

Graph 39
Financial liabilities of the municipalities by origin (millions of pesos and %, 2Q 2012)



Source: BBVA Research with data from the SHCP web page and our own estimates

Table 7
Total number of municipalities with debt by amount (2Q 2012)

Amount of credit million of pesos	Total			
	Credit		Credit %	
	Number of municipalities	Million of pesos	Number of municipalities	Million of pesos
Total	956	44,859.1	100.0	100.0
2048 and more	2	5,220.6	0.2	11.6
1024 to 2047.99	3	4,959.0	0.3	11.1
512 to 1023.99	14	10,879.0	1.5	24.3
256 to 511.99	23	8,522.0	2.4	19.0
128 to 255.99	31	5,655.6	3.2	12.6
64 to 127.99	28	2,426.8	2.9	5.4
32 to 63.99	50	2,234.3	5.2	5.0
16 to 31.99	77	1,729.6	8.1	3.9
8 to 15.99	139	1,571.1	14.5	3.5
4 to 7.99	166	970.7	17.4	2.2
2 to 3.99	160	444.4	16.7	1.0
1 to 1.99	119	179.5	12.4	0.4
Less than 1	144	66.5	15.1	0.1

Source: BBVA Research with data from the SHCP web page and our own estimates

3.a.2 State fiscal sustainability could be bolstered through further advances in fiscal regulations

To improve the decision making process in relationship to the management of subnational public finances, it is recommended that the accounting information on all levels and for all political and administrative departments and agencies be complete, timely, reliable, and comparable. The promotion and application of these desirable characteristics will help to increase the worth of the government accounting system and this, in turn, will enable the conclusions derived from the analysis of accounting data to be more objective and consistent in order to evaluate subnational government administrative performance. In this sense, the reforms to the General Law on Government Accounting (LGCG) recently passed by Congress, represents a step forward in the field of accounting, transparency, and accountability.

Promoting greater transparency and accountability in the states

To strengthen transparency and accountability at the state level, BBVA Research proposes a series of measures that are part of the best international practices in the field and recommendations of organizations and institutions from other countries. These recommendations could complement the new provisions of the General Law on Government Accounting, which would strengthen the medium and long-term fiscal benefits flowing from the accounting harmonization on an accumulative basis as required by this legislation. These measures would make it mandatory for state governments to release the following information: a) the present value of the actuarial deficit of the state pension system and the projected

flow in annual pension expenditures for the next ten years, as obtained from the actuarial valuation, b) the funding percentage of the pension plan in each budget year,[1] c) documents such as the notice of intent to contract, the invitation to potential suppliers, bidding or participation requirements, the signed contracts and technical appendices with descriptions of products or services, the names of the suppliers, prices, and additional benefits based on the spirit of www.compranet.gob.mx, concerning acquisitions, leasing of moveable property, and the provision of services of any kind to be paid for with non-federal government resources,[2] d) notarized certificates that indicate that the public servants or their family members or persons with whom they have close ties have no direct or indirect financial interest in the provision of such public goods and services,[3] (e) all the public investment projects contemplated together with programs to finance them, revenue flows, and the effects on the total account balances of state governments.[4]

A National Independent Fiscal Council will request and review the audits conducted on state governments

The effectiveness of the above mentioned measures to strengthen the fiscal sustainability of state governments could be increased by creating a National Independent Fiscal Council (CONFI), which will be endowed with the authority to request the supervision authorities to conduct audits on these state governments as well as review the results. In principle, the CONFI would have constitutional autonomy and adequate technical capacity to perform its functions. In addition to this, we would suggest that the legal framework be reformed so that it would be possible to audit all revenue and expenditures, including expenses funded with non-earmarked federal government budgetary outlays to the states.

The approval of complementary measures to the new provisions of the General Law on Governmental Accounting and the creation of the CONFI could imply the following benefits: i) greater transparency and accountability in government, ii) an increase in the number of public investment projects with higher profitability iii) lower risk of default on future contingent liabilities iv) better financial planning by state governments; and v) more complete information to assess the credit risk of state governments by the various participating forces in the market.

A fiscal regulation mandating a balanced budget extended to the states would lower the potential risk of unsustainable debt

The proposal by BBVA Research to strengthen state government fiscal sustainability consists of a fiscal regulation mandating a balanced budget. It would be desirable to extend the goal of zero fiscal deficit or a balanced budget (excluding investment spending in PEMEX) established in the Federal Budget and Fiscal Responsibility Law (LFPRH) to the state governments. The proposal can be contextualized within a framework of strengthening fiscal regulations that would facilitate financing in the short term for these state governments and in the medium term would allow for improved prospects for debt sustainability.[5] Nevertheless, to facilitate the adoption of these regulations, it is suggested that modifications be previously introduced into the Fiscal Coordination Law that would place a priority on a more effective use of federal stabilization funds in order to prevent the high procyclicality implicit in the regulations from limiting the possibility of their legislative approval.[6]

[1] The publication of this information is a recommendation by the State Budget Crisis Task Force (2012) of the United States as part of a series of measures to alleviate the fiscal problems that affect many state governments in that country.
[2] The Law on Public Sector Acquisitions, Leasing, and Services applies when the payment is charged to federal government resources excluding federal government budgetary outlays to the states.
[3] The recommendations contained in sections c) and d) are from the suggestions made by Transparency International USA in its document Transparency and Accountability Initiative (2010).
[4] This budgetary practice is recommended by the National Advisory Council on State and Local Budgeting (1998).
[5] Ter-Minassian (2010) points out that regulations mandating balanced budgets (not adjusted for the economic cycle) should be adopted when countries face serious problems of fiscal imbalances and potentially unsustainable debt dynamics. However, when such situations do not occur, the author suggests the adoption of regulations for structural fiscal equilibrium, provided that the countries are vulnerable to major cyclical fluctuations and have important automatic stabilizers. Fretes-Cibils and Garcia-Osío (2012) feel that the automatic stabilizers are of less importance in Latin America because: i) fiscal revenue from income tax collection from individuals represents a small percentage of total tax revenue, ii) the tax structure is not progressive, and iii) the high level of labor informality limits the coverage of unemployment insurance.
[6] The procyclicality of the balanced budget rule indicates that government spending, ceteris paribus, would be greater in the expansionary phase vs. the downturn of the economic cycle. Although binding state governments to such a rule would represent progress in strengthening fiscal regulations in Mexico, Fretes-Cibils and Garcia-Osío (2012) warn that the high degree of dependence of state governments on federal revenue and their limited powers to collect their own fiscal revenue, which is the prevailing situation in Latin America, become obstacles to this process of strengthening fiscal regulations and to the stabilizing role of fiscal policy.

The proposal would be characterized by the following points:

- Balanced Budget or fiscal equilibrium in which primary revenue is equal to the sum of primary expenditures (excluding capital investment spending) and financial costs.[7]
- The possibility that state governments that currently post a deficit can file a debt request with the Finance Ministry (SHCP) and their local legislatures, accompanying the request with a Balanced Budget Plan that would eliminate the deficit within a period no greater than three years.
- Debt authorized only by the SHCP in response to a failure to balance the budget or the absence of fiscal equilibrium.
- State legislatures can only authorize borrowing for capital investment spending.[8]
- Limits to the growth in debt for capital investment.[9]
- The legislative bill would have to consider greater precision in investment spending items, in which only those that are profitable and self-financing can use the debt resources approved by state legislatures.
- Strengthening the incentive framework in order for the states to be able to generate their own revenue (consumption, property taxes, etc).
- Creation of a National Independent Fiscal Council (CONFI) endowed with constitutional autonomy.
- Temporary escape clauses for the balanced budget rule when adverse macroeconomic scenarios and/or natural disasters arise, situations that would be strictly defined by the CONFI.
- Sanctions for failure to ensure a balanced budget through a decrease in the allocation of federal government revenue obtained through the General Fund for Budgetary Outlays for the States and fines for the responsible individuals.
- The CONFI will analyze the impact on state public finances of any legislative modifications to social programs, tax revenue, and federal budgetary outlays to the states.

The procyclicality of the balanced budget regulation could be mitigated with state-federal government fiscal coordination measures

Given that most state government revenue comes from federal resources (an average of 82.3% of the total during the 2004-2011 period), the proposed regulation could see its implied procyclicality mitigated by fiscal coordination mechanisms between the states and the federal government. In this regard, the proposal would be to modify the Fiscal Coordination Law so that CONFI would be assigned two main functions: 1) to determine the percentage of federal resources for stabilizing funds and national contingencies, and 2) to define the national economic growth threshold below which states will be allowed to incur in public deficit.

The balanced budget rule described here would lead to benefits for both the country as a whole as well as for the states. On the country level, financial markets would perceive less risk as a result of having, in addition to more complete, timely, reliable and comparable information, a fiscal adjustment rule that seeks the stability of state debt in the long term. In addition, it would probably provide the conditions to establish fiscal coordination mechanisms that would enable the state governments to play a more active role in the macroeconomic stabilization of fiscal policy. Meanwhile, on the level of the state governments there would be better control over organizing their finances as well as progress in accountability. In short, progress would be made in ensuring a stronger regulatory framework that would facilitate financing on a better basis for the development of the states.

[7] Bohn and Inman (1996) and Poterba (1994) point out that the regulations associated with balanced budgets and restrictions on indebtedness indicate empirical evidence in favor of fiscal sustainability. Nevertheless, Sutherland, Price, and Joumard (2006) indicate that this means running the risk that fiscal policy will become more procyclical the stricter the rule is. Therefore, capital investments are excluded from the rule so as to resort to this type of spending for purposes of macroeconomic stabilization through the use of countercyclical fiscal policies.
[8] The possibility of incurring debt only to finance capital expenditures is known in economic theory as the Golden Rule of investment. It should be noted that this rule exacerbates the problem of the procyclicality of fiscal policy, leading to greater losses in aggregate efficiency.
[9] Ter-Minassian (2010) explains that debt regulations are more directly linked to fiscal sustainability than balanced budget rules as they encompass the impact of operations that do not affect the budget balance but do increase public debt, such as the securitization of previously unrecognized liabilities.

3.a.3 Pension systems in Mexico: facing the need for sustainable reforms

In Mexico there are various public pension systems that are offered by social security institutions, both at a federal and a municipal level, as well as state-owned companies and decentralized agencies

The main public pension plans at a federal level, in terms of the covered population are the Mexican Social Security Institute (IMSS for its Spanish initials) with coverage of 14.9 million workers of the private sector, 30.7% of the economically active population (EAP) and the Government Workers Social Security and Services Institution (ISSSTE for its Spanish initials) with coverage of 2.7 million workers of the central public sector (5.5% of the economically active population). Both pension systems were reformed [1] to migrate to Defined Contribution (DC) systems based on individual accounts of which the resources are managed by the Retirement Fund Administrators (known as Afores). [2]

At a state level, the states enjoy autonomy for establishing their own pension systems through their respective local legislations. As per the National Social Security Poll of 2009, 631,000 workers (1.3% of the economically active population) are contributing to some social security institution. Most of these systems are still structured as Defined Benefit (DB) [3] plans without the benefits of portability of resources or of rights with other pension systems, which is why if the workers change employer before reaching a certain number of years worked, they lose their pension benefits completely. According to Farell (2009), pension systems in Mexico have presented an actuarial deficit since their creation, being that the contributions to said systems in most cases do not allow for financial sufficiency in the long term, in addition to the fact that they do not generate sufficient financial reserves to guarantee the payment of their pension obligations, [4] which added to the aging of the population and the financial crises, the inertial actuarial deficit increased.

However, so as to guarantee sustainability in the long term, some states have made reforms to their pension programs in recent years. According to Farell (2009) this process has been gradual and, generally, it has been derived from an analysis regarding the financial and actuarial situation of the pension systems. The first state to reform its pension plan was Nuevo Leon, migrating toward a system of individual accounts in 1993, which can be considered as the pioneer of pension reform in Mexico. Later, in 1997, a standardized actuarial evaluation [5] was made of the states' pension systems, financed by the World Bank that allowed making comparable the financial situation of various states. Based on this study, there was greater awareness of the financial situation of the pension plans, and some states decided to make both structural reforms (migrating toward Defined or Mixed Contribution plans) and parametric ones (to preserve a Defined Benefit plan, increasing the contributions or the requirements to obtain a pension).

Despite the efforts made, currently, the states' pension systems are presenting important actuarial imbalances [6] between the current value of the financial assets of the plan and the benefits granted, which is why they are not financially viable in the long term. The actuarial deficit of some states' pension systems constitutes an implicit public debt, growing in time due to the demographic dynamic of a longer life-expectancy of the population, and a reduction in the proportion of active and pensioned workers. Through December 2009, the current value of the cumulative deficit in various state pension systems rose to $1.3 billion pesos (11% of the country's GDP of 2009). [7]

[1] The reform of the IMSS pension system was made in 1997, while that of the ISSSTE in 2007.
[2] Both in the IMSS and in the ISSSTE, the reform to the Defined Contribution plans included insurance on retirement, termination of employment due to advanced age and old age, while the disability, death and work risk still function under the DB (defined benefit) managed by the respective social security institutions.
[3] In a DB (defined benefit) system, the pension amount that each worker receives when he reaches retirement is determined by years of service and by age, not having any relationship with the contributions made; and active workers finance, with their contributions, the pensions of the retired workers. While in a DC (defined contribution) system, active workers have an individual account where they accumulate their contributions, and when they retire, their pensions are determined by the funds they accumulated in their accounts .
[4] Due to investments that are not very profitable or transfers of pension resources to finance another type of benefits (for example: medical services).
[5] Homologizing the assumptions and the methodology of the actuarial calculations.
[6] It is considered that a DB (defined benefit) plan is funded if the current value of the pension payment is equal to the current value of the financial assets of the plan (reserve). Should the plan not be completely funded, there is an actuarial deficit, which is why, at times, extraordinary contributions should be made or reduce the benefits granted.
[7] According to information from the "Proposal for an accord regarding the States' Pension System" by Senator Minerva Hernandez Ramos to the Permanent Commission of Congress, June 2011.

Table 8
Reforms to State pension systems

State	Pension plan	Date of reforms
Nuevo Leon	DC	1993
Mexico	DB and DC	2002
Guanajuato	DB	2002
Aguascalientes	DB and DC	2005
Puebla	DB	2005
Sonora	DB	2005
Coahuila (staff)	DC	2007
Durango	DB	2007
Veracruz	DB	1996, 2007
Campeche	DB	2005, 2008
Sinaloa	DC	2009
Jalisco	DB	2009
Oaxaca	DB	2012

Source: BBVA Research with Hernandez data (2011)

Table 9
Number of pension systems by type

Year	DC	Mixed	DB
1993	1	0	31
2002	1	1	30
2005	1	2	29
2007	2	2	28
2009	3	2	27

Source: BBVA Research with Hernandez data (2011)

Need of pension reforms

The need to implement reforms to the public pension plans that will guarantee their sustainability in the long term has been clear in recent years. To this respect, the National Development Plan 2007-2012 [9] establishes the need to consolidate a National Pension System, more equitable and with greater coverage through the transformation of the public distribution systems [10] into individual account systems with portability among the already reformed systems.

With the aim of bolstering the reforms to the public pension systems and contributing to the consolidation of a National Pension System, based on individual accounts, the Finance Ministry established in 2007 the Support Trust for Pension Restructuring (FARP for *Fideicomiso de Apoyo para la Reestructura de Pensiones*). [11] The requirements for the States to have access to the FARP funds are: 1) to establish a system of individual accounts that will allow them to migrate to the IMSS or the ISSSTE pension system; 2) to create mechanisms of recognizance of seniority that will allow active workers to migrate to the reformed plan; and 3) to significantly reduce the current value of the total pension obligations of active employees and those of new employment. However, according to the most recent public information available, no state has obtained resources from the FARP, due to the political and social cost that is implied in the making of a structural reform.

On the other hand, in 2011, the Permanent Commission of Congress approved a Point ot Accord In which the Governors and the local Congresses are requested to review their pension systems with the intent of avoiding a financial crisis in their public treasuries and to analyze the viability of establishing new pension plans that will be sustainable for future generations.

It is imperative to advance toward a National Pension System

The state and municipal Defined Benefit pension plans have shown an actuarial deficit since their creation, due to the insufficiency of the contributions to fund the pension obligations. This problem is becoming more acute in an environment of demographic transition which implies, on the one hand, a diminished relation between active and pensioned workers, and, on the other, a greater life-expectancy of the population, thus increasing the pension payment period. Another factor that has a bearing on this deficit was the inadequate establishing of financial reserves, with not too profitable investments and subsidies to another type of benefits, such as medical services.

[9] Published in the Official Daily Gazette of the Federation of May 31, 2007.
[10] In the distribution systems, the contributions made by workers are used to finance retired workers' pensions.
[11] FARP resources can be used to support the restructuring of the pension plans of the states, the municipalities, public universities and agencies of the Federal Public Administration, as well as to support the obligations of the Federal Government, derived from the pension reforms of the IMSS and the ISSSTE.

Since 1997, Mexico started the structural transition of its pension systems: the main public systems (IMSS and ISSSTE) have been migrating in an obligatory manner toward individual capitalization plans, with private administration of the resources and benefits linked to deposits in the individual accounts. The objective of having a National Pension System is to transform the pay as you go systems into defined contribution plans, so as to have pension systems that are financially sustainable in the long term, as well as achieving a greater portability of the worlers' resources.

The reforms to the public pension plans greatly diminished the future fiscal cost of the pension obligations. However, they imply transition costs that will continue to represent a marked burden for public finances in the coming forty years. At all times, these reforms have respected the workers' labor rights, seeking social fairness and financial viability. The main benefits for the workers are obtaining good returns, transparency in the management of the individual accounts, the right of ownership of pension savings -even if the minimum number of years of contributions is not met, as well as the portability of the resources due to labor mobility between the public and private sectors; the worker can work in different sectors without losing his or her contributions.

Even though at a federal level very important progress has been shown in recent years, at a state and municipal level, there are still many aspects pending attention. Some states have recently made reforms to their pension plans with the intent of guaranteeing their financial sufficiency. However, most of them have been only parametric reforms to the distribution systems, which is why they do not meet the guidelines set by the FARP in order to have access to the resources of this trust. Despite the efforts made, the current value of the contingent liabilities of the state pension plans in 2009 reflected a total deficit of $1.3 billion pesos (11% of 2009 GDP), even though only 1.3% of the economically active population was covered.

With the aim of guaranteeing the pension rights of the workers of the state governments and of the municipalities without placing the public finances at risk, it is recommendable to make reforms to the public pension systems that are not financially sustainable in the long term, towards plans for individual capitalization that will allow the portability of the pension resources and rights with already reformed federal pension plans, with the intent of progressing toward the consolidation of the National Pension System.

3.a.4 Conclusions: strengthening public revenue through fiscal rules, transparency and accountability

In this edition of ***Mexico Regional Sectorial Outlook*** a study was made of state and municipal public finances. Although the states' long-term public debt in Mexico does not represent a systemic risk due to its size, equivalent to 2.7% of the country's GDP at the second quarter of 2012, the growth in the debt of some states, observed from 2008 to June 2012, has been a topic of general interest. For this reason, it was decided to make an analysis that would allow us to evaluate this situation. Also, although the pension liabilities do not form part of what is considered long-term state debt, due to its importance, a review of this issue was made. Finally, to further better management of the states' liabilities, BBVA Research presents three proposals: the first is to expand transparency and accountability in state governments; the second, to obtain a non-structural balanced budget; and the third, to consolidate a national pension system of defined contributions.

As to the proposal to promote greater transparency and accountability, it indicates that the states would be required to publish in their Internet web pages the following information: a) the current value of the actuarial deficit of the state pension system; and the projected flow of the annual expense on pensions for the coming ten years, based on the actuarial evaluation; b) the funding percentage of the pension plan in each budgetary fiscal year; c) evaluation of the different expenditures options d) an internet portal similar to that of www.compranet.gob.mx; d) notarized certificates as proof that public servants adhere to policies to prevent problems derived from conflicts of interest; and e) the creation of an Independent National Fiscal Council (CONFI) which would have the power both to request from the corresponding offices that conduct audits as well as to review them, including all revenue and expenditures of the states.

Moreover, the proposal to strengthen fiscal sustainability, through the implementation of a balanced budget rule or "zero" fiscal deficit, would be characterized by the elements listed below: i) a balanced budget where primary revenue is equal to the sum of primary expenditures (excluding public investment) and financial costs; ii) transition of a maximum of three years so that state governments can comply with the rule, obliging them to present an application for authorization of debt contraction to the Finance Ministry (SHCP for its Spanish initials) and their local congresses, accompanied by a plan for budgetary balance; iii) the local congresses would only be able to authorize indebtedness for capital investment expenditures, with maximum limits on new debt contracted and greater precision as to what would be considered profitable and self-financeable investment; and iv) with the aim of effectively mitigating the procyclicality of the rule; the functions to determine the savings rate of the federal funds in favorable economic times will be determined by the CONFI, as well as the establishment of the economic growth threshold, below which it would be possible to incur in a public state deficit. It is important to mention that for the balanced budget rule to be effective in controlling state indebtedness, it would be necessary to complement it with a fiscal rule that would impose limits to debt growth.

As to the proposal regarding pension liabilities the state and municipal governments are required to reform their pension systems towards programs of defined contributions to avoid additional potential pressure on their public finances.

The implementation of the above proposals would bring important benefits for the national economy, citizens, other economic agents and state governments. As for the economy, a better administration of the states' public debt would have a positive bearing on economic performance through the improved operation of the financial markets. Regarding citizens, in general, they would have more complete information to evaluate states governmental performance. With respect to other economic agents, such as rating agencies, banks, non-bank financial intermediaries and other investors in sub-national debt instruments, there would be a better quality of information, timelier, comprehensive and reliable, which would have a favorable impact on risk evaluation. Finally, state governments would be in a better position to order and plan their finances, in addition to contributing to the professionalization of public service in its jurisdictions. To summarize, progress would be made toward a system of information and accountability that would pave the way toward a more solid regulatory framework, similar to that which binds the Federation. This would allow maintaining state and national risk within limits, favoring greater economic growth.

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3.b Energy in Mexico: facing innumerable challenges and opportunities

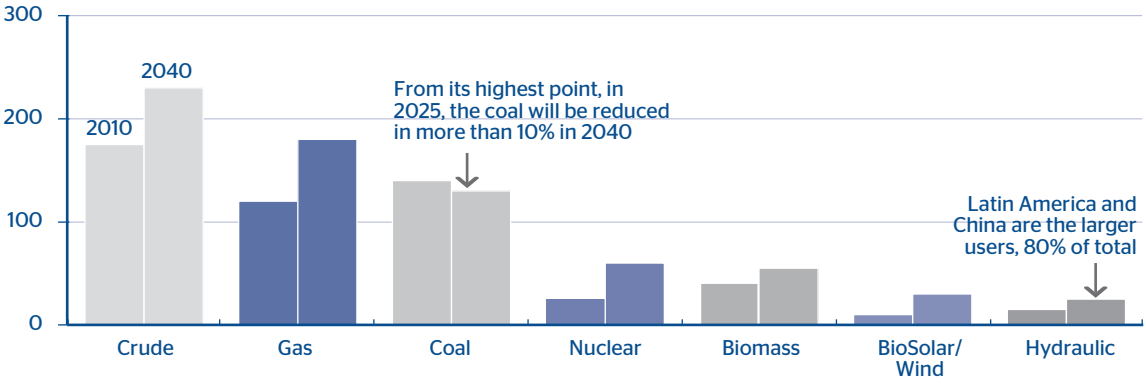
Currently, the energy sector In Mexico is facing innumerable challenges and opportunities in the short and medium term. Although the challenges are of a very diverse nature, the consensus points to two priority areas to be reviewed and thus be able to overcome them: a) the organizational structure of Petroleos Mexicanos (Pemex) and the Federal Electricity Commission (CFE for its Spanish initials) considering regulation, corporate government and transparency that allows greater competition and supply; and b) the operating part of oil and natural gas extraction, production, transportation, and distribution, and the modernization of the electric sector, ranging from the generation through the marketing of energy. It should be pointed out that relative to the diagnosis made in the issue of ***Mexico Sectorial Regional Outlook of May 2011***, the challenges are persisting with modest progress, the 2008 reform had limited scope.

In this section, a brief review will be made of the challenges facing Mexico in the energy sector and of the main proposals formulated by the specialists in this respect. The review will be accompanied by a small reference to the global energy environment.

The demand for primary energy will continue to grow in the coming 30 years with sufficient supply

According to estimates by specialists of the energy sector, the demand for energy will be 30% higher in 2040 compared to 2010, derived mainly from emerging economies. Oil, gas and coal will continue to be the most used fuels. The demand for natural gas will grow to 60% by 2040 due to the need to produce electricity. The demand for coal will grow little and that for gas will surpass it.

Graph 40
Global demand for energy by type of fuel (Quadrillions of BTU's)



Source: Exxon Mobil Annual Report 2012

Energy resources at a global level are not scarce; there are large volumes of conventional resources that have still not been developed, without a "peak oil" in view. The full oil potential of the world depends on multiple elements such as: price, technology and political factors. More than 80% of the additional production in the development phase at a world level seems to be profitable with an oil price higher than US$70 per barrel.[1] In natural gas, a growing part of the world supply will come from non-conventional sources like shale gas.

[1] For further references see page 2: "Oil: The Next Revolution" *Harvard Kennedy School.*

The challenges on the organizational structure of government-owned energy companies

To analyze Brazil's experience since 1994, what is being done in Colombia, and Norway's plan can give us some valuable experiences. For example, in Brazil's case as a result of the Constitutional Reform of 1995, the contracting of private companies is allowed for *upstream, midstream y downstream*.[2] In 1997, it was established that the exploration and development of oil and gas production be done through concession agreements, preceded by a bidding process or, in some cases, a shared production agreement, which implies the obligation of exploiting at a company's own risk. In case of success, the company with the concession may produce oil or gas in a determined block, conferring their property of the goods produced through a corresponding tax payment. These changes, among others, have allowed Brazil to rank in fewer than 17 years as the fourth oil producer in America and the 12th in the world, as per its financial performance, private capital, assets, income, profits and return on invested capital (ROI).[3]

A modern Pemex will have to consider the following aspects:

Regulatory Framework

1. Greater autonomy that will allow it greater power in decision-making and in contracting so that its operating capacity will increase, and it can have access to more efficient technology. At the same time, a new fiscal scheme that will permit investment autonomy.

Transparency

2. Assuring that more operating flexibility be accompanied by greater transparency and accountability to generate incentives to increase afficiency and productivity.

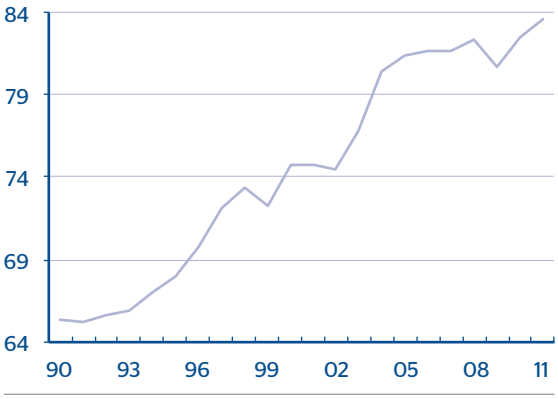
3. To strengthen the regulating authority of the National Hydrocarbon Commission so that the recovery of energy will be maximized with a short- and long-term vision. Also that it will promote competition in favor of the economy, households and firms.

The operating challenges

1. Crude oil: maintain and/or increase production

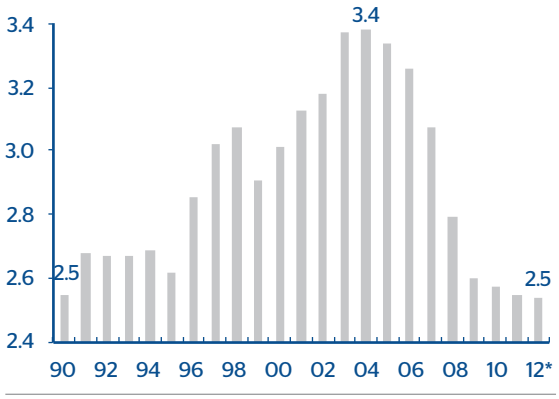
On an international scale, there is a consensus that conventional and non-conventional oil is not scarce. Oil of easy extraction is over; new developments will be exploited in a very complex manner (in deep waters and/or through non-traditional processes), which is why profound training and plentiful resources will be necessary to recruit and train human capital and obtain the appropriate technology to extract oil.

Graph 41
World production of crude oil (Billions of barrels a day)



Source: BBBVA Research with British Petroleum data

Graph 42
Crude oil production in Mexico (Billions of barrels a day)



* 2012 refers to the January-August average
Source: BBVA Research with INEGI data

[2] Upstream: exploration and production. Midstream: transportation, processes and warehousing, and Downstream: refining, sale and distribution.
[3] In Platts (2011) Main 250 Global Energy Companies.

In Mexico, the super giant oil field, Cantarell and Ku-Maloob-Zaap, produced in the easy extraction stage Currently, they are in the complicated phase and with mature oil deposits in decline. Chicontepec with complex geology, Deep Waters and heavy and extra-heavy crude oil. This type of projects is capital- and technology-intensive and of great difficulty in its execution.

Proposals:

- To improve the administration of reserves so as to maintain production and maximize oil revenue in the long term;
- To revitalize mature oil fields;
- To take advantage of the international experience as to exploration and production agreements;
- To work out a regulatory framework for investments in oil and gas to allow for private investment;
- To expand the use of technologies of shallow exploration; for example, the seismic 3rd and 4th dimension,[4] as well as electromagnetic methods that improve efficiency and profitability;
- Exploration in incorporation of reserves of oil and gas in fields located in deep waters of the Gulf of Mexico.

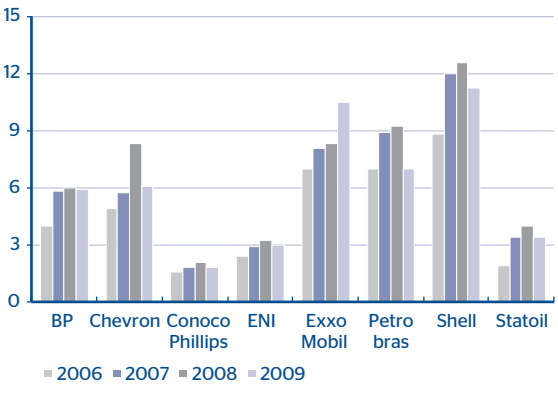
The technological needs involved and the incipient experience in these areas will impede Pemex from carrying them out per se in the period required to sustain and/or increase production in the country.

2. High oil prices due to high extraction costs and geopolitical factors

Current prices are more related to the difficulty in development and to geopolitical instability. As of 2012, when diverse investment projects have matured in the world, the price could come down to about US$70, taking as a reference the West Texas Intermediate price.

Graph 43

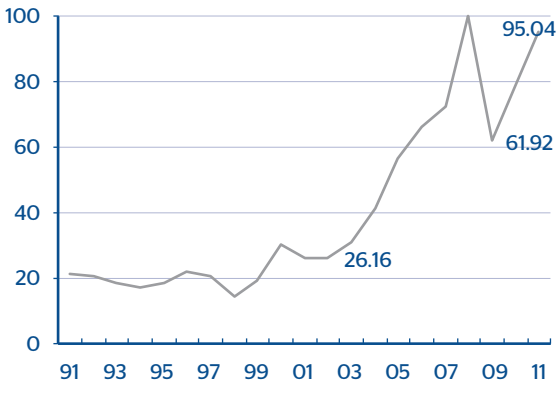
Investment in R&D (research and development) of the large oil companies in the world (Billions of dollars)



Source: The Technology of Exploration and Production in Mexico and in the World: Current Situation and Challenges, CNH

Graph 44

West Texas Intermediate Spot Price (US dollar per barrel)



Source: BBBVA Research with British Petroleum data

In Mexico, high oil prices have brought relief to public finances and to its external accounts, although this situation can be considered as not permanent- The fiscal burden represents 60% of total revenues of Pemex and 108%of the surplus generated. Also, imports grow at a higher rate than exports of oil products.

[4] These are exploitation technologies of heavy oil and of reduction of its density, among the most important of which are application of the 3D and 4D seismic multi-component; improved recovery; reactivation of the mature fields.

Proposals:

- Reduce the dependence of public finances on oil revenues;
- A new fiscal regime so that the oil industry will capture oil revenues efficiently; to apply a fiscal regime as in any company;
- Pemex consumes extensive resources or uses a debt budgetary ceiling that could be destined to other items in the country's economy.

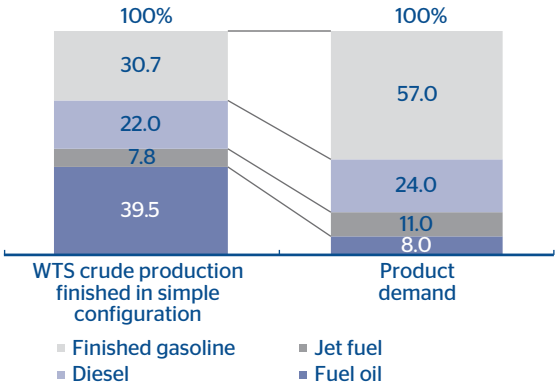
3. Petrochemicals: insufficient and deficient supply to meet growing demand

Strong global demand, mainly from emerging countries. The leading companies have, by technological tradition, been able to anticipate and meet demand needs through improvements and changes in the processes or products in view of environmental regulations. In Latin America, Brazil has assumed the leadership in the petrochemical industry.

Basic petrochemical or refining: Mexico has a dynamic internal demand; nevertheless, it is facing multiple challenges in this aspect; insufficient and deficient infrastructure of the refineries for eliminating the production of residuals; the poly-ducts and oil-ducts are, in some cases, over 25 years, with a low operational reliability of processing plants, ducts, ships and other means of transportation. High dependence on imports of petrochemical products to cover the internal needs; the gasoline imports add up to more than US$18 billion dollars annually-multiplying by over fourteen times in the last decade; the refining capacity is the same as it was 30 years ago, due to the lack of investment.

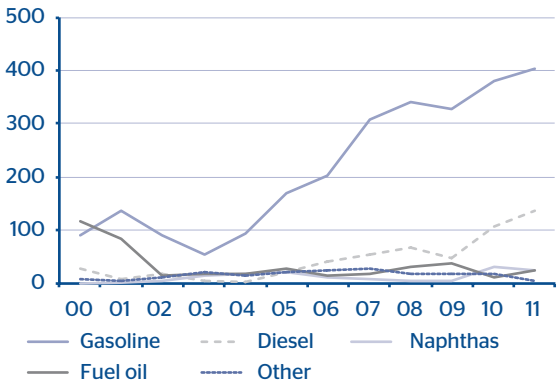
In brief, the proportion of products that are obtained from the refining process of crude oil is insufficient to cover the demand, and the properties of these are not what the market requires.[5] For example, in the structure of the demand for refined products gasoline represents 57.0% of the total, the structure of supply is of 30.7%.

Graph 45
The structure of supply and demand for refined products in Mexico. (% Total)



Source: BBVA Research with Pemex data.

Graph 46
Oil Imports in Mexico (Thousands of barrels daily)



Source: BBVA Research with SIE data.

Secondary Petrochemicals: Marked demand for petrochemicals: non-basic, derived from the first transformation of methane, ethane, propane and naphthas. Several of the plants are below their capacity on the international scale and present a technological lag; strong imports are necessary to meet internal needs.

[5] For more details on the challenges in oil refining in Mexico, see Beltrán JA. (May. 2012) "La prolemática de la refinación" in *Energía a Debate*. ("The Refining Problem" in *The Energy Debate.*) Also, see page. 26 a Puig L. in "Relatoría del Foro de Estrategias Energéticas." ("Summary of the Forum on Energy Strategies")

Proposals:

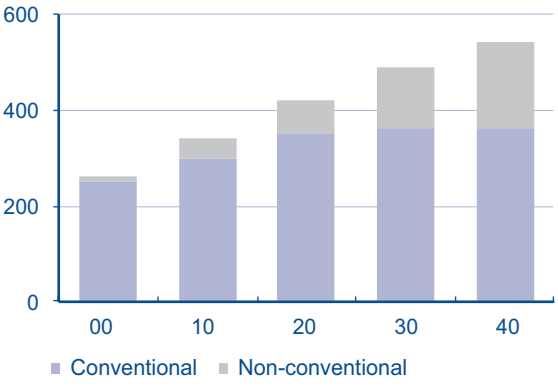
- To eliminate the segmentation of the chain between basic and secondary petrochemicals; the proposal is a vertical integration between them. Segmentation has bolstered imports. [6]
- To open to private enterprise refining ducts and terminals. To reshape and increase the refining capacity (through the construction of a new refinery or the purchase of several of them abroad, for example, in Texas).
- New projects that could be constructed to improve the supply and eventually export, allowing for certain competition with the private sector: polyethylene, PET resin; exfoliates and other derivates of ethylene oxide, of polyethylene of lineal modernization, and place in operation the polypropylene plant, modernization of the aromatics sector, to modernize and construct new ammonia plants and UREA. [7]

4. Increase the production of conventional natural gas

Through the increase in the supply of non-conventional natural gas in North America, the price of this energy product, was separated from the price of the region leading to low profitability in the production of natural gas, unassociated and associated with oil. The largest producers are Russia and North America. In the coming 30 years, an important part of the supply of gas will come from non-conventional sources.

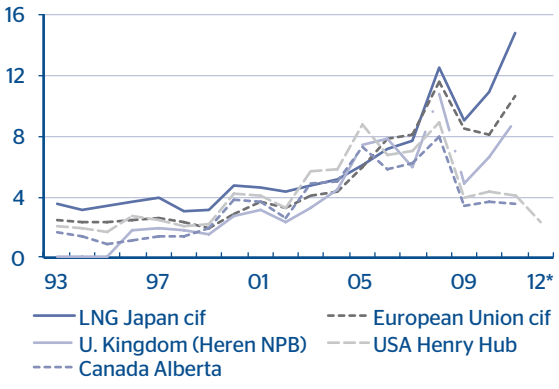
In Mexico, the main assets of conventional natural gas continue to decrease (mainly Cantarell), without being able to totally compensate the Chicontepec production. The greatest part (63%) of the production in Mexico is associated gas; the insufficient supply of gas has become one of the main factors limiting progress, considering that demand is growing, 22% of which is met with imports. The main demand sector in Mexico is oil, with 45% and electricity with 39%. The industrial (14%) and residential (1%) sectors have little relative share in demand. [8]

Graph 47
Gas production foredast in the world (Billions of cubic feet daily)



Source: Exxon Mobil Annual Report 2012

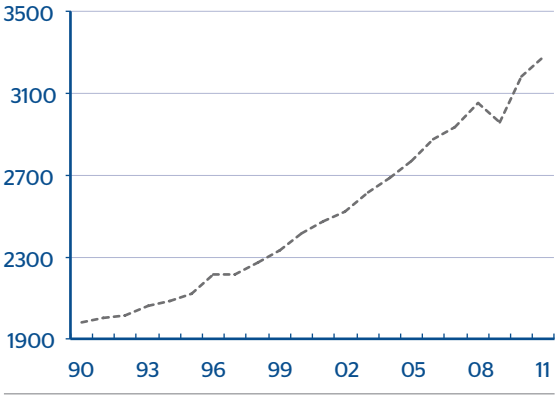
Graph 48
Natural Gas: marker prices (Dollars by millons of Btu)



Btu= British thermal units, cif= cost+insurance+freight, *average through June
Source: BBVA Research with British Petrolum (BP) data.

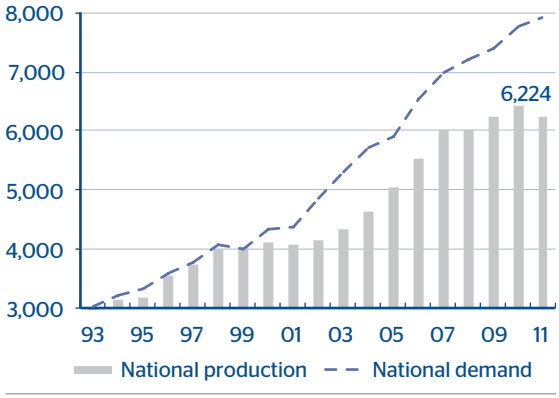
[6] For further details, see Livas R.(2008) "Los retos de Pemex en la petroquímica." ("The Challenges for Pemex in petrochemicals")
[7] For further detail on the proposals in secondary petro-chemistry, see page. 28 In "Relatoría del Foro de Estrategias Energéticas".
[8] For further detail on the statistics presented, consult the Energy Information System.

Graph 49
Natural gas production in the world
(Billions of cubic feet)



Source: BBVA Research with British Petroleum data,

Graph 50
National balance of natural gas in Mexico
(Millions of cubic feet daily)



Source: BBVA Research with SIE data.

Proposals:

- To define de fiscal treatment that will be given to conventional and non-conventional gas (shale gas).[9]
- Currently, nine million cubic feet of conventional gas can be extracted daily, but is has significantly affected the structural change of the relative prices, for which today there are projects that are not profitable in the country for domestic consumption but alright for exports.
- To increase the efficiency levels in costs in order to strengthen business profitability.
- Mexico can export gas to other latitudes where the price is attractive.

5. Natural gas infrastructure still deficient

With the opening in 1995, the objective was to double the infrastructure of the gas ducts, which at that time was of 9,000 km of ducts that shaped the National Gas Duct System (SNG for its Spanish initials). But, until now, only 3,500 km have been built, excluding the open access permits and for own use that represent growth of barely 27%.The lack of development of gas ducts and a growing demand for natural gas has had as a result a capacity limit in specific areas of the national territory (central and west).

Proposals:

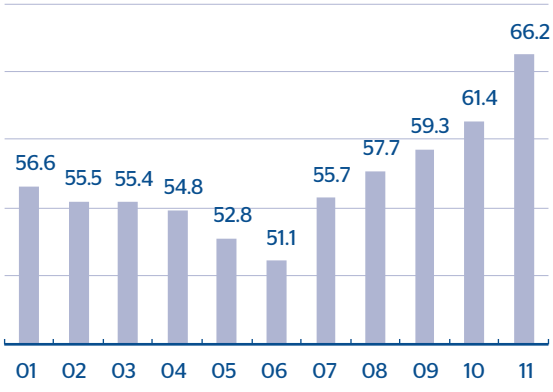
- Investment in new infrastructure is required to be able to guarantee growth in the natural gas sector
- To continue to promote the application of the rate plan called "roll in" or systemic rates[10] on necessary and strategic ducts. This plan would provide certainty of obtaining a return to investors. Up to now the plan has only been applied to integrating in the SNG, the Reynosa-San Fernando duct.

6. To benefit from the non-conventional resources (shale gas)

Shale gas is natural gas from non-conventional deposits. A technological change in its extraction has allowed a profitable recovery in the U.S., increasing the supply levels following its lowest point in 2006. One of the main effects of this technological revolution is separating the gas price from the oil price. The technically recoverable resources of shale gas in the U.S. are 862 trillion cubic feet (tcf). plus conventional resources. Tight gas and CBM are equivalent to 105 years of gas supply at the current level of consumption. As per the US Energy Information Administration (EIA), Mexico is the fourth country with the highest technical recoverable reserves.

[9] For further detail, see page 3 in "Relatoría del Foro de Estrategias Energéticas". ("Summary of the Forum on Energy Strategies").
[10] The "roll in" or "systemic": rates break down the construction costs of new ducts of the National Gas Duct System among consumers.

Graph 51
Natural gas production in the U.S. (Trillions of cubic feet daily)



Source: BBVA Research with US Energy Information Administration data.

Table 10
Technically recoverable resources of shale gas (Trillions of cubic feet)

Country	
China	1,275
USA	862
Argentina	774
Mexico	681
South Africa	485
Australia	396
Canada	388
Algeria	231
Brazil	226
Poland	187
France	180
India	63
United Kingdom	20

Source: BBVA Research with US Energy Information Administration (EIA) data.

In the case of Mexico, Pemex has identified five entities with shale gas potential: Chihuahua; Sabinas-Burro-Picachos; Burgos; Tampico-Misantla and Veracruz. The most important basins are those of Burgos and Sabinas with a potential for 498 tcf, this can represent an opportunity for counting on a low- natural gas price in a first stage for supplying the domestic market and, in a second, to become an exporter. So as to dimension the potential to be developed, 100 tfc of shale gas would increase the supply of natural gas to twice as much of what is currently produced for 50 years. To develop it, an investment of an annual US$13 billion would be required. [11]

Proposals:

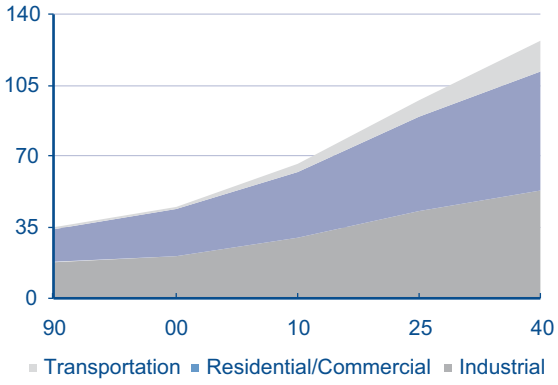
- To create a new Pemex subsidiary that would specifically be in charge of developing the exploration and production of shale gas.
- Currently, oil exploitation displaces gas projects, even when this hydrocarbon has an important potential for its exploitation and sale, not only in Mexico but also in the market abroad.
- To change some by-laws and conditions of the denominated integral agreements, so as to be able to include the private ones in the realization of said projects.
- The development of technology of well stimulation through "Hydraulic Fracturing".

7 . Electricity with opportunity areas

The growing demand for electricity in the world has been the product of various factors: change in the productive structure, growth of GDP per inhabitant, technological innovation and the expansion of emerging countries. The supply of and demand for energy in the world has presented uneven dynamics. As to the supply, international experience points to the introduction of a higher degree of competition which could be effective in stimulating efficiency improvements, outside of changes in ownership or in regulation.

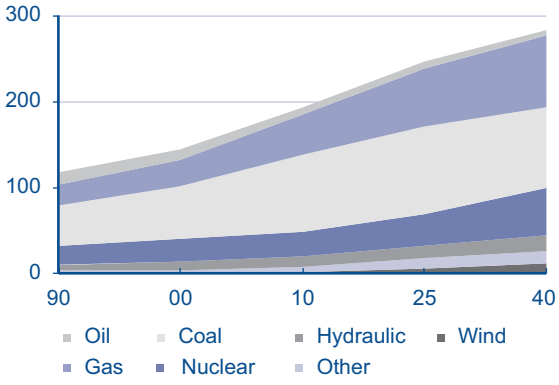
[11] Note press report published in El Economista on October 1st, 2012, with regard to "Foro Perspectivas Económicas y Empresariales de las Industrias de Gas y Aceite Lutitas", ("Forum on Economic and Business Perspectives for Lutitas Gas and Oil") estimates of the Energy Ministry.

Graph 52
Demand for electric energy by sector in the world 1990-2040 (Thousands of terawatt-hours)



Fuente: BBVA Research con datos de ExxonMobil

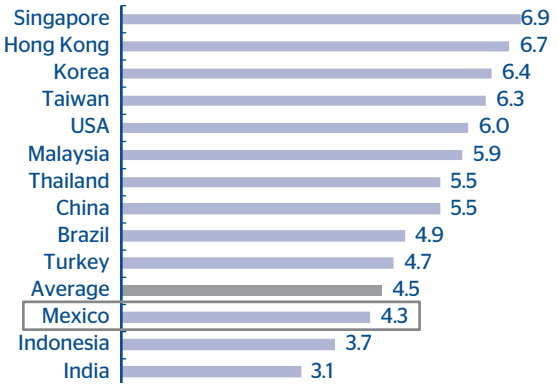
Graph 53
Electric generation by type of fuel in the world 1990-2040 (Quadrillion BTU's)



Fuente: BBVA Research con datos de ExxonMobil

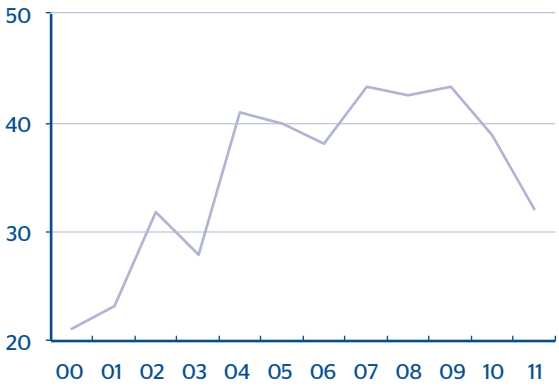
Demand for electricity will double in 15 years, with an annual investment required of close to US$7 billion, 40% more than the US$5 billion in 2012.[12] The electricity sector in Mexico is of low quality compared to other countries with which it competes in international trade. The lack of competitiveness is explained by a low geographic inter-connection, and an excess in the reserve margin in the operation,[13] and by losses in the transmission and distribution of electricity, which are reflected in high prices for industrial consumers and low prices with a strong subsidy for households, compared to the external reference (the U.S.). Out of the electricity generated 41% is based on gas, 25% is thermoelectric and 22% hydraulic. The installed capacity of transmission and distribution is the variable that has the most bearing on the efficiency of the sector, as well as the maintenance that it receives. In transmission, the installed capacity in 2011 was 50,303 km in transformation, 77.2% corresponds to transmission and the remaining 22.8% to distribution sub-stations for a total transmission of 202.9 GVA.

Graph 54
Electric service quality index 2011 2012 (Scale from 1 to 7, with the highest value indicating greater service quality).



Source: BBVA Research with The World Economic Forum data.

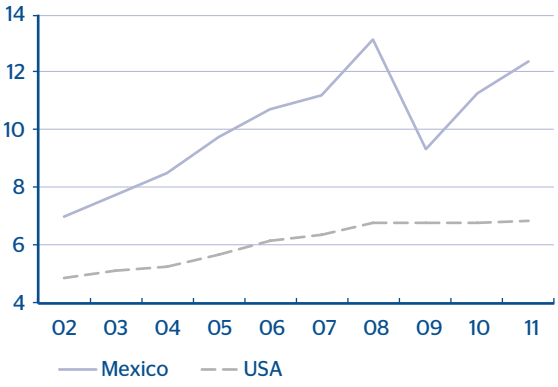
Graph 55
Reserve margin of the electric sector in Mexico.(% of the maximum coincident demand)



* Unused gross capacity, as % of total capacity during high demand peaks
Source: BBVA with Statistical Appendix, 6th Report of the FCH Government

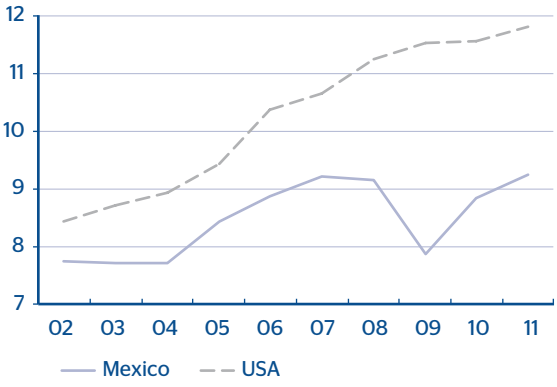
[12] Sener "National Energy Strategy 2012 -2026".
[13] The reserve margin or idle capacity causes higher costs in the CFE generation compared to independent producers, generating a perverse incentive for the CFE. For further detail on this topic, See page 19 in Gonzalez JJ (2010). "Private sector and generation of electric energy".

Graph 56
Average prices of electricity in Mexico - U.S. industrial sector
(Dollar cents per kilowatt hour)



Source: BBVA Research with U.S. Energy Information Administration and CFE data.

Graph 57
Average prices of electricity in Mexico - U.S. residential sector
(Dollar cents per kilowatt hour)



Source: BBVA Research with U.S. Energy Information Administration and CFE data.

Proposals:

- To improve the corporate government framework of the Federal Electricity Commission (CFE for its Spanish initials);
- To separate the functions of the State as the responsible owner of policies, regulator and operator;
- Distributed generation or closer to load; decentralization is proposed;
- To ensure that the price system incorporates the criteria of commercial profitability;
- To include a regulating entity with sufficient autonomy and resources;
- The separation of the three components of the chain (generation, transmission and distribution);
- To take advantage of the co-generation model and to sell its excess energy directly to other private consumers. Greater competition in the distribution, transmission and marketing.
- To focus subsidies on low-income consumers.[14]

Conclusions:

The oil resources that Mexico has are potentially considerable (for example: the country is about to certify deep water and ultra deep reserves) and in the future they could be still higher (there are still extensive unexplored areas). However, to use them to their best advantage --for the benefit of the country-- the main challenge is not only the financial, but also the operating, technological and capacity for execution. In 2011, Mexico ranked as the 8th crude oil producer in the world. Nevertheless, during 2005-2012, production has declined importantly, from 3.4 million to 2.5 million bpd (barrels per day). The production of natural gas has also declined, from 7,031 million in 2009 to 6,762 million daily cubic feet (pcd) in 2011. This situation shows the exhaustion of the oil fields and, therefore, the need for greater investment.

[14] For further details of the reform proposals enumerated for electric energy, see pages. 22 - 25 In González J.J. (2010) "Sector privado y generación de energía eléctrica." ("The Private Sector and the Generation of Electric Energy").

World production of oil continues to rise due to the continued growing demand of the emerging countries; also due to the incentive of high prices. In Mexico, however, production has diminished, as well as the proven and possible reserves. The exhaustion of the mature oil fields and the challenges in economic resources, which refers to the large projects (capital and technological intensive and of high complexity in their execution) in deep waters and Chicontepec, explain this performance. Given this, it is advisable to expand spaces for private investment, not only for the financial capacity but also for the execution capacity.

Moreover, the refining and the petrochemical areas do not produce raw material with the sufficiency and the quality that the domestic market demands, leading to the growth of imports, For example, gasoline imports, in volume, has more than tripled in size; in value, it has multiplied by more than fourteen times in the last ten years. Part of this situation is due to the lack of investment that these sectors have undergone; given this it is desirable to open spaces to private investment rather than totally to the public sector, which would allow reducing the marked lags in infrastructure, increasign the supply, and improving competitiveness in prices for the benefit of the country's productivity.

The production and extraction of conventional natural gas in Mexico are affected by the structural change in the manner of production in North America. Today, we produce less gas than four years ago. Also, the gas ducts network is totally saturated with levels higher than 95% in its transport capacity. [15] Since the reform of 1998, it had been planned to double the gas duct network. It has only grown 27%.

As to the non-conventional gas resources, we are facing a new world energy paradigm where technology (horizontal drilling and hydraulic fracturing) used for the extraction of shale gas in North America could allow Mexico--if one sixth of its shale gas resources were to be developed--to almost double the current production of natural gas during 50 years.

To materialize the shale gas production, US$13 billion is required annually –triple the annual Pemex investment.– [16] Mexico does not have the resources nor the experience and technology, which is why it would have to invest together with private enterprise.

The work done up to now by Pemex has been important, since despite its lags, it has had progress. However, the task is still incomplete; as an initial step a modern Pemex is needed, with financial independence that would bolster greater efficiency and profitability.

In the electric sector, there have also been improvements in operation, although there are still some issues to be resolved that could significantly improve its efficiency and operation throughout the country.

Demand will be growing in the coming years; modernization (decentralization, and structural reform of the CFE) will allow improving the distribution and transmission of energy and the maintenance of networks, as well as providing added value services.

In conclusion, should the changes not be made that would allow facing the main challenges in the energy sector, Mexico will continue to lose the opportunity of efficiently using its energy resources and of improving the economic competitiveness of the country due to reforms that continue to be postponed in this sector.

[15] For further details see Shields and Hernandez (July10 y 11, 2012) in "Relatoría del Foro de Estrategias Energéticas". ("Summary of the Forum on Energy Strategies") mbd= millions of barrels daily dcf (pcd in Spanish)= daily cubic feet.
[16] Press release published in El Economista on October 1st, 2012, with regard to the "Foro Perspectivas Económicas y Empresariales de las Industrias de Gas y Aceite Lutitas." Energy Ministry.

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4. Appendix

4a. Indicators of economic performance by state

Table 11

Selected indicators

					AAGR3, % 2003-2010			Place in the National					
	GDP* 2011[1]	Population[2] 2011	GDP* 2011, dollars	GDP*/inhab. 2011, dollars	Real GDP	Population	Real GDP inhab.	Real GDP 2011	GDP inhab. 2011	Remittances 2011	Employment[4] 2011	Rec. Fed. 2011[5]	Comptitiveness 2010[6]
National	13,708	113,909	1,082,678	9,505	2.5	1.2	1.2						
Aguascalientes	150	1,211	11,827	9,767	3.6	1.8	1.9	27	10	24	19	29	5
Baja California	367	3,227	28,961	8,974	2.0	2.2	-0.2	14	15	19	8	17	6
Baja California Sur	82	662	6,449	9,735	4.8	3.6	1.2	29	11	32	29	32	7
Campeche	745	836	58,815	70,325	-3.8	1.3	-5.1	5	1	31	28	28	12
Coahuila	429	2,798	33,880	12,111	2.5	1.4	1.1	10	5	26	9	20	4
Colima	81	662	6,381	9,636	4.0	2.0	1.9	30	12	27	31	31	15
Chiapas	246	4,892	19,431	3,972	1.7	1.7	0.0	19	32	13	20	5	30
Chihuahua	392	3,444	30,930	8,982	1.6	0.9	0.7	12	14	17	7	15	9
Distrito Federal	2,359	8,877	186,291	20,986	2.1	0.1	2.1	1	2	9	1	2	1
Durango	172	1,652	13,558	8,205	1.7	1.0	0.7	25	17	18	21	24	21
Guanajuato	526	5,574	41,580	7,460	2.7	1.5	1.2	8	19	3	6	7	22
Guerrero	197	3,419	15,579	4,557	1.6	0.9	0.7	22	30	4	26	11	31
Hidalgo	208	2,710	16,444	6,068	3.0	1.6	1.3	20	26	2	23	18	27
Jalisco	873	7,460	68,973	9,245	2.4	1.3	1.2	4	13	8	2	4	14
Mexico	1,275	15,387	100,701	6,545	3.5	1.4	2.0	2	24	10	3	1	28
Michoacan	328	4,390	25,889	5,898	2.1	0.9	1.2	15	27	1	15	10	25
Morelos	153	1,800	12,092	6,717	2.0	1.4	0.6	26	22	14	22	25	16
Nayarit	78	1,102	6,190	5,616	3.3	1.6	1.6	31	28	21	30	27	23
Nuevo Leon	1,001	4,741	79,060	16,675	3.8	1.6	2.2	3	4	23	4	8	2
Oaxaca	201	3,840	15,904	4,142	1.7	0.9	0.8	21	31	6	24	9	32
Puebla	459	5,854	36,215	6,186	3.3	1.1	2.1	9	25	5	12	6	24
Queretaro	262	1,875	20,667	11,021	4.4	2.2	2.2	18	6	20	14	22	3
Quintana Roo	192	1,380	15,127	10,963	4.0	3.1	0.9	23	7	30	18	26	13
San Luis Potosi	278	2,614	21,922	8,387	3.0	0.9	2.1	16	16	11	16	19	17
Sinaloa	272	2,792	21,522	7,707	2.5	0.7	1.8	17	18	15	13	16	10
Sonora	371	2,710	29,280	10,804	3.6	1.5	2.0	13	8	22	11	14	11
Tabasco	563	2,274	44,496	19,566	4.8	1.5	3.2	7	3	29	25	13	29
Tamaulipas	412	3,324	32,534	9,788	1.7	1.3	0.4	11	9	16	10	12	8
Tlaxcala	73	1,192	5,791	4,858	1.4	1.5	0.0	32	29	25	32	30	19
Veracruz	649	7,719	51,299	6,646	2.8	0.8	1.9	6	23	7	5	3	26
Yucatan	186	1,987	14,707	7,403	3.4	1.2	2.2	24	20	28	17	21	18
Zacatecas	68	1,170	5,370	4,590	3.5	0.9	2.5	28	21	12	27	23	20

[1] Billions of pesos
[2] Populatión 2010, thousands of people, estimate BBVA Research
[3] Average Annual Growth Ratel
[4] Total registered workers by the Social Security Institute (IMSS)
[5] Federalized resources
[6] State competitiveness index (IMCO)
* It refers to the gross added value. The sum of the state figures does not coincide with national due to the net taxes to subsidies figures.
Source: BBVA Research with INEGI, Conapo, Banxico, IMSS, SHCP, IMCO (Instituto Mexicano de la Competitividad, A.C.) data.

4b. Indicators by state

Table 12
Region: High Development

	Mexico City					
	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	3.9	4.3	4.8	4.4	4.6	4.9
Primary Sector	-3.2	8.3	1.1	30.3	4.9	-13.1
Secondary Sector	-3.8	6.0	10.8	6.4	9.6	8.5
Sector Terciario	5.9	3.8	4.0	4.2	4.8	5.2
Manufacturing production (annual % change)	-2.0	-1.7	-0.6	-2.4	1.7	1.4
Construction (annual % change)**	-23.6	36.3	80.9	47.3	28.8	14.6
Public works	-29.9	45.8	119.2	61.3	16.9	21.1
Private works	-16.9	27.7	53.6	34.6	39.0	7.6
Retail sales (annual % change)	1.3	6.1	5.5	7.4	6.2	6.0
Wholesale sales (annual % change)	4.8	1.7	0.5	-0.3	3.0	1.5
Total Employment (annual % change)	1.3	4.9	4.9	4.6	4.2	4.3
Industry	-4.5	6.7	5.7	5.4	4.6	5.1
Services	2.8	4.3	4.6	4.4	4.1	4.0
Total air traffic (passengers Transport, annual % change)	0.2	9.7	21.7	20.0	24.4	11.5
Federalized resources (annual % change)	2.7	3.9	4.0	-2.4	14.3	-4.7
Participations (Branch 28)	8.1	3.5	2.5	7.3	-8.3	-8.6
Contributions (Branch 33)	-1.7	5.3	7.9	3.2	29.5	-7.4
Remittances (annual % change)	3.6	15.3	18.9	18.7	14.5	0.7

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 13
Region: Tourism

	Baja California Sur						Quintana Roo					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	1.4	4.9	4.3	6.5	2.4	6.3	6.4	6.2	7.9	4.8	5.1	5.7
Primary Sector	19.5	-1.9	-12.0	19.5	-0.7	13.3	22.8	5.7	-10.2	33.4	5.9	3.8
Secondary Sector	-17.4	4.7	4.1	6.3	-2.8	5.7	-10.2	10.2	26.3	-2.1	2.5	-2.4
Sector Terciario	6.2	5.4	5.7	5.8	3.7	5.5	8.4	5.7	6.2	5.7	5.5	6.9
Manufacturing production (annual % change)	-4.1	-3.6	-7.4	-9.3	-5.0	-2.4	-1.4	-1.9	0.4	-5.1	-7.2	-5.2
Construction (annual % change)**	-29.1	-10.2	-14.4	-3.4	13.5	18.6	-29.6	52.8	121.6	48.8	-3.1	-12.6
Public works	-21.1	-27.7	-43.2	-24.9	-3.2	49.4	-32.7	59.6	131.4	31.6	18.4	61.4
Private works	-35.9	8.4	-17.6	2.8	-9.7	-8.4	-28.4	50.2	118.6	57.5	-15.3	-37.4
Retail sales (annual % change)	2.8	-1.4	0.5	-6.3	2.4	0.2	-1.7	2.9	1.6	4.4	5.6	11.7
Wholesale sales (annual % change)	10.6	5.0	3.1	6.2	3.6	0.6	-7.8	5.1	4.6	5.7	11.8	8.5
Total Employment (annual % change)	-1.7	2.2	2.5	4.3	3.9	4.8	1.5	2.8	2.2	2.2	0.9	1.6
Industry	-7.3	-3.3	-3.1	-0.7	5.1	7.2	-6.7	1.0	0.6	6.0	-16.6	-9.9
Services	-0.5	3.9	4.4	5.4	4.2	4.0	3.2	3.1	2.4	1.3	3.9	3.6
Total air traffic (passengers Transport, annual % change)	5.3	0.2	20.4	15.0	12.6	7.2	10.3	7.1	32.1	7.3	11.2	11.6
Federalized resources (annual % change)	-5.0	16.6	34.5	26.0	-4.9	36.0	3.1	4.5	8.2	6.4	4.1	28.4
Participations (Branch 28)	4.6	7.1	5.7	6.5	2.6	-13.1	7.2	6.0	4.8	13.0	0.3	-6.8
Contributions (Branch 33)	0.9	2.6	3.4	-7.4	-11.2	19.5	0.3	4.6	15.1	-3.1	10.9	30.3
Remittances (annual % change)	5.6	8.6	20.8	11.2	16.4	13.4	1.5	6.1	9.5	2.3	10.8	6.8

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 14
Region: Industrialized

	Aguascalientes						Baja California					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	7.0	4.6	5.1	5.4	8.9	6.3	3.4	5.3	6.0	6.3	5.0	7.0
Primary Sector	4.1	7.3	19.4	-10.8	8.8	19.9	0.2	3.5	-8.5	6.8	1.9	11.4
Secondary Sector	10.4	5.0	3.8	8.1	13.5	6.8	1.2	7.2	8.6	8.8	5.2	11.8
Sector Terciario	4.5	3.9	4.8	4.5	5.3	5.1	4.7	4.4	5.3	5.0	4.8	4.3
Manufacturing production (annual % change)	17.0	8.1	9.1	7.9	14.7	10.8	6.5	6.9	6.5	7.0	8.9	13.3
Construction (annual % change)**	-19.7	-1.7	-13.0	33.0	35.6	9.3	-10.6	3.2	3.6	17.2	-9.1	6.6
Public works	1.9	-27.3	-47.5	13.8	18.0	20.2	12.2	15.2	28.5	33.8	-8.4	21.6
Private works	-31.6	19.4	24.1	47.1	44.8	4.2	-24.4	-7.6	-17.6	2.8	-9.7	-8.4
Retail sales (annual % change)	-0.5	4.9	3.9	4.4	10.0	10.4	3.3	3.0	1.4	3.5	7.2	7.9
Wholesale sales (annual % change)	1.7	7.4	10.3	6.1	8.5	3.6	-4.1	2.0	0.7	1.6	6.4	-0.8
Total Employment (annual % change)	4.6	3.2	2.3	3.6	3.3	4.9	5.1	4.0	3.1	2.5	3.4	2.7
Industry	5.7	4.6	3.1	3.2	2.0	4.2	5.7	4.1	2.9	2.5	3.5	3.3
Services	3.9	1.8	1.7	3.8	4.5	5.8	2.6	3.9	3.2	3.0	3.0	2.4
Total air traffic (passengers Transport, annual % change)	2.5	12.1	17.1	14.8	18.9	28.7	5.9	-2.4	7.6	4.6	3.7	12.0
Federalized resources (annual % change)	-6.6	9.5	7.8	10.4	-0.6	13.8	3.1	1.9	11.9	0.7	9.4	9.6
Participations (Branch 28)	8.5	5.5	3.9	8.1	12.2	-5.8	11.1	0.5	2.3	6.1	12.3	-4.1
Contributions (Branch 33)	1.8	3.0	9.8	-1.7	13.2	8.1	0.1	3.8	20.3	-14.3	6.5	9.1
Remittances (annual % change)	4.3	4.2	7.8	6.5	13.4	22.0	8.2	14.0	15.9	13.7	8.8	15.4

	Chihuahua						Coahuila					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	2.0	2.0	2.0	3.7	2.9	3.7	12.8	6.2	6.2	5.6	4.1	7.6
Primary Sector	2.0	-1.5	-0.7	-2.5	-4.4	9.0	-3.8	1.6	-4.2	4.1	1.6	-0.6
Secondary Sector	-0.8	-0.3	0.1	5.9	5.4	4.3	23.0	7.8	7.0	6.4	2.8	11.6
Sector Terciario	3.7	3.7	3.5	3.6	2.1	3.0	6.2	5.0	6.3	5.1	5.8	4.5
Manufacturing production (annual % change)	1.8	1.0	1.6	3.2	4.3	4.1	32.0	7.4	5.4	6.5	4.9	11.3
Construction (annual % change)**	2.7	-3.8	-16.5	16.7	12.9	-5.3	-3.6	7.5	6.5	1.6	-3.4	23.9
Public works	-6.2	-8.2	-22.4	11.7	27.8	-9.9	3.0	6.8	22.1	-24.3	-2.9	7.1
Private works	11.2	-0.3	-12.0	20.8	3.6	-1.2	-6.3	7.8	0.7	15.8	-3.6	33.0
Retail sales (annual % change)	0.7	6.5	8.9	5.2	9.1	7.4	3.8	3.8	4.7	4.3	7.0	5.8
Wholesale sales (annual % change)	-2.7	1.2	-0.4	5.0	4.5	9.8	5.7	2.8	1.1	1.3	3.8	5.2
Total Employment (annual % change)	5.7	2.8	1.9	2.6	3.7	4.6	8.6	9.0	8.4	6.7	6.3	6.9
Industry	7.9	4.1	3.2	4.6	5.9	8.5	13.8	12.7	10.9	8.7	8.3	9.2
Services	3.7	1.3	0.0	0.3	0.6	0.1	3.3	4.7	5.4	4.5	4.2	4.2
Total air traffic (passengers Transport, annual % change)	5.9	-0.3	3.8	10.4	17.0	5.7	-13.9		23.8	20.6	20.3	4.8
Federalized resources (annual % change)	7.1	1.7	4.1	2.7	8.8	6.7	7.5	1.7	11.7	-3.3	7.1	3.2
Participations (Branch 28)	11.3	0.8	1.9	4.4	12.0	-5.8	12.1	5.7	6.7	9.4	10.7	-6.3
Contributions (Branch 33)	1.9	4.4	11.9	-0.3	5.3	7.8	0.0	4.1	12.1	1.2	4.1	12.1
Remittances (annual % change)	-2.3	5.4	9.3	9.7	10.5	19.0	0.0	5.5	9.3	11.1	13.9	15.2

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 15
Region: Industrialized

	Jalisco						Estado de Mexico					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	6.1	5.1	5.4	4.9	3.6	3.3	9.0	3.9	3.6	3.4	5.6	2.6
Primary Sector	6.0	-2.5	-2.9	-4.8	1.2	8.3	6.5	-9.7	-0.7	-7.7	-2.3	25.8
Secondary Sector	5.4	7.4	7.5	6.5	0.0	0.8	16.8	2.4	-0.1	1.9	5.2	-0.6
Sector Terciario	6.4	4.7	5.3	5.3	5.6	4.2	4.8	5.1	6.0	4.8	5.9	4.2
Manufacturing production (annual % change)	5.6	4.9	4.6	4.4	2.4	1.5	12.9	6.8	4.7	7.4	9.7	3.5
Construction (annual % change)**	9.9	12.5	18.9	10.9	-9.9	-2.0	44.3	-20.5	-34.8	-25.9	-21.5	-26.3
Public works	16.3	21.3	33.4	5.7	-28.0	-20.2	153.1	-29.3	-43.3	-33.9	-21.2	-35.5
Private works	5.4	5.6	8.4	15.2	10.4	15.4	-4.2	-10.1	-23.7	-18.0	-21.8	-17.8
Retail sales (annual % change)	3.1	5.6	5.4	3.9	6.6	5.9	2.4	9.4	8.2	9.5	9.6	10.9
Wholesale sales (annual % change)	1.8	0.9	-1.6	3.7	2.4	0.5	0.9	4.8	0.0	7.0	5.6	3.4
Total Employment (annual % change)	4.1	4.4	4.2	3.9	3.7	3.2	4.4	4.8	4.5	4.6	6.1	5.9
Industry	5.0	4.5	3.0	2.1	0.7	0.9	6.7	4.4	4.0	3.4	3.6	3.5
Services	3.3	4.2	4.9	5.2	5.5	4.7	2.9	5.1	4.9	5.7	8.2	7.9
Total air traffic (passengers Transport, annual % change)	6.2	0.7	8.1	3.8	5.7	0.9	-17.4	-30.3	-21.2	-37.5	-49.6	-51.3
Federalized resources (annual % change)	10.5	3.3	-1.1	2.3	4.5	3.7	10.2	5.3	8.5	-0.6	8.5	1.9
Participations (Branch 28)	11.9	6.4	3.9	9.6	1.4	-10.9	16.6	8.0	5.6	10.7	6.5	-9.7
Contributions (Branch 33)	1.5	5.7	11.1	3.5	3.1	6.3	2.9	6.8	10.9	4.4	3.7	5.0
Remittances (annual % change)	3.7	8.0	13.5	9.2	5.8	11.5	-3.6	1.3	5.6	1.8	0.6	0.0

	Nuevo Leon						Queretaro					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	8.9	6.4	6.8	4.7	5.1	4.7	6.9	6.6	6.9	6.5	7.6	5.9
Primary Sector	6.1	-10.4	16.4	-19.8	-3.7	8.8	9.2	-4.6	-4.3	-8.3	8.9	11.7
Secondary Sector	13.4	9.2	7.0	5.9	4.6	3.9	8.1	9.1	8.6	7.9	11.1	8.6
Sector Terciario	6.3	5.0	6.8	5.0	5.6	5.5	6.0	5.6	6.3	6.4	5.5	4.0
Manufacturing production (annual % change)	13.5	10.8	11.1	9.1	7.6	5.8	15.1	9.1	8.8	9.0	13.8	9.8
Construction (annual % change)**	17.5	-2.7	-15.6	-3.5	-8.5	1.8	-8.8	23.0	26.4	43.9	21.9	17.1
Public works	97.2	-0.4	-15.3	-8.8	-3.0	2.6	23.1	21.0	23.4	9.2	-8.2	-28.5
Private works	-5.7	-4.2	-15.8	0.1	-11.9	1.2	-21.3	24.2	28.3	73.5	42.1	44.4
Retail sales (annual % change)	2.4	4.7	3.5	5.1	9.3	11.2	6.2	6.1	4.8	5.5	11.7	10.5
Wholesale sales (annual % change)	15.1	7.1	3.7	10.6	11.7	7.6	1.0	16.7	15.9	16.3	21.8	13.6
Total Employment (annual % change)	5.6	5.2	5.0	4.3	4.7	4.2	9.1	9.5	9.3	8.6	8.7	7.8
Industry	7.7	6.6	6.0	4.1	4.6	4.5	14.3	12.0	11.1	7.9	7.5	6.9
Services	4.2	4.3	4.3	4.5	4.8	4.1	5.1	7.4	7.7	9.1	9.6	8.4
Total air traffic (passengers Transport, annual % change)	2.9	2.8	10.1	5.1	12.0	10.1	0.1	33.1	52.3	30.3	31.5	26.8
Federalized resources (annual % change)	8.0	2.7	7.4	6.8	8.3	10.5	3.5	7.1	7.8	9.8	9.3	-2.8
Participations (Branch 28)	9.0	6.0	34.9	3.6	7.6	-0.7	4.7	7.0	5.8	10.5	14.9	-1.5
Contributions (Branch 33)	1.5	4.4	10.3	0.6	6.6	9.7	0.7	5.1	12.6	0.0	2.6	4.2
Remittances (annual % change)	-3.0	8.8	13.7	11.0	17.6	13.9	-1.4	8.1	11.4	12.0	6.5	9.4

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 16
Region: Industrialized

	Sonora						Tamaulipas					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	5.1	7.6	10.6	8.0	7.5	6.3	2.0	2.0	2.6	2.7	4.9	1.6
Primary Sector	-1.4	0.7	14.5	9.4	20.5	1.2	4.6	-7.4	-6.3	1.8	-6.8	25.5
Secondary Sector	7.0	12.2	14.3	14.3	8.3	10.9	0.1	-1.5	-0.1	-2.8	6.6	-2.5
Sector Terciario	5.2	6.0	8.2	4.7	5.7	4.8	3.2	4.6	4.5	6.0	5.0	2.9
Manufacturing production (annual % change)	11.9	7.7	5.3	10.0	4.2	6.0	9.5	0.9	-3.1	-1.3	3.4	0.5
Construction (annual % change)**	-16.3	17.5	22.5	24.5	4.5	27.4	8.6	2.9	4.9	-7.1	23.3	-8.0
Public works	-22.9	26.8	33.9	6.8	-21.7	17.0	12.2	-0.8	1.2	-10.6	32.9	-11.4
Private works	-10.5	10.4	14.8	45.2	33.6	35.2	2.7	9.5	11.4	0.1	10.2	-2.4
Retail sales (annual % change)	0.2	6.5	5.0	6.5	12.2	14.5	0.4	0.8	0.3	2.6	4.5	8.6
Wholesale sales (annual % change)	-1.7	4.0	-1.4	5.5	6.4	-0.4	2.5	0.4	5.9	0.3	-7.5	-5.4
Total Employment (annual % change)	5.9	4.9	5.5	4.5	7.8	7.5	2.7	0.3	-0.9	-0.5	0.8	2.3
Industry	6.3	6.9	6.1	6.4	8.7	10.4	4.8	-0.3	-2.9	-1.7	0.7	4.4
Services	4.6	4.6	4.5	3.2	4.3	3.7	0.8	1.0	1.3	0.9	1.1	0.4
Total air traffic (passengers Transport, annual % change)	3.0	3.3	14.8	8.5	10.4	7.0	-5.7	15.2	26.2	35.6	34.3	8.9
Federalized resources (annual % change)	4.8	9.6	11.2	17.2	-2.5	21.6	4.7	0.8	-2.3	9.6	7.4	6.8
Participations (Branch 28)	7.9	6.9	5.9	8.2	-0.3	-7.3	12.6	1.0	3.3	6.9	10.0	-0.5
Contributions (Branch 33)	1.1	3.3	42.6	-6.0	-13.5	55.3	-0.2	3.0	12.8	3.3	11.7	2.9
Remittances (annual % change)	4.9	11.9	13.1	0.9	0.5	5.8	-2.9	10.7	15.2	13.5	18.0	16.3

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 17
Region: Medium Development

	Campeche						Colima					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	-4.3	-4.7	-8.5	-3.6	-3.8	-2.8	13.6	12.6	13.1	3.7	0.7	4.9
Primary Sector	14.7	-8.1	2.3	-5.2	20.0	4.3	6.7	7.2	17.0	6.9	4.5	-13.9
Secondary Sector	-5.8	-6.6	-11.1	-5.2	-5.3	-3.9	29.7	29.5	32.6	0.1	-9.0	7.6
Sector Terciario	2.3	4.9	4.0	3.5	2.2	1.9	8.9	6.4	5.4	5.1	5.5	5.1
Manufacturing production (annual % change)	6.2	-0.8	2.4	2.7	1.3	-15.3	4.0	6.5	0.7	10.2	0.1	13.0
Construction (annual % change)**	-3.9	-4.0	-19.1	-7.2	2.8	9.0	28.7	26.0	26.1	-19.0	-27.9	-5.5
Public works	-6.5	-2.5	-13.0	3.4	14.3	19.0	36.2	35.2	40.8	-20.9	-25.3	-15.2
Private works	21.1	-15.1	-64.1	-74.0	-50.6	-50.8	15.4	6.8	-6.4	-14.1	-32.4	38.2
Retail sales (annual % change)	-3.8	1.8	4.8	3.1	-2.0	1.7	6.9	3.2	5.0	1.3	6.0	10.5
Wholesale sales (annual % change)	1.9	7.4	11.3	4.6	6.1	16.9	22.4	19.1	1.0	28.6	22.9	18.3
Total Employment (annual % change)	-0.9	5.1	5.7	6.1	9.1	12.8	5.8	6.9	5.9	3.1	1.4	1.1
Industry	-4.4	1.2	-2.2	-1.4	-4.2	-2.5	13.7	11.8	8.4	-0.6	-4.2	-5.0
Services	1.6	7.3	10.2	10.5	16.8	21.7	3.0	5.5	5.2	5.3	4.4	4.1
Total air traffic (passengers Transport, annual % change)	0.3	3.1	1.9	16.4	23.0	15.7	-9.9	5.9	14.1	21.4	35.1	17.9
Federalized resources (annual % change)	6.4	4.2	3.2	6.4	8.0	16.1	4.0	7.0	6.3	9.8	2.0	13.2
Participations (Branch 28)	10.2	2.7	7.2	11.9	24.3	13.1	4.0	6.5	6.2	7.8	13.6	-5.9
Contributions (Branch 33)	0.2	3.8	12.2	-0.6	7.0	9.2	0.6	3.3	19.2	4.9	14.5	9.1
Remittances (annual % change)	-1.3	5.0	10.9	5.2	4.1	2.5	4.3	7.2	9.6	8.7	3.9	9.6

	Durango						Guanajuato					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	4.1	3.8	3.3	3.3	0.4	3.1	9.6	4.5	4.3	3.3	4.2	0.1
Primary Sector	2.0	-4.1	-8.6	-8.8	-0.1	9.9	2.4	-1.2	-10.5	-7.9	2.9	-9.3
Secondary Sector	2.6	10.4	9.8	10.9	-2.2	1.7	14.3	5.1	5.0	4.5	4.8	-3.5
Sector Terciario	5.2	2.2	3.1	2.1	2.3	2.9	7.4	4.5	4.6	3.4	4.1	3.4
Manufacturing production (annual % change)	0.7	4.9	4.1	1.9	2.0	-0.3	21.6	1.4	0.6	-3.4	1.5	-6.8
Construction (annual % change)**	-7.2	25.6	35.0	38.9	-28.2	-12.7	-13.5	26.2	30.6	51.0	35.4	24.9
Public works	-3.4	25.1	15.4	30.8	-47.6	-17.9	-24.6	22.1	17.8	55.4	17.9	-3.0
Private works	-15.7	26.8	90.8	61.7	63.8	0.3	-2.5	29.3	40.8	47.6	47.2	44.9
Retail sales (annual % change)	2.6	2.6	1.7	3.9	5.7	8.5	6.0	5.1	5.5	5.6	6.7	10.4
Wholesale sales (annual % change)	10.3	-4.7	-8.0	-4.8	-4.4	0.1	6.4	8.1	11.8	11.0	1.8	0.1
Total Employment (annual % change)	4.4	4.7	6.0	6.1	6.8	8.8	5.4	5.4	5.7	5.5	5.8	5.9
Industry	8.4	8.9	11.4	12.0	13.8	17.5	7.1	7.2	7.6	7.9	8.7	10.3
Services	1.3	1.1	1.0	0.5	0.0	0.6	4.0	3.7	3.7	3.0	3.4	2.5
Total air traffic (passengers Transport, annual % change)	-4.6	11.5	29.2	17.1	19.9	3.6	-2.5	-2.5	14.4	-4.7	11.9	13.6
Federalized resources (annual % change)	-2.1	3.9	7.0	-3.3	6.5	11.8	6.6	8.4	9.7	6.6	5.5	-3.1
Participations (Branch 28)	11.2	4.0	2.8	7.1	11.3	-6.7	15.6	9.9	7.4	11.1	6.0	-10.3
Contributions (Branch 33)	0.8	3.3	11.1	-0.9	5.3	8.7	1.7	6.6	12.4	3.2	1.9	4.1
Remittances (annual % change)	1.3	9.9	13.7	9.1	7.8	8.1	2.0	8.8	11.7	9.8	5.6	8.6

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 18
Region: Medium Development

	Hidalgo						Michoacan					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	4.5	5.7	7.7	5.1	4.2	4.2	3.4	3.9	5.4	5.2	4.2	2.8
Primary Sector	3.2	-10.1	-9.2	-13.4	-0.2	20.8	-3.6	5.3	1.6	19.1	3.6	9.4
Secondary Sector	0.0	7.8	11.1	4.7	4.1	5.6	0.8	3.0	6.7	2.8	1.4	-6.2
Sector Terciario	7.9	5.6	7.0	7.4	4.7	2.1	5.3	4.0	5.5	4.0	5.1	4.4
Manufacturing production (annual % change)	0.4	5.9	9.1	2.4	1.8	5.1	5.7	-3.1	-0.3	-6.3	-4.2	-5.3
Construction (annual % change)**	13.7	-0.4	2.2	-2.8	10.9	25.4	15.6	15.3	21.6	29.2	19.8	-17.2
Public works	8.6	14.3	9.5	2.9	12.8	24.7	11.6	-4.8	-7.1	11.6	52.9	-9.6
Private works	17.8	-11.1	-4.5	-7.8	9.5	26.1	19.5	33.9	50.1	47.7	-4.8	-20.9
Retail sales (annual % change)	nd	nd	nd	nd	nd	nd	0.0	7.8	9.4	7.3	9.2	6.9
Wholesale sales (annual % change)	nd	nd	nd	nd	nd	nd	-4.1	-1.7	-2.3	-0.3	-1.6	-3.1
Total Employment (annual % change)	2.4	7.6	7.9	7.6	6.9	5.2	4.4	3.6	3.9	3.8	4.2	2.0
Industry	1.4	12.8	13.1	12.7	12.8	10.3	4.5	4.1	6.2	2.1	1.0	-3.5
Services	3.6	3.0	3.2	3.2	1.9	0.7	3.4	3.1	3.3	4.4	5.3	4.2
Total air traffic (passengers Transport, annual % change)	na	na	na	na	na	na	-5.5	-15.1	-2.1	-7.5	13.8	16.0
Federalized resources (annual % change)	6.0	4.1	-0.3	1.5	3.1	10.6	5.9	4.2	17.3	-8.0	-2.6	3.9
Participations (Branch 28)	11.6	8.0	6.6	11.3	13.5	0.4	15.8	7.9	4.7	9.7	5.7	-9.5
Contributions (Branch 33)	1.3	3.4	6.2	-0.9	1.9	4.7	0.5	4.4	21.4	-7.6	-9.9	6.9
Remittances (annual % change)	-4.7	6.6	10.6	9.2	4.0	5.9	0.7	4.7	7.5	7.6	4.2	8.7

	Morelos						Nayarit					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	5.5	4.1	4.1	3.0	4.9	2.7	3.2	2.1	1.4	4.2	1.4	5.9
Primary Sector	3.1	-3.8	-5.8	-20.2	-1.3	2.3	-1.8	12.6	-11.3	25.2	0.1	4.5
Secondary Sector	8.2	4.2	2.8	2.6	5.8	-0.8	-0.7	-3.7	0.6	0.0	-2.0	13.1
Sector Terciario	4.3	4.4	5.3	5.0	5.0	5.2	5.3	2.4	3.6	2.2	2.7	4.1
Manufacturing production (annual % change)	10.1	8.8	6.9	8.6	5.7	4.9	2.9	-3.9	9.2	-6.3	4.3	7.0
Construction (annual % change)**	-2.2	-6.3	-0.5	-23.7	-16.6	-13.1	-8.4	7.0	36.6	5.2	4.5	27.5
Public works	-12.9	-32.6	-64.9	-64.8	-2.1	-9.4	-7.7	-5.5	35.3	-8.9	17.4	53.3
Private works	1.8	2.2	18.3	-14.6	-22.3	-14.3	-9.6	30.9	39.2	27.2	-13.0	-4.3
Retail sales (annual % change)	3.2	2.0	1.4	1.6	5.7	7.5	nd	nd	nd	nd	nd	nd
Wholesale sales (annual % change)	-8.4	-1.0	-1.9	-1.3	5.3	18.0	nd	nd	nd	nd	nd	nd
Total Employment (annual % change)	4.7	4.5	4.1	3.8	4.7	5.8	3.5	2.2	2.7	1.9	1.8	4.0
Industry	8.4	6.3	5.9	4.1	7.1	10.9	-2.1	-3.8	-2.2	-3.2	-2.3	2.1
Services	3.0	3.7	3.3	3.6	3.7	3.5	5.8	4.2	4.4	3.9	4.6	4.7
Total air traffic (passengers Transport, annual % change)	na	na	na	na	na	na	-9.4	16.3	29.1	1.5	8.1	-6.9
Federalized resources (annual % change)	8.3	6.2	0.8	7.3	2.1	-1.6	6.0	2.0	15.6	-12.7	12.6	7.6
Participations (Branch 28)	12.7	7.8	4.7	7.4	4.1	-17.2	8.2	4.0	-1.9	3.7	8.2	-13.9
Contributions (Branch 33)	0.9	3.6	11.2	-4.1	-1.0	7.8	1.4	3.6	19.9	-9.8	16.5	9.4
Remittances (annual % change)	1.4	5.8	10.6	5.9	1.0	2.7	-1.1	5.6	9.3	3.7	-0.7	3.6

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 19
Region: Medium Development

	Puebla						San Luis Potosi					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	9.9	5.8	7.4	2.5	6.9	8.9	5.1	6.2	7.0	7.3	7.0	7.1
Primary Sector	4.1	-3.8	-5.4	-3.3	-2.8	17.7	5.3	-6.2	-4.1	-11.7	2.8	2.8
Secondary Sector	19.0	10.0	13.5	0.1	10.5	16.6	5.1	10.5	10.7	14.2	10.6	11.6
Sector Terciario	5.5	3.9	4.4	4.5	5.4	3.6	5.3	4.6	5.6	4.7	5.3	4.8
Manufacturing production (annual % change)	20.8	11.6	15.0	0.8	6.9	14.9	12.1	14.1	12.8	16.9	12.3	12.3
Construction (annual % change)**	-2.1	-16.3	-2.5	-22.0	29.4	63.2	-10.6	3.1	13.6	1.2	10.9	-1.7
Public works	6.5	-18.9	13.4	-14.2	93.8	171.4	-21.1	-31.6	-26.2	-29.5	2.6	35.6
Private works	-8.9	-13.9	-16.6	-28.9	-13.7	-7.2	-1.3	28.0	42.2	19.4	14.6	-15.8
Retail sales (annual % change)	5.2	4.4	4.1	4.5	6.0	7.3	0.5	4.6	1.5	7.5	8.6	15.0
Wholesale sales (annual % change)	-1.8	-2.1	-3.0	-2.2	0.9	-1.4	7.7	4.9	1.9	3.5	5.9	8.3
Total Employment (annual % change)	4.8	4.6	3.8	3.9	6.3	6.2	4.2	7.0	6.4	7.0	7.3	6.5
Industry	5.0	2.9	0.6	0.5	2.3	3.1	5.8	10.1	8.9	9.5	8.7	6.8
Services	4.7	5.8	6.3	6.7	9.8	8.8	2.5	4.1	3.9	4.9	6.1	6.0
Total air traffic (passengers Transport, annual % change)	-7.0	-35.7	-25.8	-3.7	19.4	10.3	12.5	6.0	5.4	8.1	-4.2	-18.6
Federalized resources (annual % change)	8.0	4.5	13.0	0.0	12.2	9.5	5.1	4.6	1.5	6.9	1.8	7.9
Participations (Branch 28)	18.2	3.4	0.2	7.3	12.9	-7.6	14.6	6.2	3.7	11.5	8.1	-4.9
Contributions (Branch 33)	2.0	5.7	10.2	1.9	13.1	4.5	1.0	2.8	9.1	-0.7	1.5	5.1
Remittances (annual % change)	-0.1	7.2	9.2	4.6	0.8	1.4	0.6	11.3	14.7	13.1	13.2	10.2

	Sinaloa						Tabasco					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	7.0	0.5	9.2	4.3	8.4	3.7	5.7	4.8	8.1	5.4	6.5	5.2
Primary Sector	8.1	-21.7	69.1	27.4	55.6	57.4	2.1	0.8	-2.3	11.9	4.7	5.3
Secondary Sector	10.6	3.2	-0.7	-4.8	-2.6	-13.9	6.6	5.4	9.7	5.8	6.8	6.1
Sector Terciario	5.8	3.7	6.5	3.7	5.1	4.5	4.3	3.9	5.6	4.7	6.2	3.7
Manufacturing production (annual % change)	1.3	2.8	2.7	3.8	6.1	6.2	4.0	8.6	18.1	-5.2	-1.3	6.3
Construction (annual % change)**	-13.2	-10.4	-2.2	-13.8	-11.4	-31.4	0.7	19.8	51.7	21.5	40.1	49.3
Public works	23.1	0.7	-13.0	-0.4	-8.7	-31.4	5.4	13.7	34.7	8.2	24.4	47.6
Private works	-33.5	-21.9	14.2	-30.1	-14.6	-31.4	-16.1	47.8	137.8	94.5	114.6	56.6
Retail sales (annual % change)	0.3	5.2	3.1	7.2	9.7	16.0	1.1	4.7	8.5	2.2	4.5	5.2
Wholesale sales (annual % change)	-10.3	-14.4	-23.7	6.2	-14.4	-5.1	-9.6	4.2	2.6	6.4	10.4	6.3
Total Employment (annual % change)	4.1	1.9	2.5	3.5	5.2	5.1	3.4	6.0	7.2	7.3	10.4	9.4
Industry	3.2	3.7	3.2	5.4	4.1	6.8	0.8	8.6	12.3	7.7	15.4	11.3
Services	2.6	3.1	1.7	3.0	2.3	3.5	5.1	4.0	3.6	6.2	7.5	8.0
Total air traffic (passengers Transport, annual % change)	1.9	-2.5	10.8	-0.1	-1.0	0.0	-3.9	16.5	38.9	13.3	18.2	15.2
Federalized resources (annual % change)	4.9	2.7	-5.8	3.9	10.8	5.4	3.5	1.6	-3.5	2.2	7.6	6.8
Participations (Branch 28)	12.6	2.7	-0.1	6.4	5.0	12.3	4.2	0.4	-1.2	0.6	6.2	12.7
Contributions (Branch 33)	0.3	4.4	1.4	10.3	0.6	1.9	-0.1	5.6	2.5	12.8	2.5	1.5
Remittances (annual % change)	3.1	8.8	14.4	7.8	5.4	4.6	-2.5	0.3	2.4	1.0	6.2	5.0

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 20
Region: Medium Development

	Tlaxcala						Veracruz					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	5.7	2.0	3.2	1.3	5.0	3.3	2.1	0.6	1.7	2.7	3.5	4.9
Primary Sector	6.5	-27.9	-18.9	-35.5	-18.1	28.6	-0.7	0.9	-1.4	10.5	4.4	2.7
Secondary Sector	8.7	4.5	4.2	5.1	5.8	-1.1	-2.6	-2.7	-1.4	3.2	4.4	8.0
Sector Terciario	4.3	2.8	3.8	3.0	5.6	4.0	5.5	2.6	4.0	1.9	3.0	3.7
Manufacturing production (annual % change)	7.0	7.4	6.2	4.5	1.5	-3.9	0.7	0.3	-0.9	3.7	4.6	1.9
Construction (annual % change)**	39.6	-31.3	-30.8	25.7	119.0	71.2	6.8	-9.3	-10.7	-15.6	-4.1	14.2
Public works	51.1	-50.7	14.2	-30.1	-14.6	-31.4	2.4	-14.9	-11.3	-18.8	5.9	27.6
Private works	7.7	44.6	-37.2	208.1	117.4	36.4	19.0	4.2	-9.6	-8.1	-23.3	-9.0
Retail sales (annual % change)	nd	nd	nd	nd	nd	nd	3.4	3.5	3.1	4.9	3.3	7.0
Wholesale sales (annual % change)	nd	nd	nd	nd	nd	nd	-3.7	-3.3	-3.5	-5.8	-1.1	-5.1
Total Employment (annual % change)	7.0	5.6	6.1	1.1	5.1	3.4	3.8	1.8	1.2	3.1	4.8	5.8
Industry	7.0	4.5	5.1	-2.2	2.0	0.5	4.9	1.2	0.7	3.4	5.0	5.7
Services	7.2	7.3	7.8	6.5	10.1	8.2	3.2	2.3	1.6	3.0	4.7	6.0
Total air traffic (passengers Transport, annual % change)	na	na	na	na	na	na	-5.4	3.7	16.2	18.7	9.6	0.9
Federalized resources (annual % change)	6.8	2.1	6.9	-2.8	6.4	18.9	7.1	3.9	4.6	6.0	8.1	0.3
Participations (Branch 28)	12.1	4.6	3.2	6.6	8.9	-5.5	15.4	7.7	4.4	10.8	6.4	-8.9
Contributions (Branch 33)	1.3	4.8	12.3	2.3	5.4	10.1	0.5	4.0	10.1	0.9	9.4	1.5
Remittances (annual % change)	0.0	6.2	8.6	2.2	1.5	-0.1	-4.4	2.9	4.8	1.0	-1.2	-1.0

	Yucatan						Zacatecas					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	4.7	2.0	2.4	1.0	5.6	3.9	5.1	1.0	-1.9	4.2	5.3	3.8
Primary Sector	3.1	1.5	-0.1	0.4	-0.2	2.1	1.3	-13.6	-22.5	-18.2	-3.4	6.7
Secondary Sector	3.9	-4.2	-5.3	-7.8	8.4	6.1	10.2	5.1	-0.4	17.4	8.1	3.1
Sector Terciario	5.0	4.1	5.2	4.3	5.0	3.4	3.3	1.5	3.0	3.1	4.7	3.8
Manufacturing production (annual % change)	4.4	-4.6	-1.2	-14.2	-3.7	-0.4	6.8	-3.4	-9.3	9.3	5.2	-0.7
Construction (annual % change)**	-4.2	-2.9	-8.0	-3.1	46.6	63.2	-9.6	10.5	16.9	35.6	19.5	-13.1
Public works	-11.5	-19.7	-13.4	-13.3	56.7	36.8	-19.7	9.0	33.8	18.4	-9.4	4.1
Private works	6.8	18.3	-2.3	8.3	40.1	89.2	19.0	4.2	-9.6	-8.1	-23.3	-9.0
Retail sales (annual % change)	1.5	4.6	2.8	5.5	6.7	3.5	-0.2	3.0	0.7	5.1	11.7	13.8
Wholesale sales (annual % change)	-1.0	1.4	0.1	1.9	2.5	4.5	-9.3	1.5	0.3	-0.5	2.7	8.1
Total Employment (annual % change)	3.1	2.4	2.6	2.4	4.6	4.7	5.3	4.5	4.8	5.3	4.6	3.8
Industry	2.5	1.0	1.0	0.0	1.2	0.1	9.0	8.6	9.3	9.0	7.1	5.3
Services	3.6	3.2	3.4	3.6	6.8	7.5	3.3	2.1	2.1	3.0	3.1	3.3
Total air traffic (passengers Transport, annual % change)	8.8	6.8	14.5	19.1	15.2	-3.1	3.6	-8.4	-13.6	26.7	22.7	2.9
Federalized resources (annual % change)	2.7	5.3	8.7	6.1	11.1	9.1	-1.6	3.7	4.3	21.7	13.1	5.6
Participations (Branch 28)	6.5	4.8	3.5	7.0	12.2	-9.4	11.1	6.1	2.6	7.3	2.4	-12.2
Contributions (Branch 33)	0.4	4.4	10.4	1.6	16.5	6.3	1.0	3.5	10.0	41.4	22.0	-1.4
Remittances (annual % change)	2.6	4.5	7.3	5.4	5.9	4.0	1.6	7.5	11.3	8.6	7.3	11.5

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

Table 21
Region: Medium Development

	Chiapas						Guerrero					
	2010	2011	3Q11	4Q11	1Q12	2Q12	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	6.0	3.3	0.1	1.6	5.6	3.4	5.8	1.0	0.3	0.0	-0.4	2.9
Primary Sector	0.3	1.3	3.6	-0.3	4.8	3.6	4.9	-0.7	-1.9	-4.8	-4.5	11.4
Secondary Sector	15.4	-0.2	-12.2	-7.6	8.5	1.9	11.8	-2.4	-1.7	-1.2	-6.7	1.7
Sector Terciario	3.4	5.0	5.6	5.6	5.0	4.1	4.7	1.8	1.0	0.7	1.3	2.5
Manufacturing production (annual % change)	-1.5	-9.4	-3.9	-20.8	0.9	6.2	1.0	1.7	0.2	4.3	3.7	1.2
Construction (annual % change)**	37.5	-8.3	-18.8	-15.5	12.9	-15.9	-18.2	-6.4	-1.2	4.7	-27.7	-14.5
Public works	41.6	-14.2	-21.6	-12.9	47.8	-11.8	-8.1	-6.3	-4.3	-9.8	-33.2	-3.7
Private works	27.9	6.9	-9.5	-21.4	-30.4	-24.3	-2.5	29.3	3.3	21.7	-19.9	-24.7
Retail sales (annual % change)	1.0	5.2	4.1	5.0	10.0	9.9	-1.8	-3.4	2.5	-6.7	-5.5	-1.5
Wholesale sales (annual % change)	-8.2	-2.9	-2.3	-5.3	0.2	-5.2	-1.5	-7.5	-7.8	-3.5	-14.0	-13.1
Total Employment (annual % change)	5.4	4.9	4.7	3.9	4.3	4.4	-0.9	-0.3	0.0	-2.0	-2.7	-2.5
Industry	8.1	-0.5	-3.2	-3.1	0.6	5.8	-10.4	-3.2	-3.1	-4.9	-7.4	-5.3
Services	5.3	6.3	6.9	5.5	5.2	3.5	2.4	0.5	1.1	-1.0	-1.3	-1.4
Total air traffic (passengers Transport, annual % change)	-1.6	15.4	32.4	6.2	4.1	-9.2	-11.1	-12.7	-4.8	-10.3	-9.9	-8.6
Federalized resources (annual % change)	8.0	3.4	7.3	9.0	18.0	17.8	6.6	7.8	14.5	3.7	15.0	2.0
Participations (Branch 28)	10.6	5.3	3.4	8.6	13.6	-6.0	16.5	11.0	6.3	12.3	13.4	-11.5
Contributions (Branch 33)	0.4	5.4	11.6	2.1	19.9	24.1	0.5	3.6	10.1	0.6	1.7	5.0
Remittances (annual % change)	-5.7	3.5	2.8	2.1	4.9	0.8	0.2	5.1	8.7	4.5	3.3	0.4

	Oaxaca					
	2010	2011	3Q11	4Q11	1Q12	2Q12
Economic Activity (QIEAS*) Total	3.5	1.6	0.4	2.8	2.3	4.5
Primary Sector	2.9	1.3	-2.0	5.5	2.2	4.0
Secondary Sector	1.9	4.9	-2.1	5.8	-0.9	12.8
Sector Terciario	3.9	0.6	1.5	1.4	3.3	2.0
Manufacturing production (annual % change)	-7.7	3.1	-5.1	9.3	-4.8	0.0
Construction (annual % change)**	24.1	16.1	5.8	2.2	32.7	32.7
Public works	26.6	8.4	-2.0	-0.1	12.3	36.4
Private works	8.4	71.3	51.1	24.1	130.5	20.9
Retail sales (annual % change)	14.0	-1.1	-1.4	-2.0	-0.2	8.9
Wholesale sales (annual % change)	-10.1	-3.1	-3.3	-4.6	0.2	6.0
Total Employment (annual % change)	1.2	2.4	3.5	2.0	5.2	4.5
Industry	-2.7	1.7	5.2	-1.1	10.3	8.9
Services	2.8	2.4	2.6	2.6	3.2	2.5
Total air traffic (passengers Transport, annual % change)	-8.5	-3.7	28.3	19.5	29.1	16.3
Federalized resources (annual % change)	5.3	3.4	-2.6	3.8	3.1	-0.4
Participations (Branch 28)	15.4	7.0	6.4	9.3	15.2	-6.9
Contributions (Branch 33)	0.7	3.8	5.8	-9.0	-2.6	8.3
Remittances (annual % change)	0.0	10.1	15.4	13.6	6.0	10.9

* Quarterly Indicator of Economic Activity Statewide (Indicador Trimestral de la Actividad Económica Estatal); ** Production value in real terms; na = not available
Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

5. Special Topics Included in Previous Issues

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Some indicators in countries with higher growth rates than Mexico.
The pending task: strengthen growth; implement second generation structural reforms.

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The Sectors Most Affected by the Recession.
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The Impact of Swine Flu on Tourism.
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