Deutsche Bank
Markets Research

Strategy

# Mexico Strategy

Date
2 December 2014

Global Emerging Markets
Mexico

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## F.I.T.T. for investors

## Show me the money

### It is time to execute

Mexico's growth remains subdued despite 11 structural reforms passed months ago. Thus, baffled investors are now demanding prompt execution of projects to keep alive long-standing goodwill towards this administration. Sentiment has been further hit by a pick-up in social unrest. We do foresee a marked turnaround in public and private spending in the short term, and prolonged dynamism in 2015-20. In turn, we highlight four themes investors should not miss and potential beneficiaries of these trends.

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### One developing superpower

Deutsche Bank anticipates approved reforms to support sustained GDP growth above 5% in the long term, practically double the average growth in the last three decades. The Energy Reform alone should contribute incremental GDP growth of 1.6% by 2025. Effective actions to control unrest are paramount to place Mexico in the selective group of developed economies, in our view.

### Two signals of turnaround

Industrial production is likely to continue to accelerate supported by rising exports of automobiles (+10% YTD) and construction depicting faster growth (vs. contraction over the past three years). On this, housing starts are up 25% on a trailing 12-month basis and three months of supportive data hint that the downward trend of infrastructure activity has been broken.

### Three clear short-term catalysts

Round One of the Energy Reform should auction close to 170 exploration and extraction projects in 1H15. In addition, critical mid-term elections in June 2015 should unleash material public spending in the coming months. Finally, major projects under the National Infrastructure Program are starting to ramp up, and several more should be awarded next year. In sum, this means more than US$600bn of investments, equivalent to almost 50% of Mexico's GDP.

### Four secular themes through 2020

We identify four industries in Mexico poised to deliver superior growth opportunities for investors in 2015-20: energy, infrastructure, industrials, and housing. Companies should now benefit from a more robust economy, lower entry barriers, first-mover advantages, increased competitiveness, and an unprecedented amount of new projects in years to come.

### Five potential beneficiaries

Our best actionable ideas to benefit from these secular themes are Cemex and Grupo Mexico. Positive spillover of 10-20% incremental EBITDA implies upside potential to valuations and increases the likelihood of stronger growth, faster deleveraging and higher dividend payments. Other possible beneficiaries highlighted by our screening process include Alfa, Grupo Carso, and ICH (NR).

### Valuation and risks

We use DCF and SOTP to reach our target prices (for specifics, please see individual company sections). Downside risks: prolonged weak domestic demand; inflation running above the government's target; public finances harmed by a further drop in oil prices; an investment contraction on crime-related concerns. Upside risks: faster economic growth; higher infrastructure spending; stronger profitability; cash generation above expectations.

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*Source: Deutsche Bank*

Companies featured

| Company | Ticker | Segment | Last price |
|---|---|---|---|
| Alfa | ALFAA.MX | Conglomerate | 39.5 |
| Cemex | CX.N | Cement | 12.7 |
| Grupo Carso | GCARSOA1.MX | Conglomerate | 76.4 |
| Grupo Mexico | GMEXICOB.MX | Conglomerate | 46.3 |
| ICH | ICHB.MX | Steel | 73.8 |

*Source: Deutsche Bank; Bloomberg PLC*

| Related recent research | Date |
|---|---|
| After The Rally: Where's The Value?<br>Binky Chadha | 21 Nov 2014 |
| LatAm oil & gas - Oil in turmoil: initiating coverage<br>Alexander Burgansky | 19 Nov 2014 |
| EM Monthly - Aiming Low<br>Drausio Giacomelli | 6 Nov 2014 |
| Estimating the steady state for crude oil prices<br>Michael Lewis | 17 Oct 2014 |

*Source: Deutsche Bank*

| Upcoming events | 2015 |
|---|---|
| Mexico Week<br>Mexico City | 23-26 March |
| Contact your Deutsche Bank sales representative | |

*Source: Deutsche Bank*

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# Mexico Week

## Join us to discover opportunities across Mexico

Please join us on 23-26 March 2015 for four consecutive days of ongoing corporate access to Mexico's main public and private companies in four key sectors: energy, infrastructure, industrial, housing. Our Mexico Week will offer management meetings, direct contact with regulators, site visits, and in-depth economic and political updates.

Figure 1: SAVE THE DATE

Deutsche Bank

Passion to Perform

MEXICO WEEK

March 23-26, 2015
Mexico City

Four consecutive days of ongoing corporate access to some of Mexico's leading public and private companies in four key sectors: energy, infrastructure, industrial, and housing.

Sponsored by Deutsche Bank's Mexico Strategy and LatAm Cement, Construction and Real Estate team

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*Source: Deutsche Bank*

# Executive summary

## Structural changes done; now it is delivery time

The Energy Reform revolutionized the market structure of the sector, erasing major entry barriers and allowing private companies to reap the benefits of an unprecedented number of projects over the next few years. We foresee clear first-mover advantages, as most projects demand building successful track records before companies are entitled to key contracts. Round One alone has the potential of unleashing US$50bn of investments from the private sector (equivalent to almost two years of Pemex's capex).

In addition, the execution of an ambitious National Infrastructure Program should provide ample opportunities for a wider range of infrastructure-related companies, from building material suppliers, to contractors and concession operators. Slow government spending in the last couple of years points to the bulk of the US$520bn plan, equivalent to more than 1/3 of Mexico's annual GDP, potentially being executed in the next four years.

It is worth noting that the resulting reduction in energy costs and expansion of communication infrastructure should improve the competitiveness of the Mexican industrial sector. This is particularly the case for the automotive, aerospace and electronics industries, as well as for heavy consumers of energy such as cement and steel producers.

We highlight that faster economic growth, improving purchasing power and credit penetration should foster changes in the ability of consumers to trade up in some product categories, including housing. This means not only revitalizing home-buying but also potentially unleashing an incipient formal residential rental business.

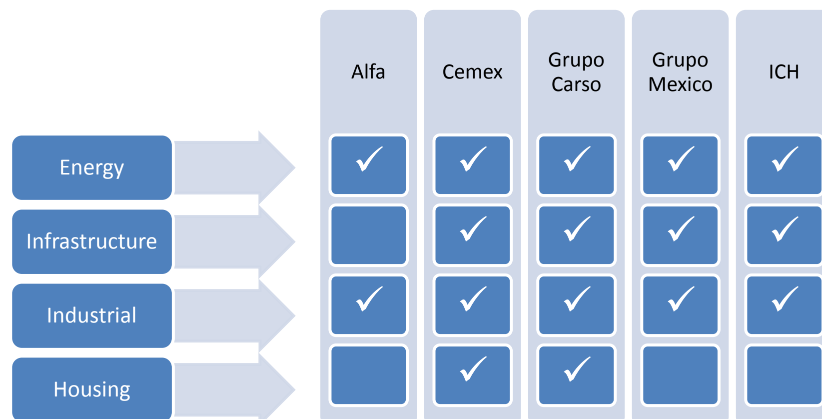
Albeit the convergence of all of these ingredients for fast and healthy growth, Mexico remains dormant. We, however, see two short-term events that could release investments and change the trajectory of the Mexican economy; the awarding of projects under Round One in 1H15 and mid-term elections in June of 2015.

Regarding the latter, we believe it is in the best interest of President Peña Nieto to boost spending as fast as possible. His party, the PRI, has an extraordinary opportunity to dominate Congress and rule most states in Mexico during the second half of this administration's term. This could translate into freedom to approve laws, expedite investment decisions and ensure prompt execution of key projects. Strong performance by President Peña Nieto and his team during the next four years could then strengthen the PRI's odds in the 2018 Presidential elections.

Add to this the view of Deutsche Bank's Mexico Chief Economist, Alexis Milo, who sees encouraging signs of recovery in several industries. In his view, expected GDP growth of 2.2% YoY in 2014 should accelerate to 3.4% YoY in 2015. Future years should depict even faster rates backed by approved structural reforms.

Based on the aforementioned trends, we have identified four secular themes in Mexico that we believe are poised to offer superior growth opportunities for investors in 2015-20. These are energy, infrastructure, industrials and housing. Furthermore, our screening methodology indicates stocks to watch: Alfa, Cemex, Grupo Carso, Grupo Mexico and ICH as all are potential alternatives to benefit from several of these secular themes at the same time.

Figure 2: Top ideas to benefit from secular themes in Mexico through 2020




Source: Deutsche Bank

Increased capacity utilization should translate into operating leverage for these names; we therefore see potential for stronger EBITDA in years to come. Current valuations already seem to account for solid numbers; however, we believe that prompt and decisive execution of energy and infrastructure projects, further growth of the industrial sector backed by a US recovery, and the clear turnaround in the housing sector put upside potential to consensus' growth, profitability, and valuation estimates. Such a combination would also increase the likelihood of stronger cash flow generation, faster deleveraging, and potentially higher dividend payments.

Figure 3: Comp sheet 2015E

| | | | Growth | | Margins | | Profitability | Leverage | | Valuation | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Company | Last Price | Revenue | EBITDA | Net income | EBITDA | Net income | ROE | Net Debt/Equity | P/E | EV/EBITDA | P/BV |
| Alfa* | 39 | 9% | 10% | NS | 12.2.% | 4.10% | 15% | 67% | 21.3 | 8.2 | 2.7 |
| Cemex | 13 | 7% | 12% | -140% | 17% | 1.00% | 0.60% | 122% | NS | 10.3 | 1.3 |
| Grupo Carso* | 69 | 9% | 11% | 10% | 13% | 8% | 14% | NS | 23.1 | 13.6 | 3 |
| Grupo Mexico | 49 | 18% | 28% | 22% | 43% | 19% | 17% | 22% | 13.3 | 6.8 | 2.2 |
| ICH* | 73 | 12% | 22% | NS | 12% | 6% | 6.50% | NS | 17.6 | 6.7 | 1 |

Source: Deutsche Bank; *Bloomberg Finance LP Consensus estimates for NR companies. Prices as of Nov/26, 2014.

According to Deutsche Bank's Chief Investment Officer, Asoka Woehrmann, an earnings-driven market in years to come (vs multiple-driven since the last cycle trough) should allow companies delivering superior earnings and dividends to sustain multiples above historical levels and thus offer investors stronger returns. In our view, Alfa, Cemex, Grupo Carso, Grupo Mexico and ICH have the potential to fit into this scenario.

And a final note on Mexican equities. The Mexican market currently trades at a 2015E P/E of 19x and the trailing multiple stands 43% above the 10-year average level and 97% above the MSCI Emerging Markets index (i.e. one standard deviation above the mean since mid-2011). Sound structural reforms that point toward an exciting future along with a generalized lack of appealing alternatives in EM and LatAm over the last few years have pushed Mexico's relative valuations above those of peers'. This might continue to be the case.

Deutsche Bank's Global Strategist, Binky Chadha, remains constructive on equities globally but maintains an underweight call for EM as in his view, the de-rating has further to go. Moreover, he reaffirms his short recommendation for LatAm mainly because of this region's commodity-producing nature, the slowest earnings growth vis-à-vis commodity exporters and the region's highest valuation relative to history. For more information, please refer to the November 21, 2014, report "*After the Rally: Where's The Value?*"

Keep in mind that Mexico is a manufacturing country, not a commodity exporter, and that its largest exposure is to the US, an economy with a relatively solid outlook. On this, Deutsche Bank's US Chief Economist, Joseph LaVorgna, sees above trend GDP growth (3.5% in 2015) supported by consumer and business spending, lower fiscal drag and housing. The Fed's exit is approaching, but the risk of rate hikes before mid-2015 has receded, in his view. For more information, please refer to the November 25, 2014, report "*The House View*".

All in all, it might just be the case that the confluence of events remains positive for equity investors in Mexico.

# Politics and economy

## Current political landscape

There are eight major political groups actively participating in state governments and Mexico's Congress.

### State governments

As of today, the PRI rules 19 of the 31 states and one federal district in Mexico; this translates into about 60% of all governorships.

Figure 4: Governors according to political party

*Source: Deutsche Bank; National Governors Commission (CONAGO)*
*PRI Partido Revolucionario Institucional; PAN Partido Acción Nacional; PRD Partido de la Revolución Democrática, PVEM Partido Verde Ecologista de México; NA Nueva Alianza; PT Partido del Trabajo; MC Movimiento Ciudadano, Morena Movimiento de Regeneración Nacional*

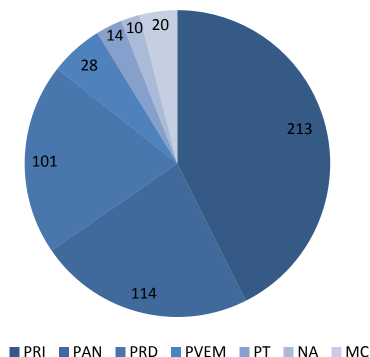
Figure 5: States with governors' elections in 2015

*Source: Deutsche Bank; Federal Electoral Institute (IFE)*
*PRI Partido Revolucionario Institucional; PAN Partido Acción Nacional; PRD Partido de la Revolución Democrática, PVEM Partido Verde Ecologista de México; NA Nueva Alianza; PT Partido del Trabajo; MC Movimiento Ciudadano, Morena Movimiento de Regeneración Nacional*

### Congress

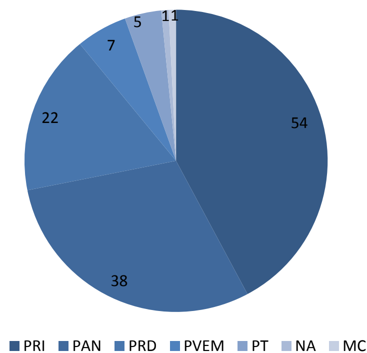
The PRI currently holds 213 seats in the Lower House, out of 500. Its closest allies, Partido Verde and Nueva Alianza, currently hold an additional 38 seats. Together, they account for a simple majority (i.e. 50% plus one vote). In the Senate, the PRI and its allies hold 48% of seats.

Figure 6: Lower House




*Source: Deutsche Bank; Cámara de Diputados*
*PRI Partido Revolucionario Institucional; PAN Partido Acción Nacional; PRD Partido de la Revolución Democrática, PVEM Partido Verde Ecologista de México; NA Nueva Alianza; PT Partido del Trabajo; MC Movimiento Ciudadano, Morena Movimiento de Regeneración Nacional*

Figure 7: Senate




*Source: Deutsche Bank; Cámara de Senadores*
*PRI Partido Revolucionario Institucional; PAN Partido Acción Nacional; PRD Partido de la Revolución Democrática, PVEM Partido Verde Ecologista de México; NA Nueva Alianza; PT Partido del Trabajo; MC Movimiento Ciudadano, Morena Movimiento de Regeneración Nacional*

## Mid-term elections in 2015 will shape the country

Mid-term elections will take place on 7 June 2015. The Lower House, on a federal level, will be completely renewed. In addition, 17 states will vote for local representatives, and nine will also elect governors. In sum, 45% of total posts will be at stake. It will also be the first time that independent candidates will be allowed to participate in local elections and that reelection will apply for municipal presidents and local congressmen (i.e. Lower House members on a federal level will be subject to reelection post-2018).

Figure 8: Mexico's 2015 ordinary elections

| State | Governor | Lower House members | Municipal Presidents |
|---|---|---|---|
| Baja California Sur | Yes | 21 | 5 |
| Campeche | Yes | 35 | 11 |
| Colima | Yes | 25 | 10 |
| Chiapas | - | 41 | 122 |
| Mexico City | - | 66 | 16 |
| Guanajuato | - | 36 | 46 |
| Guerrero | Yes | 46 | 81 |
| Jalisco | - | 39 | 125 |
| State of Mexico | - | 75 | 125 |
| Michoacán | Yes | 40 | 113 |
| Morelos | - | 30 | 33 |
| Nuevo León | Yes | 42 | 51 |
| Querétaro | Yes | 25 | 18 |
| San Luis Potosí | Yes | 25 | 58 |
| Sonora | Yes | 33 | 72 |
| Tabasco | - | 35 | 17 |
| Yucatán | - | 25 | 106 |
| TOTAL | 9 | 639 | 1,009 |

*Source: Deutsche Bank; Instituto Nacional Electoral and Universidad Autónoma Metropolitana*

### Congress could end up dominated by the PRI

On a federal level, the PRI currently holds 213 seats in the Lower House, out of 500; a scenario in which this party ends up controlling 50% or more in 2016-18 is not far-fetched, in our view. If we add to this that its closest allies, Partido Verde and Nueva Alianza, currently hold an additional 38 seats and that their stakes could prevail post 2015, then the PRI's dominance starts becoming more likely. Keep in mind that, in the Senate, for which elections take place in 2018, the PRI and allies hold a combined 48% of seats.

Reforma announced in August 2014 that results from a poll conducted by the company showed that 48% of survey respondents would vote for candidates of the PRI and allies competing in federal Lower House elections. The PAN and PRD-PT lag with 22% and 19% of vote intentions, respectively. It is interesting to note that recently created Morena, led by Mr. López Obrador, could receive 7% of votes based on this poll. Keep in mind that, as of today, the PRI holds 213 of the 500 seats in the federal Lower House. Its closest partners, Partido Verde and Nueva Alianza, hold an additional 38 seats.

### Key governorships need to be defended and won

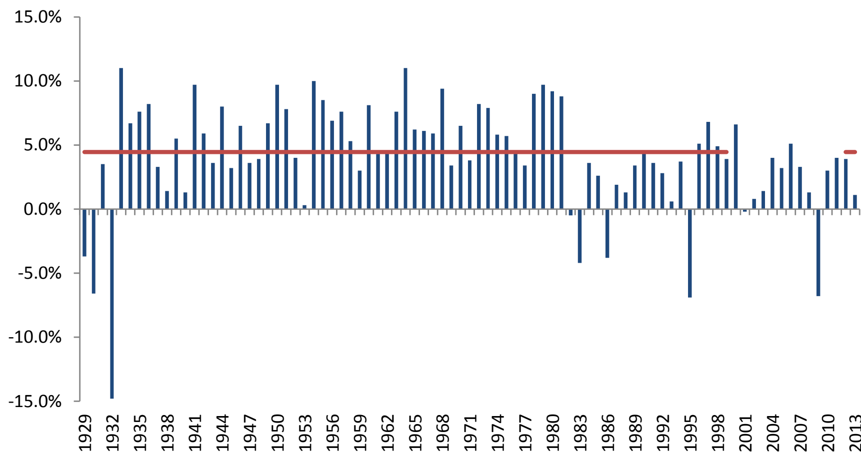
The PRI rules close to 60% of all states in Mexico, which together account for 55% of total GDP. Mid-term elections should give the party unparalleled opportunities to increase its footprint and take control of key states, such as Guerrero, Michoacán and Sonora. There is no free lunch: the process will also demand a material effort from the PRI to defend some of its flagship governorships, including Nuevo León, Querétaro and Campeche (the latter is in a privileged geographical location to reap the benefits of the Energy Reform).

### PRI's full control could translate into freedom to boost investments

A PRI-dominant Congress (with or without partners) and ruling more states during the second half of President Peña Nieto's term could translate into freedom to approve laws, expedite investment decisions and ensure the prompt execution of key projects. This, along with the positive spillover of the National Infrastructure Program and the full effect of the Energy Reform, could result in GDP growth above 5% for some years. This is in line with the result obtained in our analysis of the PRI's performance during its "most favorable years".

PRI Presidents have ruled Mexico from 1929 to 2000 and from 2012 to date. According to our analysis, Mexico's GDP growth has averaged 4.4% in real terms during the PRI's term.

Figure 9: Mexico's GDP growth with PRI Presidents




*Source: Deutsche Bank; INEGI*

A more detailed analysis of these data shows that GDP growth averaged 6.1% during the most favorable periods of time for the party. These "most favorable years" included 1934-39, 1940-45 and 1976-81, when the PRI 1) controlled the presidency, 2) had a simple majority in Congress (i.e. full control of the Lower House and Senate), and 3) enjoyed the benefits of a booming energy sector.

- Lázaro Cárdenas 1934-39. During his six-year term, GDP grew 5.5% in real terms. He nationalized the oil industry in 1938. The PRI alone controlled practically 100% of Congress.
- Manuel Ávila Camacho 1940-45. He enjoyed the immediate benefits of the oil sector's nationalization, as depicted by GDP growth of 5.3% for his entire six-year term. The PRI alone controlled practically 100% of Congress.
- José López Portillo 1976-81. During his term, the country uncovered an extraordinary amount of oil, placing Mexico as the fourth largest country based on oil reserves. During the "oil boom" of ex-President José López Portillo, GDP growth averaged 7.4%.

### Prompt and efficient execution is in the PRI's best interests

Easier comparison bases for GDP growth, and the gradual assimilation of a heavier fiscal burden on companies and individuals, should translate into improved macroeconomic metrics, including consumer confidence. In addition, group votes could translate into faster execution of President Peña Nieto's US$520bn 2014-18 National Infrastructure Program (NIP). This, along with potentially stronger numbers from this administration in the medium term, could erase hints of disappointment, thereby potentially placing the PRI as the favorite to win the next presidential elections, thus governing Mexico in 2019-24.

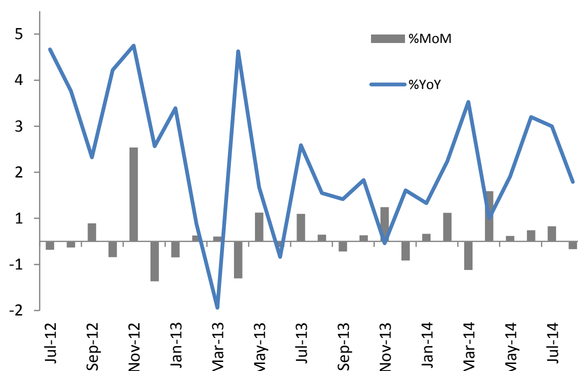
## Cautious economic outlook on relevant challenges

Deutsche Bank's Mexico Chief Economist, Alexis Milo, sees a stuttering recovery in Mexico, with encouraging signs of recovery in several industries but clear weakness in some other. We present below an excerpt of our team's view, published on 6 November 2014, in the Emerging Markets Monthly "Aiming Low".

### Economic activity showing mild growth

According to our team, latest activity numbers confirm that a recovery is under way, but it is weaker than expected. Economic activity grew well below expectations in August, by just 1.3% YoY, and fell on a monthly basis, at 0.17% MoM. Such a disappointing result was partly expected, as industrial production grew, but only moderately, in that month, due a drop in manufacturing activity. Nevertheless, the main negative surprise came from services, which fell 0.24% MoM, thus reviving fears that tertiary activities might lose resilience going forward, after they anchored economic activity in 2013 and early 2014. Economic activity was also dragged by primary activities, which fell 0.42% MoM in August.

Figure 10: Economic activity index (%)




*Source: Deutsche Bank; INEGI*

### Manufacturing and construction on the right path

Industrial production continued to send mixed signals in August, growing 0.37% MoM, with three out of its four components expanding on a monthly basis. The positive tone came from construction activity, which increased 1.17% MoM, followed by electricity, water and gas, up 0.97% MoM, and mining, up 0.29% MoM.

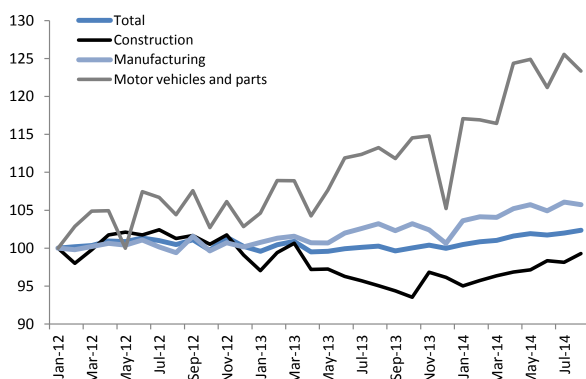
Overall manufacturing is on a positive trend and construction continues to gain momentum. In our team's view, the recent IP numbers are slightly positive, since the drop in manufacturing in August was mostly a hiccup, due to the timing of motor vehicle orders, rather than a change in trends, and construction numbers now portray a stronger recovery, due to infrastructure and a resilient buildings component.

Available data for September suggest that manufacturing activity is likely to keep accelerating. Domestic sales of autos and light trucks grew 13.7% YoY, one of the fastest expansions on record yet, and exports grew moderately, at 2% YoY. In spite of the "noise" created by the timing of some orders in

monthly data, the overall behavior of exports remains strong, with annual growth of 9% YoY in the first nine months of the year. As a result of strong domestic sales and exports, total production grew 10.7% YoY in September, and our team expects this sector to remain an important source of growth in 2015. Similarly, exports of manufacturers other than autos grew 11.7% YoY in September, a strong acceleration with respect to the first semester of the year.

Leading indicators for October also point to a sustained recovery of activity. HSBC and Markit Economics released their purchasing managers' index for Mexico manufacturing in October, which stood at 53.3 points, setting the index firmer above the 50-point threshold that anticipates an expansion, and its components offer a more even picture of recovery. Similarly, IMEF indicators point towards an acceleration of economic activity in October, as the seasonally-adjusted index for manufacturing activity rose to 54.8 points, also above expectations and the 50-point threshold that anticipates an expansion. On the other hand, the seasonally adjusted index for non-manufacturing activity recovered after a big drop last month, and stood at 52.2, thus suggesting that services will resume its expansion. HSBC and IMEF indicators show that activity is accelerating and that manufacturing is on a broader-based recovery in a context of resilient services.

Figure 11: IP and components (Jan12=100)




*Source: Deutsche Bank*

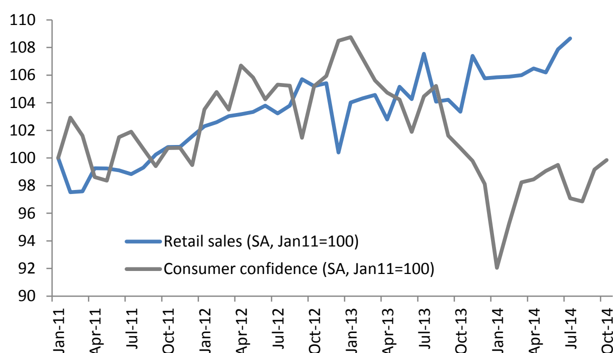
## Domestic demand remains relatively weak

Recovery seems even slower on the side of domestic demand. The latest retail sales indicator, based on a new time series developed on a more robust methodology and an enlarged sample now representative at the regional level, grew above expectations, at 4.4% YoY and 0.6% MoM. However, we take this result with caution, as the comparison with the expected number may be misleading this time, since the methodology is new and some changes may have stayed out of the forecasts. By the same token, the new time series is still relatively short, as it starts in January 2008, so the seasonal adjustment may have some statistical robustness issues. It is worth noting that INEGI's retail statistics encompass total sales, which, according to the National Retailers' Association (ANTAD), expanded at a relatively healthy 2.3% YoY in September. However, ANTAD's same-store sales contracted 2.1% YoY in the same month, thus suggesting that INEGI's indicator may be less positive than it seems.

Going forward, the prospects for private consumption have improved slightly, as the consumer confidence index firmed in September and October, with

gains of 2.32% MoM and 0.7% MoM, respectively. The recovery included a strong pick-up in the sub-index measuring the perceived capacity to purchase durable goods, which largely accounted for the overall deterioration of consumer confidence early in the year. If this trend in consumer confidence remains in place, it should extend the vigorous recovery seen early in the year and go above 2013 levels soon. However, consumer confidence remains below 2013 levels, with drops in three of the five components on a yearly basis. Thus, private consumption is likely to accelerate in the coming months, albeit moderately, as consumer confidence remains relatively low.

Figure 12: Retail sales and consumer confidence (Jan11=100)

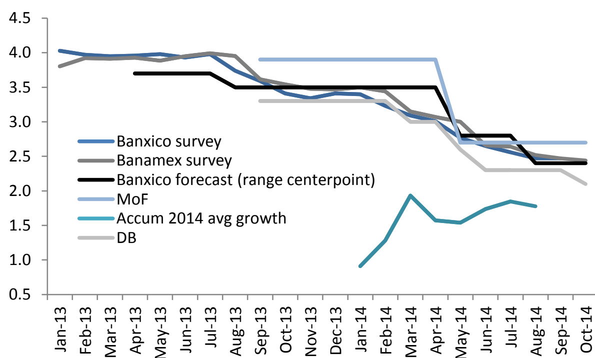



*Source: Deutsche Bank; INEGI*

## Deutsche Bank expects GDP growth of 2.2% YoY and 3.4% YoY in 2014-15

According to the latest IGAE, the Mexican economy grew 1.9% YoY in July-August, thus anticipating a weak third quarter, and merely 1.75% YoY in the first eight months of the year. This has prompted further downward revisions to expected growth for 2014 and 2015, as shown in the latest Banamex survey of economic analysts. However, the consensus implicitly assumes that the economy will accelerate significantly in the remaining months of 2014. The slow activity seen in August challenged our previous 2014 growth forecast of 2.3% YoY, which we now adjust slightly, to 2.2% YoY, but it still implies an acceleration of activity to 2.8% YoY in the last four months of the year.

Figure 13: Expected GDP growth in 2014 (% YoY)



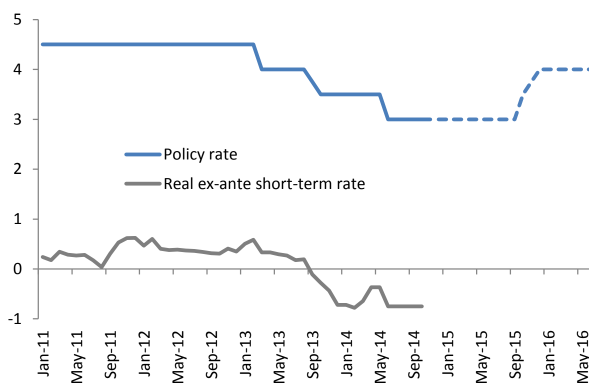

*Source: Deutsche Bank; Banxico, Banamex, SHCP, INEGI and Deutsche Bank Research*

### Inflation is still running above the government's target

In this context of weak recovery, inflation was above expectations, so the bi-weekly CPI for the first half of October put the annual headline rate at 4.32% YoY, most likely the highest point in the year and well above the upper limit of the Central Bank's target range. CPI inflation, above expectations in early October, was caused by the combination of falling prices of fruits, vegetables, and meat, which were slower than expected, and a slightly higher incidence of increased electricity prices. These effects put bi-weekly non-core inflation at its highest level in the last 10 years. It is worth stressing that the depreciation of the exchange rate that started in September has not affected the prices of core non-food merchandise so far, but if the MXN persists at current levels, there could be some additional risks for inflation going forward. Thus, we see a reduced chance that the inflation target range of the Central Bank will be met in 2014.

With CPI inflation running above the target, Banxico's decision to leave the policy rate unchanged at 3% was widely expected. In our view, after the 50bp cut last June, markets have become more prone to expect surprises from Banxico, but conditions for a rate cut were not there this time.

Figure 14: Policy and real short-term rates (%)




*Source: Deutsche Bank*

The big question about the last decision was how dovish the statement was going to be and its implications for monetary policy in 2014 and 2015. As recent economic activity readings were weaker than expected, a dovish tone in the communiqué following the decision was expected. However, Banxico basically ignored those readings, and maintained its balance of risks for growth unchanged. In fact, the tone could even be slightly positive, considering that Banxico explicitly stated that prospects for the global economy had deteriorated, while Mexico's have not, due to the reforms passed and the US upturn under way. On the other hand, Banxico reiterated a positive outlook for inflation in 2014 and 2015, and even downplayed inflation risks next year, such as the minimum wage increase and the pressure of the FX depreciation, stating that they could be balanced with upside risks, such as a drop in prices of telecommunications services and a persistent slacking in the economy. In our view, Banxico closed the door to further cuts in 2014 and 2015, as activity is likely to keep an upward trend. On the other hand, Banxico's positive tone on inflation and the expected behavior of CPI in 2015 mean that there will be no hurry to hike. Thus, we maintain our view that the timing of the Fed remains the main driver for Banxico's next hike, which we see in 3Q2015.

## Impact of oil price trends in public finances

Deutsche Bank's Mexico Chief Economist, Alexis Milo, highlights that the recent drop in oil prices has raised some concerns about Mexico's external accounts, public finances and prospects of the energy reform. The team sees no significant impact on 2014 and has moderate concerns about 2015. In all, even assuming that the Mexican oil mix price averages USD$74dpb next year, as implied by current futures contracts for WTI and Brent, our team sees a moderate impact on the three areas mentioned:

- Current account. According to our Mexico Economic unit's estimates, annual net exports fall roughly $USD400m for every dollar less in the price of oil. This number incorporates the corresponding fall in gasoline prices that enters the energy balance and cushions the overall impact on the current account. Consequently, we estimate that net exports will drop by around USD$2.0bn in 2014 and USD$8.5bn in 2015, thus adding that amount to our previous projection of the current account deficit, which would increase to 2.3% and 2.7% of GDP in 2014 and 2015, respectively. With Mexico's current account deficit at moderate levels, we do not see this scenario for oil prices as worrisome, particularly because a larger drop in oil prices could have a negative impact on the MXN and boost non-oil exports. Also, it is worth noting that the effect of lower oil prices on FX would be partly buffered by the current policy of channeling the oil dollar proceeds to Banxico for reserves accumulation.

Figure 15: Mexican oil mix spot price (dpb)

*Source: Deutsche Bank; PEMEX*

- Public finances. Government revenues would drop about USD$300m for every dollar less in the Mexican oil mix price. Considering that the broad deficit (public sector borrowing requirements) at the baseline scenario in the 2015 revenues bill is 4% of GDP, at the reference price of USD$79, the effect of lower prices might be expected to add USD$1.5bn or 0.2% of GDP to that baseline deficit. This scenario entails a moderate deterioration of public finances, but the overall fiscal stance does not change significantly and should not be a concern, unless the government keeps budgeting for high oil prices and the debt-GDP ratio deteriorates. In any case, the Ministry of Finance (MoF) recently announced that the higher deficit could be financed with the Stabilization Oil Fund, which has around USD$3.9bn to cover the potential gap. In this context, we do not see an important

role for the oil hedges. The MoF announced on November 13, 2014, that it bought hedges worth close to US$780mn, +42% vs the cost last year, to cover oil prices in 2015 (i.e. oil price of US$79 assumed in the 2015 budget). The price covered is close to US$76; the remaining US$3 will be offset with resources from the oil fund.

- Prospects for the energy reform. At current spot and futures price levels, we do not see a major threat to the prospects for the energy reform. According to Milenio, the Boston Consulting Group estimates crude oil production costs in conventional fields at US$40 per barrel and in deep waters at around US$40-80 per barrel, in many cases below those in other areas (mainly the North Sea). Thus, we expect that a large number of oil production projects may be triggered at prices around USD$70dpb for the Mexican oil mix. However, we do not rule out that lower prices may make private oil companies more selective about the projects they pursue, and we might adjust our FDI predictions when more information becomes available.

### Main risks to Mexico's macro story

In our economists' view, the downside risks for economic activity have increased slightly. Even though activity has accelerated in 2H2014, latest indicators remain uneven, and portray a recovery that is weaker than expected. Against this backdrop, the recent fall in oil prices and increased concerns about the security issue could have a potential impact on prospects about Mexico, threatening the positive mood created by the reforms going forward. They do not expect such worries to grow further.

### Energy Reform should take some time to benefit macro figures

The Federal Government's ultimate goal with the Energy Reforms is to achieve incremental GDP growth of 1% by 2018 and 1.6% by 2025, increase crude oil production to 1.5m barrels per day by 2025 (i.e. +60% vs. current levels), and increase natural gas production to 7.3bn cubic feet per day by 2025 (i.e. +100% vs. current levels). With the approval of the Energy Reform, our economists estimate additional FDI to the oil sector at around US$20bn, or 1.5% of GDP, in the long term.

## Deutsche Bank macro forecasts

Figure 16: Deutsche Bank macro forecasts for Mexico

| | 2012 | 2013 | 2014E | 2015E |
|---|---|---|---|---|
| National income | | | | |
| Nominal GDP (USD bn) | 1,177 | 1,238 | 1,315 | 1,408 |
| Population (m) | 117 | 119 | 121 | 124 |
| GDP per capita (USD) | 10,063 | 10,400 | 10,871 | 11,352 |
| Real GDP (YoY %) | 3.8 | 1.1 | 2.2 | 3.4 |
| Priv. consumption | 4.6 | 3.8 | 3 | 4.3 |
| Gov't. consumption | 2.4 | 2.2 | 2.6 | 4.7 |
| Investment | 5.5 | -0.1 | 2.1 | 4.6 |
| Exports | 4.2 | 1.4 | 3.4 | 4 |
| Imports | 6 | 2 | 4.2 | 5.1 |
| Prices, money and banking | | | | |
| CPI (Dec YoY %) | 4.1 | 4 | 4 | 3.5 |
| CPI (avg %) | 4.1 | 3.8 | 4 | 3.8 |
| Broad money | 10.8 | 11.5 | 11 | 12 |
| Credit | 12 | 10 | 16 | 21 |
| Fiscal accounts (% of GDP) | | | | |
| Consolidated budget balance* | -2.6 | -2.9 | -4.2 | -4.2 |
| Revenue | 15.7 | 16.8 | 17.6 | 17.3 |
| Expenditure | 18.4 | 19.7 | 21.8 | 21.5 |
| Primary balance | -0.6 | -0.9 | -1.5 | -1.8 |
| External accounts (USD bn) | | | | |
| Exports | 371.4 | 376.6 | 386.9 | 393.9 |
| Imports | 371.2 | 378.6 | 394.5 | 414.6 |
| Trade balance | 0.2 | -2 | -7.6 | -20.8 |
| % of GDP | 0 | -0.2 | -0.6 | -1.5 |
| Current account balance | -14.1 | -22.3 | -30.3 | -38 |
| % of GDP | -1.2 | -1.8 | -2.3 | -2.7 |
| FDI | 15.4 | 13 | 22 | 30 |
| FX reserves | 163.5 | 186.5 | 210 | 225 |
| MXN/USD (eop) | 13 | 13 | 13.5 | 13.5 |
| Debt indicators (% of GDP) | | | | |
| Government debt** | 33.7 | 35.6 | 36.8 | 37.3 |
| Domestic | 23.1 | 24.4 | 25.2 | 25.6 |
| External | 10.6 | 11.2 | 11.6 | 11.7 |
| Total external debt | 19.3 | 20.3 | 21.6 | 23.1 |
| in USD | 227.2 | 251.1 | 283.7 | 324.9 |
| Short-term (% of total) | 19 | 18 | 17 | 19 |
| General (ann. avg) | | | | |
| Industrial production | 2.8 | 0.9 | 2.1 | 3.6 |
| Unemployment | 4.9 | 4.6 | 4.3 | 4 |
| Financial markets (end period) | Spot | 14Q4 | 15Q1 | 15Q3 |
| Overnight rate (%) | 3 | 3 | 3 | 3.5 |
| 3-month rate (%) | 3.3 | 3.35 | 3.45 | 3.9 |
| MXN/USD | 13.55 | 13.5 | 13.3 | 13.5 |

*Source: Deutsche Bank estimates; National Sources*
**Corresponds to PSBR*
***Corresponds to PSBR accumulated balance*

# Crime and social unrest

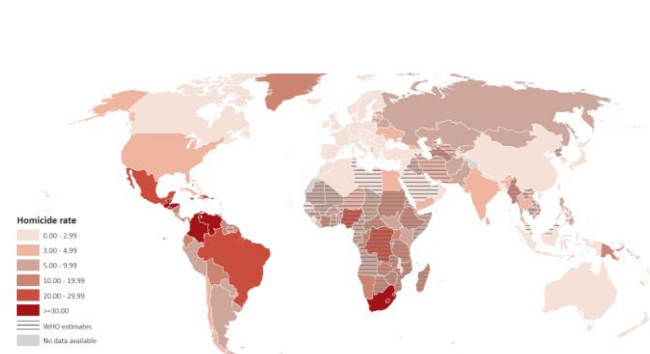
## Time bomb? Or just something we have to live with?

Investor's perception of risks in Mexico is worsening. A material pick-up in international media coverage of crime along with social unrest are behind the market's concerns.

## The bulk of crime is drug-related

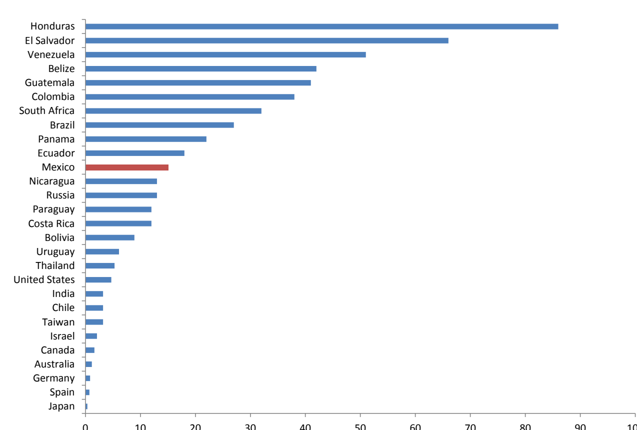
Crime and unrest have been on the rise for Mexico, as executions, drug-related trafficking, murders and other criminal activities remain common.

Figure 17: Homicide rates by country or territory




*Source: Deutsche Bank; United Nations Office on Drugs and Crime; Homicide Statistics (2013).*

Figure 18: Intentional homicide rates

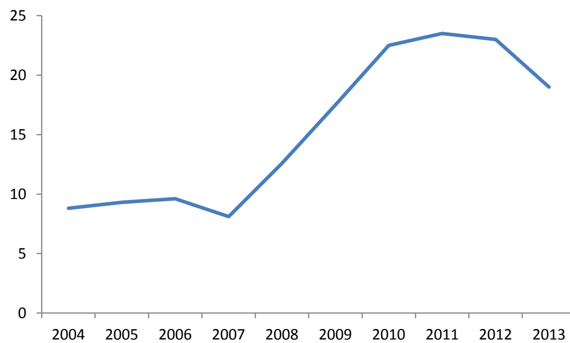



*Source: Deutsche Bank; NationMaster. Note. Homicides per 100'000 residents. Homicide is the death of a person purposefully inflicted by another person*

According to a study published by the Department of Political Science & International Relations of the University of San Diego, named "Drug Violence in Mexico", security issues in Mexico have become a high concern, mainly on the back of the significant increase in the rate and number of intentional homicides happening in the country. In 2013, Mexico's homicide rate reached 19 homicides per 1000,000 inhabitants, a decrease of 12% vs. the 2012 figures, but close to one-third of the country's states recorded higher-than-average rates. It should be highlighted that, in 2007, this rate came in at only 8.1 homicides per 100,000 inhabitants.

The main reason behind the country's homicide rate could be explained by the increased presence of organized crime across the country. Over the past five years, the level of violence in Mexico has increased because of the central role that drug trafficking organizations, and the drug war that President Felipe Calderón declared in 2008, play in this scenario.

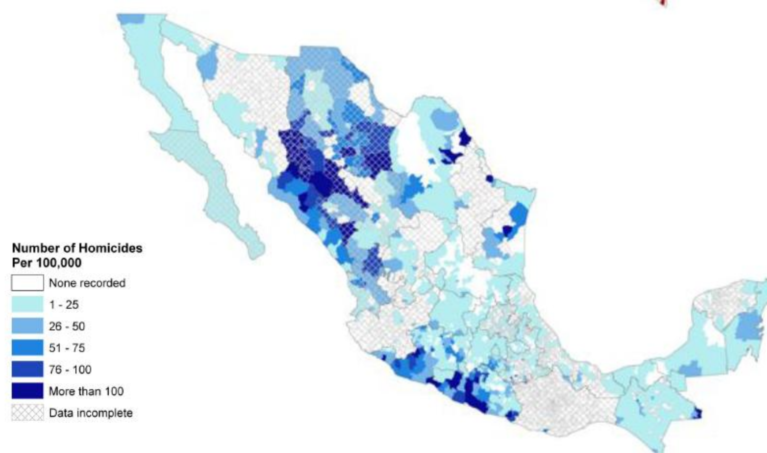
Figure 19: Homicide rate in Mexico




*Source: Deutsche Bank; INEGI*

With the beginning of President Peña Nieto's administration, the government shifted its focus of attention from violence and crime to the new and increased economic perspectives resulting from the structural reforms that would take place during 2013 and 2014. However, the effectiveness of government institutions to significantly decrease the number of violent crimes and homicides has fallen short of expectations, as the population would like to see even faster contraction of crime rates. For instance, over the past few months, hundreds of homicide victims have appeared in mass graves in different parts of the country, particularly states most affected by drug trafficking and organized crime activities, in the northwest, northeast and the Pacific Coast.

Figure 20: Homicide rate by geography




*Source: Deutsche Bank, Department of Political Science & International Relations of the University of San Diego, Data as of 2013*

According to the Department of Political Science & International Relations of the University of San Diego, in 2013, the states with the largest number of intentional homicides were Guerrero, México City, Chihuahua, Sinaloa, and Jalisco.

Going forward, it is of significant importance that the federal government's strategies to reduce violence and drug-related crimes in Mexico, such as the dismantling and fractionalization of organized crime groups, be both effective and fast, in order to achieve a noticeable decrease in violence for the remainder of the administration.

## Confrontations spike in recent weeks

Mexico is experiencing the largest wave of mass protests in recent years. While many seek changes in government policy peacefully, a growing fraction of agitators tied to power groups (because of conviction, special interests or monetary rewards) are leading organized protests to violent confrontations, fierce clashes with the police, and the occupation of key city areas.

The disappearance of 43 students last September sparked the hike in social unrest. On this, Noticieros Televisa presented an investigation how the disappearance of these students is the unfortunate outcome of a long-standing battle between two drug cartels, Los Rojos and Guerreros Unidos. According to the investigations, these groups have strong connections with authorities in the states of Morelos and Guerrero, where they have been allowed to operate under the protection of some municipal presidents and local police.

Additional information can be found in:

http://noticieros.televisa.com/programas-primero-noticias/1411/radiografia-rojos-guerreros-unidos/

According to the Wall Street Journal, many analysts see the recent wave of violence as fresh evidence of the high levels of corruption and a weak rule of law in Mexico, and these are seen as major threats that could partially derail implementation of President Peña Nieto's reform agenda in energy, telecommunications or education.

On this, Mexico's Central Bank (Banxico) has acknowledged that social upheaval could hurt confidence in the country's economy. CNBC highlighted that that the unrest has weighed on consumption and investment at a time of falling oil prices.

The recent announcement of new strategies to improve security and justice should help reduce the intensity of mass protests and sensitive social unrest (for more information, please refer to our November 28, 2014, report "*New plans should foster opportunities in infrastructure*"). We, however, highlight material risk if protests prevail as this could eventually lead to less investment flowing to Mexico or, in a worst case scenario, disinvestments from major transnational firms.

## Food for thought

But maybe social unrest in Mexico should not surprise us. Last December, the Economist predicted in its report "The World in 2014" that Mexico was at 'High Risk' of social unrest. This report highlighted that economic disparity accompanied by other elements of vulnerability could cause social unrest. Such factors include wide income-inequality, poor government, low levels of social provision, ethnic tensions and a history of unrest. Of particular importance in sparking unrest in recent times appears to have been an erosion of trust in governments and institutions: a crisis of democracy, according to The Economist.

# Energy

## All eyes on the upcoming bidding processes

The recently approved Energy Reform in Mexico breaks perennial paradigms, thus clearing the way for healthier and faster growth for years to come. It allows private companies to participate as never before in three key areas: oil & gas, downstream and electricity. The main challenge for participants will be to balance the appeal of ample business possibilities with the inherent risks of long-term relationships with the government and choppy political, social and security environments in Mexico.

## Round One

Round One of Mexico's Energy Reform is scheduled to take place in 1H15. It involves domestic and international companies, including Pemex, bidding for a total of 169 exploration and extraction blocks. These include shallow and deep-water offshore as well as unconventional natural gas fields. The government expects to attract US$51bn of investment in these fields by 2018.

This process will offer foreign and private oil companies the rights to explore 109 fields covering 14.6 billion boe in prospective resources, split as follows:

- 14.6 billion boe in prospective resources.
- 8.9 billion boe of prospective resources and 2.7 billion boe of proven and probable reserves in the onshore Chicontepec basin, as well as other nearby unconventional fields.
- 1.2 billion boe of proven and probable reserves and 724 million boe of prospective resources in onshore, shallow water and heavy oil fields.
- 142 million boe in prospective resources in unconventional natural gas fields in the Sabinas basin.

It will also offer companies the right to extract oil from 60 fields covering 3.8 billion boe in proven and probable reserves.

Figure 21: Mexico's volume of certified reserves and prospective resources as of January 1, 2014

| Basin | Cumulative production | Reserves | | | Prospective resources | |
|---|---|---|---|---|---|---|
| | | 1P (90%) | 2P (50%) | 3P (10%) | Conventional | Unconventional and deepwater |
| Southeast | 45.4 | 12.1 | 18 | 24.4 | 20.1 | |
| Tampico | 6.5 | 1.2 | 7 | 17.4 | 2.5 | 34.8 |
| Burgos | 2.3 | 0.4 | 0.5 | 0.7 | 2.9 | 15 |
| Veracruz | 0.7 | 0.1 | 0.2 | 0.3 | 1.6 | 0.6 |
| Sabinas | 0.1 | | | 0.1 | 0.4 | 9.8 |
| Deepwater | 0 | 0.1 | 0.4 | 1.7 | | 26.6 |
| Yucatán | | | | | 0.5 | |
| **TOTAL** | **55** | **14** | **26** | **45** | **28** | **87** |

*Source: Deutsche Bank; CNH.*
*Note:*
*1P Reserves: These include proven Reserves with at least a 90% extraction probability.*
*2P Reserves: The sum of Proven Reserves and Probable Reserves, which combined have at least a 50% extraction probability.*
*3P Reserves: The sum of Proven Reserves Probable Reserves and Possible Reserves, which combined have at least a 10% extraction probability.*
*Prospective Resources: Those resources not yet discovered, that are inferred to exist and are potentially recoverable through the implementation of future projects (excluding reserves).*

### Contract process

According to the National Hydrocarbons Commission (CNH), the process is divided in five key steps:

- Contract design. Sener will be in charge of selecting areas to tender, defining the technical considerations for the selection criteria and determining and designing the contract type to be used in every contractual area. The Ministry of Finance (SHCP) will be responsible for defining the contracts' fiscal terms, as well as the economic considerations related to each tender.
- Bidding round. CNH will award the contracts after considering all technical and economic proposals. The contract will be awarded to those that offer the largest amount of resources to the State throughout the life of the contract and present the most attractive technical proposals. Licenses will be awarded to those who offer the highest over-royalty and the largest investment amount. The winners can be Pemex, a joint venture between Pemex and private companies, or private companies.
- Operation. CNH will evaluate and approve the exploration and extraction plans.
- Oil revenue management. The Mexican Oil Fund for Stabilization and Development will receive all the income derived from the awarded contracts, make the respective payments, and manage the State's share of the income.
- Partnerships. Once a contract has been awarded via tender, the winner can change the capital structure and even its operator as many times as necessary, as long as it has the CNH's approval. Whenever Pemex wants to migrate one of its entitlements to a contract figure (to partner up with another company), the CNH will conduct a tender to select the partner that better serves the country's interests and declare the winner.

### Tax regime

Each type of contract awarded, whether profit sharing, production sharing, licenses, or a combination of all of these, will bear particular economic elements such as bonuses, fees, royalties, and compensation payments.

Figure 22: Tax regimes

| Economic element | Licenses | Shared profit | Shared production |
|---|---|---|---|
| Corporate income tax | Yes | Yes | Yes |
| Exploration fee | Yes | Yes | Yes |
| Basic royalty | Yes | Yes | Yes |
| Signature bonus | Yes | No | No |
| Compensation | Yes | No | No |
| Adjustment mechanism | Yes | Yes | Yes |

*Source: Deutsche Bank; CNH*

- Exploration fee. This payment is linked to the contracted acreage, as long as there is no production. This allows the State to receive a positive cash flow during the exploratory phase and increases the idleness costs for contractors.
- Basic royalty. It is a moderate payment, based on the project's net gross income. It is applied progressively in relationship with the

hydrocarbons' prices; consequently, the payments increase as the prices increase. It guarantees the State a positive cash flow and is easy to regulate.

- Signature bonus. It is a predetermined and moderate cash payment. It is indicative of the contractor's commitment and provides a financial incentive to achieve early production.
- The State's compensation. It is calculated as a percentage payment of the basic gross income (over-royalty). In general, it serves as one of the award variables during the tendering process, as well as an investment commitment.
- Cost recovery. The contractor can recover the recognized costs, as long as they are related to the activities listed in the plan approved by the CNH and correspond to the fiscal terms established by the SHCP.
- Cost recovery limit. Each period, the contractor can recover costs up to an established percentage of its income; the exceeding costs can be recovered in subsequent periods.
- Profit sharing percentage. The profits are calculated deducting the recognized costs from the total revenue, considering the cost recovery limit for each period. The State's profit percentage is also an award variable.
- Adjustment mechanism. Its objective is to control the extraordinary profitability due to high hydrocarbon prices, greater productivity (lower costs), or unexpected discoveries. In general, while the contractor does not reach a certain profitability threshold, it receives 100% of the compensation. Once the profitability exceeds the established threshold, the contractor will receive a gradually lower compensation percentage.

### National content

The Ministry of Economy unveiled the formula to determine the stake that Mexican companies will have in hydrocarbons exploration and exploitation contracts (i.e., national content).

The result will be obtained from dividing the sum of all assets, labor services, workforce training, and transfers of technology and infrastructure by the sum of expenses and labor costs.

By law, Mexico needs to increase the average national content in hydrocarbons exploration and exploitation from 19% currently to 25% in 2015. In 2025, national content could reach up to 35%, except for deep- and ultra deep-water projects.

According to El Economista, national content in Mexico is materially below that found in Brazil or Norway, which stand above 50%. This should place Mexico as an interesting country to invest in for international companies.

## Round Zero

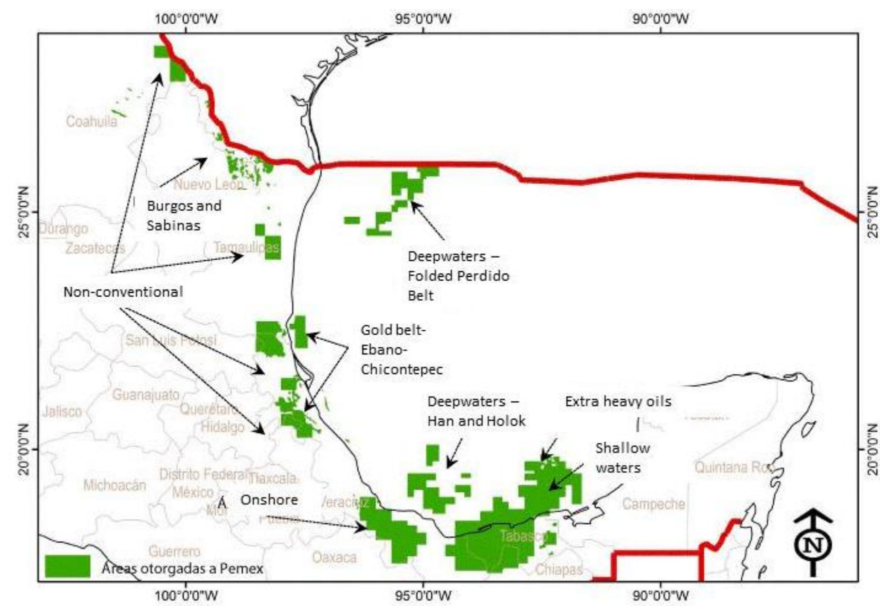
The main objectives of Round Zero were to 1) strengthen Pemex by providing it with the necessary resources to efficiently maintain its production levels and achieve an appropriate reserve restitution ratio as a first step toward becoming a State Productive Enterprise, and 2) multiply investments in oil and gas exploration and extraction activities through bidding rounds in which oil and gas companies and Pemex will be able to participate.

Round Zero took place between March and August of 2014 and allowed Pemex to choose projects that it assesses as technically and financially feasible over the coming years. The result was the company being assigned all its existing producing areas; this is 83% of the proven and probable reserves plus 21% of prospective resources. Thus, Round Zero left Pemex's proven reserve-base largely intact at 13.4 MMboe and set the foundation for Pemex to produce approximately 2.5 MMboe per day for the next 21 years.

Pemex entitlements amount to 20,589 million barrels of oil equivalent (MMboe), almost 100% of the requested reserves' volume. At the current production rate of 2.5 million barrels per day, this is tantamount to 15.5 years of production. In terms of prospective resources, Pemex entitlements amount to 23,447 MMboe. This is 68% of the requested volume and is therefore equivalent to roughly 5 years production, based on the reserves that will be added.

According to CNH, a comparison of international companies' reserves using similar certified methodologies ranks Pemex fifth with 12,448 MMboe, below Exxon Mobil, Petro China, Royal Dutch/Shell, and Petrobras but above Total, BP, Chevron, and Statoil. This comparison excludes many OPEC companies, as their estimation methodologies vary greatly.

Figure 23: National entitlements awarded to Pemex




Source: Deutsche Bank; CNH

### Simplified taxes

Round Zero also improved Pemex's finances by lowering the profit sharing duty charged today from 70% of the value of extracted hydrocarbons less allowable deductions to 65% by 2019.

Hydrocarbon exploration and extraction activities will pay a fixed amount for exploration per square km plus a fixed amount for extraction per square km. Income tax (ISR) will allow the following deductions: 100% of investments in exploration, enhanced oil recovery, and maintenance subject to capitalization; 25% of investments in extraction and development; and 10% of investments in storage and transport infrastructure.

### Plenty of leeway for the private sector to participate

Pemex's business plan includes 14 objectives, which the private sector can help achieve, in our view. The most relevant are to 1) increase inventory of reserves through new discoveries, 2) increase production of hydrocarbons, 3) obtain efficiency levels in-line with international standards, and 4) support business growth through technological development.

We also foresee immediate opportunities for the private sector in the following strategic projects for the institute: 1) deep-water exploration, 2) cogeneration, 3) clean fuels, 4) cryogenic plants, and 5) new refineries.

## Pemex: the partner of choice

Pemex is the seventh largest oil producer worldwide and the third largest oil exporter to the USA. It currently owns six refineries, a fleet of 21 tankers, storage capacity of 13.5 MMb of refined products, and more than 14,000 km of pipelines. In natural gas, the company owns 70 plants in 11 gas processing centers and over 12,000 km of pipelines. Finally, Pemex owns eight petrochemical plants.

The company's current crude oil production amounts to 2.5MMbd, of which 75% is produced offshore (1P reserves-life at 10.1 years). Production mix includes 54% heavy crude, 35% light crude, and 11% extra-light crude. Total refining capacity stands at 1.7MMbd.

Natural gas production is roughly 5,800 MMcfd. Gas processing capacity includes sour natural gas 4.5 Bcf, cryogenic 5.9 Bcf, condensate sweetening 144 Mbd, fractioning 568 Mbd, and sulfur recovery 3,256 t/d.

The company's petrochemical production capacity stands at 13.6MMt per year.

Pemex has unparalleled understanding of the country's geology, deep knowledge of domestic E&P regulation, existing production infrastructure to expedite commercialization, a well established supply chain, and expertise with stakeholder and community management. It also possesses unmatched geological conditions to capitalize on the new oil in the North American O&G Energy Block.

As a State Productive Enterprise, Pemex will aim at maximizing economic value and profitability for the Mexican state, by improving its productivity, maximizing oil revenues, and contributing to national development.

### Impact on Pemex of lower oil prices

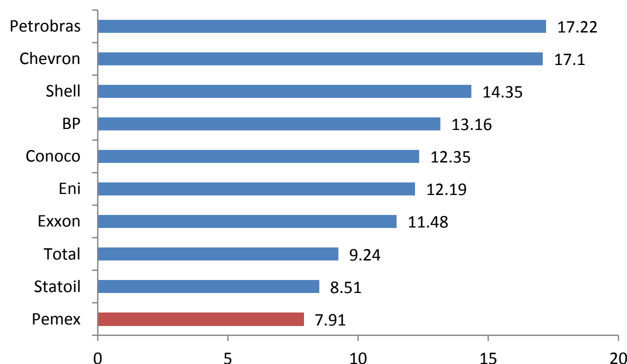
The Ministry of Energy acknowledged that low international oil prices could affect investments expected in Round One of bids for fields in Mexico, as companies may take the route of focusing on lower-cost operations such as shallow-water or onshore fields, leaving aside the risks associated with unconventional shale fields or deep-water exploration.

Despite a highly diversified portfolio of projects in Round One, the bleak outlook for oil prices could make investments in higher-cost projects less attractive. This is the potential case of 28 deep-water fields, which tend to have average drilling costs of US$150-200mn per well and success ratios typically ranging 20-50%, which implies that, of each 100 wells drilled, close to US$10-12bn will be lost in dry wells.

We highlight that the Ministry of Finance has room to modify the fiscal regimes of particular projects for which oil prices and other economic conditions dramatically change expected profitability. This government entity can also modify the minimum and maximum values of key variables included in each bidding process, including investments, expenses, and capex.

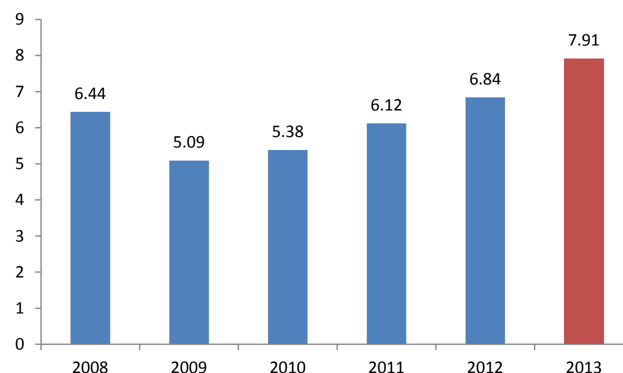
In a scenario of lower oil prices, having Pemex as a strategic partner becomes more relevant than ever. The company's production costs at US$7.91 per boe and finding and development costs at US$14.91 per boe are the lowest among peers.

Figure 24: Production costs (US$ per boe)



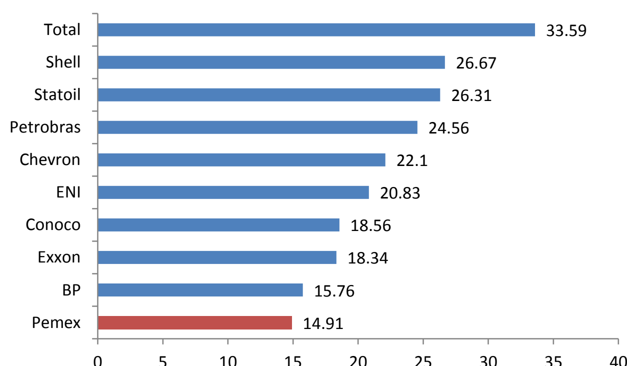

Source: Deutsche Bank; Pemex. Data as of 2013.

Figure 25: Production costs (US$ per boe)



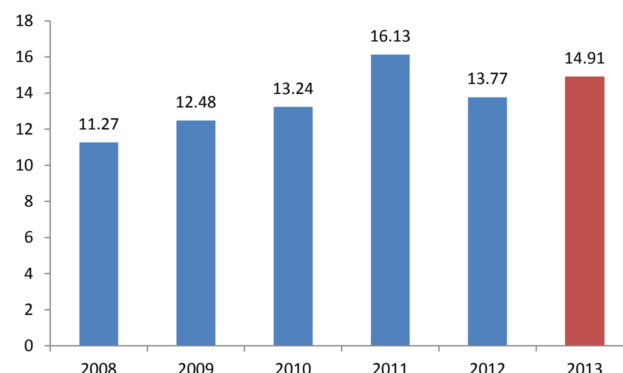

Source: Deutsche Bank; Pemex. Data as of 2013.

Figure 26: Finding and development costs (US$ per boe)




Source: Deutsche Bank; Pemex. Data as of 2013.

Figure 27: Finding and development costs (US$ per boe)




Source: Deutsche Bank; Pemex. Data as of 2013.

## Building partnerships

Article 13 of the Hydrocarbons Act establishes that Pemex can form alliances or associations with other companies in order to operate the entitlements that it decides to migrate to contracts. In this regard, Pemex will be able to accelerate its development, increase production, and access state-of-the-art technologies and practices. The company will also be able to liberate some operating capacity and access diverse capital sources.

The business schemes Pemex is looking for are 1) alliances with partners that have capital and operational excellence, 2) strategic suppliers of materials, and 3) Joint Ventures in transportation, cogeneration, and other fields.

Pemex intends to establish a cooperation framework with a number of entities through MOUs and/or Collaboration Agreements (CAs). This strategy is aimed at exchanging technical knowledge, information, experiences, and practices regarding oil & gas opportunities.

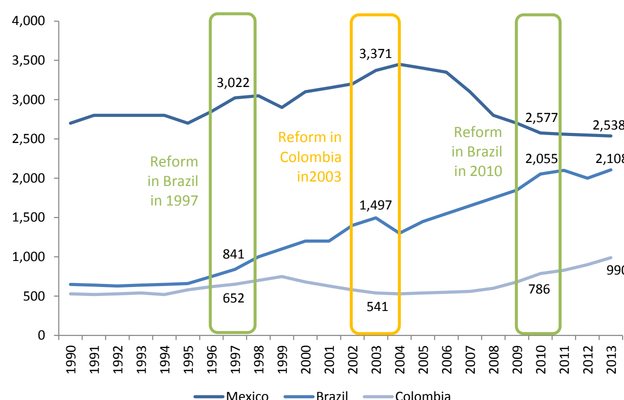
Both Pemex and partners can bear the benefits of JVs in Round Zero and Round One, including the fast development of deep-water, extra-heavy oil and unconventional projects, higher financial returns, access to new markets, acquisition of new technical and operational capabilities, minimizing risk, and improving project management and supply chain management skills in complex projects and new plays.

## Energy Reform in a nutshell

President Peña Nieto's flagship initiative since taking office in late 2012 was and has been the complete revamping of Mexico's energy sector. His administration thus launched Mexico's Energy Reform in an attempt to break perennial paradigms and clear the way for healthier and faster growth for years to come. In turn, private and foreign players are allowed to participate actively in the energy sector, specifically upstream, downstream, and electricity.

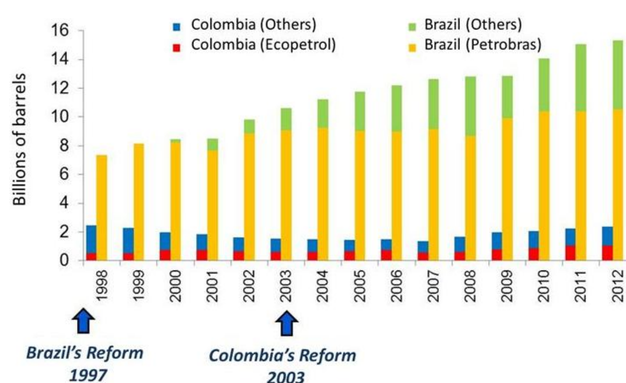
Crude production in LatAm countries with constitutional amendments has increased at least 45%. Brazil, for example, has had major reforms: one in 1997 and another one in 2010. Crude production has increased from about 650,000 barrels per day in 1990 to 2.1mn barrels per day as of today. This implies a 60% increase. Colombia is another good example, which had a major reform in 2003. Crude production has increased from about 530,000 barrels per day in 1990 to almost 1.0mn crude barrels per day as of today. This implies a 45% increase.

Figure 28: Crude production in countries with reforms




Source: Deutsche Bank; Milenio; Ministry of Energy

Figure 29: Increase in proven reserves




Source: Deutsche Bank; CNH

### Background

Mexico's GDP growth is slowing and was just 1.3% last year. Since 2007, growth has averaged below 2% compared to 3% in the decade prior to the financial crisis. Pemex provides 1/3 of total federal income, while non-oil tax revenues at just 10% of output are low even by Latin American standards. This leaves the state-owned energy sector severely capital constrained, thereby affecting future investment plans.

Mexico is among the world's 10 largest crude producers, but since hitting peak production of 3.4 million bpd in 2004, output slipped to 2.5 million bpd last year. Last month, Pemex revised its output forecast for this year down to 2.4 million bpd, and data from the Ministry of Energy (Sener) show a clear negative trend, with production potentially falling close to 15% by 2016.

Considering the decline of the Chicontepec reservoir, maintaining a production platform close to current levels will require multiplying project execution capacity along the exploration and exploitation value chain, as well as important investment resources.

The production of hydrocarbons in Mexico has been in a clear downward trend, affected by an outdated energy model in which the private sector has extremely limited participation.

In addition, proved and probable reserves have contracted over the last years, and the outlook remains one of reduction. Proved reserves have declined at a 1% CAGR since 2008; probable reserves, however, have shrunk at a 4% CAGR during the last four years.

### First step: Constitutional changes in December 2013

In December 2013, Congress approved modifications to Articles 25, 27, and 28 of the Constitution to allow the participation of private companies in the energy sector.

Private investments are now allowed in crude oil exploration, extraction, and refining; gas processing; oil and gas transport, warehousing and distribution; and electricity generation and transport. The State kept exclusive rights to control the national electrical system, as well as transmission and distribution networks.

Pemex ceased to be a state monopoly and turned into a productive entity that now competes against other companies. The Federal Electricity Commission (CFE) also lost most of its monopolistic power and now competes against private companies in electricity generation and commercialization (the State controls transmission and distribution).

Several sector regulators were given increased powers to rule the industry. The National Hydrocarbons Commission will now act as an independent regulatory agency, which means it will control the use of proceeds arising from contracts and have enough power to manage competition in the sector.

The National Hydrocarbons Commission (Comisión Nacional de Hidrocarburos or CNH) will auction all new contracts among private companies and Pemex. It will provide technical assistance to Sener, gather geological information, designate the winners of bidding processes, and underwrite hydrocarbons exploration and extraction contracts.

### Second step: Secondary Laws approved in August 2014

The approved Energy Reform includes the possibility of offering private companies four types of contracts: service, profit sharing, production sharing, and licenses (no concessions will be granted to safeguard the state's power over natural resources). In addition, the approved bill includes the possibility of offering "other schemes". This suggests that the array of production alternatives may be even wider than expected.

- Cash for service contracts. Companies are hired for clearly defined jobs and for a fixed period of time. They will explore and develop oil or natural gas fields on behalf of the Mexican government by bringing their own technology and making all upfront capital investments. The payment is fixed and agreed upon when the contract is signed. Payments will be in cash, and the company will not receive any of the oil it helps extract. A major drawback is that pre-determined fees for deep-water exploration and extraction are typically so onerous that Pemex and the Mexican government have so far been unable to use service contracts for more complex drilling and development work.

- Profit sharing. Companies will receive a fixed base payment mainly to cover incurred costs. In addition, they will also get a fee per barrel that should be capped at a level that allows the private entity to reach a certain internal rate of return (IRR). The payment will be in cash. The company will have no field ownership rights and will bear most of the operational risks.
- Production sharing. The Mexican government and participating private companies will agree on a percentage of production that each party will receive after both sides have recovered a specified amount of costs and expenses. This means that part of the oil extracted will be used to cover costs (i.e., cost oil), and the remaining portion will be profit (i.e., profit oil). Payments will be in cash or in oil. These contracts should foster a partnership between the private companies and Pemex to maximize profits. Mexico will retain full control and ownership of the resources.
- Licenses. Private companies will compete in public bidding processes to win the right to explore and extract oil. Payments to the government imply an up-front fee and could also include a bonus payment upon conclusion of the contract. After extraction, hydrocarbons will be transferred to the private companies, which could have to pay some additional fees. Across the world, licenses also include other smaller income streams such as fees per square kilometer. Licenses should allow companies to write them as long-term assets, thus increasing the possibility of leveraging the balance sheet to execute the projects. Close to half of the crude oil production in the world is conducted through concession-based schemes similar to licenses in Mexico.

To support the projects financially and to promote technology and expertise transfers, the State can have a participation of up to 30% of the project's value through Pemex or any other financial vehicle. In addition, the State will have a direct involvement of at least 20% in trans-boundary projects.

### Third step: launching of bidding rounds from 2015 onward

The Ministry of Energy (Sener) has an optimistic outlook for oil, gas, downstream, and electricity backed by the private investments that the Energy Reform should unleash.

Oil & Gas According to Sener, hydrocarbon projections in production from 2013-2018 are based on a starting level of 3,729 thousand barrels of oil and can reach levels of up to 5,648 thousand barrels of oil. In 2026, the share of crude oil in the production of hydrocarbons could decrease to reach a range of 59-64% due to the expected exploitation of shale gas in Mexico.

Sener estimates investments in production to be at least P$311bn during 2012-2026. Of the total investments to be developed in exploration and production projects between 2012 and 2026, 19% will go to deep-water developments and 24% for exploration projects on onshore basins and shallow waters.

It is estimated that comprehensive production contracts could average at least 8.4 %of total investments, while the development of shale gas projects requires a minimum of 4% of investments in 2012-2016. Additionally, exploitation activities could represent at least 70% of crude oil production in 2012-2026.

Regarding natural gas, Sener expects demand in Mexico to grow at an average rate of 3.5% per annum for 2012-2026. The electricity sector is expected to become the main user of natural gas in 2026, with a 46% share of the product, followed by the oil and industrial sectors, with 36% and 16%, respectively.

In our view, the Energy Reform should help encourage the extraction of Mexico's ample shale gas reserves, most of which remain intact and with limited potential to be exploited under the current energy model. On this, the Energy Information Administration (EIA) forecasts shale gas reserves of 7,299 billion square feet across the world. Mexico holds sixth place with 545 billion square feet of gas or 7.4% of total worldwide reserves.

Downstream Sener expects processed crude oil to reach 1.8mn barrels per day by 2016, not enough to offset current demand in the domestic market. It is important to keep in mind that the quality of crude oil to be processed will also demand higher investments. In 2006, heavy crude oil accounted for 39% of total processed oil; however, Sener expects this stake to increase to 60% by 2016. Furthermore, the increase of the vehicle fleet, air travel, and a stronger industrial sector will require more and better fuel availability, especially gasoline, turbosine, and diesel.

For 2011-2026, gasoline demand will grow at an annual average rate of 3.7% according to Sener, with the motor transport sector utilizing close to 100% of the production. Sener expects turbosine production to have an annual growth of 1.5% in 2011-2026; this should result in a deficit in the long term mainly due to an increase in demand from the aeronautical sector in the country. Diesel production is estimated to grow at an annual average rate of 5.2% for the period spanning 2011-2026.

Electricity Mexico's current effective electricity capacity reaches 63 Gigawatts. Of this, nearly 64% is operated by CFE, with the remaining 36% operated by private producers through schemes such as Independent Electric Energy producers (PIE), auto-supply, and co-generation, among others (all part of 1992 Electric Energy Reform). The main problem of these alternative generation schemes is that their entire electric flux of independent producers has to be sold to CFE, which then has the task of distributing exceeding supply.

Electricity tariffs are on average 25% higher than those in the US despite Mexico's subsidized rates. The main objective of the reform to the electricity sector is the decrease of tariffs. This should be achieved through the reduction of production costs, the increase in supply, and the efficient operation of the National Electric System.

CFE expects to increase its transmission network by 1.1% per year in 2013-26, below the expected 4.1% annual growth in demand during the same period.

Domestic users account for 87% of CFE's users but only 17% in sales (MWh) and 14% in revenues (P$). On the other hand, the industrial sector accounts for 1% of users but 59% in sales (MWh) and 64% in revenues (P$).

## Mexico in the context of LatAm Oil & Gas

Deutsche Bank's LatAm Oil & Gas analyst, Alexander Burgansky, believes oil & gas reforms in the region have risen again to the top of the political agenda (please refer to *LatAm oil & gas - Oil in turmoil: initiating coverage*). Mexico leads this trend, with practically all of the structural changes already approved.

In his view, deep-water blocks in the Perdido Fold belt are among the most coveted areas because of their proximity to the prolific acreage in the US's Gulf of Mexico. Also, Mexico's onshore shale blocks are located close to the US fields, making them attractive for new entrants. Of particular interest will be oil-prone shale deposits close to the Gulf coast port Tampico, located close to existing infrastructure, as well as the Eagle Ford formation (mainly within the Burgos basin), which has been extensively exploited in Texas and spreads into Mexico's northern Coahuila, Chihuahua, and Tamaulipas states. EIA estimates that Mexico has recoverable shale oil and shale gas reserves of 13.1bnbbls and 545tcf (15tcm), respectively, of which 6.3bnbbls and 343tcf are located in the Burgos basin.

The emergence of Mexico as a major destination for new oil & gas capital is putting pressure on many other Latin American countries to improve their fiscal terms and reduce risks. Colombia has made changes to its fiscal terms to improve the economics of offshore acreage (making it more competitive with the US Gulf of Mexico and offshore Brazil) amid disappearing conventional reserves, and Peru is making efforts to revitalize its gas sector. Argentina has passed a new hydrocarbon law, which increases the attractiveness of foreign investment in the oil and gas sector.

Venezuela, on the other hand, has been delaying reforms, similarly to Brazil, where the progress has been lackluster and sometimes absent.

All in all, the five largest hydrocarbon producing countries in South and Central America plan to invest nearly US$1tr in their oil and gas industries over the next 10 years or so, with each also targeting a substantial improvement in production.

Figure 30: Oil and gas sector is important for South and Central America

| Country | Production trends | Importance to the state: % of government budget from oil and gas revenues | Investment and production plans |
|---|---|---|---|
| Argentina | Argentina's oil production was down 1.5% in 2013 | low | YPF estimates its gross capex will reach US$65bn between 2013-2022 |
| Brazil | Brazil's oil production was down 1.7% in 2013 | 10% | Total investments in the oil and gas sector are expected to reach US$370bn by 2023, according to the government |
| Colombia | Colombia's oil production was up 6.3% in 2013 | 12% | Ecopetrol plans to invest US$68bn in 2014-2020 to reach output 1.3mnboepd in 2020 |
| Mexico | Mexico's oil production was down 1.1% in 2013 | 35% | Mexico expects US$50bn of new investments in its oil and gas sector in 2015-2018. In addition, Pemex plans to raise its spending to $62bn pa in 2015-25, up from $25bn pa currently |
| Venezuela | Venezuela's production was down 0.8% in 2013, while PDVSA's production was down 8% | 50% | The US$257bn "Siembra Petrolea" expansion plan for 2012-2018 – announced in August 2005 – has been delayed to at least 2019, mainly because of PVSA's inability to cover its 60% share of required capex |

*Source: Deutsche Bank*

## Global oil price outlook

Deutsche Bank's Global Commodities team recently published a report attempting to establish the level of the oil price that could be considered fair value. Our team found that, in real terms and relative to incomes, oil prices would also need to fall toward USD55/bbl to bring valuations back toward their long-run historical averages.

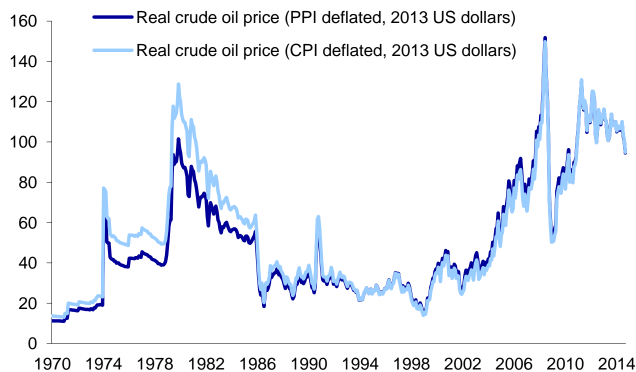
From a budget breakeven perspective, the current level of the oil price implies a long-term deterioration in the budgetary position of the majority of oil-producing countries in the Middle East. Only Qatar, Kuwait, and the UAE have budget breakevens below current oil price levels. Oil prices would therefore need to fall toward USD70 to imply the entire universe of oil producers moving under water from a budget breakeven perspective.

We present below an excerpt of our team's view published on October 17, 2014, in the report, *Estimating the steady state for crude oil prices*.

### Oil prices in real terms

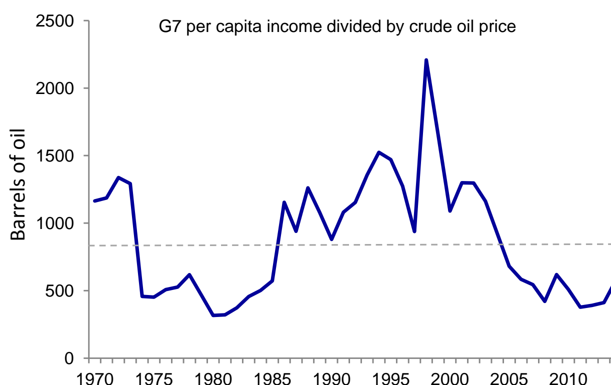
We examine the nominal oil price deflated by the US producer price and consumer price indices. We find that, despite the recent correction in the crude oil price, on a historical basis, crude oil prices are still trading at elevated levels in real terms. Bringing prices down toward their long-run historical averages would require the oil price falling to USD52/bbl (PPI terms) and USD54/bbl (CPI terms).

Figure 31: Oil prices in real terms




Sources: Deutsche Bank

Figure 32: Crude oil prices relative to per capita income




Sources: Deutsche Bank

### Crude oil prices relative to incomes

Another way to examine the fair value of crude oil is to assess the affordability of oil relative to income. We measure this by calculating the number of barrels of oil that can be purchased with respect to per capita incomes in the Group of Seven economies (G7). In 1970, back in the days of cheap oil and prior to the 1973 and 1979 oil crises, oil prices were trading at around USD3.20/bbl. At that time, the average G7 per capita income was around USD3,700 and consequently sufficient to buy just over 1,000 barrels of oil each year.

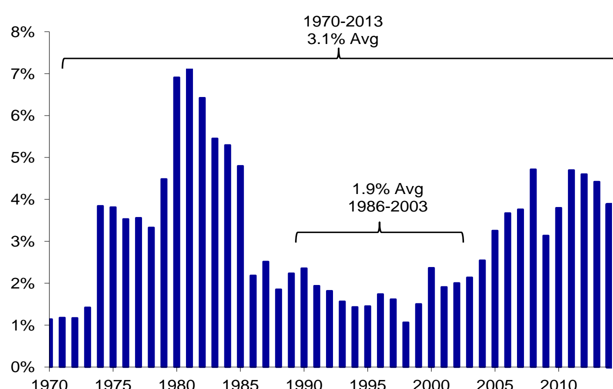
Following the 1973 and 1979 oil price shocks, when oil prices surged, G7 incomes were only sufficient to purchases around 450 barrels of oil. It was not until the aftermath of the 1997-8 emerging market crises when oil prices collapsed to around USD10bbl that oil became extremely cheap on a per capita

basis, such that incomes were sufficient to buy over 2,000 barrel of oil. However, since 2000, the purchasing power of the average G7 consumer has deteriorated once again to bring purchasing power back to where it was in the late 1970s. However, the recent correction in oil prices, if sustained, is helping to improve affordability levels. However, it would require the oil price falling to USD53/bbl to bring the purchasing power of the average G7 consumer back toward its long-run historical average.

### Crude oil as a percent of global GDP

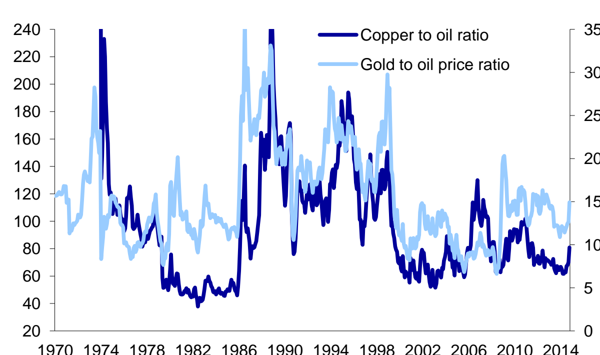
Below we illustrate the value of oil in the global economy. The percentages represent the nominal price of crude oil times total global oil use divided by nominal GDP. The peak in the series was reached in 1981 at 7.2%, while the average over the 1970-2013 stands at 3.1%. Although the share of oil in world GDP has been falling over recent years, it remains historically high. We estimate that crude oil prices would need to fall to USD70/bbl to bring oil as a percent of global GDP back to its long-run historical average.

Figure 33: Oil as a percent of global GDP




Sources: Deutsche Bank

Figure 34: Oil prices relative to gold and copper




Sources: Deutsche Bank

### Crude oil prices relative to gold and copper

Since the price ratios between various commodities tend to respect broad trading bands and display mean reversion properties over the long term, we believe it may be instructive to examine whether crude oil can be considered cheap or expensive versus other commodities such as god and copper. We find that crude oil has been trading at particularly rich levels of valuation versus industrial metals. For example, to bring the copper to crude oil price ratio back to its long-run historical average would require oil prices falling to USD55/bbl. In contrast, the gold to oil price ratio indicates no extreme levels of valuation, since bringing this ratio back toward its long-run historical average would require Brent crude oil prices falling to USD80/bbl and consequently close to current levels.

### Crude oil prices relative to budget breakevens

Budget breakevens can provide a clue as to the sensitivities of the key oil-producing nations to an oil price decline. Indeed, Iran, with the highest breakeven of any oil producing country, has been the most vocal in speaking out for more decisive action to defend crude oil prices. Meanwhile, oil ministers in Kuwait and the UAE seem less concerned by the violent collapse in oil prices recently. Budget breakevens may help to explain this divergent behavior, since budget breakevens in Qatar, Kuwait, and the UAE are significantly lower in comparison at USD71/bbl, USD75.5/bbl, and USD80/bbl,

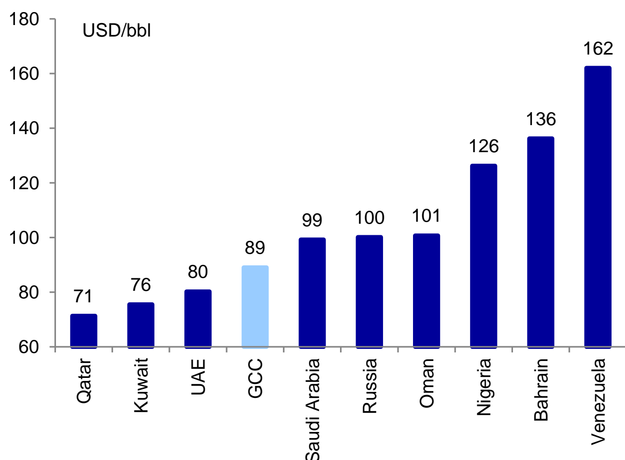
respectively. For the GCC as a whole, we estimate budget breakevens at USD89/bbl.

Since the oil price has been trading above Saudi Arabia's budget breakeven levels for the past few years, the kingdom has a certain degree of flexibility to withstand lower oil prices. However, we would view a move below USD80/bbl as unsustainable over the long term, since without increasing borrowing or tightening in policy, it implies deterioration in the region's budgetary position.

### Crude oil prices and the US dollar

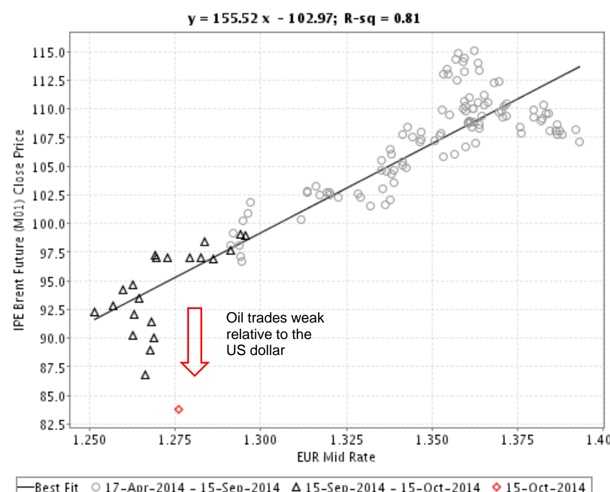
A strengthening US dollar will be a welcome development for Middle Eastern oil producers, as it would imply an improvement in the region's terms of trade since their main assets (oil) are denominated in US dollars and their main liabilities (European manufactured imports) are denominated in euros. This may therefore increase the tolerance among OPEC producers and specifically Saudi Arabia to a lower oil price in a rising US dollar environment.

Figure 35: Budget breakevens across key oil producing countries




*Sources: Deutsche Bank estimates*

Figure 36: EURUSD and the Brent crude oil price



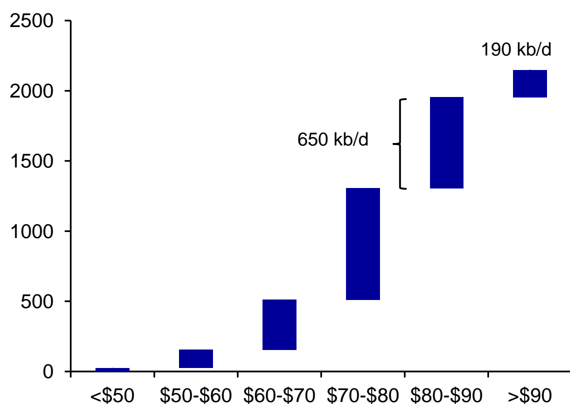

*Sources: Deutsche Bank*

We find that there is a positive correlation between EURUSD and the oil price that has risen over the past few months. Interestingly, the recent correction in the oil price seems to go beyond what would be implied by the current level of the US dollar. In an attempt to measure fair value of crude oil relative to the US dollar, we first estimate PPP for EURUSD at 1.18. According to the recent correlation, this would imply a fair value of the Brent crude oil price relative to the US dollar at around USD80/bbl.

## Crude oil prices relative to US shale plays

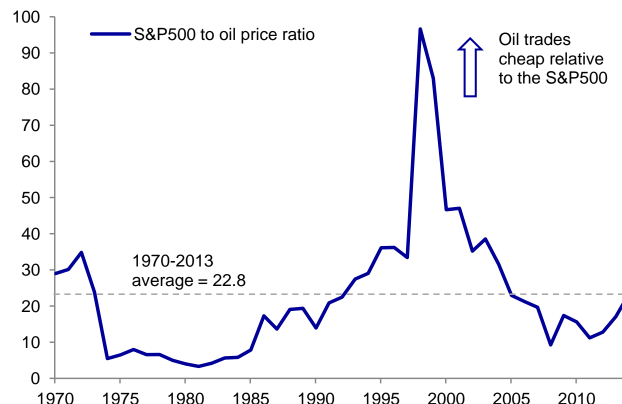
We believe US shale oil activity could be increasingly sensitive to a falling oil price particularly compared to Russian or Canadian supply because of the shorter drilling contracts in the US. Although the weighted average of US tight oil is USD72/bbl, close to 200kb/d (or 9%) of 2015 expected production would not attract new investment below USD90/bbl (Brent equivalent). A further 650kb/d (or 40% of US tight oil production) would become unattractive between USD80-90/bbl. Between USD70-80/bbl, one would capture an additional 800kb/d of US tight oil production.

Figure 37: 2015 US tight oil production by incentive price (kb/d)




Sources: Deutsche Bank

Figure 38: Oil prices relative to the S&P500




Sources: Deutsche Bank

## Crude oil prices relative to the S&P500

Although the S&P500 to oil price ratio is not mean reverting, it may be instructive to see whether crude oil prices can be considered cheap or expensive on this measure. Interestingly, this ratio has been rising steadily recently, implying that the high level of oil prices has not been contaminating the outlook for growth. Interestingly, we find that at USD80, the ratio of the US equity market to the crude oil price is at its long-run historical average.

## Conclusion

Earlier this year, crude oil was the most overvalued and overbought commodity in the world. The deterioration in physical fundamentals in the oil market from the beginning of July therefore exposed the crude oil price to significant downside risk.

We believe the next stage in the oil price correction will be how Middle Eastern producers and the US shale oil sector respond to falling prices. Indeed, prices have now fallen below USD89/bbl, which represents the average budget breakeven for the GCC region as a whole. In terms of US shale oil plays, we estimate the weighted average cost of US tight oil production is USD72/bbl.

We would, therefore, expect verbal intervention from either OPEC and/or US oil producers as likely in coming weeks and months if Brent crude oil prices fell below USD80/bbl, since at this level it would put long-term pressure on the budgetary positions of the Gulf states and lead to an estimated 40% (or just under 850kb/d) of US tight oil production becoming unattractive.

Figure 39: Estimating the steady state for crude oil against various indicators

| | |
|---|---|
| Real terms (PPI) | USD53 |
| Relative to income | USD53 |
| Real terms (CPI) | USD54 |
| Relative to copper | USD55 |
| As a share of w orld GDP | USD70 |
| US tight oil incentive price | USD72 |
| Relative to gold | USD80 |
| Relative to the S&P500 | USD80 |
| Versus the USD | USD80 |
| GCC budget breakeven | USD89 |
| **Average** | **USD69** |

Source: Deutsche Bank

# Infrastructure

## All set for faster public spending

The ramp-up of public spending under the current administration, especially at the beginning of President Peña Nieto's term, has been the slowest of the past three presidential terms. According to Reforma, public spending during the first four months of 2013 was down 7.1% YoY; ex-president Calderón spent 6.1% more during the first four months of 2007 vs. the comparable period of 2006, and public spending under the administration of ex-president Fox was 4.8% higher YoY during the first four months of 2001.

Since then, infrastructure spending has remained subdued. With the full approval of President Peña Nieto's structural amendments, especially the Energy Reform, we see no reason for all efforts to align toward faster infrastructure spending in upcoming years.

## National Infrastructure Program

President Peña Nieto unveiled in April 2014 a new P$7.7tr or US$520bn infrastructure spending plan for 2014-18. This program is 90% higher than the one announced on July 2013 and materially above the US$226bn plan announced by the previous administration. The new National Infrastructure program (NIP) will focus on sectors such as energy, housing, and tourism. More than half of the foreseen investments should be provided by the federal government and the rest by the private sector.

### The bulk of the budget should go toward energy

Close to P$3.9tr, or 51% of the budget, should be directed toward energy. Communications and Transportation should receive another P$1.3tr, or 17% of the budget; these resources would be invested in revamping and constructing highways as well as in new mass transportation systems in main urban areas. Investments for housing development will amount to P$1.8tr or an additional 23% of the budget. The rest should be split between hydraulic projects, tourism, and health care.

## Hydroelectric plants

Mexico's Federal Electricity Commission (CFE) expects to launch the simultaneous construction of three new hydroelectric plants in the remainder of President Peña Nieto's Administration. This would materially outperform results in the last decades that point toward one hydroelectric central built per presidential term.

These plants should be located in the south and Pacific areas. One of these plants is Las Cruces, in the State of Nayarit. It was already approved by the Ministry of Environment and Natural Resources (Semarnat). Estimated investments should amount to US$640mn or P$8bn. This 240MW plant is expected to satisfy 77% of Nayarit's energy demand.

## New Mexico City airport

In September 2014, President Peña Nieto announced the construction of a new Mexico City airport. This project will most likely will be the main infrastructure venture presented during President Peña Nieto's administration.

The current Mexico City International Airport is the second busiest airport in Latin America in terms of passenger traffic and the busiest airport in terms of aircraft movements (followed by Bogota's International airport and Sao Paulo's International Airport). With its two runways, the airport has capacity to handle 32 million passengers per year. In 2013, the airport handled close to 31.5 million passengers (+7% YoY), which represents close to 32% of the total national airport system's traffic. As of September 2014, AICM had already reached total capacity of close to 25 million passengers. We estimate that, by the end of 2014, the total number of passengers going through the airport will surpass 33 million.

The new Mexico City Airport will be located right next to the current airport, in the municipalities of Atenco and Texcoco Ecatepec, in the State of Mexico. A total extension of 4,430 hectares, which is currently under guard of the national Water Commission (Conagua), will be used for the project.

The airport will have only one terminal (unlike the current airport, which has two), and it will have six runways that will be able to operate simultaneously. When completed, the new airport will be able to cater to 120 million passengers per year, close to four times the capacity of the current airport. It is estimated that this project will be able to satisfy air travel demand for the next 50 years.

The federal government announced an estimated US$13bn in total investments for the construction of the project. In terms of allocation, the Ministry of Communication and Transportation announced close to 58% of the total investment will come from public resources, while the remaining 42% will come from private sources. According to local news sources, the public portion of the investment will consist of multiyear fiscal revenues, investments, and surplus, while the private portion will primarily come from bank loans and the issuance of government bonds.

The first stage of the project will most likely begin construction in 2H15 and be operational by 2020. The first stage of the airport will be comprised of three runways able to handle simultaneous operations and capacity to receive over 50 million passengers per year and close to 550,000 operations.

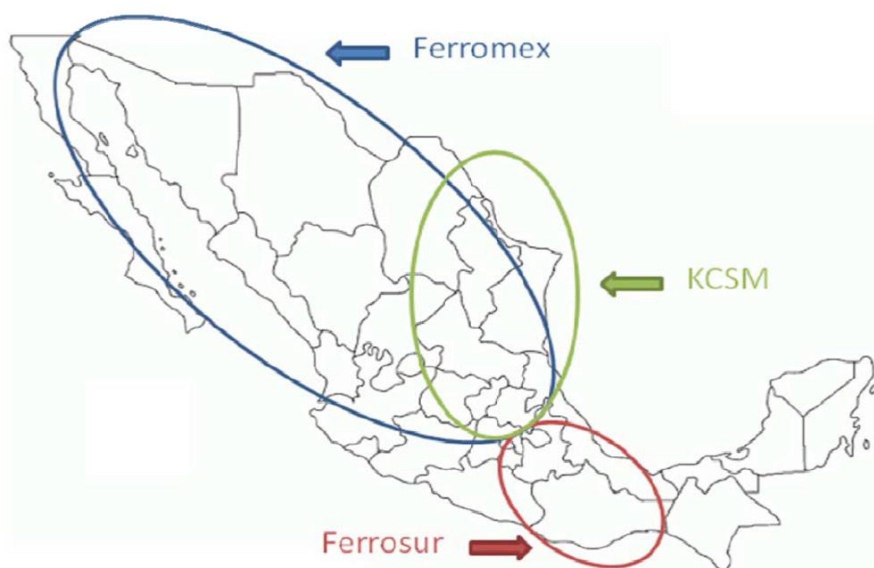
The Ministry of Communications and Transportation (SCT) expects to launch the bidding processes for the construction of the airport in 1Q15. It should be highlighted that, when dealing with projects of this magnitude, it is common for a number of companies to form a consortium for the duration of the project. Currently, some of the main companies that could potentially be involved, due to their size and experience in the field, are Ica, Tradeco, OHL Mexico, and Carso Infraestructura y Construccion.

## Railways could be the next big theme in Mexico

A painful process of nationalization and privatization of Mexico's rail system over the last century has translated into a deteriorated industry far from international standards.

Grupo Mexico and Kansas City Southern control the space, and Mexico's rail system has been neglected for decades. The industry was nationalized in the 1920-30s but commonly posted operating deficit, which resulted in minor maintenance and expansion capex. In the 1990s, the government privatized the system, and a chain of subsequent mergers led to operations nationwide practically being controlled by two companies: Grupo Mexico (through Ferromex and Ferrosur) and Kansas City Southern de México (KCSM).

Figure 40: Geographic presence of main rail operators in Mexico




*Source: Deutsche Bank; company reports*

Currently, trucks dominate load distribution in Mexico, with approximately 74% market share vs. 26% for railways. Ferromex and Ferrosur account for about 55% and 9% of the market, respectively; KCSM controls 34% of the market, and the remaining 2% is in the hands of regional lines.

### Passenger trains coming back to life

New railway projects worth about US$10bn are an integral part of the 2012-18 National Infrastructure Program (NIP). The Ministry of Communications and Transportation (SCT) has already started to bid several projects and plans to have trains up and running during the first half of 2018.

Information released over the last months points toward US$7.4bn to be invested in developing three new passenger train routes:

- Mexico City – Toluca. According to several news sources, the Mexico City – Toluca project includes the construction of a 58km high-speed rail from the city of Toluca to Mexico City. Additionally, it includes a public works contract for the construction of 36km of rail track, as

well as other stock tenders and electromechanical works. The investments involved in this project will be around US$3.3bn

- Mexico City – Querétaro The Ministry of Communications and Transportation (SCT) granted in early November 2014 the US$4.3bn construction project to the consortium lead by China Railway Construction Corporation (CRCC), which also includes Mexican companies GIA, Prodemex, Teya, and GHP Infraestructura Mexicana. Construction works include 210km of railways and two terminals. It should be highlighted that, shortly after the grant, President Peña Nieto announced the revocation of the grant following strong criticism from several groups of lawmakers qualifying the bidding as a direct award given that 13 other interested companies withdrew their proposals when the SCT refused to extend the deadline for the submission of projects. A new bidding process is bound to be open again before the end of 2014. On this, the SCT already announced that the bidding process will be open up to six months after its publication.
- Mérida – Mayan Riviera. Also known as Trans-peninsular Train (TT), this project intends to connect Mérida with Cancún, Playa del Carmen, and other main cities in southeast Mexico. The estimated cost is US$1.5-2.0bn. The SCT expects to bid this project in 2015.

In addition, cargo projects, including a new line between Aguascalientes and Guadalajara as well as several bypasses nationwide, could be worth US$2.5bn.

## Ports

### Port of Veracruz

The expansion project of the port of Veracruz was included in the National Infrastructure Program published by the Federal Government in April 2014. The total investment for the project is estimated at around US$5.3bn, and it is expected to be fully operational by 2025.

In 3Q14, the SCT announced its intentions to tender the first phase of the expansion project. According to local news sources, this phase will require investments of up to US$1.9bn and will include several infrastructure and environmental works and the construction of a 2,800m dock, which will increase the capacity of the port by 250mn TEUs. This project will most likely be completed by 2018.

The expansion of the port of Veracruz will give way to greater maritime inputs, thus contributing significantly to reach the six-year goal of President Peña Nieto to mobilize 500 million tons of goods annually in Mexican ports.

## Highways

### Second floor Mexico City – Toluca

The construction of a second floor that will be a part of the Mexico City – Toluca highway is part of the National Infrastructure Program 2013-2018 published in early 2014.

The project will require an investment of close to US$300mn and will cover about 15 miles, serving approximately 120,000 vehicles per day.

The highway will charge a quota per vehicle per trip, although authorities have not yet determined the cost. Government officials consider that this route would facilitate the traffic in the area. With the second floor, transfer time from Santa Fe to Toluca will likely be reduced making the journey last less than 20 minutes.

### Highway Tuxpan – Tampico

According to several news sources, this project consists of the construction of a 246 km four lane highway, which will include the construction of the Tampico and Tuxpan bypasses. The project is thought to speed the traffic flows along the Veracruz-Matamoros strip and improve the access from the south and southeastern regions to the northern border of the country.

The project will likely require an investment of close to US$475mn and contemplates building a 246km highway, with a bypass which will be 12m wide, it also includes five junctions and 60 structures, such as pedestrian bridges and crosswalks.

The project has expected traffic of 5,000 vehicles per day, and aims to improve road connections between central Mexico and northeast states.

### Second floor Mexico City – Cuernavaca US$150mn

The second floor that will connect Mexico City and Cuernavaca is an elevated viaduct of four lanes; two in each direction, and will start in Mexico City's Urban Freeway. The project will connect the Mexico City - Cuernavaca highway after the toll booth of the existing highway.

The second floor will have a length of seven kilometers and will have an estimated daily traffic of 30,000 vehicles. Investment for this project is estimated at US$245mn. This work is also part of the National Infrastructure Program 2013-2018.

# Industrial

## Manufacturing to remain a key growth driver

Available data for September suggest that manufacturing activity is likely to keep accelerating. Domestic sales of autos and light trucks grew 13.7% YoY, one of the fastest expansions of record yet, and exports grew moderately at 2% YoY. Similarly, exports of manufactures other than autos grew 11.7% YoY in September, a strong acceleration with respect to the first semester of the year. Leading indicators for October also point to a sustained recovery of activity.

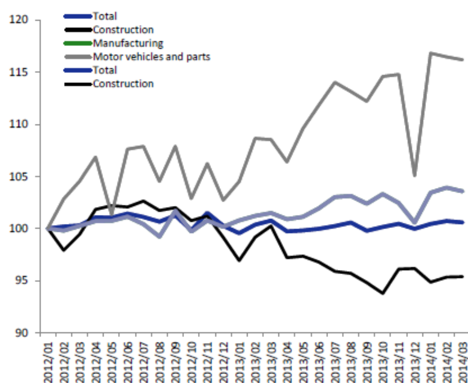
Note that the Energy Reform should also allow Mexico-based manufacturers to benefit by lowering the cost of gas and power. Currently, the price of gas in Mexico is double that of its two northern neighbors, hurting the country's industrial competitiveness. For instance, its manufacturers pay 75% more for power than their North American counterparts. We expect the combination of energy and electricity reforms to bring down both gas and energy prices by a third.

## The automotive sector seems unstoppable

Over the past ten years, the automotive sector has become even more relevant for overall growth in Mexico. It has been the pillar of industrial activity and is expected to remain so, mainly backed by US vehicle demand. In turn, our Mexico economic unit anticipates the automotive industry to contribute close to 4-5% of total GDP in 2015 and 2016, 20% of the manufacturing GDP, and around 30% of manufacturing exports.

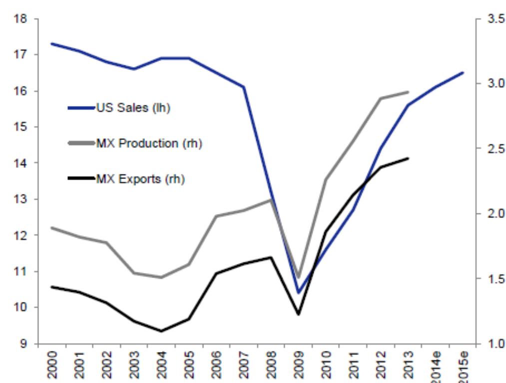
In 2013, Mexico's automotive sector (including auto parts) received close to US$3.0bn in FDI; this is 8% of the nationwide figure and 11% of FDI to the manufacturing sector.

Figure 41: Industrial production (Index, 2012=100)




*Source: Deutsche Bank, INEGI and AMIA*

Figure 42: Motor vehicles (millions)

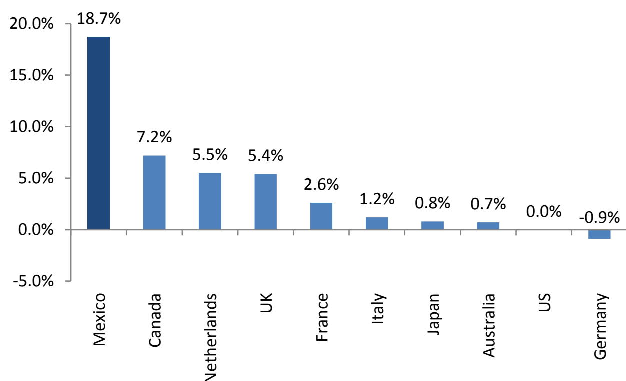



*Source: Deutsche Bank, INEGI and AMIA*

## The main driver of increased auto production could be low labor costs

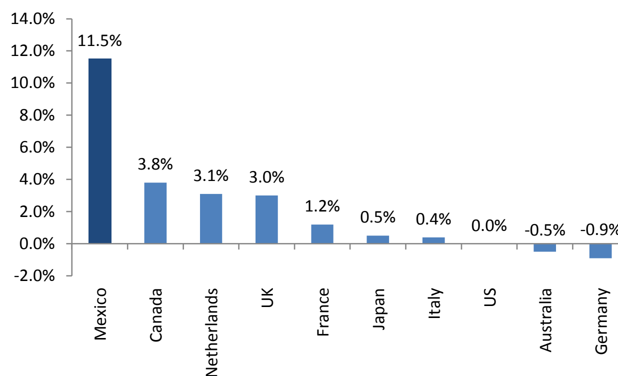
Mexico is the lowest-cost country examined in KPMG's Competitive Alternatives 2014 report. According to the company, Mexico's 18.7% cost advantage over the US in 2014 is similar to 2010, backed by minor changes in the value of the Mexican peso and material cost advantages in the manufacturing sector, which encompasses the automotive one.

Figure 43: Cost ranking vs. the US (all industries)




Source: Deutsche Bank, KPMG

Figure 44: Cost ranking vs. the US (manufacturing sector)




Source: Deutsche Bank, KPMG

Furthermore, according to KPMG, labor costs represent the single largest location-sensitive cost factor for any given industry, followed by transportation costs and cost of capital. The typical range for manufacturing operations is 45-60% of location-sensitive costs tied to labor. The study clearly shows that Mexico depicts the lowest labor costs by a wide margin.

Figure 45: Relative significance of key location-sensitive cost factor

| | Services Sector | Manufacturing Sector |
|---|---|---|
| Labor costs | 74-90% | 44-60% |
| Salaries and wages | 52-64% | 31-42% |
| Statutory plans | 9-11% | 5-7% |
| Other benefits | 13-16% | 7-10% |
| Facility costs (office, factory leasing) | 4-16% | 2-6% |
| Transportation costs (road, sea, air) | NA | 7-24% |
| Utility costs (electricity, natural gas) | 1-1% | 2-8% |
| Costs of capital (depreciation, financing) | 0-7% | 9-21% |
| Taxes | 2-10% | 6-14% |
| Income taxes | 0-11% | 4-11% |
| Property taxes | 0-0% | 1-3% |
| Other taxes | 0-1% | 1-1% |

Source: Deutsche Bank; KPMG

Figure 46: Labor cost comparison (per employee)

| | Salaries & wages | | Statutory Plans | | Employees benefits | | Total labor | |
|---|---|---|---|---|---|---|---|---|
| | Average per Employee (US$) | Rank | Percent of payroll | Rank | Percent of payroll | Rank | Average per Employee (US$) | Rank |
| North America | | | | | | | | |
| Canada | 65,504 | 6 | 10% | 2 | 26% | 6 | 89,038 | 3 |
| Mexico | 29,105 | 1 | 13% | 5 | 27% | 7 | 40,648 | 1 |
| United States | 70,125 | 7 | 9% | 1 | 36% | 10 | 102,249 | 9 |
| Europe | | | | | | | | |
| France | 56,126 | 2 | 42% | 10 | 24% | 5 | 93,450 | 6 |
| Germany | 75,715 | 10 | 17% | 7 | 21% | 3 | 104,440 | 10 |
| Italy | 60,848 | 4 | 28% | 9 | 24% | 4 | 92,287 | 4 |
| Netherlands | 64,433 | 5 | 15% | 6 | 30% | 8 | 93,074 | 5 |
| United Kingdom | 58,925 | 3 | 10% | 3 | 31% | 9 | 82,930 | 2 |
| Asia Pacific | | | | | | | | |
| Australia | 73,210 | 9 | 19% | 8 | 16% | 1 | 99,093 | 8 |
| Japan | 71,607 | 8 | 12% | 4 | 19% | 2 | 94,067 | 7 |

*Source: Deutsche Bank; KPMG*

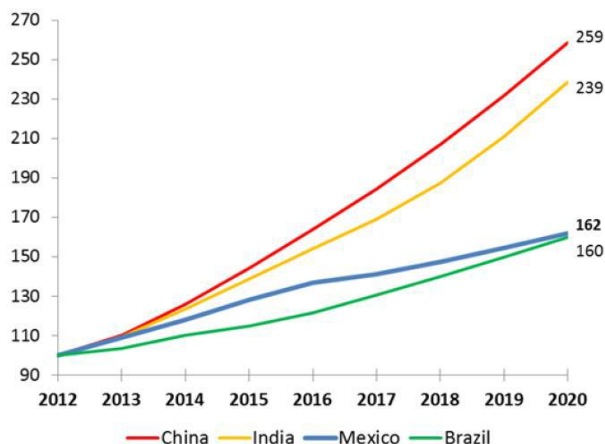
A wider sample from the US Department of Labor also shows Mexico's labor cost advantages vs. most countries. The agency's International Labor Comparisons (ILC) report shows that, compared to the US, countries with lower average hourly compensation costs are primarily in southern and eastern Europe, Asia, and Latin America, with Mexico being the most advantageous alternative in the Americas.

The Ministry of Economy forecasts Mexico to depict more advantageous costs than peers such as China and India in years to come. By 2020, the agency expects unit labor costs in Mexico to remain more than 30% below those in China and India.

Compared to Brazil, the Ministry of Economy anticipates slightly higher labor costs in Mexico. However, we highlight Mexico's direct access to the Pacific Ocean, a key logistical advantage that Brazil lacks. Furthermore, Mexico has direct access to the US and Canada through railways. On this, Ferromex, the largest train operator and vehicle transporter in Mexico, expects to move 2mn vehicles in 2014, up 25% YoY. Its main customers include Ford, General Motors, and Chrysler.

These advantages should continue to place Mexico as one of the most sought after alternative locations for auto production in the world.

Figure 47: Unit labor cost forecasts from the Ministry of Economy (2012=100)

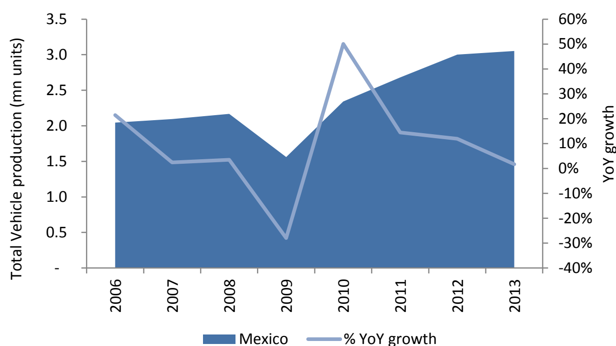



*Source: Deutsche Bank, Ministry of Economy*

## Vehicle production is likely to grow at high-single-digit rates for the next years

Historically, Mexico has been one of the global leaders in vehicle manufacturing. According to OICA, Mexico is among the top ten main vehicle producers worldwide, reaching over 3mn vehicles produced in 2013 (+2% YoY), which is about 3.5% of global production.

Figure 48: Total vehicle production in Mexico



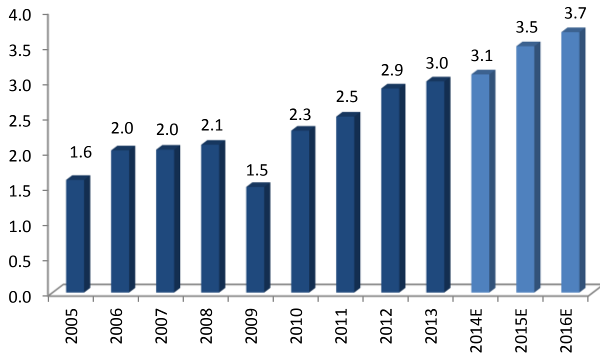

*Source: Deutsche Bank, OICA*

Of the close to 3mn vehicles produced, around 95% were directed to light vehicle production. In 2013, this production increased close to 1.4% vs. 2012. Additionally, heavy vehicle production increased 1.1% YoY.

According to the AMIA (Mexican Automotive Industry Association), year-to-date light vehicle production reached more than 2mn units, +8.5% YoY. This shows material acceleration from the 3% YoY growth in 2013. Exports lead the way with 9.6% growth as of October.

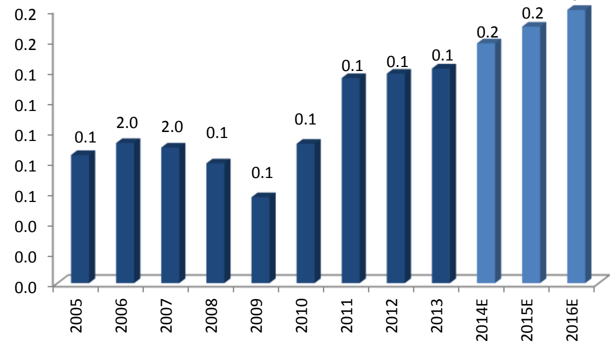
The Ministry of Economy, in the report titled “The Automotive Industry,” highlights a 3.1mn forecast for production of light vehicles nationwide in 2014, 3.5mn units in 2015, and 3.7mn units in 2016. This translates into a 7% CAGR over the next three years. As for heavy vehicles, the agency anticipates an 8% CAGR in 2014-16, which translates into close to 180,000 units at the end of the period.

Figure 49: Light vehicle production (million units)



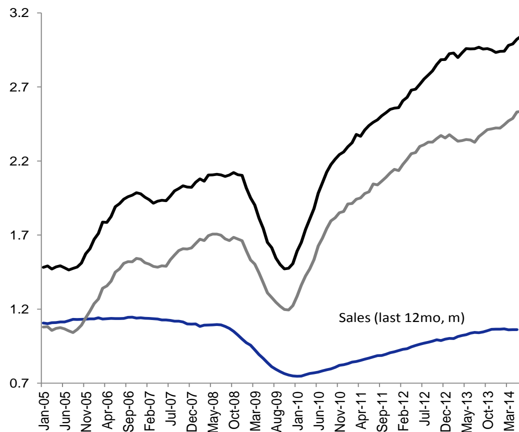

*Source: Deutsche Bank, Ministry of Economy*

Figure 50: Heavy vehicle production (million units)



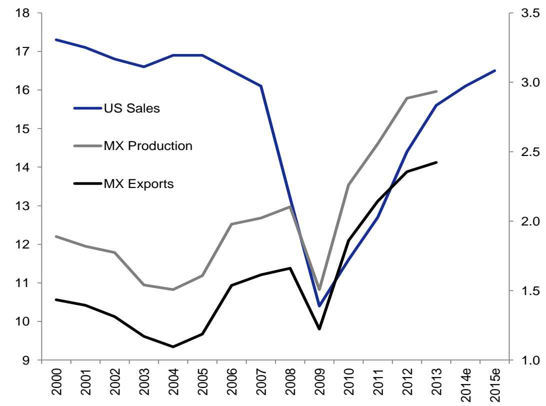

*Source: Deutsche Bank, Ministry of Economy*

Figure 51: Motor vehicles (million)




*Source: Deutsche Bank, INEGI, AMIA*

Figure 52: Motor vehicles (million)




*Source: Deutsche Bank, INEGI, AMIA*

## Aerospace should yield exponential growth

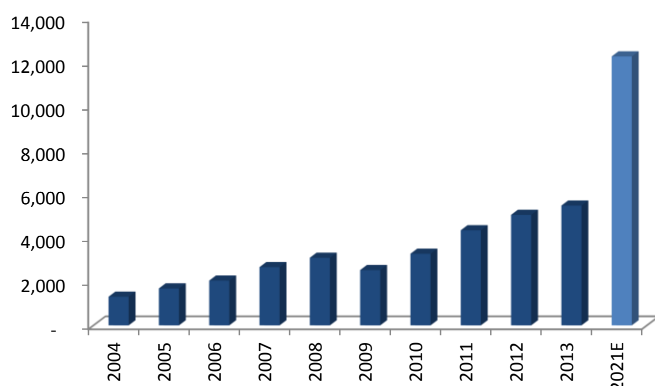
The aerospace industry in Mexico is composed mainly of foreign companies that have established operations in the country mainly due to low labor costs and good quality labor. The aerospace industry is classified into original equipment manufacturing companies (OEMs), first-line providers (Tier 1), and second-line providers (Tier 2 and Tier 3). Mexican capital firms represent 22% of the supply and cater mainly to the Tier 3 segment.

According to the Ministry of Economy, aerospace and defense companies are experiencing a number of challenges, such as costs, the supply chain, the need to expand operations, and solid macroeconomic indicators. In the civil sector, the fleet of passenger and cargo aircraft is expected to reach 36,556 by 2032, more than double the current 17,739 commercial aircrafts in service. Single-aisle passenger aircrafts will most likely represent the biggest share in demand going forward. On this, according to ProMexico, close to 20,240 aircraft are planned to be delivered over the next 20 years. Moreover, the demand for twin-aisle aircraft is expected to rise to 6,780 new passenger planes and almost 500 cargo carriers over the same period.

According to the Mexican Ministry of Economy, over the past ten years, Mexico has become one of the most important global players in the aerospace sector. Since 2004, the industry has reported a growth rate of 17.2% per annum. Currently, in Mexico, there are 287 companies related to the aerospace industry established in six states and employing more than 32,600 high-level professionals.

Moreover, according to a report published by ProMexico, Mexican aerospace exports amounted to US$5.4bn in 2013 and are expected to be close to US$12bn in 2021, reaching an average growth rate of 14% per year.

Figure 53: Aviation industry in Mexico (exports, US$mn)

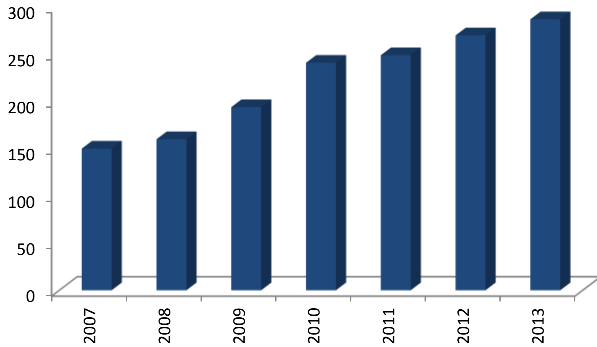



*Source: Deutsche Bank, ProMexico*

It should be highlighted that Mexico is the sixth largest supplier to the United States aerospace industry. Furthermore, according to data provided by the Ministry of economy, geographical proximity to the United States, considered to be one of the world's largest aerospace markets, and convergence with the two main manufacturing corridors in North America are competitive factors that incentivize investments in the country.

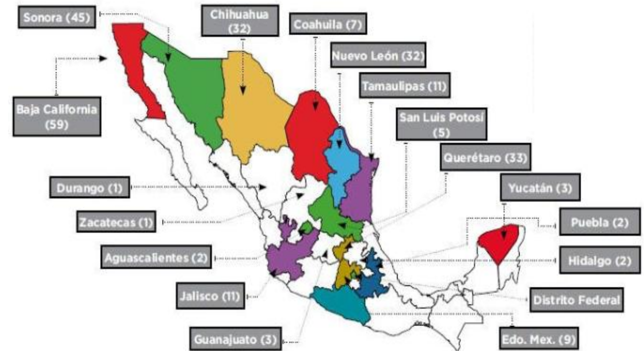
As of 2013, 287 aerospace companies and support businesses were registered in Mexico. These companies and support businesses are mostly located mainly in four states and, according to estimates by the Ministry of Economy, employ more than 33,000 high-level professionals.

Figure 54: Companies in the Mexican aerospace industry




*Source: Deutsche Bank, ProMexico*

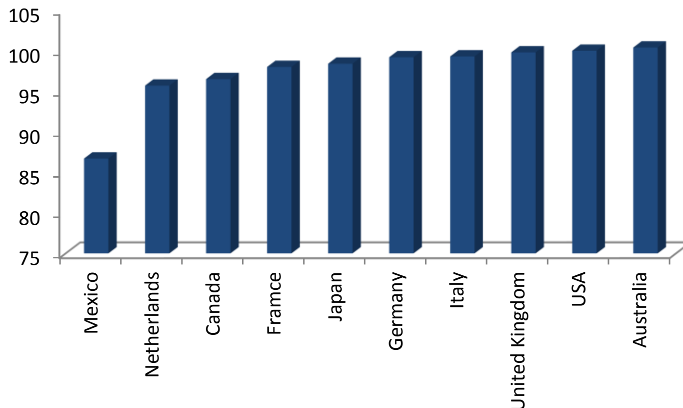
Figure 55: Geographic presence of aerospace industry




*Source: Deutsche Bank, Forbes Magazine, () number of companies established per state*

Additionally, according to a study by KPMG, Mexico is 13.3% more cost efficient than the United States and Australia, and close to 10% more efficient than Canada and the Netherlands, in terms of labor.

Figure 56: Aircraft parts manufacturing cost index (USA=100)




*Source: Deutsche Bank, ProMexico*

The aerospace industry in Mexico is growing on average over 20% per year, and in 2013, the sector generated 35,000 jobs nationwide and US$5bn in exports.

The Ministry of Economic Development (Sedeco) reported that there are 287 companies, of which 79% are in manufacturing, 11% maintenance and repair (MRO), and 10% of research and development in the country.

Sedeco added that, by 2015, the industry is projected to create 37,000 jobs, more than 350 companies, and exports of US$7.5bn, of which 30% will have local contact. Additionally, according to data provided by Sedeco, Mexico has

become one of the main recipients of foreign direct investment (FDI). From 2008-2013, FDI in aerospace came in at around US$6.8bn.

According to the Ministry of Economy, over the next 20 years, air traffic will grow 4.7% per year, demanding the production of 29,000 new airplanes. Thus, it is estimated that, by 2020, Mexico will most likely be among the ten largest suppliers in the industry and ranked the ninth supplier for the aerospace market in the United States and the sixth for the European Union (EU).

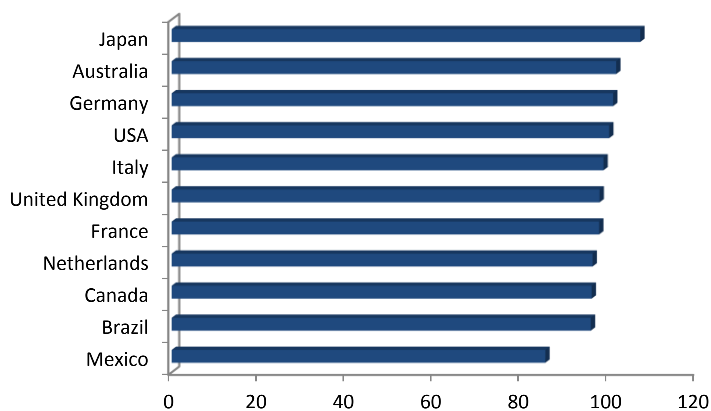
## Leading exports of electronics

Electronic products have increasingly shorter life cycles and lower costs. Major international companies continue investing in technology that will reduce the size of electronic devices and provide more user-friendly components. Moreover, companies are seeking to develop electronic technology and components with better data processing capacity.

The electronics industry focuses on devices or components that process some kind of information. The industry is divided into five large segments: audio and video; computers and office; semiconductors; communications; and medical equipment and precision, measurement, control, and optical instruments.

According to the Ministry of Economy, over the past years, Mexico has positioned itself as a global exporter and assembler of electronics. Some of the main international electronics companies such as Samsung, LG, Toshiba, Foxconn, Flextronics, and Intel have gradually increased their presence in the country. According to data provided by ProMexico, companies seek to invest resources in the country not only in manufacturing plants but also in engineering and design centers, which employ Mexican engineers, mainly due to the country's favorable conditions to establish operations, such as low-cost labor.

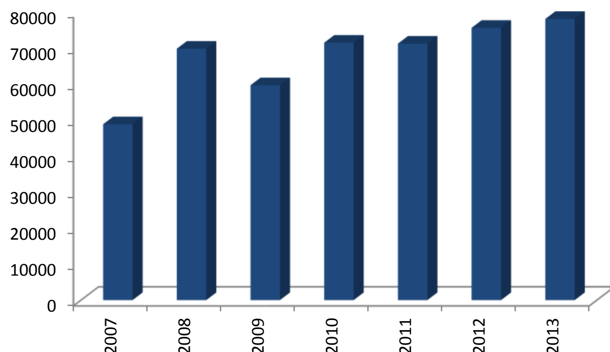
Figure 57: Electronics assembly cost index (USA=100)




*Source: Deutsche Bank, ProMexico, KPMG*

According to the data provided by the federal government, Mexico is especially competitive in the consumer electronics subsector. The country ranks as one of the leading exporters of electronics on a global scale, such as flat screen televisions, computers, and mobile phones. In 2013, the industry exported a total of US$78bn, an increase of 3% vs. the US$75bn exported in 2012.

Figure 58: Mexican exports of electronics (US$mn)

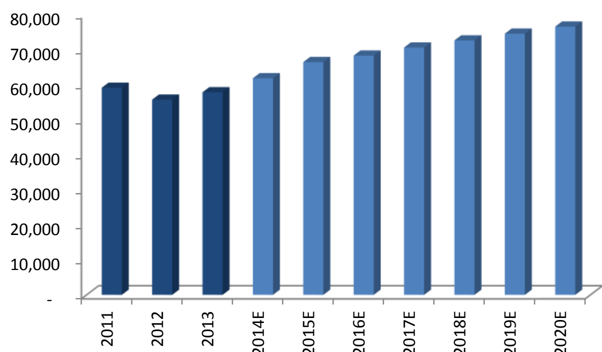



*Source: Deutsche Bank, ProMexico*

In 2013, the sector contributed 4.7% of GDP in manufacturing and 24% in manufacturing exports, and recent developments present a growth rate at a 3.7% annual average from 2004 to 2013.

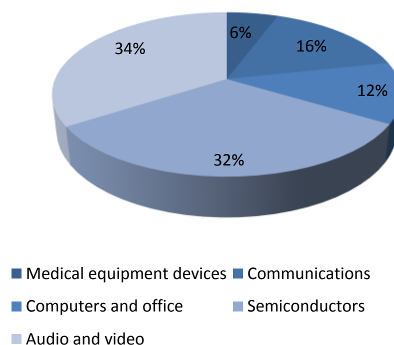
Moreover, the value of production in the electronics sector in Mexico was US$56bn in 2012, and it is expected to record a CAGR of 4.1% for 2012-2020.

Figure 59: Projections for the national production of the electronics industry 2011-2020 (US$mn)




*Source: Deutsche Bank, ProMexico*

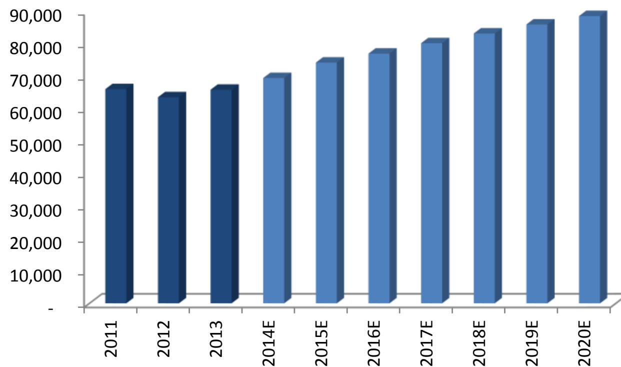
Figure 60: Share in production of the electronics industry by subsector in Mexico 2011




*Source: Deutsche Bank, ProMexico*

It is estimated that consumption of electronics in Mexico was US$63bn in 2012, and it is expected to record a CAGR of 4.2% for 2012-2020.

Figure 61: Projections for the national consumption of the electronics industry 2011-2020 (US$mn)



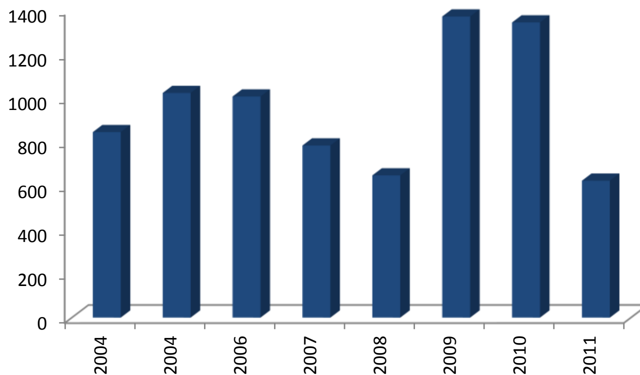

*Source: Deutsche Bank, ProMexico*

## Foreign direct investment

Between 2000 and 2011, foreign direct investment (FDI) accumulated in this sector totaled US$10bn. Some of the main countries that have invested in Mexico are the United States, Japan, and the Netherlands.

Foreign direct investment accumulated for the electronics industry is increasing year after year. Investment captured in 2011 was 623.0 million, 53.6% lower than the amount recorded in 2010.

Figure 62: Foreign direct investment in the electronics industry (US$mn)




*Source: Deutsche Bank, ProMexico*

# Housing

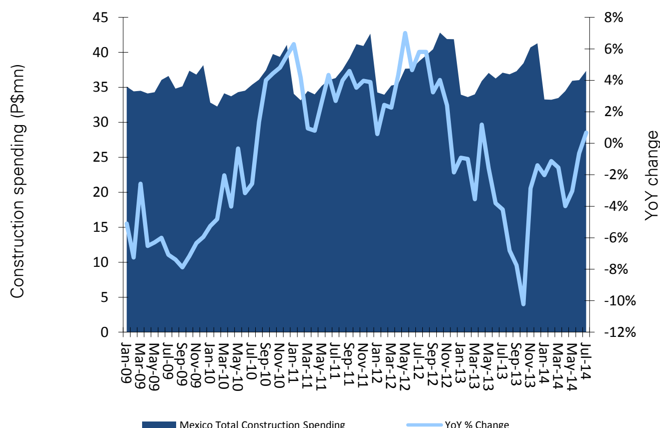
## Clear recovery under way

The production of new homes started to stabilize early this year. In recent months, activity points toward solid double-digit growth rates. If housing starts were to remain at year-to-date average levels, our estimates would place full-year housing volumes at 345,000 units (+13% YoY vs. an average 15% YoY contraction in 2011-13). This estimate seems clearly conservative when compared to Conavi's 450,000-unit target for the year.

## Housing is a key component of the infrastructure plan

During 2014, the construction sector has shown positive performance. Over the past nine months, total construction spending increased on average 1% per month versus an average -4% per month over the same period in 2013. The current administration has committed close to P$2trn to promote housing demand for the period spanning 2014-2018.

Figure 63: Construction spending in Mexico




Source: Deutsche Bank, Bloomberg Finance LP

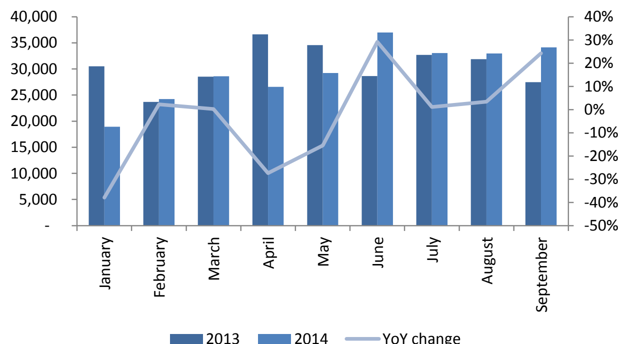
Throughout the year, indicators of housing construction, placement of credits, subsidy granting, and funding to developers have shown a clear trend of recovery in this sector.

According to the Ministry of Agriculture and Urban Development (Sedatu), public policy has an important role when promoting programs that contribute to the revival of the industry. For the federal government, the housing sector is strategic, from an economic perspective, mainly due to its multiplying effects on production and employment and because it is also a catalyst of investments to other sectors such as infrastructure, office real estate, and industrial plants, among others.

Going forward, this industry shows a scenario with positive signals. As of September 2014, credits granted by Infonavit have remained practically in line with the credits provided in the same period in 2013, reaching a total of close

to 265,000 credits granted in 2014. Moreover, on a month-on-month basis, credits granted during September increased 24% versus 2013 levels.

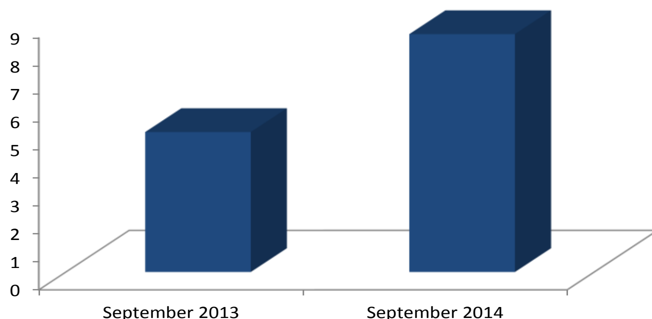
Figure 64: Credits granted by Infonavit




*Source: Deutsche Bank, Infonavit*

On the other hand, as of October 2014, the number of subsidies granted has reached a total of P$9.3bn, up 63% YoY. Moreover, funding provided by Sociedad Hipotecaria Federal increased 70.5% as of September 2014 compared to the same period last year.

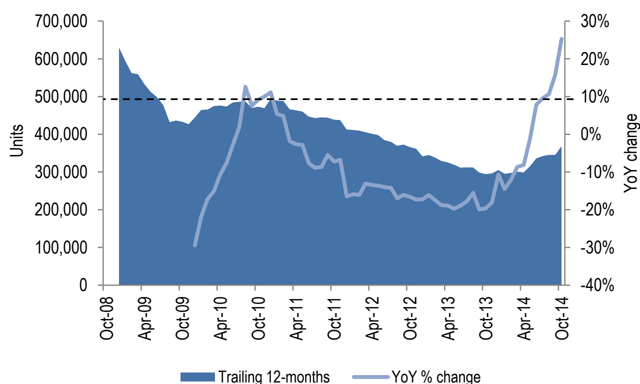
Figure 65: Credits granted by Sociedad Hipotecaria Federal




*Source: Deutsche Bank, Sedatu*

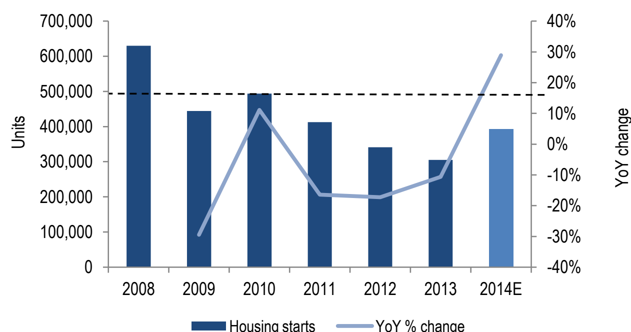
According to the National Housing Registry (RUV), about 47,000 units were constructed in October 2014. This translates into housing starts on a trailing 12-month basis up 32% YoY, showing significant growth for the first time since early 2011. In our view, the current clear recovery pattern could translate into high-teen growth of housing starts for the full-year 2014 vs. double-digit contraction in 2011-13. Regarding the existing housing stock, in September, the RUV recorded 487,000 units, 20.4% higher than that observed in the same month of 2013.

Figure 66: Housing starts trailing 12 months




Source: Deutsche Bank, Sedatu

Figure 67: Housing starts, annual



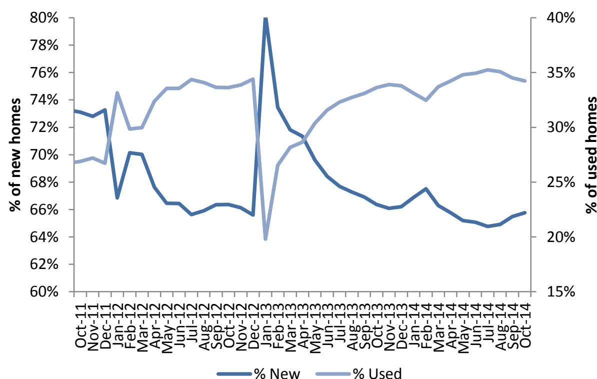

Source: Deutsche Bank, Sedatu

## Changing client preferences

The lack of suitable transportation alternatives in main metropolitan areas has resulted in citizens spending about a couple of hours per day commuting between new home developments and work. In turn, consumers have started to look for secondary market units (i.e., pre-owned units) that typically lie within walking distance or a short ride to work.

About 89% of Infonavit's mortgages were used to acquire new housing units in 2004. This ratio dropped to 76% early 2011, and today that proportion has fallen to 66%. The long-term trend is clearly to the downside.

Figure 68: Infonavit's mortgage granting – new vs. used homes




Source: Deutsche Bank, Infonavit

Moreover, in April 2014, Sedatu published the 2014-2018 National Housing Program in which it establishes the guidelines the current administration intends to follow with regards to housing policy. The new housing program will seek to promote renting programs in order to incentivize the use of the industry's secondary market. According to Sedatu, one of the ways to expand access to housing is the renting market, as it allows low-wage workers to access intra-urban housing and for whom purchase requires a large investment.

# Stocks to watch

## Beneficiaries of four secular themes through 2020

Our screening process for stocks whereby investors might take advantage of energy, infrastructure, industrials, and housing trends takes into account the following five parameters:

- We defined our potential investable universe as all listed firms in Mexico with market cap above US$1bn. This filter put our sample at 57 names.
- The list was refined to include only those stocks with average daily traded volume (ADTV) above US$1mn. This filter pushed our sample to 51 stocks.
- Afterwards, we narrowed our list to those companies with direct exposure to at least two of the following sectors: energy, infrastructure, industrials, and housing. This filter pushed our sample to 10 stocks.
- We then focused on those companies for which these sectors account for at least 30% of operations. This filter pushed our sample to six stocks.
- Deutsche Bank's Hold-rated names were excluded from the universe. This filter pushed our sample to five stocks.

Our best actionable ideas are Buy-rated Cemex and Grupo Mexico. Other potential beneficiaries (non-rated) resulting from our screening process include Alfa, Grupo Carso, and ICH.

Figure 69: Top investable ideas in Mexico

| Company | Ticker | Last Price (Local currency) | DB rating | Segment | Market Cap (US$bn) | ADTV (US$mn) |
|---|---|---|---|---|---|---|
| Alfa* | ALFAA.MX | 39.6 | Not rated | Conglomerate | 15 | 33 |
| Cemex | CX.N | 12.7 | Buy | Cement | 16 | 116 |
| Grupo Mexico | GMEXICOB.MX | 46.5 | Buy | Conglomerate | 27 | 33 |
| Grupo Carso* | GCARSOA1.MX | 77.6 | Not rated | Conglomerate | 13 | 3.5 |
| ICH* | ICHB.MX | 73.2 | Not rated | Steel | 2.3 | 3.1 |

*Source: Deutsche Bank; *Bloomberg Finance LP for NR companies. Note: prices as of Nov/26, 2014*

Figure 70: Comp sheet 2015E

| | | Growth | | | Margins | | Profitability | Leverage | Valuation | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Company | Last Price | Revenue | EBITDA | Net income | EBITDA | Net income | ROE | Net Debt/Equity | P/E | EV/EBITDA | P/BV |
| Alfa* | 39 | 9% | 10% | NS | 12.2.% | 4.10% | 15% | 67% | 21.3 | 8.2 | 2.7 |
| Cemex | 13 | 7% | 12% | -140% | 17% | 1.00% | 0.60% | 122% | NS | 10.3 | 1.3 |
| Grupo Carso* | 69 | 9% | 11% | 10% | 13% | 8% | 14% | NS | 23.1 | 13.6 | 3 |
| Grupo Mexico | 49 | 18% | 28% | 22% | 43% | 19% | 17% | 22% | 13.3 | 6.8 | 2.2 |
| ICH* | 73 | 12% | 22% | NS | 12% | 6% | 6.50% | NS | 17.6 | 6.7 | 1 |

*Source: Deutsche Bank; *Bloomberg Finance LP Consensus estimates for NR companies. Prices as of Nov/26, 2014.*

## Top Picks; Cemex and Grupo Mexico

### Cemex; Buy; target price US$15.5

#### Company description

Cemex is a global building materials company that produces, distributes, and sells cement, ready-mix concrete, aggregates, and related building materials in more than 50 countries throughout the Americas, Europe, Africa, the Middle East, and Asia. The company's vertically integrated portfolio of products – tailored to each market's needs – provides it with the opportunity to manage its assets as one integrated business rather than as distinct businesses, further improving its operational efficiency and profitability. Current cement capacity reaches 94mn tons.

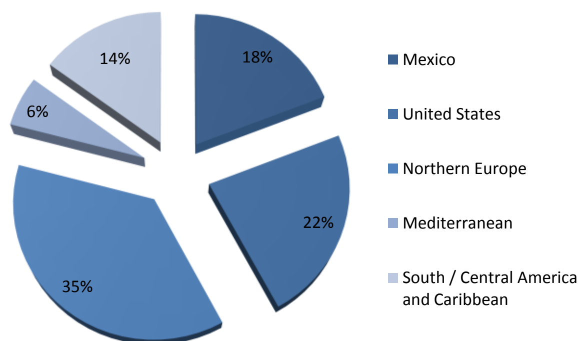
#### Business model

The company has 55 cement plants across the world (plus 12 cement plants with minority participation), 1,784 ready-mix concrete facilities, 362 aggregate quarries, 222 land-distribution centers, and 63 marine terminals. Close to 46% of all company sales are tied to cement, 39% to ready-mix concrete, and 15% to aggregates.

Mexico accounts for more than 30% of Cemex's EBITDA generation. In this country, close to 2/3 of cement volumes target the housing sector, while the remaining 1/3 is directly linked to infrastructure.

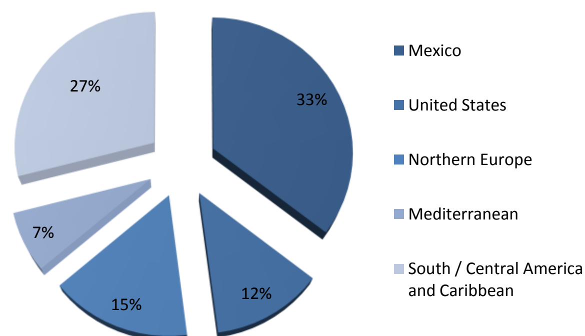
We expect the company to deliver revenues and EBITDA in 2014 of US$17bn and US$2.7bn, respectively.

Figure 71: Revenue breakdown




*Source: Deutsche Bank; Deutsche Bank 2014 estimates*

Figure 72: EBITDA breakdown




*Source: Deutsche Bank; Deutsch Bank 2014 estimates*

#### Key opportunities ahead

Cemex seeks to continue to strengthening its global leadership by growing profitably through the cement value chain. The focus should remain in the core business of cement, ready-mix concrete, and aggregates. The lack of available cement substitutes enhances the marketability of the company's products.

- Energy. Cementing wells for drilling, production and sealing, cement and ready-mix concrete for oil & gas, petrochemical and electricity projects such as new production facilities and communication infrastructure, horizontal drilling and hydraulic fracturing, wind farms.

- Infrastructure. Toll roads, bridges, tunnels, ports, airports (runways and terminals), concrete railway ties or sleepers, sewage works, hydroelectric plants, hospitals.
- Industrial. Mining and industrial facilities such as new production plants, distribution and logistics infrastructure, commercial and other private construction projects.
- Housing. Vertical and horizontal formal housing complexes, self-construction.

### Quantifying the potential impact

Cemex has 15 cement plants in Mexico with total capacity surpassing 29mn tons. The company's last 12-month consolidated revenues and EBITDA currently stand at US$16bn and US$2.9bn, respectively. The Mexico business unit has delivered 12-month sales and EBITDA of US$3.1bn and US$989mn (i.e., about 32% EBITDA margin).

According to our estimates, the average utilization rate for cement plants in Mexico stands at 60%.

We estimate that each 5% increase in the utilization rate of Cemex's Mexico assets along with stable EBITDA margins should translate into about US$30mn of incremental EBITDA, +3% vs. last 12-month figures. Furthermore, increased asset utilization along with stable prices should come along with higher economies of scale. We forecast that each 100bp of EBITDA margin expansion at a given utilization rate should translate into about US$35mn of incremental EBITDA, +3-4% vs. last 12-month figures.

Assuming that Cemex is able to increase the utilization rate of its Mexican plants to 85% and that this allows the EBITDA margin to expand to 34-35% (below the 38-40% achieved in the previous cycle's peak years), we estimate that Cemex Mexico could generate incremental EBITDA of US$190-230mn, 23-26% above last 12-month figures for this region. This would push Cemex's consolidated EBITDA about 10% higher than results posted over the last 12 months.

Figure 73: Cemex's Mexico business unit (EBITDA in US$mn)

| Utilization | EBITDA margin | | | | | | |
|---|---|---|---|---|---|---|---|
| | 32% | 33% | 34% | 35% | 36% | 37% | 38% |
| **60%** | 983 | 1,014 | 1,045 | 1,076 | 1,106 | 1,137 | 1,168 |
| **65%** | 1,014 | 1,046 | 1,077 | 1,109 | 1,141 | 1,173 | 1,204 |
| **70%** | 1,045 | 1,077 | 1,110 | 1,143 | 1,175 | 1,208 | 1,241 |
| **75%** | 1,076 | 1,109 | 1,143 | 1,176 | 1,210 | 1,244 | 1,277 |
| **80%** | 1,106 | 1,141 | 1,175 | 1,210 | 1,245 | 1,279 | 1,314 |
| **85%** | 1,137 | 1,173 | 1,208 | 1,244 | 1,279 | 1,315 | 1,350 |
| **90%** | 1,168 | 1,204 | 1,241 | 1,277 | 1,314 | 1,350 | 1,387 |

*Source: Deutsche Bank; company reports*

### Long-term risks

Growth is highly dependent on infrastructure spending and credit availability. Potential delays in the execution of Energy Reform and/or National Infrastructure Program projects in Mexico could result on lower-than-anticipated EBITDA growth. Cash flow generation is paramount to achieve the deleveraging set forth in the Financing Agreement with banks. Slower pick-up of the US residential sector, a prolonged weak environment in Europe, and profitability pressure on price contraction are other key risks to keep in mind.

## Outlook

Cemex should continue to deliver solid results backed by margin expansion in the US and strong performance of the South/Central America and the Caribbean division. In Mexico, we anticipate a gradual pickup in economic activity and infrastructure investments in-line with normalizing government spending. Furthermore, the country's Energy Reform should translate into higher volumes for Cemex, especially from 2015 onward. Buy on attractive risk/reward.

## Valuation

Our target price is based on a discounted cash flow (DCF) analysis that employs a terminal growth rate of 2% in nominal terms and a WACC of 9.3%; this assumes a risk-free rate of 2.0%, risk premium of 0.9%, beta of 2.2, and total cost of debt of 8.5%.

## Risk

Downside risks are slower infrastructure and housing sectors in the US, Europe, and Mexico, debt repayment risk on lower-than-anticipated FCF generation and potential equity dilution on further convertible bonds issuances.

## Valuation

Figure 74: Comp sheet – Cement

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| **LatAm** | | | | | | | | | | | | | | | | | | | |
| Argos | 9,660 | 6,115 | 3,126,691 | 15% | 24% | 118% | 20% | 3% | 8% | 17% | 41% | 22% | 7% | NS | 14.5 | 1.2 | NS | 12.6 | 1.6 |
| Cemex | 13 | 15,858 | 114,354 | 13% | 6% | NA | 16% | -6% | 6% | 12% | NA | 17% | 0% | NS | 11.6 | 1.3 | NS | 10.3 | 1.3 |
| CLH | 17,300 | 4,482 | 5,793,004 | 1% | -5% | -4% | 34% | 15% | 6% | 8% | 15% | 35% | 16% | 17.6 | 9.7 | 2.8 | 15.4 | 8.7 | 2.4 |
| GCC* | 35 | 849 | 7,606 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Moctezuma* | 46 | 2,969 | 671 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Pacasmayo | 5 | 969 | 618 | 3% | 2% | 2% | 28% | 13% | 9% | 14% | 28% | 29% | 14% | 16.1 | 9.2 | 1.3 | 14.2 | 8.3 | 1.2 |
| Unacem | 3 | 1,637 | 679 | 0% | 0% | 5% | 32% | 7% | 19% | 24% | 30% | 33% | 8% | 19.6 | 10.6 | 1.3 | 18.1 | 9.3 | 1.2 |
| **Weighted average** | | | | 9% | 7% | 22% | 19% | 1% | 7% | 12% | 12% | 20% | 4% | 3.9 | 10.4 | 1.3 | 3.4 | 9.2 | 1.3 |
| **Global** | | | | | | | | | | | | | | | | | | | |
| ACC | 1,465 | 4,463 | 488,053 | 8% | 4% | 0% | 12% | 10% | 12% | 34% | 11% | 14% | 9% | 28.0 | 18.0 | 3.3 | 22.6 | 13.7 | 3.1 |
| Adelaide Brighton | 3 | 1,902 | 5,959 | 9% | 6% | 12% | 21% | 11% | 4% | 3% | -7% | 20% | 10% | 13.5 | 7.9 | 2.0 | 13.9 | 7.8 | 1.9 |
| Ambuja Cements | 226 | 5,679 | 429,699 | 9% | 25% | 37% | 19% | 11% | 8% | 12% | 11% | 20% | 14% | 26.2 | 13.7 | 3.4 | 23.7 | 12.1 | 3.1 |
| Anhui Conch | 25 | 15,311 | 300,180 | 10% | 20% | 27% | 34% | 17% | 11% | 14% | 15% | 35% | 20% | 8.6 | 5.2 | 1.6 | 7.5 | 4.3 | 1.4 |
| Asia Cement | 40 | 4,297 | 153,710 | 12% | 32% | 28% | 19% | 10% | 13% | 19% | 21% | 20% | 12% | 15.0 | 10.2 | 1.4 | 12.4 | 8.6 | 1.4 |
| BBMG | 6 | 5,421 | 62,822 | 0% | 18% | 7% | 15% | 7% | 17% | 10% | 15% | 14% | 8% | 6.3 | 4.7 | 0.7 | 5.6 | 4.1 | 0.7 |
| Buzzi | 12 | 2,812 | 11,808 | -9% | -13% | NS | 16% | 0% | 8% | 21% | 101% | 18% | 5% | NS | 7.8 | 1.0 | 16.9 | 6.2 | 1.0 |
| China Shanshui | 3 | 1,220 | 19,863 | 7% | 3% | -8% | 22% | 6% | 13% | 12% | 28% | 21% | 6% | 6.7 | 5.8 | 0.6 | 5.2 | 5.1 | 0.6 |
| CR Cement | 5 | 4,270 | 50,917 | 13% | 33% | 42% | 26% | 11% | 7% | 12% | 14% | 27% | 15% | 7.0 | 5.2 | 1.1 | 6.1 | 4.4 | 1.0 |
| CRH | 18 | 16,952 | 36,266 | 3% | 10% | NA | 9% | -2% | 7% | 18% | 42% | 10% | 4% | 24.2 | 9.9 | 1.4 | 17.0 | 8.3 | 1.3 |
| Eagle Materials* | 94 | 4,700 | 78,304 | 70% | 127% | 338% | 33% | 9% | 32% | 41% | 10% | 35% | 19% | 26.2 | NA | NA | 17.3 | NA | NA |
| Holcim | 72 | 24,428 | 73,387 | 3% | -6% | -1% | 18% | 6% | 8% | 16% | 23% | 19% | 7% | 20.0 | 9.3 | 1.2 | 15.1 | 8.0 | 1.2 |
| India Cements | 104 | 518 | 328,536 | -3% | -35% | -199% | 12% | 4% | 21% | 38% | NA | 14% | 1% | NA | 10.0 | 0.8 | NS | 8.4 | 0.8 |
| Italcementi | 5 | 2,172 | 4,181 | -3% | -11% | NA | 15% | -2% | 4% | 11% | NS | 16% | 1% | NA | 8.1 | 0.5 | NS | 7.3 | 0.5 |
| Lafarge | 58 | 20,627 | 33,152 | -16% | -15% | -38% | 21% | 4% | 4% | 14% | 114% | 23% | 6% | NS | 10.2 | 1.1 | 18.7 | 8.9 | 1.1 |
| Martin Marietta* | 130 | 8,746 | 108,459 | 32% | 40% | 146% | 19% | 6% | 32% | 52% | 17% | 22% | 9% | NS | 18.7 | 1.9 | 24.6 | 12.5 | 2.1 |
| Semen Indonesia | 16,100 | 7,883 | 99,102,470 | 12% | 5% | 3% | 31% | 22% | 12% | 13% | 12% | 31% | 20% | 17.2 | 11.4 | 4.0 | 15.3 | 10.1 | 3.4 |
| Shree Cement | 8,943 | 5,055 | 153,758 | 5% | -12% | -14% | 23% | 18% | 19% | 28% | 0% | 25% | 12% | 19.6 | 11.9 | 5.4 | NS | 17.0 | 5.5 |
| Siam City Cement | 410 | 2,877 | 31,114 | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Titan | 20 | 2,021 | 1,307 | 4% | -1% | NA | 16% | -3% | 10% | 28% | NS | 18% | 4% | NS | 11.2 | 1.2 | 33.7 | 8.6 | 1.1 |
| UltraTech Cement | 2,491 | 11,090 | 648,149 | 1% | -18% | -18% | 18% | 13% | 20% | 20% | 7% | 18% | 9% | 22.7 | 13.7 | 3.5 | 28.7 | 16.3 | 3.5 |
| Vulcan* | 69 | 9,043 | 67,911 | 5% | 27% | NS | 22% | 1% | 13% | 24% | 28% | 24% | 7% | NS | 17.2 | NA | 38.1 | 13.6 | NA |
| West China | 1 | 448 | 13,062 | -2% | -20% | -75% | 25% | 9% | 16% | 25% | 323% | 27% | 8% | 29.5 | 5.9 | 0.5 | 7.0 | 4.1 | 0.5 |
| **Weighted average** | | 103,946 | 1,172,989 | 6% | 9% | 68% | 20% | 8% | 12% | 19% | 107% | 21% | 10% | 17.2 | 10.1 | 1.7 | 16.6 | 8.9 | 1.6 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$'000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

## Grupo Mexico; Buy; target price P$51

### Company description

Grupo Mexico is a holding company in Mexico whose main activities are: (i) Mining (being one of the world's largest copper producers), (ii) Transportation (with the largest and most profitable railroad in Mexico), and (iii) Infrastructure (drilling services, construction & engineering, and power generation). The Infrastructure division should also benefit as new platforms, modular units, power plants, and toll roads become operational. The Transportation division should benefit from improving demand (energy and auto), increased railroad penetration, and efficiencies (and higher speeds) on ongoing investments.

The Transportation division operates Ferromex, Mexico's largest railroad with a network of 8,111km covering ~71% of the geographical area of the country and connected to five border points with the US, four ports on the Pacific Coast, and two points on the Gulf of Mexico. It also operates Ferrosur with a track network of 1,549km covering the central and eastern parts of the country.

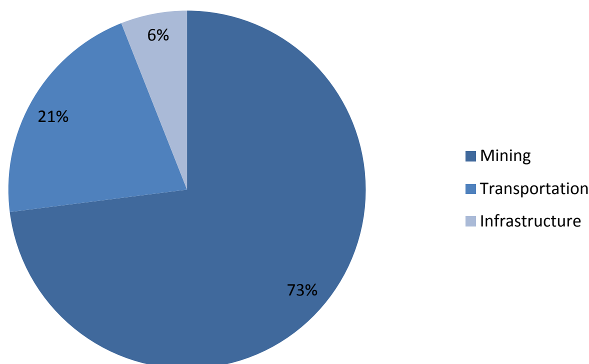
The Infrastructure division engages in engineering, procurement, infrastructure construction, and drilling activities (land and sea), as well as in the construction and service of combined cycle power plants. Pemex is a key client of this division.

In addition, Grupo Mexico has a ~20% equity stake in publicly traded Grupo Aeroportuario del Pacífico (GAP), which holds concessions to operate, maintain, and develop 12 airports in the Pacific and Central regions of Mexico.

### Business model

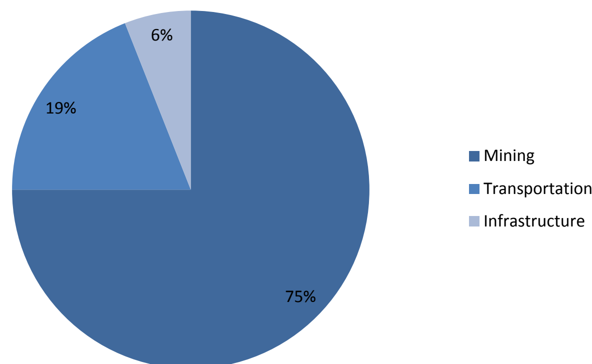
As of 9M14, Grupo Mexico has delivered revenues and EBITDA of US$7bn and 3bn, respectively.

Figure 75: Revenue breakdown




*Source: Deutsche Bank; company reports. Data as of 9M14.*

Figure 76: EBITDA breakdown




*Source: Deutsche Bank; company reports. Data as of 9M14.*

Copper accounts for about 80% of the Mining division's sales. It is used extensively in construction and electrical applications, accounting for more than 1/3 of total copper usage. Copper is also used in industrial machinery and equipment, consumer products, and the automotive and transportation industries. This division also produces zinc necessary to produce die castings (used extensively in the automotive and electrical industries).

The energy, chemical, industrial, and automotive segments account for about 40% of the Transportation division's sales. Other sectors such as agricultural, industrial, mineral, metals, and cement account for the rest.

### Key opportunities ahead

Grupo Mexico has the potential of becoming one of the largest diversified infrastructure conglomerates in the world. This will require faster growth of the transportation and infrastructure divisions vis-à-vis the businesses' other divisions.

- Energy. Oil drilling, services, power generation. Development of shale reserves in Mexico could represent higher cargo from Pemex, the most important customer for the transportation division.
- Infrastructure. Civil and industrial engineering. Copper is used intensively in the construction industry. Intermodal, expected to be the most dynamic segment for the transportation division in the near future.
- Industrial. Increased cargo for the automotive and electromechanical sectors, as well as other major industries. Copper and zinc are used in the automotive and electrical industries.

### Quantifying the potential impact

As of 9M14, Grupo Mexico's consolidated revenues and EBITDA stand at US$7.0bn and US$3.0bn, respectively. Deutsche Bank's Metals & Mining analyst, Wilfredo Ortíz, expects the company to deliver 2014 full-year revenues and EBITDA of US$9.8bn and US$4.2bn.

The transportation division has delivered revenues and EBITDA of US$1.5bn and US$537mn (i.e., 36% EBITDA margin) in 9M14, while the infrastructure division has posted revenues and EBITDA of US$405mn and US$151mn (i.e., 37% EBITDA margin). Based on these results, we estimate that, for the full-year 2014, the transportation division could deliver revenues and EBITDA of US$2.0bn and US$720mn and the infrastructure division revenues and EBITDA of US$550mn and US$205mn.

Based on company's capex plans, we estimate that the transportation division has the potential to post load volume at 52,000 Million Tons/Km this year and grow it by 5% per year going forward.

We forecast that each 5% increase in load volume of the transportation division vs a potential 52,000 Million Tons/Km this year along with stable EBITDA margins should translate into about US$40mn of incremental EBITDA, +6% vs. potential 2014 full-year figures for this division, according to our estimates. Furthermore, increased load volume along with stable prices should come along with higher economies of scale. We forecast that each 50bp of EBITDA margin expansion at a given utilization rate should translate into about US$12mn of incremental EBITDA, +2-3% vs. potential 2014 full-year figures for this division, according to our estimates.

Assuming that the transportation division is able to post load volume at about 63,000 Million Tons/Km and that this allows the EBITDA margin to expand to 37-38%, we estimate the company could generate incremental EBITDA of US$180-200mn, 25-28% above our estimated potential 2014 full-year figure for this division.

Figure 77: Transportation (EBITDA in US$mn)

| Load volume | EBITDA margin | | | | | | |
|---|---|---|---|---|---|---|---|
| | **36.0%** | **36.5%** | **37.0%** | **37.5%** | **38.0%** | **38.5%** | **39.0%** |
| **52,000** | 720 | 730 | 740 | 750 | 760 | 770 | 780 |
| **54,600** | 756 | 767 | 777 | 788 | 798 | 809 | 819 |
| **57,330** | 794 | 805 | 816 | 827 | 838 | 849 | 860 |
| **60,197** | 833 | 845 | 857 | 868 | 880 | 891 | 903 |
| **63,206** | 875 | 887 | 899 | 912 | 924 | 936 | 948 |
| **66,367** | 919 | 932 | 944 | 957 | 970 | 983 | 995 |
| **69,685** | 965 | 978 | 992 | 1,005 | 1,018 | 1,032 | 1,045 |

*Source: Deutsche Bank; company reports. Note: load volume in Million Tons/Km*

Regarding the infrastructure division, our recent conversations with the company point toward potential EBITDA of US$470-480mn by 2018, including only the ramp-up of current projects. This would imply incremental EBITDA of about US$260mn vs potential 2014 results for this division, according to our estimates.

We estimate that incremental EBITDA from the potential rental of each additional platform could reach US$30-45mn; in addition, potential incremental EBITDA from each additional power plant could stand at US$100mn. Needless to say, this would come along higher capex thus, on a discounted-cash flow basis positive net present value (NPV) should be achieved in the medium-term.

Assuming that the infrastructure division is able to reach the 2018-estimated EBITDA with current projects and that the infrastructure division is able to benefit from one additional platform and one additional power plant, we estimate it could generate incremental EBITDA of US$600-620mn, three times our estimated potential 2014 full-year figure for this division.

In sum, our base-case scenario would imply a combined effect on the transportation and infrastructure divisions yielding incremental EBITDA of US$780-820mn, 19-20% higher-than-consolidated potential EBITDA for Grupo Mexico in 2014.

Our estimates might be conservative given that we account for no incremental volume the Mining division, especially copper which is used extensively in construction and electrical applications.

## Long-term risks

Lower-than-expected commodity prices; operational, technical, and environmental challenges; and project execution and fluctuations in FX present risks to Grupo Mexico. Delays in developing new projects could result in an increase in costs and not lead to anticipated increases in production. M&A cannot be ruled out, nor can the possibility of government intervention (including increased taxation or changes to existing concessions).

## Outlook

Grupo Mexico (GMEXCOB.MX) is a holding company in Mexico whose main activities are: (i) Mining (being one of the world's largest copper producers); (ii) Transportation (with the largest and most profitable railroad in Mexico) and (iii) Infrastructure (drilling services, construction & engineering and power generation). Grupo Mexico is one of the few listed companies that could benefit from Mexico's new Energy Reform (already having a relationship with PEMEX) and consequent increased infrastructure investments. Infrastructure division should also benefit as new platforms, modular units, power plants and toll roads become operational. Transportation division should benefit from improving demand (energy and auto), increased railroad penetration and efficiencies (and higher speeds) on ongoing investments. Longer term, the company should benefit from Southern Copper's potential to meaningfully increase FCF generation (and dividends) as new lower cost production comes on stream. We rate Grupo Mexico a Buy.

## Valuation

We have set our PT for Grupo Mexico's shares at 0.9x estimated net asset value (NAV). Grupo Mexico's NAV comprises: (i) 82.5% stake in Southern Copper (valued at 1.0x estimated NPV calculated under a DCF methodology, using 10.1% WACC, a 1.25% nominal terminal growth rate and a real LT copper price forecast of $3.22/lb); (ii) wholly owned US copper producer Asarco (valued using an EV/EBITDA multiples-based approach); (iii) 75% (59% effective) stake in Mexican railroad operations (valued using an EV/EBITDA multiples-based approach derived from North American operators); (iv) wholly owned Infrastructure division (drilling services, construction & engineering and power generation) and (v) 23% stake in publicly traded Grupo Aeroportuario del Pacífico (GAP) (valued at 1.0x estimated NPV/share calculated under a DCF methodology, using a WACC of 10.0%).

## Risk

Key downside risks to our Buy rating are lower-than-expected copper, moly, silver and zinc prices and/or production. Risks also include operational and technical challenges, and project execution as AMC expands/ramps up several operations/projects that could result in cost pressures (and not lead to production increases) and capex overruns. Environmental constraints and/or permitting/licensing delays could derail expansion targets, as could relationships with local communities and labor forces along with geopolitical risks (Mexico and Peru). Potential clean-up charges and liability from recent spill at Buenavista's SX/EW III, with company creating a $151m clean-up fund. Fluctuating commitment to a capex plan could also delay expansion plans. Cash costs could be impacted by currency fluctuations, changes in raw material prices and other pressures. Ongoing legal disputes regarding ownership stake in GAP could lead to non-operating costs and divert management's attention. Given expectation of FCF generation, possible M&A cannot be ruled out nor can the possibility of government intervention (including increased taxation or changes to existing concessions).

## Valuation

### Figure 78: Comp sheet – Construction

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Chicago Bridge & Iron | 58 | 6,227 | 105,608 | 17% | 30% | 16% | 9% | 4% | 15% | 22% | 17% | 10% | 4% | 10.8 | 6.1 | 2.1 | 9.5 | 4.9 | 1.8 |
| Fluor Corporation | 69 | 10,781 | 108,163 | -19% | 1% | 1% | 6% | 2% | 12% | 5% | 9% | 6% | 3% | 16.1 | 6.2 | 2.9 | 14.2 | 5.7 | 2.5 |
| Jacobs Engineering | 49 | 6,573 | 60,526 | 7% | -21% | -45% | 4% | 3% | 8% | 39% | 67% | 5% | 2% | 19.7 | 12.2 | 1.6 | 13.5 | 7.4 | 1.3 |
| Mills* | 11 | 580 | 13,181 | 1% | -4% | -48% | 47% | 21% | 8% | 8% | 61% | 48% | 16% | 12.5 | 5.2 | 1.3 | 11.1 | 4.6 | 1.2 |
| **Weighted average** | | | | -3% | -6% | -14% | 7% | 3% | 11% | 34% | 33% | 8% | 3% | 13.9 | 8.4 | 2.2 | 13.1 | 5.8 | 1.9 |

*Source: Deutsche Bank and Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

### Figure 79: Comp sheet – Conglomerate

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Alfa* | 39 | 14,887 | 32,631 | 9% | 23% | -56% | 12% | 3% | 9% | 10% | NS | 12% | 4% | 24.5 | 9.3 | 3.1 | 21.3 | 8.2 | 2.8 |
| Grupo Carso* | 81 | 13,568 | 3,580 | 3% | -39% | -47% | 13% | 16% | 9% | 11% | 10% | 13% | 8% | 26.7 | 16.0 | 3.5 | 23.9 | 14.1 | 3.1 |
| Grupo Mexico | 45 | 25,807 | 33,083 | 5% | 5% | 4% | 43% | 19% | 18% | 28% | 22% | 46% | 19% | 14.4 | 7.8 | 2.4 | 11.7 | 6.1 | 2.1 |
| Kuo* | 30 | 993 | 405 | 63% | 82% | -48% | 11% | 7% | 8% | 11% | 23% | 11% | 3% | 21.2 | 6.7 | 1.7 | 17.7 | 6.0 | 1.6 |
| **Weighted average** | | | | 7% | 1% | -26% | 27% | 14% | 13% | 19% | 13% | 28% | 12% | 20.3 | 10.2 | 2.9 | 17.4 | 8.6 | 2.5 |

*Source: Deutsche Bank and Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

### Figure 80: Comp sheet – Metals and Mining

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Fresnillo* | 205 | 11,113 | 10 | -11% | -11% | NA | 45% | 15% | 24% | 24% | NA | 45% | 18% | NS | 18.2 | 4.7 | NS | 15.0 | 4.4 |
| Frisco* | 23 | 4,267 | 856 | 27% | 19% | NA | 39% | 2% | 10% | 20% | NA | 43% | 13% | NS | 15.5 | 3.5 | 29.5 | 12.8 | 3.0 |
| ICH* | 73 | 2,321 | 3,104 | 14% | 30% | NA | 11% | 6% | 12% | 22% | NA | 12% | 5% | 18.4 | 8.5 | 1.1 | 17.6 | 6.6 | 1.0 |
| Peñoles* | 289 | 8,419 | 3,546 | -7% | 6% | NA | 26% | 7% | 7% | 7% | NA | 26% | 7% | NS | 8.2 | 2.6 | 24.9 | 7.6 | 2.3 |
| Simec* | 51 | 1,870 | 2,273 | 17% | 42% | NA | 11% | 8% | 13% | 39% | NA | 13% | 7% | 13.5 | 5.8 | 0.9 | 11.0 | 3.3 | 0.9 |
| **Weighted average** | | | | 0% | 6% | NA | 33% | 9% | 15% | 19% | NA | 34% | 12% | 2.4 | 13.1 | 3.3 | 14.2 | 11.0 | 3.1 |

*Source: Deutsche Bank and Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

# Other potential beneficiaries (non-rated)

## Alfa

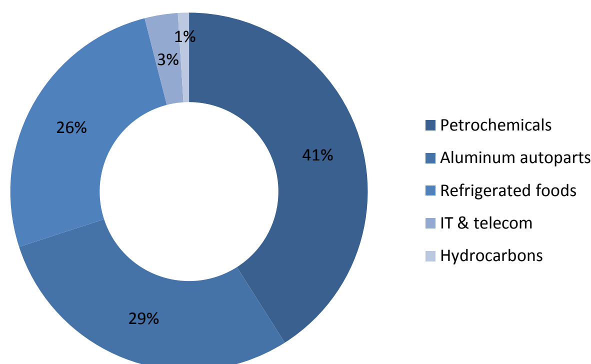
### Company description

Established in 1974, Alfa is today one of the largest conglomerates in the world. It has 121 plants in 24 different countries. The company leads the Mexican market in petrochemicals such as polypropylene, expandable polystyrene (EPS), and caprolactam and is one of the world's largest producers of polyester (PTA, PET and fibers). Alfa is also engaged in the exploration and exploitation of natural gas and hydrocarbons. It is currently developing the Eagle Ford Shale (EFS) and Edwards Trend (ET) plays in South Texas. In addition, it is the leading producer of cold cuts in North America and Europe, and of cheese in Mexico, as well as a main player in information technologies and communication services for the business segment in Mexico.

### Business model

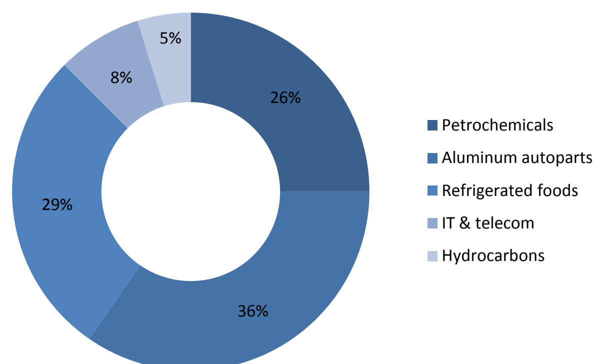
Close to 75% of Alfa's assets are located in the energy and industrial sectors. The company has delivered 12% EBITDA CAGR since 2004, and it anticipates revenues and EBITDA in 2014 to reach close to US$16bn and US$2.0bn, respectively.

Figure 81: Revenue breakdown




*Source: Deutsche Bank; company reports. Company guidance in 2014.*

Figure 82: EBITDA breakdown




*Source: Deutsche Bank; company reports. Company guidance in 2014.*

Alfa operates in the following segments:

- Energy. Production of integrated polyester groups used mainly for the food & beverage industry, of polyester fibers for textiles, plastics and chemicals for fertilizers, capture natural gas, ethane and propane advantage in North America, E&P in the US (especially in TX, OK, CO, and KS), further exploit Eagle Ford Shale along with Pioneer Natural Resources and Reliance Industries, E&P in Mexico along with Monclova Pirineos Gas, oil and gas services in Mexico along with Petrofac.
- Industrial. Plastics and chemicals for the automotive sector increase the penetration of aluminum structural components.
- Housing. Plastics and chemicals for the home appliances.

## Quantifying the potential impact

As of 9M14, Alfa's consolidated revenues and EBITDA stand at about US$13bn and US$1.5bn, respectively. For the full-year 2014, Bloomberg Finance LP consensus expects the company to deliver revenues of P$222bn (ie, US$16bn) and EBITDA of P$27bn (i.e. US$2.0bn).

The petrochemical division has delivered revenues and EBITDA of US$4.8bn and US$362mn (i.e., 7.5% EBITDA margin) in 9M14. In turn, it has accounted for 38% and 24% of the company's consolidated revenues and EBITDA, respectively. In 2014, Bloomberg Finance LP consensus expects the petrochemical division to deliver revenues and EBITDA of P$84bn (ie, US$6bn) and EBITDA of P$7bn (i.e. US$500mn).

This division currently has capacity to produce 6.6mn tons per year (slightly more than half located in Mexico). The company has indicated its current utilization rate stands at about 80%. Increased utilization of the Mexican assets backed by growth from the energy and industrial sectors should come along with higher economies of scale which in turn should allow Alfa's petrochemical division to post stronger EBITDA in years to come.

The auto parts division has posted revenues and EBITDA of US$3.5bn and US$543mn (i.e., 15% EBITDA margin) in 9M14. In turn, it has accounted for 28% and 36% of the company's consolidated revenues and EBITDA, respectively.

Close to 60% of Alfa's auto parts division's plants are located in North America, with Mexico accounting for about 2/3 of this. In turn, 35% of Alfa's auto parts activities are domestically based.

Year-to-date, the auto parts division sold volumes at stand at 38mn equivalent heads, +7% YoY. In 2013, it sold 48mn equivalent heads vs 55mn equivalent heads of annual installed capacity; this implies that operations are running at about 90% utilization rate. Increased utilization of Mexican assets backed by growth from the industrial sector should come along with higher economies of scale, in turn allowing Alfa's auto parts division to post stronger EBITDA in years to come.

Note that Alfa's hydrocarbons division currently operates exclusively in the US. In 2013, the hydrocarbons division posted revenues and EBITDA of US$133mn and US$91mn (i.e., EBITDA margin of 68%). The Eagle Ford Shale (EFS) and Edwards Trend (ET) regions in South Texas reach also several regions in northern Mexico.

## Long-term risks

Alfa's global operations expose it to foreign exchange and interest rate risk. In carrying out its activities, the company depends on the supply of raw materials provided by its suppliers, both in Mexico and abroad, among which are intermediate petrochemicals, beef products, pork and poultry, dairy products, and aluminum scrap, principally. Natural gas is one of the main energy inputs used by the company. The selling at first hand is determined by the price of that product on the "spot" market in South Texas, US, which in the past has experienced volatility. Finally, Alfa is actively engaged in M&A activity; future transactions could prove to be less accretive than originally anticipated.

## Valuation

### Figure 83: Comp sheet – Food and Beverage

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Arca Continental* | 87 | 10,334 | 8,824 | 2% | 9% | 6% | 22% | 10% | 8% | 13% | 18% | 23% | 11% | 22.2 | 11.2 | 3.1 | 18.9 | 10.3 | 3.0 |
| Bachoco* | 66 | 2,924 | 3,615 | 3% | 35% | -77% | 13% | 5% | 3% | -16% | NS | 11% | 6% | 12.5 | 5.8 | 1.8 | 15.6 | 6.6 | 1.7 |
| Kof | 138 | 21,003 | 8,648 | 10% | 17% | 21% | 20% | 7% | 6% | 6% | 13% | 20% | 9% | 20.5 | 9.6 | 2.4 | 18.1 | 8.8 | 2.2 |
| Cultiba* | 20 | 1,059 | 438 | 8% | 4% | -148% | 8% | 0% | 4% | 17% | NA | 10% | 2% | NS | 7.9 | 1.1 | NS | 6.3 | 0.9 |
| Femsa | 132 | 33,196 | 22,565 | 11% | 15% | 6% | 16% | 6% | 9% | 8% | 14% | 16% | 6% | 28.0 | 11.8 | 2.7 | 24.5 | 10.7 | 2.6 |
| Gruma | 150 | 4,762 | 9,363 | -9% | 6% | 13% | 14% | 6% | 4% | 13% | 8% | 15% | 7% | 17.9 | 10.9 | 3.6 | 16.6 | 9.3 | 2.7 |
| Bimbo | 39 | 13,499 | 5,433 | 7% | 14% | 43% | 11% | 3% | 9% | 23% | 40% | 12% | 4% | NS | 12.0 | 3.5 | 21.0 | 9.5 | 3.0 |
| Herdez* | 36 | 1,142 | 2,266 | 6% | 10% | 20% | 16% | 5% | 7% | 9% | 10% | 17% | 5% | 21.0 | 11.4 | 2.5 | 19.2 | 10.1 | 2.4 |
| Lala* | 30 | 5,405 | 6,175 | 5% | 7% | -69% | 12% | 6% | 8% | 13% | 365% | 13% | 8% | 22.7 | 11.6 | 3.3 | 19.9 | 10.1 | 3.0 |
| Maseca* | 21 | 1,416 | 103 | NA | NA | NA | NA | 11% | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| **Weighted average** | | | | 7% | 14% | 7% | 16% | 6% | 7% | 10% | 37% | 16% | 7% | 19.6 | 10.8 | 2.8 | 20.3 | 9.6 | 2.5 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

### Figure 84: Comp sheet –Conglomerates

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Alfa* | 39 | 14,887 | 32,631 | 9% | 23% | -56% | 12% | 3% | 9% | 10% | NS | 12% | 4% | 24.5 | 9.3 | 3.1 | 21.3 | 8.2 | 2.8 |
| Grupo Carso* | 81 | 13,568 | 3,580 | 3% | -39% | -47% | 13% | 16% | 9% | 11% | 10% | 13% | 8% | 26.7 | 16.0 | 3.5 | 23.9 | 14.1 | 3.1 |
| Grupo Mexico | 45 | 25,807 | 33,083 | 5% | 5% | 4% | 43% | 19% | 18% | 28% | 22% | 46% | 19% | 14.4 | 7.8 | 2.4 | 11.7 | 6.1 | 2.1 |
| Kuo* | 30 | 993 | 405 | 63% | 82% | -48% | 11% | 7% | 8% | 11% | 23% | 11% | 3% | 21.2 | 6.7 | 1.7 | 17.7 | 6.0 | 1.6 |
| **Weighted average** | | | | 7% | 1% | -26% | 27% | 14% | 13% | 19% | 13% | 28% | 12% | 20.3 | 10.2 | 2.9 | 17.4 | 8.6 | 2.5 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

### Figure 85: Comp sheet – Oil and Gas

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Alpek* | 23 | 3,575 | 1,922 | -6% | 37% | NA | 8% | 0% | 1% | 13% | NA | 9% | 3% | 23.4 | 8.9 | 1.9 | 18.8 | 7.9 | 1.8 |
| Ienova* | 80 | 6,745 | 6,403 | 11% | 18% | -69% | 40% | 21% | 9% | 21% | NA | 45% | 30% | NS | 23.3 | 2.8 | 28.5 | 19.9 | 2.8 |
| Mexichem* | 51 | 7,917 | 10,165 | 7% | 4% | -20% | 17% | 2% | 16% | 21% | NA | 17% | 6% | 28.0 | 9.8 | 2.3 | 19.1 | 8.3 | 2.2 |
| Pochteca* | 14 | 138 | 71 | NA | NA | NA | NA | 1% | NA | NA | NA | NA | NA | 19.5 | NA | NA | 12.0 | NA | NA |
| **Weighted average** | | | | 6% | 15% | -34% | 24% | 8% | 11% | 20% | NA | 26% | 14% | 16.7 | 14.5 | 2.4 | 22.4 | 12.4 | 2.3 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

### Figure 86: Comp sheet – Technology, Media, and Telecom

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| America Movil* | 16 | 80,345 | 186,539 | 7% | 5% | -69% | 32% | 9% | 4% | 3% | 271% | 32% | 10% | 14.6 | 5.9 | 4.7 | 12.8 | 5.7 | 3.9 |
| Axtel* | 4 | 347 | 1,024 | 8% | -51% | -94% | 26% | 23% | 0% | -1% | NS | 26% | NS | NA | 4.3 | 0.8 | NA | 4.4 | 0.9 |
| Azteca* | 7 | 1,520 | 1,511 | 8% | 12% | -8% | 30% | 10% | 4% | 8% | 53% | 31% | 12% | 15.8 | 6.6 | 1.6 | 12.6 | 5.9 | 1.4 |
| CIE* | 9 | 389 | 2 | NA | NA | NA | NA | 2% | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| Televisa* | 100 | 21,192 | 70,572 | 8% | 5% | -57% | 38% | 11% | 7% | 9% | NS | 38% | 12% | NS | 11.2 | 3.7 | 27.5 | 10.1 | 3.4 |
| Maxcom* | 2 | 191 | 305 | -2% | NA | NA | 28% | NS | 0% | 11% | NA | 31% | 4% | NA | 4.9 | 0.6 | NA | 4.6 | 0.7 |
| Megacable* | 59 | 3,692 | 1,462 | 11% | 12% | -67% | 43% | 19% | 12% | 10% | 319% | 43% | 21% | 21.4 | 10.1 | 3.1 | 19.6 | 9.0 | 2.9 |
| **Weighted average** | | | | 7% | 5% | -65% | 33% | 10% | 5% | 4% | 214% | 33% | 11% | 11.9 | 7.1 | 4.4 | 15.8 | 6.6 | 3.7 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

## Grupo Carso

### Company description

Grupo Carso is one of the largest diversified conglomerates in LatAm. It is involved in three sectors: Retail, Industrial, and Infrastructure. The Industrial division offers a portfolio of products and services focused on satisfying needs in the telecom, construction, electrical, power, automotive, and mining industries. The Infrastructure division provides service to five sectors: the petroleum and chemical industry, duct installation, infrastructure, civil construction, and housing development.

During October 2014, Grupo Carso announced corporate reorganization on its current energy-related activities through its subsidiary Carso Energy. Certain assets were proposed to be integrated into two divisions: one related to oil and gas and the other one related to electric power activities:

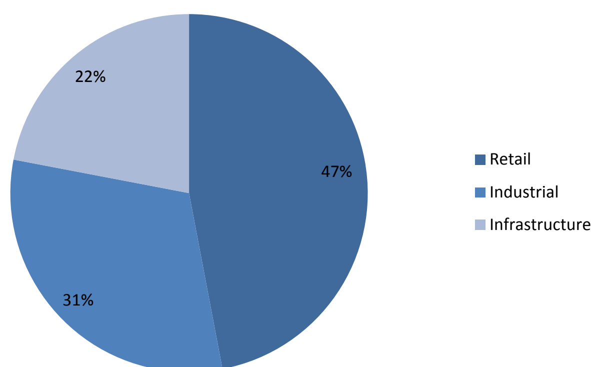
- Drilling of oil wells and services such as drilling fluids, directional drilling, cementing; operation and leasing of drilling rigs (Jack ups); exploration and production of two oil fields in Colombia.
- Engineering and installation of photovoltaic systems, efficiency and saving energy systems such as LEDs, solar panels, electricity generation.

Carso Energy will consolidate assets of more than P$8bn as well as experienced human capital, seeking operational efficiency and financial strength.

### Business model

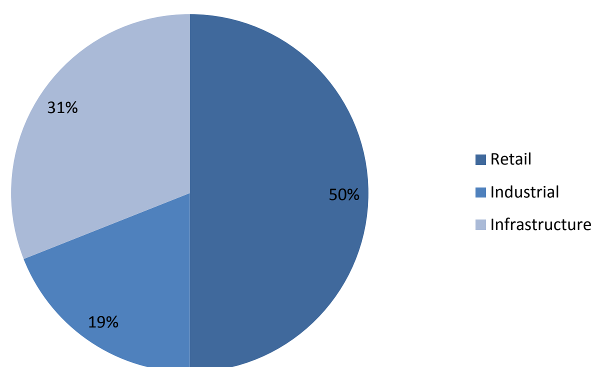
Half of Grupo Carso's EBITDA is generated by the Industrial and Infrastructure divisions. The company anticipates EBITDA in 2014 to reach more than P$12bn and the net cash position to increase to almost P$5bn backed by the sale of Philip Morris Mexico.

Figure 87: Revenue breakdown




*Source: Deutsche Bank; company reports. Data as of 2013.*

Figure 88: EBITDA breakdown




*Source: Deutsche Bank; company reports. Data as of 2013.*

In the industrial division, close to 60% of revenues are contributed by the construction sector, 26% by the automotive industry, and the remaining 14% by telecom.

In the Infrastructure division, manufacturing and services for the oil and chemical industries as well as the installation of ducts contribute more than

50% of revenues. Infrastructure and construction represent another 25% of revenues. Housing accounts for less than 5%.

Grupo Carso operates in the following segments:

- Energy. Oil platforms, natural gas ducts, drilling of oil wells, vapor injection wells, production of solar panels.
- Infrastructure. Highways, dams and water treatment plants, aqueducts, sewage systems, industrial plants, office buildings, commercial real estate, hospitals.
- Industrial. High-tension, telecom, electrical, coaxial and fiber optic cables, electromechanical installations, shock absorbers and automotive harnesses, precision steel tubing, transformers and reactors.
- Housing. Low-income housing

### Quantifying the potential impact

As of 9M14, Grupo Carso's consolidated revenues and EBITDA stand at P$58bn and P$7.2bn, respectively. For the full-year 2014, Bloomberg Finance LP consensus expects the company to deliver revenues of P$89bn and EBITDA of P$12bn.

The industrial division has delivered revenues and EBITDA of P$19bn and P$2.1bn (i.e., 11% EBITDA margin) in 9M14, while the infrastructure division has posted revenues and EBITDA of P$11bn and P$1.9bn (i.e., 18% EBITDA margin). This means that the industrial and infrastructure divisions have accounted for 29% and 26%, respectively.

Grupo Carso has indicated the current utilization ratio of these two divisions currently stands at about 60%. We therefore see potential for higher economies of scale arising for increased utilization ratios at Grupo Carso's industrial and infrastructure divisions.

### Long-term risks

The Industrial division is exposed to adverse movements of raw material costs, which could jeopardize the company's profits. Performance of the Infrastructure division has historically been tied to Mexican public sector spending and Grupo Carso's ability to bid successfully for such contracts. A decrease in public sector spending as a result of deterioration of the Mexican economy, changes in Mexican government policy, or other reasons can adversely affect Grupo Carso's financial condition and results of operations. In addition, increased competition in energy projects could affect the company's margins and pricing power.

## Valuation

### Figure 89: Comp sheet – Construction

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Chicago Bridge & Iron | 54 | 5,797 | 118,176 | 17% | 30% | 16% | 9% | 4% | 15% | 19% | 17% | 10% | 4% | 10.4 | 5.8 | 1.9 | 9.0 | 4.7 | 1.7 |
| Fluor Corporation | 66 | 10,362 | 99,155 | -13% | 0% | 2% | 6% | 2% | 19% | 21% | 26% | 6% | 3% | 15.4 | 5.8 | 2.7 | 11.9 | 4.6 | 2.3 |
| Jacobs Engineering | 47 | 6,270 | 58,313 | 9% | -18% | -36% | 4% | 3% | 9% | 52% | 83% | 6% | 3% | 18.4 | 10.4 | 1.4 | 12.2 | 6.2 | 1.2 |
| Mills* | 16 | 855 | 12,015 | 9% | 8% | -10% | 50% | 21% | 13% | 14% | 20% | 50% | 18% | 14.1 | 6.1 | 1.8 | 12.2 | 5.2 | 1.6 |
| **Weighted average** | | | | 0% | -3% | -10% | 7% | 4% | 14% | 35% | 42% | 8% | 4% | 13.4 | 7.1 | 2.0 | 11.4 | 4.9 | 1.7 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

### Figure 90: Comp sheet – Infrastructure Conglomerate

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Alfa* | 58 | 6,227 | 105,608 | 17% | 30% | 16% | 9% | 4% | 15% | 22% | 17% | 10% | 4% | 10.8 | 6.1 | 2.1 | 9.5 | 4.9 | 1.8 |
| Grupo Carso* | 69 | 10,781 | 108,163 | -19% | 1% | 1% | 6% | 2% | 12% | 5% | 9% | 6% | 3% | 16.1 | 6.2 | 2.9 | 14.2 | 5.7 | 2.5 |
| Grupo Mexico | 49 | 6,573 | 60,526 | 7% | -21% | -45% | 4% | 3% | 8% | 39% | 67% | 5% | 2% | 19.7 | 12.2 | 1.6 | 13.5 | 7.4 | 1.3 |
| Kuo* | 11 | 580 | 13,181 | 1% | -4% | -48% | 47% | 21% | 8% | 8% | 61% | 48% | 16% | 12.5 | 5.2 | 1.3 | 11.1 | 4.6 | 1.2 |
| **Weighted average** | | | | -3% | -6% | -14% | 7% | 3% | 11% | 34% | 33% | 8% | 3% | 13.9 | 8.4 | 2.2 | 13.1 | 5.8 | 1.9 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

### Figure 91: Comp sheet – Metals and Mining

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Fresnillo* | 205 | 11,113 | 10 | -11% | -11% | NA | 45% | 15% | 24% | 24% | NA | 45% | 18% | NS | 18.2 | 4.7 | NS | 15.0 | 4.4 |
| Frisco* | 23 | 4,267 | 856 | 27% | 19% | NA | 39% | 2% | 10% | 20% | NA | 43% | 13% | NS | 15.5 | 3.5 | 29.5 | 12.8 | 3.0 |
| ICH* | 73 | 2,321 | 3,104 | 14% | 30% | NA | 11% | 6% | 12% | 22% | NA | 12% | 5% | 18.4 | 8.5 | 1.1 | 17.6 | 6.6 | 1.0 |
| Peñoles* | 289 | 8,419 | 3,546 | -7% | 6% | NA | 26% | 7% | 7% | 7% | NA | 26% | 7% | NS | 8.2 | 2.6 | 24.9 | 7.6 | 2.3 |
| Simec* | 51 | 1,870 | 2,273 | 17% | 42% | NA | 11% | 8% | 13% | 39% | NA | 13% | 7% | 13.5 | 5.8 | 0.9 | 11.0 | 3.3 | 0.9 |
| **Weighted average** | | | | 0% | 6% | NA | 33% | 9% | 15% | 19% | NA | 34% | 12% | 2.4 | 13.1 | 3.3 | 14.2 | 11.0 | 3.1 |

*Source: Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

## ICH

### Company description

Founded in 1934, ICH is one of the largest Mexican steel production and processing companies. It is the largest Special Bar Quality ("SBQ") steel producer in North America and the leading structural steel producer in Mexico. ICH has a total of 17 steel production and processing plants and four scrap metal processors in Mexico, as well as eight plants in the United States and Canada. The company has 2.2mn tons of steel-making capacity in the US (1.8mn tons of rolling and finishing capacity) and 3.3mn tons of EAF steel-making capacity in Mexico (2.6mn tons of rolling and finishing capacity).

Currently, ICH's major markets are energy (oil & gas), automotive, and appliances, among others.

ICH holds an 82.5% stake in Mexican steel producer Simec.

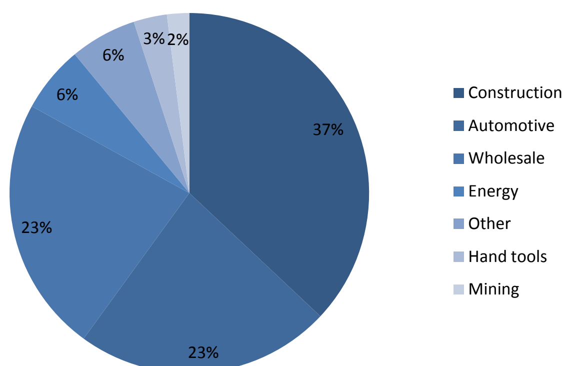
### Business model

ICH is the only producer of SBQ in Mexico, with a market participation of approximately 40%; the rest is imported. In the United States, it has an approximate market participation of 20%.

The company's main clients in the special bar quality steel and large diameter pipe product line belong to the automotive, manufacturing, petroleum, and gas industries. For commercial steels – including structural shapes, merchant shapes, and rebar – the main clients belong to the construction sector.

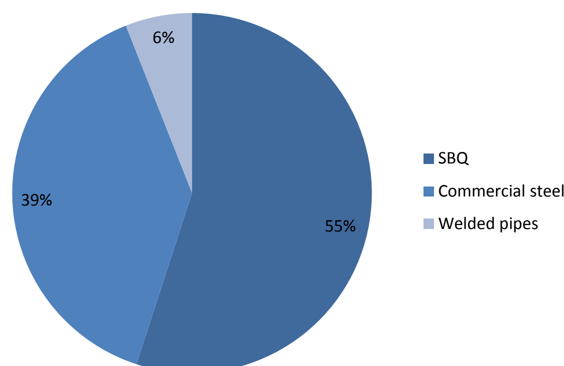
The proximity of plants to clients and raw materials allows ICH and its clients to significantly reduce distribution costs.

Figure 92: Sales breakdown per industry




*Source: Deutsche Bank; company reports. Data as of 2013.*

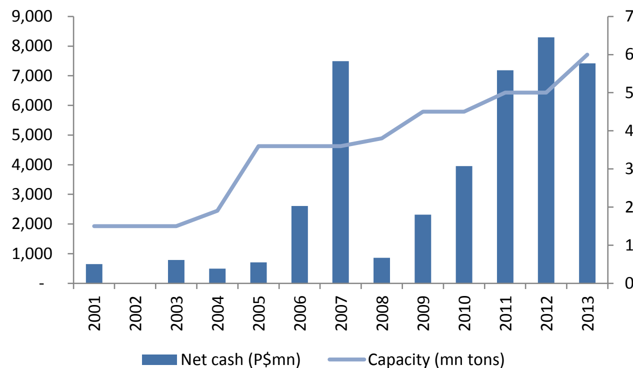
Figure 93: Sales breakdown per product




*Source: Deutsche Bank; company reports. Data as of 2013.*

The company has delivered strong growth driven by acquisitions and operational improvements. It enjoys a robust cash position to pursue new ventures, especially positioning itself in high value-added niches and making investments in new product lines.

Figure 94: Historical net cash and capacity evolution




*Source: Deutsche Bank; company reports*

ICH can serve the following segments:

- Energy. The petroleum industry uses SBQ to produce valves and pipeline couplings for oil extraction, structural shapes used mainly in the construction of electricity transmission towers, seamed pipes used in the oil & gas sector.
- Infrastructure. Steel train rails; structural shapes used mainly in commercial and office structures; rebars used to reinforce cement and concrete highways and structures in columns, floors, foundations, and walls; seamed pipes used in hydraulic projects.
- Industrial. Auto parts such as such as axles, transmissions, and suspensions; structural shapes for trailer chassis and platforms for trucks and buses; angles, channels, flat bars, and round and square bars for construction.
- Housing. Steel parts for kitchen appliances.

### Quantifying the potential impact

ICH has a total of 25 steel production and processing plants worldwide, with combined steel-making capacity of 5.5mn tons. In 2013, it sold 2.3mn tons of steel (i.e. 1.9mn tons in 9M14) which implies a utilization ratio of about 42%.

Consolidated revenues and EBITDA in 9M14 stand at P$24bn and P$2.2bn (ie, 9% EBITDA margin), respectively. For the full-year 2014, Bloomberg Finance LP consensus expects the company to deliver revenues of P$32bn and EBITDA of P$3.4bn.

In Mexico, the company has 16 plants, including value-added and scrap processing factories, steel mill and rolling, and welded pipes production facilities. The company’s installed capacity in Mexico stands at 3.3mn tons of EAF steel-making capacity (2.6mn tons of rolling and finishing capacity).

The Mexico business unit has delivered 9M14 sales and EBITDA of P$13bn and P$1.8bn (i.e., about 14% EBITDA margin). We see potential for higher economies of scale arising for increased utilization ratios at ICH’s Mexico-based assets as a result of increased activity in the energy, industrial and infrastructure sectors.

## Long-term risks

ICH is materially exposed to price volatility in steel markets worldwide. This could be directly related to potential overcapacity in countries where the company currently does not operate. In addition, adverse FX movements of the Mexican peso vis-à-vis the US dollar could impact the company's operations. Environmental laws in Mexico and the US could translate into unforeseen costs. Scrap, natural gas, and electricity are key inputs for which the cost could increase.

## Valuation

Figure 95: Comp sheet – Metals and Mining

| | | | | 2014E Growth | | | 2014E Mg. | | 2015E Growth | | | 2015E Mg. | | 2014E | | | 2015E | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Companies | Last price | Market Cap | ADTV | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | Rev | EBITDA | Net Inc. | EBITDA | Net Inc. | P/E | EV/EBITDA | PBV | P/E | EV/EBITDA | PBV |
| Fresnillo* | 205 | 11,113 | 10 | -11% | -11% | NA | 45% | 15% | 24% | 24% | NA | 45% | 18% | NS | 18.2 | 4.7 | NS | 15.0 | 4.4 |
| Frisco* | 23 | 4,267 | 856 | 27% | 19% | NA | 39% | 2% | 10% | 20% | NA | 43% | 13% | NS | 15.5 | 3.5 | 29.5 | 12.8 | 3.0 |
| ICH* | 73 | 2,321 | 3,104 | 14% | 30% | NA | 11% | 6% | 12% | 22% | NA | 12% | 5% | 18.4 | 8.5 | 1.1 | 17.6 | 6.6 | 1.0 |
| Peñoles* | 289 | 8,419 | 3,546 | -7% | 6% | NA | 26% | 7% | 7% | 7% | NA | 26% | 7% | NS | 8.2 | 2.6 | 24.9 | 7.6 | 2.3 |
| Simec* | 51 | 1,870 | 2,273 | 17% | 42% | NA | 11% | 8% | 13% | 39% | NA | 13% | 7% | 13.5 | 5.8 | 0.9 | 11.0 | 3.3 | 0.9 |
| **Weighted average** | | | | 0% | 6% | NA | 33% | 9% | 15% | 19% | NA | 34% | 12% | 2.4 | 13.1 | 3.3 | 14.2 | 11.0 | 3.1 |

*Source: Deutsche Bank and Bloomberg Finance LP. All companies reflecting figures in local currency for last price; *companies not covered by Deutsche Bank, estimates reflect Bloomberg consensus. Data calculated with last available closing price of the date of this report. ADTV in US$000, Market Cap in US$mn. Prices as of Nov/26, 2014.*

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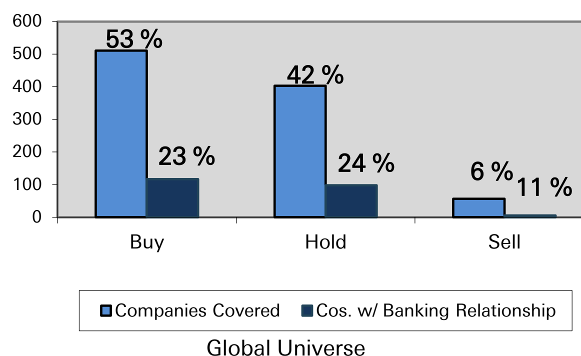

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