

Regional Sectorial Watch

Economic Research Department

July 2009



Contents

Closing date: July 2, 2009

	Editorial	3
•	Artícles Which States will Be Most Affected by the Recession?	4
	The Sectors Most Affected by the Recession	9
	Box: Manufacturing under the Magnifying Glass	12
	The Motor Vehicle Industry Situation in Mexico	14
	Box: Support Program for Production Stoppages	20
	Box: Chrysler Bankruptcy	23
	Box: General Motors (GM) Bankruptcy	24
	The Impact of Swine Flu on Tourism	26
	Job Losses in 2009: How Many and Where?	31
т	Indicators	
1.	Indicators of Economic Performance by State	35
	Indicators by State	36

Editorial Board: Adolfo Albo, Jorge Sicilia, Eduardo Torres

This publication was prepared by:

Editor: Adolfo Albo Eduardo Torres Alma Martínez Fernando Tamayo (Art) a.albo@bbva.bancomer.com e.torres@bbva.bancomer.com alma.martinez@bbva.bancomer.com fernando.tamayo@bbva.bancomer.com

July 2009

Editorial

In 2009 elements came together in the Mexican economy to form what we might call "the perfect storm, impossible to foresee due to its magnitude", as a series of external shocks of great dimension accumulated simultaneously and in those spheres where the country is exposed the most. The effects of the global recession and, in particular, the contraction of consumption in the United States were, in a way, expected; the origin of the crisis in the real estate sector was also expected, although it should be noted that it is the sector that employs the greatest proportion of the population of Mexican descent. But there were other events, equally important, that could not be anticipated, among them the perceptible increase in the global levels of aversion to risk and the strong depreciation of the peso, the bankruptcy of two of the three automobile manufacturing companies of the United States, and even less so, that Mexico would be identified as the center of the outbreak of the influenza epidemic, which threatened to become pandemic (although it was later confirmed that the first case occurred in the United States). This issue of Regional Sectorial Watch is focused on analyzing in detail the implications of these events, both at the national level, by sector of activity, as well as in terms of the state economies.

The weight of the recession has fallen mainly on the manufacturing sector, and at the regional level in the border states, some of which, in addition to being "maquiladoras" (in-bond manufacturing companies) have a strong presence in the automobile industry, where production cuts this year, compared to last year, could be on the order of 60%. As for the effects of the influenza on tourism, although these were significant in some states, the efforts of the authorities must be recognized, which acted rapidly establishing measures of containment, alert and monitoring that made it possible to avoid greater contagion. Thanks to this, the impact on economic activity, although intense, was diluted in a relatively short term.

Although economic conditions will remain complicated the greater part of the year, signs are beginning to emerge pointing to the fact that the most difficult part of the recession may have been left behind. The gradual return to stability in the international financial markets has reduced the levels of aversion to risk, which in turn has translated into greater stability of the peso; inflation is beginning to lessen, which gives Banco de México more space to determine the magnitude and duration of the cycle of monetary easing; private consumption and expectations in the United States show signs of improvement, and tourism indicators suggest that the effects of the influenza are diluting rapidly. However, we cannot be too optimistic; recovery will be gradual and probably more visible toward the end of this year or the beginning of the next. In this context, it can be said that the Mexican economy will resume its potential growth toward 2011.

The 2009 experience must make it clear that the best way to reduce the vulnerability of the economy to external shocks is to carry out second-generation reforms that spur productivity, competition in the markets and generate an attractive environment for capital investment (physical and human). With this, Mexican exports will be more competitive, the domestic market will strengthen and grant the government the space it requires in terms of the budget to face external shocks such as those of 2009 with greater strength. How has the recession in the USA impacted on federal states? During the first stage, the sharp contraction in manufacturing activity, particularly in the motor vehicle industry (which led to requests for state aid from the US government by the main manufacturers), had significant repercussions on the states where the assembly plants are located, and on states in the north of the country where there are many bonded assembly plants. However, these have not been the only impacts. Since the end of 2008 the effects have spread to other sectors. In some cases this could result in lower activity for the country and specific regions in the short term, but this could also represent an investment opportunity due to the major restructuring faced by the US motor vehicle industry.

In this article we analyze the ways in which states are linked to the US economy and we develop an analytical tool to identify and quantify the main risks in the current environment, and to estimate the potential size of the resulting impact on state GDP. The approach adopted complements and reinforces the analysis and conclusions which were presented on this issue in the Regional Sector Watch magazine for May 2008.¹

The sources of links to the USA

What is the transmission mechanism through which the US business cycle impacts on the economies of Mexican states? The answer to this question depends on the type of activity prevalent in the state, its production areas and/or geographic location. We can identify at least four activities which are linked to the USA: bonded assembly plants, the vehicle industry, tourism (and property development for foreigners near the beach) and the sending of remittances.

In the case of industrial activity (bonded assembly and the motor vehicle industries), the major connections come from flows of foreign investment. There are fifteen states which have received foreign investment flows in manufacturing activities (including motor vehicles) over the current decade; in order of importance, these are: Federal District, Chihuahua, Puebla, Guanajuato, Nuevo León, State of Mexico, Tamaulipas, Coahuila, Baja California, Sonora, Jalisco, San Luis Potosí, Querétaro, Morelos and Aguascalientes. It should come as no surprise that these states are also the ones which, over the current decade, have either reinforced their links with the US economy, or have taken advantage of NAFTA, the North American Free Trade Area, since the outset (see the article on ties to the United States in Regional Sector Watch, May 2008).

Thirteen states have significant investment flows relating to tourism and residential investment for foreigners²: Baja California Sur, Quintana Roo, Nayarit, Jalisco, Sonora, Federal District, Baja California, Yucatán, Guerrero, Sinaloa, Tamaulipas, Colima and Chihuahua.

¹ Available online at the website of the BBVA Economic Research Department (serviciodeestudios.bbva.com).

² See Mexico Real Estate Watch for September 2007, which analyzed the potential demand for property for US retirees ("Baby boomers") through the legal format of housing trusts for foreigners in restricted areas. Available online at the website of the BBVA Economic Research Department (serviciodeestudios.bbva.com).

Every state in the country receives income flows in the form of remittances, although some are more dependent on these than others. If we take as a criterion those where the percentage of households which regularly receive remittances is in excess of the national average (5%), we can identify thirteen states: Zacatecas, Michoacán, Durango, Nayarit, Guanajuato, San Luis Potosí, Guerrero, Jalisco, Colima, Aguascalientes, Chiapas, Morelos and Hidalgo.

One productive activity undertaken in every state which is directly linked to the business cycle in the USA is housing development. In those states where there is a significant presence of bonded assembly and/or motor vehicle plants, together with those geared to foreign tourism, housing acquisition in the medium and low income segments (which represent over 70% of total sales) is directly linked to the US cycle.

Building a scale of risks

Having identified the forms of exposure, the next step is to quantify the relative importance of these for each state. Business censuses enable us to approximate the importance of housing, manufacturing, the motor vehicle industry and tourism for state economies. In the case of remittances, the relative importance of these can be obtained by comparing such flows with state GDP.

The sum of the risks, weighted by their relative weight, provides a homogeneous measurement —which to date has not been thoroughly explored— of the exposure of each state to the US business cycle. The results are nevertheless interesting. Using a scale of 0 to 100, the states with the most significant exposure to the USA —practically at the same level— are those which are strongly exposed to the tourism industry. In both cases, the main source of exposure is tourism (including residential developments for foreigners) and, to a much lesser extent, housing.

The Federal District is in third place in terms of relative exposure, although the most important component here is manufacturing activity, once the motor vehicle industry is excluded.³ Michoacán has the fourth highest level of exposure, all of which comes from remittances, which is also the case for Zacatecas, which is in ninth place. The border states of Chihuahua, Baja California and Nuevo León are the next on the list; here the common factor is the diversification in the sources of risk. Chihuahua in particular is strongly exposed to the motor vehicle industry (almost 30 % of its GDP) and this contributes more than half of its exposure to the USA; in Baja California meanwhile, the majority of the risk is related to the large number of bonded assembly plants in the state.

Identifying Risks with the USA at State Level Scale 0 to 100



- US FDI in motor vehicle industry (accumulated 1999-2008) FDI in hotels and housing trusts in restricted areas
- (accumulated 1999-2008)

2

- Proportion of households with income from remittances greater than national average
 US FDI in manufacturing excluding motor vehicle industry
 - (account of 1999-2008)
- Note: The scale of integration with the USA is taken from a study published in the Regional Sector Watch, May 2008. Source: BBVA Bancomer

³ There will always be the debate about the over-representation of the Federal District, as this is the state where the investments are registered, even in the production takes place in another state. In other words, this is because of the concentration of parent companies in the Federal District. Whilst it is true that the largest foreign investments are concentrated in the Federal District —both for motor vehicles and for other manufacturing— this state also has a heavy concentration of manufacturing (excluding motor vehicles, almost 16% of GDP).

State Exposure to the US Cycle Scale 0 to 100



In general, the states with the most diversification in their sources of links to the United States are to be found in the middle of the table. This is true for Guanajuato, Jalisco, Puebla (with a high concentration of motor vehicle manufacturing), Tamaulipas, Aguascalientes, Coahuila, the State of Mexico, Sonora, Sinaloa and Querétaro. Despite being in this block, Nayarit and Guerrero are both exceptions, as the risks here are only related to tourism and remittances.

San Luis Potosí is perhaps the only case where the classification shows a relatively low level of exposure compared to what it may well be in reality. This may be due in part to the strong growth in industrial activity in recent years not being fully reflected in the 2004 economic census (for example, the General Motors plant was only installed in 2008) and to the high levels of marginalization which still exist (reflecting the low level of welfare of a large part of the population).

With the exception of Zacatecas and Michoacán, the states at the bottom of exposure index list are those where the links to the United States come exclusively from remittances. This group -which includes Oaxaca, Chiapas, Durango (although the latter may have some impact from the industrial zone associated with the lagoon area), Colima (which also has some tourism from Manzanillo), Tlaxcala and Veracruz—has relatively low exposure to risks from the United States. The level of exposure in Yucatán is even lower, with tourism being the only component. Finally we have Tabasco and Campeche; these states are associated with primary industries and the oil industry, and have no apparent links to the United States; in other words, both of these states are not affected by what happens in the US economy. However, unfortunately for them, this does not necessarily put them in a better position than the other states, particularly when the main basis of their economies is the oil industry, where production levels have been falling off rapidly in recent years.

What could offset the impact of the crisis? It might be thought that the depreciation of the peso would have a favorable impact on exports and on tourism; however, in reality the former is overwhelmed by the fall in demand, whilst given the outbreak of flu the depreciation has only had a significant influence on tourism in the border region. The Bank of Mexico's international travelers account shows that in the first few months of the year, border crossings increased at rates of over 30% year-on-year, whilst revenue from tourists traveling by plane fell by between 5% and 10%. However, a positive effect from the depreciation can be seen in remittances; despite having fallen in dollar terms (by around 5% year-on-year in January-May), the value of these in pesos in real terms has increased.

Internal factors, such as private consumption and public spending, could potentially offset some of these effects, but not on this occasion where there have been significant job losses (310 thousand jobs lost in January-May) and substantial falls in tax collections (down 15% year-on-year in the period January-April). Federal resources (joint and direct expenditure) may represent up to 30% of GDP in some states, with the amounts involved being adjusted







on a monthly basis based on the performance of tax collection and oil revenue, both of which are on downward trends. As a result the capacity for internal demand to contain the external shock has fallen significantly.

The result: significant differences in growth

Once we have taken into account the main factors associated with the United States which affect economic activity at the state level, and having included internal variables, such as private consumption and federal transfers, we are in a position to estimate the relative performance of each state.

The figures show significant differences in the performance of state GDP in 2009. It is inevitable that all the states will contract; however, we can identify three groups based on the degree to which they are affected: greater than, similar to or less than the national average.

The first group includes Quintana Roo and Baja California Sur as a result of their high dependence on tourism and the significant falls in this sector in 2009; Chihuahua and Puebla, where the motor vehicle industry is very important (around 30% of GDP in both cases) and production levels could fall by as much as 60% this year; Campeche and Tabasco, states which are heavily dependent on the oil industry and state transfers, both of which are on downward trends (in the first quarter, oil production fell at a year-on-year rate over 15%, whilst federal resources fell by 7.5%); and the Federal District and Nuevo León, the states with the highest levels of development, where both industry and services are suffering from sharp contractions in demand.

At the opposite extreme, where the fall has been substantially lower than the national average, we find states where remittances play a significant role in GDP and are the main connection to the US; this group includes states such as Zacatecas, Michoacán, Durango, Hidalgo, Guerrero and Tlaxcala. This group also includes Querétaro, San Luis Potosí, Morelos and Aguascalientes where, despite there being some industry, remittances predominate.⁴

There are fourteen states where the fall in GDP is similar to the national average: Sinaloa, Colima, Chiapas, Oaxaca, Tamaulipas, the State of Mexico, Jalisco, Nayarit, Sonora, Yucatán, Baja California, Coahuila, Veracruz and Guanajuato.

The results of this analysis are the same as the ones published in the last Regional Sectorial Watch, where we warn about the differences between states according to the exposure level with the Unites States, its economic focus (industrialized, tourist, etc.) as well as the reason for the shock, that is, if it is focus on industry or services.

How Important are Federal Resources*? % share of GDP, 2006



Which States will Suffer the Recession Most Severely in 2009? Comparison of state GDP and national average



⁴ In the particular cases of Querétaro and Aguascalientes, which are diversified in terms of exposure but which have significant manufacturing activity, the housing sector —which is performing better than national GDP (i.e. the fall is smaller)— is helping to offset the effects of the falls in industrial activity.

Conclusions: differences between states are likely to increase

Whilst the Mexican economy as a whole will be in recession in 2009, the impact of this will vary from state to state. By identifying and quantifying the exposure of each state to the United States we can assess their risk level, leading to a more informed debate about the issue. Estimates of state GDP for 2009 show that, while there will be a general fall throughout the country, Baja California Sur, Campeche, Chihuahua, the Federal District, Nuevo León and Quintana Roo could be the affected most sharply by the current crisis, due to large falls in tourism, the motor vehicle sector and oil production, which in turn have implications for other industries and services and public expenditure. However, on the other hand, despite falling in dollar terms, the depreciation of the peso means that remittances will increase in real peso purchasing power terms, and this could help to offset the external shock. According to our analysis, the states where GDP is likely to fall by less than the national average include mostly (though not exclusively) those where remittances are the sole connection to the United States.

References

Roache, Shaun K., Gradzka Ewa (2007). "*Do Remittances to Latin America Depend on the U.S. Business Cycle*?" IMF. September 2007.

The Sectors Most Affected by the Recession

It is clear that in the recessive environment that will prevail during a good part of 2009 and perhaps 2010, the manufacturing sector will be facing the greatest challenges. However, in this sector also there will also be important differences, with some activities in a relatively more favorable condition than others. What will those differences be? This article examines the degree of exposure of the main manufacturing branches to the current cycle—particularly the U.S. recession—from different standpoints, including foreign trade, sensitivity to income and even marketing margins. Based on this analysis, it will be possible to arrange risks in order of importance and identify activities with greater or lesser exposure.

1. Exposure via foreign trade

As a first approximation on the issue of manufacturing exposure to the current cycle, a review is in order of the composition of Mexican exports to the United States. Figures at the end of 2008 show that, of the 21 sub-branches of activity in which the manufacturing industry¹ is divided, only those of the automotive industry (which include the manufacture of vehicles and auto parts) and of computers and electronic products account for more than 50% of the total. By adding the following three sub-branches, electrical appliances and equipment, machinery and basic metals, we reach 75% of manufacturing exports to the United States. The figures simply confirm the marked concentration of productive activity of the country, or at least the activity that has a high degree of integration with the U.S. economy. In addition to the labor-intensive factor, the common denominator of these activities is the production of durable goods. Also and almost by definition, given that in general these are luxury goods (or at least they are not basic commodities), they are easily dispensable in times of a contraction of income. And, in fact, this occurs: in recessive episodes they show a greater contraction than the rest of activities in the economy. Also, when we are in the high part of the cycle, they are the ones that show the greatest growth.

In terms of the contribution to GDP, the story is a little different, since the activities with a significant weight in exports, correspond, in great part, to in-bond manufacturing ("maquila") processes with low added value. For manufacturing activities with a greater weight in exports, only those of the automotive industry have a relatively high added value (3%), and, in a distant second place, the steel industry (1%). If they are taken jointly, the activities that represent 80% of exports contribute only 7% to GDP. In contrast, the food and beverages industry, with a 5% contribution to GDP, has a relatively low weight in exports of 3.6%. The fundamental characteristic of this last activity is its marked reliance on the domestic market, something that undoubtedly helps to cushion external shocks.

When including the exposure of the manufacturing sub-branches in an indicator, weighing its importance both in trade and in GDP, the result is that the activity with the most exposure is that of computers and electronic devices. The figure shows that, relative to its size, its

How Are Exports to the U.S. Distributed? % share, 2008







Source: BBVA Bancomer with INEGI and U.S. Dept. of Commerce data

¹ According to the Industrial Classification System for North America (ICSNA) which the INEGI recently adopted.

What are the Manufacturing Activities with the Greatest Risk? Weighted by elasticity and export to the U.S.



% share in national GDP of branches in cuadrant
 Source: BBVA Bancomer with INEGI, Banco de México and U.S.
 Department of Commerce data

share in exports is the highest among all other manufacturing activities. At the bottom of the classification is food, given its relatively low share in exports.

2. Income elasticity

A second approximation to the exposure of manufactures to the current cycle has to do with the sensitivity of production to changes in income. One way to measure this is through the ratio between the production rate of the activity, compared with the growth rate of the economy as a whole, or what is known as income elasticity. Based on industrial production and GDP figures in the United States² for the 1990-2008 period, the analysis of the 21 manufacturing subbranches shows a differentiated pattern between durable-type goods and non-durables: as was to be expected, production in the case of durable goods, these respond in a more than proportional manner to changes in income, that is, they are relatively elastic. In contrast, for non-durable goods, the response is less than proportional, that is, they are relatively inelastic.

Considered jointly, durable goods have an income elasticity of 1.3 during the period in reference, while for non-durable goods, the elasticity is 0.3. Thus, with the elasticity criterion, durable goods are more vulnerable in a recessive stage to changes in income conditions, and similar to foreign trade, they have a higher risk level. By weighing trade and income elasticity in just one indicator, the result is that the activities with greater exposure or risk are the four that make up the division of machinery and equipment: computers and electronic devices, electrical equipment and appliances, machinery and the automotive industry. In the case of non-durable goods, those with higher risk are apparel, leather and footwear. It is interesting that the joint share of these activities in national GDP is barely higher than 5% (around 25% of the manufacturing production value).

For the rest of the manufacturing activities, where the risk is comparatively lower, the greater relative importance corresponds to non-durable goods (8.7% of GDP). This sub-group includes activities such as food, beverages and tobacco, paper, publishing and printing, as well as chemical products, predominantly focused on the domestic market.

3. Marketing margins

When analyzing the spread between consumer and producer prices for the different manufacturing activities, the result is an additional indicator of exposure to risk. In activities where the spread is wider, producers have a greater capacity to charge cost increases to the consumer. On the other hand, when the spread is low or even negative, producers must reduce their marketing margins or absorb part of the production costs when these rise. Typically, this occurs in goods with a high exposure to foreign trade³.

² The United States economy was used as a reference due to the availability of information (for Mexico, the production figures under the ICSNA classification are available as of 2003) and due to the current context of a slowdown in external demand (with the United States receiving 85% of Mexico's manufacturing exports).

³ Imports help mitigate the imbalances in domestic prices, provided that there are no imbalances also in the exchange rate.

Based on the price indices prepared by Banco de México for the manufacturing sector, we obtain 32 activities for which it is possible to make an analysis that will allow setting an approximation of the marketing margins⁴. Two results are significant. On one hand, we observe that, throughout the current decade, the marketing margins have been reduced in most activities, or that producer prices have grown at a greater speed than consumer prices. To a great extent, this could reflect the effect of a higher level of competition, first with the NAFTA and later with China's entry in the World Trade Organization⁵.

The second result, consistent with the analysis of foreign trade and price elasticity, is that, in general terms, the margins are better for non-durable goods, and especially food. Being a basic commodity, obviously marketing agents are in a more comfortable position in periods of generalized contraction of demand. In contrast, at the bottom of the list, among the most vulnerable activities are electrical appliances and equipment, on which the lowering of the cost of technology, seen in recent years, together with a greater supply of products, has probably had some bearing. It is also true that analysis based on the marketing margins has its limitations⁶, which are reflected, for example, in that there are also some food-related activities that are among those of greater margin reduction. Generally, however, the results are still valid: the most vulnerable activities predominantly correspond to non-durable goods and vice versa.

Conclusions

Notwithstanding how difficult 2009 will be for the economy and, especially for the manufacturing sector, there will be notable differences in the performance of the various sectors. In manufacturing, the most vulnerable activities will be the machinery and equipment division: electrical appliances and electronic equipment, automotive products and machinery. This is how the analyses are reflected in terms of exposure to exports, sensitivity to income and even to companies' marketing margins. Although they are not surprising, the results of the analysis help us arrange, in order of importance, the magnitude of the impact of the global recession on the different productive activities.

References

Cuevas C., Alfredo, Messmacher, Miguel y Werner, Alejandro (2003). "Sincronización Macroeconómica entre México y sus Socios Comerciales del TLCAN" ("Macroeconomic Synchronization between Mexico and its NAFTA Trading Partners"). Banco de México.

Gabriele, Alberto (2006). "*Exports of Services, Exports of Goods and Economic Growth in Developing Countries*". Journal of Economic Integration. Vol. 26. No. 2. June 2006.

Roache, Shaun K (2007). "*Central America's Regional Trends and U.S. Cycles*". Article presented at the seminar on "Economic and Financial Linkages in the Western Hemisphere". IMF. November 2007.

Marketing Margins in Manufactures: What Activities are the Most Vulnerable? Spread between producer and consumer prices



Source: BBVA Bancomer with Banco de México data

⁴ One way of structuring an approximation or proxy of the marketing margins is to consider the ratio between the producer and consumer prices of the same productive branch.

⁵ Until the mid-nineties, all the indices showed positive spreads, or the capacity of producers to transfer the final cost increases to the consumer.

⁶ Because of intermediaries, the impact of supply shocks, regulations, etc., competition conditions are very different, even in the same product category. In food, the case of sugar is a good example, since specific legislation isolates this product from volatility in the international prices and of the adjustment capacity to domestic supply shocks via imports.

Manufacturing under the Magnifying Glass: How Competitive is it?

Despite the impact of the global recession on the Mexican manufacturing sector, some activities have shown signs of being highly competitive and are very well positioned in the U.S. market. A detailed review of the country's foreign trade will identify such activities and thus provide better elements for weighing their vulnerability in the period marked by economic weakness that is currently being experienced.

Manufacturing sectors have positioned themselves in the United States

Recent figures from the U.S. Department of Commerce show that Mexico's share of that country's imports of manufactured goods is around 10%. However, in a third of the close to one hundred tariff categories in manufacturing, the percentage share in 2008 exceeded this figure, and in slightly more than half (54 categories) the market share in 2008 was higher than at the beginning of the decade. This reflects the competitiveness of these branches¹ of manufacturing activities.

Using as a reference point the subgroup of Mexican manufacturing sectors with a higher than average share of U.S. imports (that is, above 10%) and whose percentage share has increased in the past decade, we have a total of 20 highly competitive activities, with market shares that reach levels of up to 60%. What are they and how much do they contribute to trade with the United States?

Among the list are audio and video equipment (Tijuana, in the country's northern frontier, is the city where the largest number of televisions are manufactured on a world level), electrical appliances, engines and air conditioning units, car bodies and spare parts, as well as different construction-industry related products (brick, cement, glass). Essentially, they are durable goods, although some foods also enter the list (tortillas, fruits and vegetables, and some candies). In 2008, this group of products together represented 40% of the value of exports of Mexican manufactured goods to the United States.

Could the depreciation of the peso help?

Several factors have boosted the competitiveness of exports of Mexican manufactured goods, such as the cost of labor, preferable access through the North American Free Trade Agreement (NAFTA), etc. In the current context, one of the questions that arises is to what extent the recent depreciation of the peso could counteract the drop in demand. Stated in other words, it is worthwhile to consider whether the price effect (positive, associated with the depreciation) will compensate the income effect (negative, associated with the recession). Based on figures of exports of machinery and equipment, the peso-dollar exchange rate, and U.S. GDP for the 1994 to 2008 period (that is, from the date that NAFTA was signed), the evidence shows that the income effect clearly exceeds the price effect. According to the regression analysis, a one percent increase in U.S. GDP translates into a 2.5 percent rise in exports, but the response to movements in the peso exchange rate is substantially less, only 0.3 per cent.



Importance in the U.S. of Mexican Manufactured Exports % and percentage points

¹ This represents an approximation of a focus on preferences disclosed as a criteria to demonstrate the competitiveness of different industries in international trade.

It should also be mentioned that the experience accumulated over the slightly more than 15 years since NAFTA entered into force is somewhat limited in measuring the effect of significant variations resulting from a real depreciation of the peso. For example, the only time that the peso experienced a depreciation comparable to 2009 devaluation (40% in February, compared with its level in September 2008) was in 1995, but then the circumstances were diametrically different, as the U.S. economy was on the rise in those years, as was the process of industrial integration due to the recent signing of the NAFTA. By the same token, the depreciation of the peso in 2004 and 2005 (4 percent and 11 percent, respectively) was not sufficient to stop the fall in exports of manufactured goods, a phenomenon associated with China's entry into the World Trade Organization.



Exports, U.S. GDP, and Exchange Rate Annual % change

Conclusions

Although concentrated in a few activities, some manufacturing sectors have been gaining market share in the United States, which is good news within the recessive context of the global economy. The depreciation of the peso has made Mexican products even more competitive, and even though this is probably not sufficient to counteract the effect of the fall in demand, it can, however, contribute to absorbing part of the shock, and above all, in facilitating the rebound when the recovery process begins, perhaps toward the end of the current year or in the first half of 2010. In this sense, it can be argued that the most favorable variant for Mexican exports will be a recovery of the U.S. economy, more than the favorable impact that could be registered due to the depreciation of the peso. Domestically, a gain in more permanent competitiveness through second generation reforms is the most solid road to help spur a vigorous and sustained recovery, both in exports as well as the economy.

Bibliographic References

Amoroso, N., Chiquiar, D., Quella N. and Ramos-Francia M. (2008). "Determinantes de la Ventaja Comparativa y el Desempeño de las Exportaciones Manufactureras Mexicanas en el Periodo 1996-2005" (Determining Factors of the Comparative Advantage and the Performance of Mexican Manufacturing Exports in the 1996-2005 Period). Banco de México, Working Papers, No. 2008-011.

(IMF) International Monetary Fund (2005). Country Report No. 07/379. Mexico: 2007 Article IV Consultation-Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion for Mexico. International Monetary Fund.

— (2005) Country Report No. 05/247. Mexico: 2005 Article IV Consultation-Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Mexico. International Monetary Fund.

The Motor Vehicle Industry Situation in Mexico

Vehicle Sales in the U.S.

	N	lillion uni	ts	Annual	% chg.
Origin	2007	2008	2009*	2008	2009
North America	8.4	6.4	4.3	-23.9	-32.72
Japan	5.2	4.6	3.7	-12.3	-18.48
Germany	0.9	0.9	0.7	-5.5	-22.95
Other	1.6	1.4	0.7	-13.1	-47.96
Total	16.1	13.2	9.5	-18.0	-28.20
* Annual	ized with	January-May	information	1	

Light Vehicle Production in North America

	Un	iit*	Contr	ib. %	Annual	Seg-
Mix	2007	2008	2007	2008	% chg.	mt**
U.S.						
Cars	3.9	3.8	60.6	60.9	-3.8	44.7
Light	6.5	4.7	76.6	73.2	-28.5	55.3
Total	10.5	8.5	69.7	67.1	-19.3	100.0
Canada						
Cars	1.3	1.2	20.7	19.3	-10.9	58.5
Light	1.2	0.8	14.0	13.3	-29.4	41.5
Total	2.5	2.0	16.9	16.2	-19.6	100.0
Mexico						
Cars	1.2	1.2	18.7	19.8	1.6	58.6
Light	0.8	0.9	9.3	13.5	8.7	41.4
Total	2.0	2.1	13.4	16.6	4.4	100.0
Total						
Cars	6.5	6.2	100.0	100.0	-4.3	49.2
Light	8.5	6.4	100.0	100.0	-25.2	50.8
Total	15.0	12.6	100.0	100.0	-16.2	100.0
* Tł	nousands					

BBVA Bancomer with Ward's AutoInfoBank data Source:

A Sector and Regional Appraisal

The dramatic decline in motor vehicle demand on a worldwide scale from the second half of 2008 onwards has been one of the clearest signs of the global recession and perhaps the least expected in terms of its extent, in terms of the heavy fall in sales and the growing financial problems of companies, especially North American. With a more than 40% drop in sales during the first few months of this year, only comparable in terms of units sold to the volumes recorded in the early 1980s, the global industry, in particular the North American industry, is facing a profound restructuring that had commenced years ago and that this crisis is probably going to speed up. These changes will include updating or eliminating models, in some cases the relocation of factories, aggressive cost cutting and incentives to increase productivity. They will have huge implications for countries such as Mexico, where the motor vehicle industry bears significant weight in the manufacturing sector and in the economy as a whole.

Against this backdrop of major transformations, which could be of a structural scope and could in some cases take years to become consolidated, this article analyses the global motor vehicle industry context, with a special emphasis on the situation that US car markers are experiencing and the implications for Mexico. Based on the characteristics and recent changes in factories located in Mexico, forecasts are made for the rest of 2009 and for 2010, from both a domestic point of view and the state economies that rely heavily on this activity.

How did Mexico get on in 2008?

Until 2008, transactions in Mexico were some of the least affected by the global crisis, in relative terms, compared to the US and Canada. In the North America Free Trade Agreement (NAFTA) zone, the total volume of vehicles and lorries (including heavy vehicles) manufactured in 2008 fell by 16.2% in annual terms. This represents 12.6 million units produced compared to 15 million in the same period in 2007. In Mexico, however, manufacturing rose by 4.4% that year, increasing its participation as a manufacturer in North America from 13.4% in 2007 to 16.6% in 2008. The different companies have used the advantages of producing in Mexico to assemble vehicles mainly for the US, but also for other markets: in 2008, around 77% of the units exported from Mexico were sent to the US, whereas in the same period in 2007 the proportion was higher, at 80%. Without losing its focus as a regional supplier, the motor vehicle sector in Mexico has gradually progressed towards the geographical diversification of its sales.

A thorough analysis of vehicle production in Mexico helps to explain the high growth levels in the industry and its special features on a regional level. Considering the motor vehicle segment alone, in Mexico 24 models are manufactured, eight of which recorded positive growth levels in 2008 and represented 48% of output. The most dynamic makes were Honda and Toyota, with high annual growth levels, 97% and 47% respectively, although their weight in the total produced volume is relatively low (3.2% taken together). As for other car makers, it is worth noting that the results were generally mixed, with some models growing at two-digit rates and other, even manufactured at the same plant, with just as significant falls.¹ This reflects the change in consumer preferences and the strong competition in the industry.

In Mexico, locally-differentiated results

In accordance with the INEGI, the motor vehicle industry (vehicle, engine and car parts manufacturing) represents around 3% of the GDP, 3% of total employment in the formal sector and 6% of total remuneration, also on a domestic scale. However, for states such as Puebla, Chihuahua and Aguascalientes it represents one of the pillars of the state economy, with shares of between 20 and 30% of the GDP and between 18 and 33% of employee wages.

The results in terms of employment during 2008 reveal these regional differences. According to the National Occupation and Employment Survey (ENOE) results, out of the 246 thousand jobs lost in the manufacturing sector in 2008, a significant part can be linked to the fall in vehicle output volumes at motor vehicle factories. Examples are: Guanajuato and Coahuila, which together account for 26% of the job losses and recorded falls in output of 18 and 39% respectively over the year; and Puebla, which also accounted for a relatively high percentage of the decline in employment (8%), recorded a 36% drop in its output in the fourth quarter of the year (although in accrued annual terms the result was a 4% increase). At the opposite end are Sonora, Jalisco and the State of Mexico, where a net creation of manufacturing jobs was recorded, which is in keeping with increases in Ford production in Hermosillo (9%), Honda in El Salto (92%), and Chrysler in Toluca² (174%).

Changes in 2009

Due to the persistent decline in vehicle demand, the industry has continued to change its production plans. In early 2009 initial forecasts hinted at a drop in output volume of between 30 and 40%. However, reality has exceeded expectations, and in view of the market squeeze and the changes in US car maker output levels, the annual output volume is now expected to reduce by around 60%, dropping from 2.1 to just 1 million units.

In the case of Chrysler, apart from the falls that have already taken place, we must add those resulting from the restructuring of its transactions due to filing for protection under chapter 11 of the North American bankruptcy code (see Chrysler bankruptcy table). In Mexico, the first impact will be the temporary shutting down of most of its transactions for 30 days from May 4, further harming current output levels. At the end of the year 146 thousand vehicles fewer than 2008 will be produced, or a reduction of just over 50%, with the Toluca factory being the worst hit. In Coahuila, Chrysler has two factories, one engine factory in Saltillo and an assembly plant in Ramos Arizpe where it produces the Dodge Ram Pickup. Toluca's output is exported everywhere in the world.

Which Automobiles are Made in Mexico and Which Ones Grew in 2008? 2008 growth and relative contribution*, %



Source: BBVA Bancomer with PirceWaterHouse data

How Important is the Motor Vehicle Industry? % contribution, 2006

	GDP	Employment*	Wages*
National	3.3	3.2	5.8
Puebla	28.6	4.0	18.0
Chihuahua	25.9	22.6	33.1
Aguascalientes	21.3	5.2	18.1
Coahuila	19.6	13.1	19.0
Guanajuato	19.1	2.1	5.0
Querétaro	13.9	5.8	13.7
San Luis Potosí	7.7	3.8	6.3
Morelos	7.3	1.5	10.2
México	6.6	2.8	7.6
Tamaulipas	6.4	7.4	11.2
Sonora	5.5	4.2	7.5
Nuevo León	5.1	4.1	4.7
Baja California	3.1	3.0	5.5
Tlaxcala	2.2	1.3	2.5

On a national level

Source: BBVA Bancomer with INEGI data (Economic Census 2004 and The Motor Vehicle Industry in Mexico, 2008 edition)

¹ This is the case of General Motors, for example, with 23% growth in Suburban, and falls of more than 20% in Avalanche, Escalade and Sierra pickup trucks.

² There are two factories in the State of Mexico: Chrysler in Toluca, with 174% output increases in 2008, and Ford in Cuautitlán, with a 22% fall over the year. In net terms, vehicle production for the State recorded an 89% increase.

Decline in Manufacturing Jobs in 2008 and Motor Vehicle Industry Relative contribution



[%] change in vehicle production

Source: BBVA Bancomer with INEGI data

Vehicle Production in Mexico

	Un	its ¹	Contr	ib. %	Annual
Company	2008	2009*	2008	2009	% chg.
Nissan	449.4	298.7	21.6	29.3	-33.5
VW	449.1	197.5	21.6	19.3	-56.0
GM	484.3	186.1	23.3	18.2	-61.6
Chrysler	280.1	141.7	13.5	13.9	-49.4
Ford	314.2	124.1	15.1	12.2	-60.5
Honda	51.3	46.5	2.5	4.6	-9.2
Toyota	49.9	26.5	2.4	2.6	-46.8
	2,078.3	1,021.2	100.0	100.0	-50.9

1 Thousands 2 2009 vs. 2008 * Own estimate BBVA Bancomer with PwC and AMIA data

Chrysler Production in Mexico

		Ur	nits1	Diffe	rence
Factory	r	2008	2009*	Abs.	Rel. %
Toluca					
Dodge .	Journey ^b	124.8	30.6	-94.2	-75.5
PT Crus	sier ^a	57.9	_	—	
Saltillo					
Dodge I	Ram pickup⁵	105.5	111.3	5.9	5.6
Total Ch	nrysler prod.	288.1	141.9	-146.2	-50.8
Contr. 9	6 to Mex. prod.	14.4	10.6	-3.8	
Total Ch	nrysler exports	255.5	129.2	-126.4	-49.4
Contr. 9	6 to Mex. exp.	15.3	12.1	-3.2	
1	Thousands			A secolar states	
â	Car segment	stimate wi	in January-A	April data	
b	SUV's and Pickups				
Source:	PwC				

It is worth mentioning that the Chrysler factories in Mexico, unlike many in the US and Canada, are modern, small and versatile in which the investment flow has not stopped in spite of the difficult circumstances. At the moment a 570 million dollar factory is being built near the city of Saltillo, which is expected to produce 440,000 engines a year.

The outlook for GM Mexico also became gloomy due to the restructuring plans in which the company is involved. For the time being, some temporary halts in activity were announced, the longest-lasting of which will be in Silao.³ Together with the low levels that output is recording, this points to a fall of around 60% in 2009, or 286 thousand fewer units. The Ramos Arizpe and Silao factories will be the most affected, because their output is mainly focused on pick-up trucks and SUVs, for which the decline in demand has been the heaviest.

The San Luis Potosí facilities will be the least affected because they came into operation half way through last year. A further 300 million dollars were added to the billion dollar investment in this factory in order to start a new transmissions factory during 2009.

In 2008, the GM and Chrysler operation generated around 14,000 direct jobs and 56,000 indirect jobs in Mexico, which were then affected by the temporary shutdowns and job losses.

What effect will these changes have on employment and the GDP? In accordance with the records of workers covered by the IMSS (Mexican Social Security Institute), in the motor vehicle sector changes in the employment level started a year earlier than the economy as a whole. From its highest point, in October 2007, to May this year, the number of workers in this industry fell by 27% (from 490 thousand to 360 thousand). On the other hand, on a domestic level, employment started to decline in November 2008, and its fall in May was 4.8%.

Technical slowdowns (which in some cases will mean stopping factories from operating for more than three months during the year) have helped to avoid a bigger decline: from their maximum level (third quarter of 2007), in the January-March period this year the value of motor vehicle output had plunged by 40%; and the drop in the employment level has been less than proportional (see employment support program table).

As regards the impact on the GDP, in view of the relative important role that the motor vehicle industry plays in the domestic economy, a fall in production volume in 2006 of around 50% hints at a negative impact on GDP growth of at least 1.6 percentage points.

How will this affect local economies? Clearly the most vulnerable states are those that have built most of their development on the motor vehicle industry although, like what happened in 2008, significant differences can be expected in accordance with the type of vehicle and the make manufactured in each state.

³ Silao will shut down for seven weeks from May 18 onwards; Ramos Arizpe, from May 18 through 22; and San Luis Potosí from June 1 through 12.

By region, the greatest impact from the changes in the motor vehicle industry will be on states such as Chihuahua, Coahuila, Guanajuato, Puebla and Aquascalientes, due to their high share in the state economy. Although there could be up to twelve states affected to a certain extent, significant differences between them can be expected depending on the type of vehicles that they manufacture, the make and the type of plant. For example, states such as Coahuila, State of Mexico and Guanajuato, where the GM and Chrysler factories are located, are not only facing the difficult situation, they are also facing bankruptcy proceedings or state intervention of these companies in the US. In Chihuahua, although there is no assembly plant, engines and car parts are manufactured, and as a proportion of the GDP, the motor vehicle industry in the federal entity bears the most weight on a domestic level. The worst hit states in relative terms could be those where factories are relatively new, such as Baja California, Jalisco and San Luis Potosí, or where the models manufactured are better received on the market. This could be the case of Sonora, where the models that the Ford factory assembles recorded better results in 2008 compared to other makes.

Still-favorable outlook in the medium-term

In the medium-term, in order words, once this crisis is over, Mexico could hold onto its relative advantage as a vehicle manufacturer in North America. The type of vehicles manufactured in the country and the type of output (relatively new, small and flexible factories with a chain of suppliers, cheap and specialized labor, high productivity and geographical proximity to the US) will continue to hold appeal.

In Mexico, motor vehicles that are widely accepted on the US market are manufactured, to the extent that it ranks among the ten most sold in 2008, including Ford's F series (first place), the Chevrolet Silverado (second place) and the GMC Sierra (fifth place), both from GM.

The relatively small size of factories in Mexico also brings important advantages, because they can be used more intensively than large manufacturing centers in Michigan or Canada, in other words, they are more flexible. PriceWaterhouse figures reveal that in 2008 factory use capacity in Mexico was 85% vs. 74% in the US.

There is also the well-known matter of labor costs: 3.0 dollars an hour in Mexico vs. 21 in Canada and 25 in the US, and that is without considering the compensation package that the trade union in the US (the UAW) is negotiating in favor of workers in this industry. In addition, the recent depreciation of the peso (which during 2009 could be 35% compared to 2008) makes Mexican labor even more competitive, as well as other intermediate goods in domestic output.

Having said that, this year at least will see major definitions for the global industry, and thereafter will come a period of consolidation with new players and strategies. Examples of this situation can be found in the recent transfer of the operation and management of Chrysler to Fiat and the heavy restructuring of GM in the US which has

General Motors Productio in Mexico

	Ur	nits1	Diffe	rence
Factory	2008	2009*	Abs.	Rel. %
Ramos Arizpe				
Saturn VUE Hybrid⁵	88.7	14.6	-74.1	-83.5
Chev. Captiva Hybrid ^b	18.4	13.5	-4.9	-26.4
Chevrolet C2ª	63.3	16.1	-47.2	-74.6
Chevrolet HHR ^₅	110.6	27.8	-82.8	-74.9
Silao ^b				
Chevrolet Avalanche	29.2	14.1	-15.2	-51.9
Cadillac Escalade EXT	4.6	1.0	-3.6	-78.4
GMC Sierra Pickups	35.7	18.3	-17.4	-48.7
Chevrolet Silverado	80.6	54.5	-26.2	-32.4
Chevrolet Suburban	28.9	8.7	-20.1	-69.7
San Luis Potosí				
Aveoa	24.2	29.5	5.3	22.0
Total GM production	484.3	198.1	-286.1	-59.1
Contr. % to Mex. prod.	24.1	19.4	-4.7	
Total GM exports	390.0	148.6	-241.4	-61.9
Contr. % to Mex. exp.	23.4	21.9	-1.5	

Thousands

BBVA Bancomer estimate with January-April data

Car segment SUV's and Pickups

Source: PwC





industry in the state GDP and scope announced per factory Source: BBVA Bancomer with INEGI, AMIA and PriceWaterHouse data involved, among other measures, the sale of several of its divisions and the shutdown of factories, mostly in the US (see GM bankruptcy table). In the short-term, then, it is unlikely that production processes will be transferred or the production factory will be reactivated. This is especially true of US car makers as far as their factories outside the country are concerned, because the government aid that they have received could cause them in the short-term to keep a certain number of jobs or production centers within their territory. Although there is little doubt that factories in Mexico will continue to operate, it is clear that, at least in the short-term, they will do so on a lower scale and with fewer resources, leaving a lot of vacant niches for other foreign capital makes.

Conclusions: Mexico is holding onto its appeal as an investment recipient in the motor vehicle sector

2009 will no doubt be a long, difficult year for the motor vehicle industry, both on a global scale and in Mexico. In terms of supply, factors such as the accrual of inventories, excess capacity and financial problems of car makers are laying the foundations for an industry re-sizing process. In terms of demand, the decline in employment (and other sources of income) and the credit crunch (which restricts funding) will limit the industry's recovery potential, at least this year and perhaps next year. For the Mexican economy, the announced changes in output (in May) for vehicle manufacturing by different car makers could take away around 1.6 percentage points from economic growth.

On a local level, the impact will clearly be greater in states that play a strong role in this industry. Nevertheless, in the medium-term the outlook is still favorable for the industry in Mexico, which will hold onto its relative advantage and highly competitive position as a vehicle manufacturer in the North American region. In this regard, we maintain our appraisal from the last Regional and Sector Situation, in the sense that Mexico is an appealing place to attract foreign investment as a result of the global restructuring of the industry. It is likely that we will see the survival of the main regional car makers, a profound restructuring process and high competition in the industry. To sum up, the medium- and long-term potential for the motor vehicle and car parks sector in Mexico is holding on in spite of the global crisis. In the short-term there will be a re-sizing due to trends towards lower demand levels, perhaps for several years, but in the long-term the trend towards high motor vehicle growth on a worldwide scale seems to be strong, as the emerging economic continue to grow and their purchasing power increases.

Bibliographic References

Regional Sectorial Watch, BBVA Bancomer (May 2008) "*The regions most and least exposed to the slowing US economy*".

Sectorial Observatory, BBVA Bancomer (10 Dec 08). "North American motor vehicle industry: chronicle of a death foretold or foundations to create an efficient, competitive industry with long-term feasibility".

Brief Note "Where are the Detroit Big Three Heading" (27 May 2007)

Sectorial Regional Coordinates. BBVA Bancomer (13 July 07) " *Global motor vehicle industry trends, Mexico's role and its prospects*".

http://media.gm.com/mx/gm/es/index.html http://www.nissan.com.mx/nsp/ http://wardsauto.com/ http://www.pwcautomotiveinstitute.com/ http://online.wsj.com/public/page/auto-industry.html http://www.detnews.com Autos Insider

Support Program for Companies Planning Production Stoppages

In response to the dramatic fall in manufacturing production, particularly in the auto industry, in the last few months of 2008 and the beginning of 2009, the government is promoting a more flexible program of wage compensations to prevent companies from firing their workers. Ingenious in its design and innovative in that is the first time such a program has been applied in Mexico in key industries and on an important scale. The program rewards businesses for retaining their workforce and distributes the resources throughout the year, following an audit (including a tax audit) of the participating companies. This article analyzes the characteristics of the program and the elements that will define its success, in terms of scope and effectiveness.

Manufacturing bears the brunt of the recession

In the first part of the adjustment process that the Mexican economy is facing, the weight of the recession has fallen mainly on the manufacturing sector. In fact, while for the economy as a whole, the recession began in the fourth quarter of 2008 and in the United States a year previously, the manufacturing industry has been posting declines since the first quarter of 2008 and employment has been falling since the third quarter of 2007.



The activities that have been affected most negatively have been precisely those that most contribute to production value and job creation, namely, the auto industry, electrical apparatuses (lighting equipment but also appliances), and electronics (televisions, computers, and audio and video equipment). Together, these three sub-branches account for 20% of manufacturing employment and one third of the industry's production value. In the fourth quarter of 2008 (through November) the industry posted a decline of 6% in production and 7% in employment.

How Important is Machinery and Equipment in Manufacturing?

Contribution to Annual Change in Production Value Percentage points



The Auto Industry Adjustment, Greater in Production than Employment

Index, period with maximum production level = 100



... and especially in the automotive sector

Where the world recession has hit hardest, with massive job cuts (in the United States alone, more than two million people were left jobless in the first four months of the year), a net loss of financial wealth (due to the capital market and housing prices), in addition to a tightening of credit, consumers have significantly modified their spending habits, first of all by reducing the demand for durable consumer goods. Both in the European Union as well as the U.S. market, car sales in the last quarter of 2008 decreased by around 45%, and in the January-April 2009 period the contraction was about 40%. Sales figures in the United States have only been compiled over the past 30 years. All in all, the production mix of motor vehicles in Mexico, in which 60% corresponds to compact cars, had contributed to cushioning the impact of the contraction in demand (the strong increases in gasoline prices reduced the demand for SUVs by more than half), although in 2009 the fall has also been considerable, with a 42% annual drop in production and exports in the January-May period.

The auto industry is extremely important in job creation in Mexico. Over the past decade, this industry has led the rest of the economy in terms of the generation or loss of jobs and has made an important contribution to the net loss in times of contraction. The current cycle has been no exception. Since its maximum point in November 2007 to May of 2009, auto industry employment has fallen 27%, while for the economy as a whole, the adjustment began one year later (October 2008) and through May an accumulated 4.8% loss in jobs has been registered.



How Much does the Auto Industry

Auto Industry Employment Begins Its Adjustment a Year Before the Rest of the Economy

Thousands of workers



In this scenario, layoffs and production stoppages, which before 2008 were barely resorted to, have become common occurrences in 2009, and in a good number of cases, the only alternative to not reducing the workforce. In fact, the adjustments in production during the present year could be placed in ranges from 50% to 60% (see article on the situation of the auto industry).

An agile response on the part of the government

The federal government response to the fall in auto production as well maquiladora activity (in-bond manufacturing) has been the Employment Preservation Program (PPE, for its Spanish initials), which compensates companies with part of the wages of workers earning between one and 10 times the minimum wage involved in production, or workers, for the time that production is halted, that is, during the production stoppages. Thus, the incentive for the preservation of jobs consists in it being the government that absorbs a part of the cost of wages while production in the plant is detained; the subsidy increases to the extent that the company chooses to retain the workforce. The program is specifically directed to the maquiladora and machinery and equipment sectors that have been most affected in the crisis, concretely electric and electronic equipment and apparatuses and the automotive and auto part industries.

This is undoubtedly a timely, innovative, and even ingenious response in terms of its design, although in its operation, its limitations have been demonstrated. At the beginning it was required that in order for companies to participate in the program, they had to be up-to-date in their tax obligations and fee payments to the Mexican Social Security Institute (IMSS). In addition, they had to have previously registered the days of their production stoppages that they planned to implement in every twomonth period. Finally, they must submit their request on a bi-monthly basis, for the purpose of verifying the scope of the scheduled adjustments (the reduction in the payroll due to the production stoppages should be the equivalent of, at most, a third of the expected reduction in the dollar value of the company's sales), the number of workers involved, and the evolution of sales.

The process, although well intentioned, turned out to be too complicated to be put into practice. A few weeks after it was launched, it was clear that the program needed some adjustments, because the companies were simply not requesting resources. At the close of May, only 71 companies had received financial support, for a total of 167 million pesos, less than 10% of the 2 billion pesos that was budgeted.

At the end of May, the program's rules of operation were modified, eliminating the requirement that companies have to report on their tax situation and on the payment of IMSS fees¹.

Are the resources sufficient?

Another issue involves the resources. How much can the program's budget actually do? According to the monthly industrial survey, the universe of potential beneficiaries is 190,000 workers (total number of workers in the automotive industry as well as the electrical and electronic equipment and appliances sector), who receive an average wage of 6,600 pesos (without considering benefits). This means a payroll on the order of 1.25 billion pesos monthly. Thus, in round numbers, the federal government program could help compensate workers with a month and a half of wages for all the industries considered (auto and auto parts, electrical and electronic equipment and appliances). However, in reality, the scope of the program would be much more modest if it were to include the *maguiladoras*, which according to the latest figures published (2006), would add at least 400,000 workers (270,000 in auto and 130,000 in electrical and electronic equipment and appliances). If this were the case, the program's resources would last for slightly more than two weeks pay per worker.

Conclusions

The wage compensation program that the federal government has launched to cushion the impact on employment is an agile and very opportune response in attending to workers in the branches of economic activity most negatively affected in the current recession, even though its scope is modest and the rules of operation are somewhat restrictive. It remains to be seen whether with the modifications to the rules of operation introduced at the end of May, the program will have greater success. Therefore, without failing to recognize the effort expended, it would be more beneficial to move forward with greater determination in making the labor market more permanently flexible, through the revision and modernization of regulatory aspects, in order to facilitate the speed of adjustments in recessive periods and in addition generate incentives to hiring workers in times of recovery. A greater flexibility of the labor market is key to promoting the creation of more and permanent jobs.

Bibliographic References

Ministry of the Economy (2009). "Reglas de Operación del Programa para el Desarrollo de las Industrias de Alta Tecnología (PRODIAT)" (Rules of Operation of the Program for the Development of High Technology Industries). Diario Oficial de la Federación, (Daily Gazette of the Federation) May 28, 2008.

BBVA Bancomer (2006). Serie Propuestas: Diez Acciones para Impulsar la Productividad y el Bienestar (Proposals Series: Ten Actions to Boost Productivity and Well-being).

¹ There were also other modifications, such as substituting the reduction of the payroll as an element for calculating the subsidy and replacing it with the reduction in sales. In addition, the condition of retaining workers was modified from November-December 2008 to January-February 2009.

Chrysler Bankruptcy

Chrysler's application to file for protection under Chapter 11 of the United States bankruptcy code¹ last April will bring with it a deep restructuring process for the third largest car maker in the US (behind GM and Ford), which will involve public funds, corporate re-sizing (including the shutdown of factories, and fewer models and even distributors) and a merger process with Fiat.

The bankruptcy scene is nothing new for Chrysler. In 1980 it managed to avoid it with public funding totaling 1.5 billion dollars. In 1998 Chrysler was bought out by Daimler for 36 billion dollars, and this sold it ten years later, in 2007, to the Cerberus investment fund for 7 billion. The detonator in 2009 was ultimately the lack of liquidity due to the market squeeze and the need to cover short-term liabilities for its creditors (46 overall, totaling 6.9 billion dollars) partly linked to its labor costs, which represent 10 billion euros in terms of medical care and pensions alone.

Chrysler Production in North America Thousands of units

	Chrysler	US car makers
2008 total	1,864.9	7,248.4
Annual % change	-24.5	-21.2
Contribution %	14.40	56.0
2008 Mexico	288.1	1,086.6
Annual % change	1.5	2.9
Contribution %	15.5	15.0
2009 total*	776.6	3,789.0
Annual % change	-58.4	-47.7
Contribution %	10.9	53.3
2009 Mexico*	110.0	552.3
Annual % change	-61.8	-49.2
Contribution %	9.2	14.6
* Annualized with Janua	ry-May data Ward's data	

Regardless of the time that the bankruptcy procedure takes, there is the certainty that Chrysler will come out of this situation with fewer labor liabilities. In fact, this was the condition that Fiat laid down for the merger. It was achieved through an agreement with the trade union and the Health Trust through this would agree to swap debt securities for the company's shares equivalent to 68% of the share capital. Fiat will initially buy 20% of the company—in exchange for technology and innovation—, with the option of increasing its share holding to 51% once the liabilities are liquidated with the US and Canada Governments equivalent to 12% of the share capital. The merger promises to create synergies in technology and access to the European market.

Two companies are born out of the Chrysler bankruptcy. One that has been called "good", to which the profitable assets will be transferred (including factories), and another that has been nicknamed "bad", which will keep the non-productive assets, liabilities and obligations, which will have to be sold or liquidated. Chrysler will receive 8 and 1.5 billion dollars from the US and Canada Governments respectively to back the new company. As for the employees, their wages and benefits will continue under the bankruptcy protection and a judge will allocate 2 billion dollars to the creditors for their loans in order of priority.

Chrysler Factories About to Close

Conner Avenue Detroit 2009		State	Date	
St. Louis Planta NorteMissouri2009TwinsburgOhio2010Steling HeightsMichigan2010Planta de ejesDetroit2010KenoshaWisconsin2010	Conner Avenue St. Louis Planta Norte Twinsburg Steling Heights Planta de ejes Kenosha	Detroit Missouri Ohio Michigan Detroit Wisconsin	2009 2009 2010 2010 2010 2010 2010	

Source: BBVA Bancomer with Detnews.com data

The restructuring plan with the merger includes the shutting down of seven factories in the US, apart from the two closed in 2008. This will result in a total 23 operating factories (from 32 in 2008) with which they plan to cut output to less than half compared to 2008. It should be noted that until now all of the factories considered for shutdown are in the United States. The factories in Mexico, rated as profitable assets, have practically stopped due to the lack of intermediate goods supplies from the company's factories in the US and, although there are still no plans to resume activities, it is thought that due to their flexibility and efficiency, they will shortly be included in Fiat's production projects to avoid further market share losses. To conclude, the merger with Fiat could allow the new company to create certain scale economies that could make navigating through these times of global crisis easier for them.

⁴ Chapter 11 allows a company in financial difficulties to continue to operate while an agreement is sought with creditors. During this period it allows the debtor to keep all of its assets, object to its creditors' requests, reject its due payments and even unilaterally reduce the amount of its debt. However, resorting to this chapter requires time and money and obliges the applying company to regularly update the bankruptcy judge in detail about the progress of transactions with its creditors. The application to file for protection under Chapter 11 alone can set a company back 800 thousand dollars. The alternative to Chapter 11 is Chapter 7, which envisages immediate liquidation.

General Motors (GM) Bankruptcy

The GM bankruptcy was finally concluded a month after Chrysler, which had been taken for granted for quite some time. Since the end of 2008, when it needed an emergency Government bailout of 17.4 billion dollars, in a climate of falling sales and restricted access to credit, it was obvious that the most important car maker in the United States (and until 2007 the most important in the world in terms of units produced) would have problems keeping up its financial feasibility with a consolidated debt of 172.8 billion dollars and assets of 82.3 billion dollars in the first quarter of the year. This is the same as a loss of 90 billion dollars of non-secured debt for investors and creditors.

GM Corp. Consolidated Debt Billions of dollars

	as of March 31, 2009
Assets	82.29
Liabilities	172.81
Wilmington Trust Company Deutsche Bank AG	27.4 22.8 4.4
Bank of New York Mellon	0.2
Commercial*	0.9
Secured banks**	6.0
Trade unions	25.4
U.S. Government	19.4
Canadian Government	9.5
Subtotal	88.6
Other	84.2
* Only considers main creditors ** Citigroup, JP Morgan, Chase and Credit Sui	sse

Source: BBVA Bancomer with Detnews.com data

The US Government will back the car maker with 30 billion dollars to liquidate its liabilities. This will make it the main shareholder, holding 60.8% of the company's worth in exchange for 50.1 million dollars that the Treasury securities total. The Canadian Government will own 11.7% of the share capital in exchange for 9.5 billion in loans granted. Non-secured bondholders will also participate in the share capital structure with 10%. The company also reached a deal with trade unions to swap 25.4 billion dollars of trust fund debt to pay medical care to pensioners in exchange for holding 17.5% of the company's share capital.

The bankruptcy does not mean that GM will disappear, but it does mean an imminent change in its operating scale, especially in the US, and only keeping its most profitable assets. According to its restructuring program, the "New GM", which is expected to start operations during the third quarter of this year, will keep the Chevrolet, Cadillac, Buick and GMC makes on the market, while it will sell or restructure Saab, Hummer, Saturn and Opel. So far, Pontiac is the only make for which an exit from the market has been announced in 2010.

GM owns 47 factories in North America, of which it plans on shutting down 17 (nine of them at the end of 2009 and the rest between 2010 and 2011). In 2008 it closed the Toluca factory that mainly manufactured engines and parts, with 2.2 job loses. Overall, the changes will involve the loss of 21 thousand jobs, which will represent 38.8% of the total employees belonging to trade unions in the US and its supply of models on the market will fall from 48 to 34 in 2010. By then, distributors will have dropped by more than 40% (from 6,246 to 3,605).

GM Factories About to Close

Factory		Date
Factory Massena, N.Y Grand Rapids, Mich Wilmington, Del Orion Twp, Mich Pontiac, Mich Spring Hill, Tenn Boston, Mass Jacksonville, Fla. Columbus, Ohio Mansfield, Ohio Livonia Engine, Mich Pontiac Flint North, Mich Ypsilanti Twp Parma, Ohio Fredericksburg NY	Stamping Stamping Assembly plant Assembly plant Assembly plant Assembly plant Distribution center Distribution center Distribution center Stamping Stamping Stamping Stamping Stamping Stamping Stamping	Date May 2009 June 2009 September 2009 October 2009 November 2009 December 2009 December 2009 June 2010 June 2010 December 2010 December 2010 December 2010 December 2010 December 2010 December 2010
Indianapolis	Stamping	December 2011

The restructuring of output in North America will continue with the scheduled technical slowdowns under the close supervision of output results to ensure they are in line with market demand. All trade operations will continue as normal.

In Mexico, the company has three factories in the states of Coahuila, Guanajuato and San Luis Potosí that together employ some 9 thousand people. The three of them are still operating, although on a lower scale due to the previously scheduled technical slowdowns. In fact, there are three launches just around the corner. In Silao, Guanajuato will exclusively produce the GMC Sierra

and Chevrolet Silverado hybrid pickup trucks for North America. In Ramos Arizpe, Coahuila tests will be run to manufacture the Cadillac BRX, a new "crossover" that is expected to be included in the production line at the end of the summer. The rest of the models will continue to be produced as normal, although on a lower scale.

GM Production in North America Thousands of units

	GM	US car makers
2008 total	3,258.6	7,248.4
Annual % change	-19.7	-21.2
Contribution %	25.20	56.0
2008 Mexico	484.3	1,086.6
Annual % change	3.5	2.9
Contribution %	14.9	15.0
2009 total*	1,544.4	3,789.0
Annual % change	-52.6	-47.7
Contribution %	21.7	53.3
2009 Mexico*	285.9	552.3
Annual % change	-41.0	-49.2
Contribution %	18.5	14.6
* Annualized with Janu	arv-May data	

Source: BBVA Bancomer with Ward's data

As far as the European market is concerned, GM finally reached an agreement for 1.5 billion euros of German Government funding and a memorandum of understanding to join forces with Magna International Inc. which will contribute 0.7 billion euros in exchange for 20% of the share capital. Under the agreement, Opel/Vauxhall will be grouped in Adam Opel GMBH, and the Russian bank Sberbanck will also own 35% of the share capital, Opel employees 10% and GM 35%.

Out of the rest of the makes put up for sale, three are yet to be realized. Chinese group Sichuan Tengzhong Heavy Industrial Machinery was the chosen buyer for the Hummer 4x4. This includes brand rights, the management team and the operational team. The same applies for Saturn and Saab which will be sold to Penske Automotive Group and the Swedish firm Koenigseeg, respectively. In the three cases, the terms of the agreement protocol are not yet known. If course, this is only the beginning and there are still a lot of issues to be resolved. Although bankruptcy was inevitable, above all to oblige the parties to drop most of their claims, should the bankruptcy last for a long time the implications are likely to be very negative because not many investors want to buy something valuable and long-term from a losing company.

Of course, in the short-term GM will no longer be the icon of the US motor vehicle world. Although at the moment it has more appealing models for consumers than in the past, the "new GM" will involve a lower market share, even significantly lower than the company estimates in its restructuring plan.

Another concern are medical care costs, because these have not been eliminated. In 2010 the "new GM" will have to give UAW (workers trade union) 600 million dollars in the form of dividends to meet this obligation. The pension fund has not been sufficiently capitalized either, and at the 2008 year-end it recorded a deficit of around 13 billion dollars. To sum up, the start of the GM restructuring process should be interpreted as another, but not the last, chapter in the company's evolution. We must acknowledge the improvement in products in recent years and a strong attempt to modernize the company, both positive factors that will help it through these times.

Bibliographic References

The Detroit News online

The Wall Street Journal Autos online

Ward's Automotive Industry News online

The Economist. "Briefing the bankruptcy of General Motors. A giant falls". June 6th-12th 2009

What Activities Make Up Tourism? Share %

Estab	lishments	GDP
T . (1)	400.0	100.0
Iotal	100.0	100.0
Hotels and restaurants	29.2	20.1
Hotels and motels	4.1	12.3
Restaurants	25.1	7.8
Transportation	1.2	34.0
Air	0.0	7.4
Intercity and rural	0.4	6.2
Railway	_	5.3
Transport- related services	0.3	13.5
Collective	0.6	1.7
Retail trade	44.5	26.4
Self-services	2.9	8.1
Fashion boutiques	17.4	4.2
Department stores	0.2	3.9
Healthcare	4.1	3.4
Fuels	0.4	2.4
Art and crafts, gifts, etc	11.2	1.6
Footwear	4.7	1.6
Jewelry	3.7	1.2
Other activities	25.1	19.5

Source: BBVA Bancomer with INEGI and Tourism Ministry data



What is the Weight of Tourism

The flu epidemic that swept through the country in April and May clearly hit economic activity hard at first. Preliminary estimates suggest that this episode, due to the additional effects throughout the year, could decrease GDP growth by between half a percentage point and a whole percentage point this year.¹ This article analyses implications for tourism and related activities, where the economic effects from the epidemic were concentrated. By reviewing activities in the tourism sector and their specific contribution to the economy, including the tourism features and trends before and after the flu outbreak, estimates are given about the extent to which they could have been affected, both on a national and a regional level.

Tourism, more than just hotels

In accordance with the INEGI's Tourism Satellite Account, which uses the method proposed by the IMF, 23 of the 79 activity branches in which the economy is broken down are linked to tourism. Out of these, the contribution from hotels in terms of GDP is just 12%. The greatest share is in supplementary activities, such as transport (34%), trade (26%), and restaurants (8%). Overall, these four main activities represent 80% of the tourism GDP and they comprise 75% of the companies that are directly or indirectly involved in the sector.

Where is the hotel infrastructure?

The share of tourism in the domestic economy is around 9% of the GDP, although for some states it is much higher: in the case of Quintana Roo, for example, it is almost 50%, and for Baja California Sur it is 30%. At the opposite end are states such as Tabasco, Campeche and the State of Mexico, where tourism contribution to the economy is not even 2%.²

The hotel infrastructure also reflects the focus on tourism in these states and the important role that they play in domestic economic activity. The Federal District and Jalisco are the two states with the greatest accommodation offer, together representing 20% of the country's total hotel rooms.³ Quintana Roo, which is in third place, has the most luxury hotels on the other hand: 16% of all of the country's hotels with a 4 star rating and above are in this state.

A look at the cities reveals that among those that have a population of at least 100 thousand inhabitants (181 in total), half of the tourism offer (calculated by number of hotels) is concentrated in just 26 cities. Hotel density, or the ratio of hotels to inhabitants, is high (domestic average plus standard deviation) in just 20 of them. Generally speaking, the cities in this group are in keeping with those that the Secretariat of Tourism identifies as the most important in terms of number of visitors, which include Cancún, Playa del Carmen and in general the Riviera Maya region in Quintana Roo; Los Cabos in Baja

¹ Estimates by the Secretariat of Finance, Banxico, BBVA Bancomer and other analysts

² This is largely explained by the heavy weight of other activities in the economy of these federal entities, such as oil, in the case of Campeche and Tabasco, and the motor vehicle industry in the State of Mexico.

³ Nuevo León is an interesting case. In spite of its important economic role, it is not among the top entities in terms of hotel infrastructure (although more than 60% of its hotels are luxury hotels)

California Sur; Puerto Vallarta in Jalisco; Veracruz and Boca del Río in Veracruz; Mazatlán in Sinaloa; Acapulco and Ixtapa in Guerrero; the Nuevo Vallarta region in Nayarit; Mérida in Yucatán; Oaxaca and Huatulco in Oaxaca; Guanajuato and San Miguel Allende in Guanajuato; and San Cristóbal de las Casas in Chiapas.

Tourism features

According to Secretariat of Tourism figures, in 2008 around 40 million tourists checked into hotels. Inflow records at immigration control points show that 8.4 million tourists from abroad entered the country. A reconciliation of the figures shows that for each international tourist there are 4.7 national tourists, in other words, international tourism represents 21% of the total.

The bulk of international tourism activity (only considering those who travel deep into the country or arrive on cruise ships) is during the first quarter and declines significantly from then on, especially in the fourth quarter.⁴ As regards domestic tourism, this is mostly during the summer. The seasonal pattern is especially important when calculating the fall in tourism brought about by swine flu, as well as the speed of recovery.

With regard to the focus on tourism in states, in accordance with the Secretariat of Tourism's figures only Quintana Roo, Baja California Sur and Nayarit receive more tourists from abroad than domestic tourists, and in a very-far-off second group are Baja California, Jalisco, Federal District, Chihuahua, Yucatán and Coahuila, with a contribution of tourists from abroad of between 20 and 35%. The numbers confirm that tourism from abroad is heavily concentrated in coastal destinations,⁵ while national tourism is mainly in cities in mainland Mexico.

Recent trends: before and after swine flu

How much did swine flu impact tourist activity? Or rather, How much did swine flu contribute to the down trend that was recorded since the start of 2009? Which cities did it hit the hardest?

Firstly, it is worth noting that tourist activity recorded a clear decline since the start of the year, in terms of foreign and domestic tourism. As regards the former, there had been many speculations about the positive effect that the heavy depreciation of the peso would have⁶ and that could counteract the impact of the recession on a global scale and in the United States in particular, from where more than 70% of tourists from abroad come. It turned out that this impact was not as heavy as expected, or in economist language, the income effect (recession) prevailed over the price effect (depreciation and in some cases price fall). In the first quarter, inflow records at immigration

Accommodation Capacity by State and Rating Hotel rooms



Cities with Most Hotel Activity Hotels per 10 thousand inhabitants



The Summer will Set the Trend for Recovery in Domestic Tourism % share of tourism based on air traffic, 1998-2008



⁴ This suggests that the climate factor is the determining factor in international tourism to Mexico. Although it is straightforward, the reason helps to explain why tourism is so highly concentrated on the coast.

⁵ Based on immigration control point records, which are probably the most reliable source of foreign tourist inflows, 52% of these tourists are in Cancún, another 33% split between Los Cabos, Puerto Vallarta, Guadalajara, Mazatlán, Acapulco and Ixtapa, while the remaining 15% enter via the Federal District (12%) and other points (3%).

^{6 45%} at its lowest point, in the first quarter, compared to its mid-September levels when the crisis broke out.

Only Three States Receive Tourists Mostly from Abroad % share in tourist inflow, 2008



Air Traffic Fell, Even Before the Flu Outbreak Annual % change



The Swine Flu Impact is Easing Gradually, More Quickly in Mainland Cities

	Mainlar Nights [*]	nd cities	Beaches Nights* Occup.**						
Before swine flu (1-Jan a 19-Apr)	-6.5	44 (-6.5)	0.0	64 (-5.5)					
Swine flu									
W1 (20 - 26-Apr)	-5.7	48 (-8.3)	-5.2	58 (-7.0)					
W2 (27-Apr - 3-May) -48.7	24 (-27.5)	-36.0	44 (-22.2)					
W3 (4 - 10-May)	-48.0	18 (-27.1)	-49.5	24 (-30.0)					
W4 (11 - 17-May)	-40.1	28 (-26.7)	-36.0	44 (-22.2)					
W5 (18 - 24-May)	-29.3	33 (-21.2)	-43.1	30 (-29.2)					
W6 (25 - 31-May)	-16.9	38 (-14.9)	-31.6	35 (-21.3)					
W Week * Overnight sta	vs (annua	al % change)							

	Overnight stays, (annual % change)
* *	Hotel occupancy, %. * Numbers in brackets mean change in
	hotel occupancy rate in percentage points
Source:	BBVA Bancomer with Tourism Ministry data

control points showed an 8.5% fall in the international tourism flow compared to the same period in $2008.^7$

As far as domestic tourism is concerned, weekly hotel activity records reveal that from January to the third week of April (i.e. after Easter and before the swine flu outbreak, during the fourth week) overnight stays and hotel occupancies in mainland cities (domestic tourism trend indicator) recorded a drop of around 6% compared to 2008.⁸

Both results, domestic and international tourism, hint that the fall in tourist activity, without taking the swine flu effect into account, was around 7% in annual terms, once the relative weights are calculated.

The impact of swine flu on tourism became apparent as soon as this was announced, on April 24, but mainly over the following three weeks, when hotel occupancy fell to 10% (from 60% before the epidemic) in areas such as the Riviera Maya. In both coastal destinations and mainland cities lodgings fell by around 50% in annual terms. Furthermore, there were also signs in the sense that the recovery could be quicker in mainland cities: by the fifth and sixth week after the virus broke out, the rate of decline had eased in these cities compared to coastal resorts.

Quantifying the impact

Based on trends up until the flu outbreak, tourism seasonality and hotel occupancy figures during the weeks following the outbreak, the scope of the impact of the epidemic on tourist activity, both national and regional, can be inferred.

It is assumed that the impact of swine flu mainly occurred during the second quarter, with a dramatic fall during the first few weeks and easing off after a month. Based on the differences in occupancy in coastal resorts compared to mainland cities (with a more pronounced fall in the former) it can be estimated that tourism fell around 45% in annual terms during the second guarter, with foreign tourism recording a drop of between 55 and 60%, whereas for domestic tourism this was between 40 and 45%. Bearing in mind that the trend up until the epidemic was a decline of around 7.5%, it could be said that the flu outbreak itself caused a 37% reduction in domestic tourism during the April-June period. If the impact was mainly during one quarter, as assumed, the result for 2009 as a whole could be a drop in tourism of between 16 and 17%. In a scenario such as this, for coastal destinations the decline during the year could reach around 20%, where as for mainland cities this would be in the region of 15 to 16%. In terms of absolute numbers, it is possible that the recession could push the number of tourists in the country (national and

⁷ A strong upturn was recorded in cross-border tourism, which according to Banxico figures rose by 35% in annual terms in the first quarter of the year.

⁸ Domestic air traffic records published by the Secretariat of Communications and Transport showed a 13% reduction, whereas hotel check-ins published by the Secretariat of Tourism recorded a 17% fall. However, different factors come into play here, ranging from statistical effects (in 2008 Easter was in March and 2009 it was in April), changes to air fares following a long price war and the rise in fuel prices in 2008, as well as the recession itself.

from abroad) down by between 2.5 and 3 million, and the swine flu epidemic would cause a further reduction of 4 to 4.5 million.

In terms of the GDP, estimates hint that swine flu will be responsible for taking between half a percentage point and a whole percentage point away from the domestic GDP in 2009.

What will this mean for local economies? In accordance with the estimated decline in tourism for mainland cities and coastal resorts, and the relative weight of tourism in the domestic GDP, the impact on a local level can be estimated. The worst hit states will clearly be Quintana Roo, Baja California Sur, Nayarit, Colima, Guerrero and Sinaloa, for which the share of tourism in the economy is higher than the domestic average and that account for around 70% of tourism from abroad. For this group, the downturn linked to swine flu alone ranges from 5.5 percentage points in the case of Quintana Roo, to 1.5 points in Sinaloa. At the opposite end, the impact for states such as Campeche, Tabasco, Nuevo León, State of Mexico and Chiapas will be light. It should be mentioned, however, that even in this last group there will be cities that will be heavily affected, such as San Cristóbal de las Casas, in Chiapas, and Valle de Bravo and Ixtapan de la Sal in the State of Mexico.

Conclusions

Regarding the estimates of the impact of swine flu on tourism, it must be noted that tourist activity includes much more than just hotels, in fact, when speaking about tourism GDP, hotels only account for 12%. More important activities both in terms of the number of establishments and aggregate value are transport, restaurants and retail trade. Support programs for affected companies must identify the most important states and cities in terms of economic units as well as employment and aggregate value when it comes to establishing the priority of programs and money to be allocated.

Several important considerations arise from the analysis of trends before and after the swine flu outbreak. Firstly, domestic and international tourist activity was already showing signs of a downturn even before the epidemic. Secondly, the first tourist activity indicators after the outbreak hint at a heavy but short-term impact. This is in keeping with past experience regarding a case of this type on an international scale, for example, the SARS in Asia in 2003 (Siu, and Wong, 2004). Furthermore, although the impact was widespread at the domestic level, it was more intense in coastal resorts. Mainland cities, which are more heavily targeted at domestic tourism, could see their activity levels pick up sooner than the coasts, especially those that are mainly focused on tourism from abroad.

Preliminary estimates suggest that the fall in the tourism GDP during 2009 could be 16 to 17%. For the economy as a whole, swine flu could contribute negatively by between half a percentage point and a whole percentage point to GDP growth. Levels of around 6% could even be reached in states such as Quintana Roo, where the economy depends almost 50% on tourism and where the greatest impact from the epidemic was recorded. A lot will depend on the speed with which tourist flows, especially from abroad, return to normal.

What Impact will Swine Flu have on Tourism?

	(1)	Before swine flu (2)	2009 With swine flu (3)	Swine flu effect (3) - (2)
Tourism total ^a Domestic Abroad Tourism total ^b Domestic Abroad	40.0 31.6 8.4 — —	37.3 29.5 7.8 - 6.7 -6.5 -7.6	33.5 26.6 6.8 - 16.4 -15.7 -19.0	-3.9 -2.9 -1.0 -9.7 -9.2 -11.4

Millions of tourists Annual % change

purce: BBVA Bancomer with INEGI and Tourism Ministry data

How will Swine Flu Affect State Economies? Percentage points of GDP



Source: BBVA Bancomer with INEGI and Tourism Ministry data

Bibliographic References

Siu, Alan y Wong, Y.C. Richard (2004), "*Economic Impact of SARS: The Case of Hong Kong*", Hong Kong Institute of Economics and Business Strategy, April 2004

(INEGI) Instituto Nacional de Estadística y Geografía (2005). Sistema de Cuentas Nacionales de México, Cuenta satélite del turismo en México. INEGI.

Hai, Wen, et al. (2004). "*The Short-Term Impact of SARS in the Chinese Economy*", Asian Economic Papers, 2004, Vol. 3, 1, pp. 57-61.

Job Losses in 2009: How Many and Where?

In the first five months of this year, 309,000 posts in formal employment were lost in the country and 696,000 since the peak in October 2008.¹ The fall in employment is undoubtedly one of the greatest worries in the present recession: How many could be lost in total? In which businesses and regions? By reviewing previous recessions, sensitivities to GDP fluctuations, as well as structure and distribution, this article looks at the risks to employment and quantifies the possible impact by business, sector and region. This allows for an itemized assessment on the possible evolution in the country.

An overview of recent history

Will the fall in employment be similar on a sector and regional level this time to that seen in the 1995 and 2001 recessions? Around 555,000 jobs were lost in the first and just over 300,000 in the second. However, each had unique features, as does this one. For example, in the nineties' recession, employment reached its highest level, as did business, in the fourth quarter of 1994. Employment recovered to pre-crisis levels at the end of seven quarters (September 1996) while it took GDP ten quarters to reach the same level (June 1997).

International trade and, specifically, China's entry into the WTO were key factors to employment evolution during the 2001 recession, with the recover period taking longer that time around. In this way, while the economy took two years to recover pre-fall levels, employment took four years to reach the same rates.

While keeping due proportion for differences in the causes and conditions of the economy then and now, the present employment cycle could be said to have more in common with 1995 than 2001. As corrections have been major from the start, perhaps a recovery may also be a little quicker, at least when compared with 2001. Mexico's position in the US market in terms of its main export products and the boost to competitiveness from the recent depreciation of the peso (see the articles on the manufacturing sector and the automotive industry) may be ingredients aiding recovery.

Industry and services, two different stories

The evolution of employment over the present decade shows major differences when industry and services are assessed differently. The former anticipates and reacts more than proportionally to falls in production and its recovery has been less vigorous. In turn, services have shown positive growth rates throughout the present decade, surpassing GDP pace in most instances. This means, industrial employment is relatively sensitive to changes in business levels while employment in services is, at least in the last decade, hardly sensitive in relative terms; the first is elastic to revenue and the second has been inelastic.

How Did Employment React in the Last Recessions? Maximum employment levels and

quarters required for recovery Period when employment reached maximum = 100



* t = period when the activity reached its highest level Source: BBVA Bancomer with IMSS and INEGI data

Employment Income Elasticity 1999 - 2008

с	ontr. %	Elasticity in GDP	Annual % chg. Sep-08
Total	100.0	1.0	1.6
Manufacturers	27.6	1.5	-3.4
Construction	10.0	1.5	-0.1
Transp. and communic.	5.6	0.9	3.0
Home, pers. & B2B servs.	24.6	0.8	5.8
Rest., hotels and retail	20.8	0.7	3.9
Electricity, gas & water	1.2	0.7	4.2
Mining	0.7	0.6	17.8
Social & community servs.	6.9	0.4	2.0

Source: BBVA Bancomer with IMSS data

¹ However, starting from October is perhaps not the best thing since employment is known to contract at the end of every year. That is, there is a marked seasonality in the months of November and December.

Employment Seasonality Difference in percentage points vs.

yearly average, 1993-2008



Fuente: BBVA Bancomer with IMSS data





The elasticity analysis results are maintained by breaking down the business as per the main sectors: manufacturing and construction, the two relevant industrial activities in terms of production value and employment, show relatively high elasticity rates (higher than one) while services show a consistently low elasticity (below one).

Seasonality

Although highly accentuated, statistical effects have also had a major influence on the contraction in employment in the present downturn. Typically, most job creation occurs in the third and fourth quarters. December is traditionally a month for limited job creation; in fact it is almost always negative. Equally, in the first months of the year (especially January and February) net job creation is limited. Obviously, this does not mean job losses associated to the recession are not important,² but it helps to have a better perspective on the problem. More importantly, bearing in mind seasonality helps when quantifying the potential job losses throughout the year.

Employment distribution: major concentration

Where is job creation concentrated in the country? One in every three social security registered workers in the formal sector is located in the Federal District and State of Mexico. Adding Jalisco and Nuevo León, we get a figure of 50%. With Veracruz, Guanajuato, Chihuahua, Puebla, Tamaulipas, Baja California and Coahuila, with shares between 4 and 6% each, the figure reaches 85%. The common denominator in most cases is the presence of a relatively important assembly manufacturing base and/or a major automotive sector anchor. The exceptions are the Federal District, whose contribution comes mainly from services (the contribution to the national total being nearly 30%) and Veracruz, where most petrochemical and oil refining production is based. This shows the high level of manufacturing business concentration in Mexico: for the 21 institutions not part of this group, employment participation of only 15% is considerably lower to their weight in population terms at 40%.

By business sectors, employment concentration is also marked. According to formal insurance figures from the IMSS (Mexican Institute of Social Security) trade (wholesale and retail) represents around 30% of formal employment. Manufacturers add 25%, B2B services and services other than government business add 12%, hotels and restaurants 8% and construction 5%. This means, four out of every five formal jobs created in the country are concentrated in four large activities.

A look at manufacturers

Looked in greater detail, manufacturers also show major concentration. Figures from the INEGI (National Institute of Statistics and Geography) Monthly Industrial Survey for the 21 business subbranches considered in accordance with the NAICS classification show that 86% of production value and around 75% of employment are concentrated in just nine. Four of these sub-branches, transport equipment, chemicals, drinks and electrical machines and equipment, are relatively elastic to revenue, while the other five, food, basic

² In the US, the loss of employment resources in the first two months of the year was 1.3 million, nine times above Mexico.

metals, non-metal minerals, rubber and plastics and metal products, are relatively inelastic.

Then, how many jobs could be lost?

Combining information relating to employment structure and its regional and sector distribution, employment sensitivity to production changes as well as seasonality are counted in a reference framework to estimate the potential impact on employment in the present recession.

May figures show job losses in the formal sector at around 3.9% in annual terms, although with major differences between sectors (e.g. community and social services, involving the government, with growth over 3%, while manufacturers show a loss of 11%) and states (Chihuahua being the most dramatic example with a loss of almost 14% and Chiapas, on the other hand, with an increase of 4%). The impact of swine flu was clear: in Baja California Sur and Quintana Roo, contraction of around 10% per year is comparable to that seen in states on the border.

As per our estimates, for the whole of 2009 employment contraction may be around 5.1% equating to around 700,000 jobs. Most of this loss will have taken place in the first semester, both due to seasonality factors and the expectation of moderately more favorable conditions towards the end of the year.

In accordance with estimates, manufactures could contribute with around 205,000 to net job losses, construction with 85,000, commerce with 150,000, services with 220,000 and other activities (primary sector, mining and electricity, gas and water generation) contributing the remaining 40,000.

Regionally, the Federal District and Chihuahua will be the states where job losses will be more pronounced with around 100,000 losses in both states. The list continues with Baja California, Coahuila and Nuevo León, Mexico State and Tamaulipas, Jalisco and Sonora. This means, the most affected states will be those on the border and those with higher industrial and economic development (Federal District, Mexico State and Jalisco). Three out of every four jobs lost on a national level this year will be concentrated in this set of states.

Measured in relative terms, the border states appear once again in first place (Chihuahua, Coahuila and Baja California, Tamaulipas and Sonora), but also the major tourist states of Baja California Sur and Quintana Roo. Campeche, Michoacán, Oaxaca, Zacatecas and Veracruz appear at the end of the list which, due to their limited industrial sector and a certain boost received from infrastructure work (shown in the growth of the mining, construction and electricity, gas and water generation industries), have hardly seen the recession impact on their employment levels.

The Most Vulnerable Manufacturing Activities Relative participation and employment elasticity in production, 2001-2008



Source: BBVA Bancomer with INEGI data

Where will Job Losses Be Concentrated in 2009? Thousands



In Relative Terms, Where will the Greatest Impact Be? Expected formal job losses in 2009, %



Conclusions

It is undoubtedly a difficult year but not particularly different than what has been seen in other recession periods for the Mexican economy. With three recessions in 15 years from the start of the NAFTA era, two due to external shocks, the external sector has been a determining factor in the size of the contraction and also a boosting factor in coming out of it. This time will be no different and, if the US economy starts to show signs of improvement towards the end of 2009 or in the first semester of 2010, the recovery of employment in Mexico may follow a similar path to that in 1995, with a major fall but a slightly clearer recovery, at least compared with other recessions. In any case, employment projections are consistent with those in business, showing that most of the fall will be concentrated, as has been the case until now, in the states and sectors most exposed to the US economy, with the border and some industrial and tourist areas standing out. The south and southeast will see a relatively lower impact.

References

Cuadra, Gabriel (2008). "*Hechos estilizados del ciclo económico en México*". Documento de investigación 14-2008.

Sarabia, Arturo (2009). "*Efectos del Ciclo Económico en EE.UU. sobre la Producción y el Empleo en México*", Documento de Trabajo, SDE 456, CIDE.

Indicators of Economic Performance by State

GDP* 2006			GDP*/inhah	A	AGR ³ , % 2000	-2006	Lugar en el nacional							
(GDP* 2006 ¹	Population ²	dollars	2006, dollars	Real GDP	Population	Real GDP per inhab.	Total GDP 2006 i	GDP per inhab. 2006	Remitts. 2008	Empl.⁴ 2008	Fed. Res.⁵	Com- pet. ⁶	
_														
Total	1,691,169	104,874	751,551	7,166	2.3	1.1	1.2							
DF	343,588	8,822	161,733	18,332	0.8	0.2	0.5	1	1	9	1	2	1	
Méx	179,996	14,228	72,836	5,119	2.5	1.7	0.8	2	21	3	3	1	25	
NL	126,006	4,280	56,518	13,205	3.6	1.6	2.0	3	2	23	4	7	2	
Jal	105,868	6,844	46,670	6,820	1.8	1.1	0.8	4	14	4	2	4	14	
Chih	77,923	3,292	34,163	10,377	2.6	1.3	1.3	5	4	17	6	14	4	
Ver	69,875	7,222	31,963	4,426	2.3	0.5	1.9	6	24	5	5	3	22	
Gto	63,257	4,968	25,985	5,230	3.1	0.7	2.4	7	20	2	8	8	16	
Pue	60,242	5,480	27,634	5,043	2.5	1.3	1.2	8	22	6	11	6	26	
Coah	58,385	2,545	24,749	9,724	3.5	1.4	2.1	9	6	25	10	19	6	
BC	58,233	2,908	27,051	9,303	2.7	3.3	-0.6	10	7	21	7	16	3	
Tamps	53,660	3,076	24,218	7,873	3.0	1.5	1.4	11	12	15	9	12	9	
Son	49,880	2,439	21,414	8,780	3.1	1.3	1.8	12	9	24	12	15	10	
Mich	37,735	4,004	16,032	4,004	1.4	-0.2	1.6	13	28	1	14	10	23	
Sin	34,680	2,638	14,224	5,392	2.2	0.3	1.8	14	19	16	13	18	15	
SLP	31,838	2,449	14,262	5,824	3.9	0.7	3.1	15	17	12	16	20	18	
Qro	30,711	1,629	13,714	8,420	3.2	2.1	1.1	16	11	19	15	22	7	
Chis	28,752	4,362	12,188	2,794	2.2	1.4	0.8	17	32	11	20	5	30	
Gro	26,081	3,153	12,007	3,809	1.3	0.1	1.1	18	29	8	26	11	29	
QR	25,252	1,176	11,886	10,112	4.4	4.5	-0.1	19	5	30	17	27	11	
Mor	24,228	1,635	10,064	6,156	3.0	1.0	2.0	20	16	14	22	25	19	
Oax	24,108	3,553	11,418	3,214	1.6	0.2	1.4	21	31	7	24	9	32	
Yuc	23,905	1,850	10,613	5,735	3.1	1.5	1.7	22	18	29	18	21	20	
Hgo	22,629	2,383	9,689	4,066	1.3	0.7	0.5	23	26	10	23	17	28	
Dgo	22,540	1,531	9,747	6,365	3.9	0.6	3.2	24	15	18	21	23	21	
Ags	22,378	1,088	9,540	8,769	4.3	2.0	2.3	25	10	22	19	28	5	
Tab	19,194	2,018	9,549	4,732	1.7	0.7	0.9	26	23	28	25	13	24	
Camp	18,335	768	9,188	11,961	2.3	1.4	0.9	27	3	31	28	26	17	
Zac	13,664	1,383	5,611	4,056	3.4	0.1	3.3	28	27	13	27	24	27	
BCS	10,466	524	4,660	8,899	4.6	3.0	1.5	29	8	32	29	32	8	
Nay	9,472	961	4,209	4,378	2.3	0.4	1.9	30	25	20	30	29	13	
Col	9,250	578	4,050	7,012	2.0	1.5	0.5	31	13	27	31	31	12	
Tlax	9,038	1,089	3,969	3,644	2.1	1.7	0.4	32	30	26	32	30	31	

1 2 3 4 5 6 *

Billions of 2003 pesos 2006 population, thousands of persons, Conapo estimates Average Annual Growth Rate Total registered workers by the IMSS 2008 federalized resources State competitiveness index (IMCO), 2008 It refers to the gross added value. The sum of the state figures does not coincide with national due to the net taxes to subsidies figures BBVA Bancomer with INEGI, Conapo, Banco de México, IMSS, SHCP, IMCO (Instituto Mexicano de la Competitividad, A.C.) data Source:

Indicators by State

Region: Medium Development

			Camp	eche	e Colima								
	2007	2008	2008	3008	4Q08	1009		2007	2008	2008	3008	4Q08	1009
Manufacturing production (annual % change)	6.7	0.3	-4.1	1.4	-2.1	-4.4		1.9	5.4	17.7	1.9	-10.7	-17.8
Construction** (annual % change)	-26.0	-10.9	-19.5	7.8	14.4	30.4		14.1	-34.5	-28.9	-44.0	-30.7	68.5
Public work	-27.5	-12.6	-23.2	5.8	15.3	27.5		38.6	-44.8	-37.9	-62.9	-38.6	119.6
Private work	10.6	17.5	62.9	33.5	4.5	91.5		-3.2	-24.2	-14.2	-24.5	-24.8	26.7
Building	-2.7	44.6	162.0	54.2	7.0	97.2		34.2	-21.0	-5.5	-28.1	-31.3	11.0
Watering and drainage	94.6	-15.3	-46.9	-19.6	2.3	1.0		85.9	-87.1	nd	-98.2	-63.0	nd
Electricity and communications	-62.7	-31.1	23.4	-81.6	-71.0	-78.0		-99.6	-50.4	nd	nd	-60.8	nd
Transportation	126.5	78.0	195.4	27.9	-11.0	47.0		-20.5	-37.3	-15.9	-60.5	-46.2	115.1
Oil and petrochemicals	-32.8	-27.2	-46.3	-2.4	31.3	18.4		-44.3	-68.6	-64.3	nd	nd	108.0
Other work	-60.9	-36.9	-70.8	75.1	-50.5	235.8		184.0	19.8	-3.9	170.6	69.1	127.3
Electricity distribution (annual % change)	-5.7	8.5	-2.0	0.5	18.8	5.0		6.1	-1.9	3.9	-17.5	-25.7	-47.0
Retail sales (annual % change)	4.2	23.8	30.8	35.6	12.8	-1.9		4.2	-0.1	8.2	-0.8	-12.9	-13.1
Wholesale sales (annual % change)	-5.6	-2.9	6.6	-4.9	-10.6	-10.4		5.5	-6.7	-16.8	-6.5	-3.8	-2.9
Total employment (annual % change)	nd	nd	-5.8	-6.0	-5.9	2.9		nd	nd	-9.0	-9.6	-11.4	-2.8
Industry	nd	nd	-14.5	-15.7	-14.6	3.6		nd	nd	-3.2	-3.2	-5.0	-4.2
Services	nd	nd	5.7	5.2	4.5	4.4		nd	nd	-2.9	-4.8	-6.0	1.3
Gasoline sales (annual % change)	13.2	4.0	7.2	10.3	-2.6	12.6		74.7	19.9	-2.8	2.3	49.9	6.0
Total air traffic (transported pass., annual % change)	12.3	nd	-3.7	9.5	-5.0	1.1		19.5	nd	-15.8	-46.7	-43.7	-38.2
Domestic	15.3	nd	-4.2	10.4	-4.4	2.3		20.4	nd	-15.2	-45.5	-50.5	-47.2
From abroad	-18.7	nd	3.8	-3.4	-14.6	-17.1		17.0	nd	-18.0	-53.0	-22.9	-28.9
Federalized resources (real annual % change)	-3.4	17.4	39.0	35.0	24.0	-6.5		2.7	10.5	11.9	5.1	-1.8	-5.8
Participations (Branch 28)	-14.1	12.2	67.7	83.7	62.1	-14.1		-2.6	16.8	3.3	11.9	11.1	-12.1
Contributions (Branch 33)	5.8	21.0	12.8	-2.6	-0.2	2.0		7.0	5.7	22.0	-1.3	-10.9	-1.1
Foreign direct inv. (annual accum. flows, US\$ million)	8.1	-17.8	-10.3	-25.4	-17.8	-14.8		14.3	0.3	3.9	0.2	0.3	0.1
Remittances (annual % change)	-3.6	-8.1	-3.3	-11.1	-10.7	-10.7		4.7	0.8	-4.9	-1.2	19.0	17.4

			Dura	ngo		Guanajuato						
Manufacturing production (annual % change)	-2.1	3.8	9.3	5.0	0.6	-47.4	-0.2	-2.9	-3.6	-8.6	1.0	-16.7
Construction** (annual % change)	-1.5	22.8	7.3	34.5	46.6	-3.0	-19.2	-2.8	5.0	9.6	0.8	8.6
Public work	-3.8	64.3	29.5	98.7	130.6	38.8	-39.3	1.6	20.8	16.7	-9.9	8.8
Private work	0.5	-11.7	-6.3	-11.0	-33.1	-40.9	0.9	-5.5	-2.6	5.3	8.8	8.4
Building	6.8	-31.7	-21.6	-28.8	-65.0	-45.3	-16.3	-17.5	-8.6	-18.9	4.4	30.5
Watering and drainage	-50.7	155.5	81.7	167.7	372.2	-46.0	-44.4	7.8	116.2	19.9	-37.9	-63.0
Electricity and communications	16.9	25.8	325.1	10.6	-33.1	-59.5	-0.1	85.7	151.3	258.7	44.7	-9.2
Transportation	-8.5	125.5	86.9	184.4	231.8	95.2	-19.2	8.9	8.0	49.1	-0.2	22.5
Oil and petrochemicals	616.7	291.3	-55.0	nd	324.4	-74.7	44.4	-18.4	-40.1	-29.1	173.6	-52.4
Other work	14.6	-8.3	-30.6	-23.4	114.5	21.2	-37.5	57.9	167.0	28.0	-23.9	-55.5
Electricity distribution (annual % change)	14.9	-40.4	-38.2	-42.5	-51.1	-7.5	0.5	-7.7	-16.5	-18.2	-1.4	-17.6
Retail sales (annual % change)	6.9	5.0	7.4	0.7	2.4	-5.0	3.7	1.6	12.2	1.8	-7.9	-8.8
Wholesale sales (annual % change)	-7.7	0.3	0.1	4.0	1.8	5.0	3.0	-1.2	8.8	1.4	-3.8	5.7
Total employment (annual % change)	nd	nd	-5.3	-8.3	-11.7	-6.1	nd	nd	-3.3	-5.0	-6.4	-2.7
Industry	nd	nd	0.5	-4.5	-8.4	-8.2	nd	nd	-5.1	-7.7	-8.4	-4.3
Services	nd	nd	3.7	1.6	-1.7	0.4	nd	nd	4.7	3.8	1.6	0.8
Gasoline sales (annual % change)	7.3	2.0	3.8	-0.8	2.4	2.1	8.5	4.4	5.6	5.2	3.0	1.1
Total air traffic (transported pass., annual % change)	20.0	nd	-20.4	-40.4	-32.2	-35.3	10.2	nd	-18.5	-21.8	-26.9	-27.7
Domestic	32.2	nd	-22.6	-39.5	-28.6	-34.1	20.4	nd	-26.8	-21.5	-30.0	-25.1
From abroad	-36.0	nd	18.4	-45.7	-67.8	-58.4	-5.6	nd	1.0	-22.4	-21.1	-31.7
Federalized resources (real annual % change)	1.5	7.9	20.3	10.2	2.2	-6.5	4.2	7.2	17.5	10.0	14.5	-8.6
Participations (Branch 28)	-2.7	10.0	10.2	20.3	16.8	-18.0	0.3	11.1	15.1	20.6	22.9	-21.2
Contributions (Branch 33)	4.0	6.8	28.8	3.8	-5.3	0.4	7.4	4.2	20.1	0.9	8.4	5.2
Foreign direct inv. (annual accum. flows, US\$ million)	37.7	545.5	88.5	534.8	545.5	551.9	209.1	70.0	151.3	109.6	70.0	69.3
Remittances (annual % change)	3.1	0.0	3.1	-3.9	-3.2	-5.2	1.5	-1.2	-1.2	-6.7	0.3	-4.8

Region: Medium Development

Region. Medium Developin	CIII	Hidalgo						Michoacán						
	2007	2008	2008	3Q08	4Q08	1Q09		2007	2008	2008	3008	4Q08	1Q09	
Manufacturing production (annual % change)	3.7	0.2	4.1	2.5	-6.3	-6.7		5.7	1.8	9.1	4.5	-11.0	-21.4	
Construction** (annual % change)	23.3	84.6	128.7	84.2	69.8	-5.6		-17.4	2.2	15.6	-0.8	-6.0	-44.7	
Public work	11.2	45.8	80.1	65.1	77.2	77.0		-13.1	5.3	0.6	4.5	46.3	-27.3	
Private work	31.8	107.8	155.7	95.2	66.4	-28.3		-19.2	0.9	23.8	-3.1	-23.0	-51.4	
Building	13.5	87.3	107.8	87.1	82.3	9.6		-27.0	14.3	17.9	20.1	11.8	-31.3	
Watering and drainage	-6.2	59.8	294.1	173.8	-61.0	81.3		-73.9	34.7	1235.3	114.0	-62.7	-59.3	
Electricity and communications	111.0	112.8	294.1	9.5	216.7	256.2		632.4	56.1	120.4	nd	nd	-98.0	
Transportation	63.2	-6.3	86.2	-29.5	-30.1	0.2		7.7	-3.9	14.8	-19.9	-8.3	-55.6	
Oil and petrochemicals	86.8	466.5	nd	2164.0	nd	nd		-77.7	-94.4	nd	nd	nd	nd	
Other work	12.2	185.5	55.2	102.4	1488.9	-90.7		-2.3	-69.7	-75.5	-92.3	-47.7	-50.2	
Electricity distribution (annual % change)	5.0	-2.4	-13.7	-8.1	-8.7	-28.7		8.9	-2.8	-7.3	4.7	-12.5	-17.1	
Retail sales (annual % change)	nd	nd	nd	nd	nd	nd		2.1	5.5	9.9	6.1	3.9	8.8	
Wholesale sales (annual % change)	nd	nd	nd	nd	nd	nd		-1.4	0.4	6.3	0.1	-0.7	-2.7	
Total employment (annual % change)	nd	nd	-0.5	-1.8	-4.7	-2.9		nd	nd	-4.1	-4.4	-5.5	0.2	
Industry	nd	nd	-4.8	-6.9	-11.2	-7.9		nd	nd	-0.3	-2.5	-6.3	-2.0	
Services	nd	nd	6.9	6.6	4.9	3.0		nd	nd	3.6	3.5	4.0	4.8	
Gasoline sales (annual % change)	7.2	10.2	6.3	11.7	14.7	1.3		3.5	5.5	5.8	6.3	3.0	1.9	
Total air traffic (transported pass., annual % change)	nd	nd	nd	nd	nd	nd		-0.8	nd	-10.3	-25.0	-14.3	-18.6	
Domestic	nd	nd	nd	nd	nd	nd		13.8	nd	-7.4	-26.2	-22.9	-35.6	
From abroad	nd	nd	nd	nd	nd	nd		-21.9	nd	-16.7	-22.5	4.5	26.7	
Federalized resources (real annual % change)	2.8	10.8	17.9	9.0	4.8	-7.1		2.8	7.8	20.3	10.8	6.1	-14.9	
Participations (Branch 28)	-0.2	11.2	13.2	22.1	21.2	-17.1		3.4	11.8	15.2	22.6	20.3	-19.8	
Contributions (Branch 33)	4.4	10.6	21.2	1.2	-3.2	-1.2		2.4	5.5	24.7	3.3	-1.8	-11.6	
Foreign direct inv. (annual accum. flows, US\$ million)	2.0	15.1	16.4	15.5	15.1	0.6		1633.9	24.1	119.6	52.3	24.1	34.7	
Remittances (annual % change)	14.8	-13.5	-10.2	-17.0	-9.2	-11.4		-5.1	2.7	2.7	-2.5	7.8	-1.2	

	Morelos								Nayarit						
Manufacturing production (annual % change)	4.7	-7.9	-6.6	-5.1	-7.3	-6.4		13.1	-4.5	-10.3	-7.5	-3.0	-2.4		
Construction** (annual % change)	-0.2	1.8	-3.4	0.6	-5.0	0.6		-30.5	22.0	0.7	41.0	74.9	81.4		
Public work	-49.4	29.9	40.3	85.5	-10.3	29.4		-48.8	89.0	145.4	105.5	166.1	149.5		
Private work	7.6	-0.3	-6.4	-2.4	-4.5	-3.0		16.5	-53.2	-74.3	-40.2	-50.2	-49.6		
Building	-1.8	10.4	6.5	6.8	6.0	2.2		82.1	-34.6	-56.7	-29.2	-37.8	-34.4		
Watering and drainage	-83.5	555.6	1272.1	117.3	592.1	-61.8		-75.4	73.7	495.4	424.6	-57.9	-80.3		
Electricity and communications	nd	-44.3	nd	nd	nd	-95.5		-57.1	74.7	83.4	114.4	229.7	316.3		
Transportation	-27.8	-53.3	-54.8	121.6	-75.5	293.0		-46.3	54.2	9.5	98.8	69.1	40.7		
Oil and petrochemicals	nd	21.7	nd	nd	nd	nd		nd	1012.1	nd	nd	nd	nd		
Other work	105.0	-53.5	-65.3	-67.8	-54.9	-78.0		-13.2	-22.0	1.2	-18.8	129.7	321.8		
Electricity distribution (annual % change)	4.7	2.7	1.0	-0.9	2.2	2.2		141.2	48.9	32.3	59.2	20.5	7.4		
Retail sales (annual % change)	3.2	3.9	6.7	0.5	4.3	0.2		nd	nd	nd	nd	nd	nd		
Wholesale sales (annual % change)	-10.9	-12.8	-1.1	-3.6	-27.5	-27.6		nd	nd	nd	nd	nd	nd		
Total employment (annual % change)	nd	nd	-6.6	-6.4	-7.9	-2.7		nd	nd	-10.1	-9.8	-13.5	-4.7		
Industry	nd	nd	-5.9	-6.6	-8.3	-4.1		nd	nd	0.5	0.8	-11.7	-13.4		
Services	nd	nd	3.3	3.1	2.1	1.8		nd	nd	2.5	0.1	-1.0	5.6		
Gasoline sales (annual % change)	-0.7	4.0	-1.4	13.3	12.0	8.1		8.3	2.9	4.2	-9.9	3.7	1.5		
Total air traffic (transported pass., annual % change)	320.5	nd	-28.5	-53.5	-92.6	-100.0		38.7	nd	-16.1	-56.2	-69.1	-72.0		
Domestic	320.5	nd	-28.5	-53.5	-92.6	-100.0		38.7	nd	-16.1	-56.2	-69.1	-72.0		
From abroad	nd	nd	nd	nd	nd	nd		nd	nd	nd	nd	nd	nd		
Federalized resources (real annual % change)	2.4	8.8	15.6	7.7	4.1	-9.9		2.7	6.6	12.8	5.5	10.4	-2.8		
Participations (Branch 28)	-0.3	12.6	11.3	16.6	16.4	-19.2		-0.2	11.9	8.1	19.0	19.1	-9.0		
Contributions (Branch 33)	4.5	6.1	20.4	0.4	-3.4	-2.0		4.5	3.5	17.3	-3.8	5.6	1.9		
Foreign direct inv. (annual accum. flows, US\$ million)	444.3	132.1	111.2	131.9	132.1	28.5		54.8	4.8	25.3	17.3	4.8	4.6		
Remittances (annual % change)	4.5	1.0	3.7	-3.1	0.5	-1.8		6.2	1.8	2.8	-3.9	5.1	1.5		

Region: Medium Development

		Puebla							San Luis Potosí						
	2007	2008	2008	3008	4Q08	1009		2007	2008	2008	3008	4Q08	1Q09		
Manufacturing production (annual % change)	5.0	6.4	10.1	1.9	-2.7	-22.3		4.7	-2.1	-0.8	-0.9	-4.3	-15.9		
Construction** (annual % change)	4.8	4.8	6.8	5.7	-11.3	-38.5		-26.5	8.3	34.0	-0.4	1.4	-17.4		
Public work	7.1	-1.6	-17.0	3.1	-10.2	-14.1		-14.2	29.2	99.1	-5.7	-37.0	-55.6		
Private work	3.2	9.2	25.7	7.4	-12.2	-54.0		-31.3	-1.9	1.7	3.0	25.2	17.6		
Building	20.2	6.9	2.3	2.7	2.7	-36.3		-13.6	-0.9	5.0	0.8	20.6	-3.1		
Watering and drainage	-46.2	-14.4	59.7	-2.6	-39.3	-5.8		-41.3	7.6	23.4	27.4	-27.7	24.2		
Electricity and communications	-9.7	32.4	31.9	75.7	-39.4	-91.0		190.5	67.1	317.8	2.9	-99.7	-98.9		
Transportation	-20.8	8.3	26.5	11.0	-27.1	-35.8		-37.2	37.5	2.7	36.4	48.5	38.3		
Oil and petrochemicals	nd	nd	nd	nd	nd	nd		-76.0	nd	nd	nd	nd	nd		
Other work	24.7	-39.9	-19.0	-2.8	-59.1	-50.5		-30.7	11.0	24.9	-10.2	-15.5	-64.2		
Electricity distribution (annual % change)	8.5	6.4	11.6	0.6	-13.7	-26.1		49.3	21.1	40.9	-4.1	-9.8	-14.3		
Retail sales (annual % change)	6.8	0.8	6.5	0.7	-6.6	-6.9		0.6	5.0	7.7	5.4	-0.2	-4.3		
Wholesale sales (annual % change)	2.5	1.2	0.3	1.4	1.0	-4.5		2.7	3.9	17.7	0.0	-4.9	-12.1		
Total employment (annual % change)	nd	nd	-3.6	-4.4	-6.6	-3.1		nd	nd	-6.7	-6.7	-9.3	-4.0		
Industry	nd	nd	-1.3	-2.3	-6.0	-6.4		nd	nd	-3.1	-5.6	-10.0	-7.1		
Services	nd	nd	1.7	0.7	-0.5	2.2		nd	nd	-0.3	0.0	-0.5	2.5		
Gasoline sales (annual % change)	7.7	2.4	5.4	1.9	-4.4	-2.9		4.3	3.5	3.1	3.6	-0.4	-4.1		
Total air traffic (transported pass., annual % change)	121.2	nd	48.4	-3.6	-35.1	-58.4		15.8	nd	-1.8	-6.6	-23.4	-27.7		
Domestic	131.6	nd	74.8	0.6	-35.5	-60.7		20.5	nd	-5.2	-7.5	-26.0	-22.3		
From abroad	76.3	nd	-55.1	-31.1	-30.7	-17.9		5.4	nd	7.5	-4.5	-17.8	-39.0		
Federalized resources (real annual % change)	3.0	8.7	18.3	11.4	13.7	-8.7		2.4	10.3	17.0	5.5	9.1	-5.8		
Participations (Branch 28)	0.0	11.2	15.5	24.8	21.3	-23.7		0.1	10.1	13.8	17.1	19.6	-15.5		
Contributions (Branch 33)	5.2	7.0	21.1	1.5	8.5	5.6		3.7	10.4	19.3	-1.6	3.9	1.2		
Foreign direct inv. (annual accum. flows, US\$ million)	275.3	179.4	281.0	281.2	179.4	186.2		140.6	51.3	55.9	89.1	51.3	-63.9		
Remittances (annual % change)	9.1	0.8	3.8	-2.8	-1.3	-6.3		7.1	-0.3	2.8	-6.8	0.3	-3.8		

	Sinaloa							Tabasco					
Manufacturing production (annual % change)	3.1	0.0	-2.3	2.2	-1.3	-5.7		-9.0	-6.1	-8.2	-3.2	-2.9	-5.5
Construction** (annual % change)	18.3	6.0	15.0	-7.3	-1.7	4.8		-19.2	27.9	40.9	13.4	53.4	-7.5
Public work	54.7	-2.3	41.2	-16.6	-31.8	73.1		-24.6	32.1	52.4	3.0	51.4	-9.0
Private work	2.5	11.5	-0.2	-0.6	23.7	-24.8		2.7	15.4	11.5	55.3	61.7	-1.1
Building	15.8	14.1	24.2	-5.4	-0.4	-21.5		-22.4	12.3	7.5	30.7	59.5	-43.0
Watering and drainage	16.3	30.6	10.6	15.9	36.4	62.4		-58.2	78.8	-6.1	-35.3	538.8	95.7
Electricity and communications	-55.8	119.2	393.8	270.3	62.7	480.0		-26.6	23.0	14.5	30.0	-30.4	-31.7
Transportation	109.2	-14.6	-1.6	-34.1	-36.7	42.7		-28.6	63.7	48.9	30.9	131.8	27.1
Oil and petrochemicals	-82.4	-60.2	nd	nd	nd	nd		7.7	13.2	58.8	-13.3	28.8	-9.6
Other work	25.4	-35.3	-50.9	-19.8	8.5	15.3		-64.6	63.1	216.8	356.9	-13.3	42.9
Electricity distribution (annual % change)	4.5	-6.7	-14.7	3.5	-8.5	-10.5		4.0	0.7	5.5	-7.2	-5.4	14.7
Retail sales (annual % change)	1.3	4.9	5.3	3.3	3.0	5.3		4.8	0.2	-1.0	-1.8	-1.0	-14.1
Wholesale sales (annual % change)	-2.3	3.5	8.1	-0.1	8.5	-0.3		-2.8	-4.4	-3.9	-5.7	0.0	-1.1
Total employment (annual % change)	nd	nd	-6.3	-8.3	-14.5	-7.0		nd	nd	-3.4	-4.0	-3.6	3.0
Industry	nd	nd	2.0	-2.5	-8.6	-8.4		nd	nd	3.6	1.7	0.6	5.5
Services	nd	nd	4.5	4.7	4.2	3.6		nd	nd	2.0	1.6	1.1	4.3
Gasoline sales (annual % change)	7.0	7.9	7.2	11.7	2.7	-1.2		3.4	9.0	8.1	8.9	9.0	3.2
Total air traffic (transported pass., annual % change)	29.1	nd	-1.1	-17.6	-20.6	-20.1		16.6	nd	19.2	6.2	-6.9	-19.3
Domestic	34.7	nd	1.5	-16.3	-21.2	-22.2		17.1	nd	20.0	6.6	-7.4	-19.8
From abroad	9.2	nd	-12.7	-25.9	-18.0	-14.0		5.2	nd	-2.7	-4.7	11.7	0.1
Federalized resources (real annual % change)	3.5	8.0	17.1	7.6	11.5	-8.2		8.5	3.5	13.4	13.2	13.0	-5.4
Participations (Branch 28)	0.6	9.6	13.5	18.8	17.1	-17.7		8.7	5.2	11.0	21.9	17.9	-10.3
Contributions (Branch 33)	6.0	6.8	21.4	-2.6	7.3	2.3		8.1	0.5	18.2	-0.2	6.6	3.4
Foreign direct inv. (annual accum. flows, US\$ million)	51.6	39.5	41.4	33.3	39.5	12.3		0.9	32.0	0.9	nd	32.0	36.2
Remittances (annual % change)	1.8	-5.3	-3.5	-11.6	-5.5	-1.8		-3.8	-13.9	-8.5	-19.4	-18.9	-18.2

Region: Medium Development

	UIIC		Tlax	cala					Vera	cruz		
	2007	2008	2008	3Q08	4008	1009	2007	2008	2008	3Q08	4Q08	1009
Manufacturing production (annual % change)	0.2	-3.7	-0.4	-4.7	-13.0	-15.9	6.4	-3.4	-1.2	-8.8	-7.9	-2.4
Construction** (annual % change)	99.6	-16.5	-26.0	-24.3	19.5	2.4	7.1	-20.6	-22.2	-23.6	-25.0	-0.4
Public work	30.2	88.7	-57.2	232.6	261.0	202.0	11.4	-36.2	-37.0	-41.6	-41.0	14.7
Private work	135.7	-46.7	-14.0	-68.0	-62.2	-48.8	-3.8	24.2	13.4	29.6	35.2	-25.5
Building	116.3	-45.9	-5.7	-69.3	-58.3	-29.6	-13.8	56.0	67.8	71.6	61.0	-25.8
Watering and drainage	-45.3	28.1	158.2	92.5	19.0	18.5	13.4	-52.3	-29.7	-59.9	-16.5	305.6
Electricity and communications	449.7	-31.9	-63.5	-88.5	2442.1	nd	-5.3	-48.7	-88.7	-52.4	-1.9	-17.0
Transportation	111.3	114.7	-66.2	364.6	588.6	289.7	-11.5	-9.2	2.6	-9.9	-36.8	51.4
Oil and petrochemicals	nd	nd	nd	nd	nd	nd	32.2	-47.3	-52.2	-53.6	-48.3	12.3
Other work	92.0	-43.1	1.6	-97.7	nd	40.2	-54.3	15.3	-8.8	76.3	-3.9	-75.1
Electricity distribution (annual % change)	2.5	-3.2	-1.9	-6.3	-9.2	-10.1	2.3	-11.9	-12.6	-20.0	-21.1	-12.1
Retail sales (annual % change)	nd	nd	nd	nd	nd	nd	10.5	-0.7	4.7	0.5	-14.2	-6.2
Wholesale sales (annual % change)	nd	nd	nd	nd	nd	nd	2.2	-2.4	1.0	-4.9	-5.5	-1.1
Total employment (annual % change)	nd	nd	-5.2	-7.7	-11.4	-6.5	nd	nd	-9.6	-8.1	-8.8	0.0
Industry	nd	nd	-9.1	-12.1	-17.3	-10.0	nd	nd	-5.8	-4.9	-7.8	3.7
Services	nd	nd	3.6	2.2	1.1	-0.2	nd	nd	2.2	1.9	2.4	4.1
Gasoline sales (annual % change)	nd	nd	nd	nd	nd	nd	9.9	6.4	7.1	5.3	7.2	2.4
Total air traffic (transported pass., annual % change)	nd	nd	nd	nd	nd	nd	29.1	nd	8.0	-2.9	-10.7	-7.2
Domestic	nd	nd	nd	nd	nd	nd	30.1	nd	7.9	-3.2	-10.7	-7.2
From abroad	nd	nd	nd	nd	nd	nd	-2.8	nd	10.8	10.1	-11.6	-9.5
Federalized resources (real annual % change)	2.6	10.7	13.4	7.4	14.0	-4.2	1.3	7.0	16.3	6.1	11.0	-8.5
Participations (Branch 28)	-0.1	10.7	7.3	18.8	21.1	-12.1	-2.3	10.8	13.6	15.8	19.1	-18.7
Contributions (Branch 33)	4.7	10.7	19.5	-1.4	9.6	2.4	3.8	4.5	19.0	-1.1	5.9	0.2
Foreign direct inv. (annual accum. flows, US\$ million)	14.8	7.5	22.1	17.7	7.5	-0.6	11.2	-8.3	-19.2	-30.4	-8.3	18.7
Remittances (annual % change)	9.5	2.0	2.7	-2.6	2.3	-4.0	3.8	-6.7	-2.0	-15.1	-7.9	-9.5

			Yuca	ıtán					Zaca	tecas		
Manufacturing production (annual % change)	1.4	-1.1	-6.1	1.6	-2.6	-5.7	4.8	6.8	12.4	7.0	1.1	-1.7
Construction** (annual % change)	19.9	-28.3	-31.5	-32.0	-37.9	-26.4	25.3	26.9	40.1	21.5	29.6	65.6
Public work	6.7	-20.9	-28.0	-28.9	-11.6	-24.6	0.9	57.9	36.0	72.8	74.3	89.3
Private work	34.1	-34.6	-34.6	-34.7	-55.5	-28.0	67.3	-5.2	46.1	-27.9	-15.4	37.4
Building	17.7	-35.1	-49.3	-40.8	-37.5	-18.7	1.4	10.7	77.2	-14.4	7.3	60.8
Watering and drainage	-33.7	67.1	914.7	nd	nd	-59.6	6.1	19.4	21.5	30.5	-13.7	-33.6
Electricity and communications	36.5	-60.8	-31.9	-76.2	-85.8	-99.5	-34.5	37.9	1253.4	-73.1	1269.6	-55.7
Transportation	-2.0	8.6	16.3	60.3	40.0	61.5	37.6	56.7	9.5	85.1	90.0	74.1
Oil and petrochemicals	327.3	nd	nd	nd	nd	nd						
Other work	157.8	-44.1	12.5	-69.0	-67.7	-90.7	125.6	-1.3	41.3	-9.9	-16.1	181.8
Electricity distribution (annual % change)	17.6	0.7	0.2	-4.9	-6.4	-9.6	6.2	2.1	6.9	-6.4	-1.6	-4.9
Retail sales (annual % change)	2.7	7.0	10.0	6.6	3.4	-2.7	13.2	4.4	-0.8	-0.1	4.4	-4.7
Wholesale sales (annual % change)	-1.0	4.2	7.3	6.7	-0.9	3.4	2.2	0.6	3.4	5.7	2.2	4.7
Total employment (annual % change)	nd	nd	-1.9	-2.6	-3.8	-1.5	nd	nd	3.3	3.3	2.3	3.9
Industry	nd	nd	-5.0	-7.1	-10.6	-10.6	nd	nd	10.7	5.5	3.0	5.4
Services	nd	nd	4.1	4.2	3.9	4.6	nd	nd	3.6	6.2	5.5	4.2
Gasoline sales (annual % change)	9.9	7.5	7.1	10.0	2.3	-4.1	6.5	-7.0	1.7	4.3	-37.3	-12.9
Total air traffic (transported pass., annual % change)	25.3	nd	7.5	-10.3	-23.5	-24.4	-16.8	nd	-17.0	-11.0	4.0	-10.7
Domestic	28.5	nd	9.6	-9.5	-23.3	-24.5	-20.6	nd	-18.0	1.7	12.7	-18.5
From abroad	-3.8	nd	-18.9	-21.2	-25.7	-22.7	-6.7	nd	-14.4	-33.0	-14.6	10.0
Federalized resources (real annual % change)	2.6	9.0	14.1	8.2	10.1	-3.8	0.6	7.3	15.2	15.0	2.9	-5.8
Participations (Branch 28)	0.8	9.1	9.1	17.8	17.7	-10.8	1.4	11.1	9.6	20.9	19.2	-14.6
Contributions (Branch 33)	3.9	8.9	19.4	0.4	5.1	2.6	0.1	5.2	20.1	11.5	-6.0	0.9
Foreign direct inv. (annual accum. flows, US\$ million)	45.6	20.8	14.5	14.9	20.8	13.9	51.1	1490.2	322.7	1507.4	1490.2	1367.2
Remittances (annual % change)	12.1	-3.3	2.1	-2.6	-5.5	-12.3	13.1	-10.5	2.4	-6.6	1.0	-0.7

Region: High Marginalization

0 0 0			Chia	ipas					Guer	rero		
	2007	2008	2008	3008	4Q08	1009	2007	2008	2008	3008	4Q08	1009
Manufacturing production (annual % change)	-12.7	-1.9	-8.3	-0.9	13.9	2.2	-5.3	-5.1	0.3	-5.8	-10.2	-12.4
Construction** (annual % change)	-23.4	-5.0	-7.7	-16.7	23.1	5.9	85.9	14.2	10.0	7.9	3.9	-5.6
Public work	-29.7	2.3	4.3	1.6	15.5	9.7	54.0	-33.1	-63.0	-38.0	54.3	107.4
Private work	-12.2	-15.5	-25.5	-38.2	37.5	0.4	117.6	47.5	93.4	43.5	-10.6	-31.6
Building	-9.1	-25.9	-20.5	-47.7	-5.7	-19.4	87.8	41.4	36.5	49.7	20.1	-8.2
Watering and drainage	-57.9	18.4	71.8	59.7	-15.1	150.8	-56.8	140.8	nd	-69.4	nd	nd
Electricity and communications	27.8	49.4	13.0	15.2	110.0	64.8	300.8	-10.1	-22.7	-33.4	5.9	-7.4
Transportation	-22.2	-15.4	-11.8	-21.8	1.1	39.6	19.3	-41.0	-26.7	-39.3	-60.6	-75.6
Oil and petrochemicals	27.9	156.6	27.6	789.7	40.5	12.5	nd	nd	nd	nd	nd	nd
Other work	-84.8	162.0	61.6	92.8	329.4	-77.7	35.0	-9.4	52.9	-13.2	-64.4	-68.0
Electricity distribution (annual % change)	-42.0	95.3	145.5	125.5	175.6	173.6	5.3	-34.2	-40.4	-29.5	-21.3	44.6
Retail sales (annual % change)	8.4	2.2	6.2	4.8	-8.2	-3.5	5.9	-0.2	-0.6	-3.3	-1.2	-3.1
Wholesale sales (annual % change)	0.8	2.0	6.0	-0.8	-2.1	-6.7	-8.4	-13.6	-11.2	-10.6	-23.5	-25.6
Total employment (annual % change)	nd	nd	-4.7	-4.7	-5.1	1.6	nd	nd	-7.3	-8.0	-10.9	-0.1
Industry	nd	nd	-2.5	-0.5	-1.7	4.9	nd	nd	0.9	0.1	-8.6	-5.1
Services	nd	nd	4.5	3.4	3.2	4.2	nd	nd	-9.4	-10.1	-10.9	2.2
Gasoline sales (annual % change)	11.5	9.7	6.4	9.2	2.2	-4.1	7.5	7.5	8.0	8.5	3.1	-0.1
Total air traffic (transported pass., annual % change)	17.1	nd	11.3	7.2	6.9	-2.1	7.4	nd	6.4	-0.7	-4.5	-10.2
Domestic	17.1	nd	11.3	7.2	6.9	-2.1	12.0	nd	12.1	2.6	1.2	-7.8
From abroad	nd	nd	nd	nd	nd	nd	-3.0	nd	-12.2	-19.3	-22.6	-13.8
Federalized resources (real annual % change)	3.4	7.9	12.1	10.0	11.7	-4.6	5.7	6.4	20.1	10.3	5.1	-6.8
Participations (Branch 28)	5.2	13.6	10.5	22.8	18.4	-13.5	0.5	10.6	15.5	26.8	25.1	-22.0
Contributions (Branch 33)	2.4	4.5	13.5	1.7	7.6	2.0	7.7	4.9	22.5	3.6	-1.9	-0.3
Foreign direct inv. (annual accum. flows, US\$ million)	13.8	0.5	14.2	13.1	0.5	nd	-35.9	0.6	-41.7	-22.1	0.6	4.8
Remittances (annual % change)	-4.0	-11.7	-6.5	-15.9	-18.2	-21.1	2.9	-1.2	1.9	-7.7	-2.6	-7.0

Oaxaca Manufacturing production (annual % change) 0.1 2.2 -4.6 6.2 7.2 9.5 Construction** (annual % change) -2.8 -22.4 -26.7 -17.7 -22.1 27.9 85.3 Public work 12.9 -12.2 6.5 -11.9 -2.5 -38.4 Private work -20.2 -27.4 -58.3 -58.3 -55.4 22.1 -29.0 Building -36.3 -56.5 -15.1 0.1 Watering and drainage -20.2 -8.0 74.7 -1.6 -22.8 -12.2 Electricity and communications -49.0 96.5 486.6 113.4 97.2 782.6 Transportation -16.9 -21.1 -1.8 -37.2 -40.0 55.8 Oil and petrochemicals 173.3 -88.4 -83.3 nd nd nd -8.8 -30.4 Other work 2.7 -45.2 52.8 -7.7 Electricity distribution (annual % change) 0.1 0.1 -21.4 35.7 -12.4 -6.8 -2.8 Retail sales (annual % change) 7.8 -1.1 -3.5 -3.0 -14.0 Wholesale sales (annual % change) 5.8 09 -0.3 1.3 14 -5.5 Total employment (annual % change) nd nd -1.0 -0.3 -2.2 3.1 0.9 0.3 -5.3 4.8 Industry nd nd Services nd nd 2.0 2.3 2.0 4.2 Gasoline sales (annual % change) 10.2 5.6 5.4 5.1 3.1 0.7 Total air traffic (transported pass., annual % change) 6.2 6.4 nd -10.1 16.3 29.9 Domestic 9.9 -10.9 6.5 15.1 27.1 nd From abroad -47.4 nd 20.1 -4.1 55.9 68.1 Federalized resources (real annual % change) 6.0 2.7 9.8 20.2 30.7 -7.6 Participations (Branch 28) 15.0 23.5 -20.8 -0.4 13.2 24.3 Contributions (Branch 33) 88 -1.4 72 18.2 35.2 -1.7 Foreign direct inv. (annual accum. flows, US\$ million) 6.1 12.0 11.3 12.2 12.0 8.3 Remittances (annual % change) 2.5 -4.6 9.8 7.5 2.9 -4.3

Region: Industrialized

Aguascaliente	S
---------------	---

Baja California

	2007	2008	2Q08	3008	4Q08	1009	2007	2008	2Q08	3008	4Q08	1Q09
Manufacturing production (annual % change)	6.9	-1.7	5.1	2.9	-3.6	-18.1	0.7	-2.1	1.4	0.6	-7.6	-19.4
Construction** (annual % change)	-4.1	-8.5	20.2	-39.8	-5.3	41.1	2.4	-14.5	-3.4	-21.4	-30.5	3.2
Public work	-12.3	-28.9	18.3	-50.6	-29.2	129.4	-3.1	-21.1	3.3	-36.9	-39.8	4.4
Private work	2.7	5.9	21.2	-31.8	15.0	12.3	5.9	-10.8	-6.5	-10.6	-24.5	2.6
Building	-5.8	7.6	38.0	-30.8	12.9	-1.5	-1.4	-10.4	10.8	-8.6	-31.6	6.6
Watering and drainage	-54.3	-4.4	76.3	249.4	-72.4	275.4	-29.3	-41.9	-38.8	-46.0	-60.9	-51.6
Electricity and communications	-97.2	-32.6	2219.3	-93.9	nd	nd	-85.9	651.1	684.2	1576.0	394.0	112.2
Transportation	36.6	-13.7	47.0	-60.6	-19.8	141.9	56.7	-35.4	-30.7	-54.5	-48.3	14.4
Oil and petrochemicals	-82.6	-82.5	nd	nd	nd	nd	202.9	-45.7	-39.8	-30.3	-94.1	-69.3
Other work	110.1	-57.3	-72.9	-35.0	13.9	8.6	41.6	-17.1	-45.5	-41.1	32.1	-32.3
Electricity distribution (annual % change)	3.5	-2.0	2.4	-2.1	-8.8	-10.7	5.9	-0.6	0.0	-3.3	-5.4	-9.6
Retail sales (annual % change)	2.5	2.1	7.5	1.5	-3.0	-3.7	4.3	3.6	4.0	2.9	3.3	7.5
Wholesale sales (annual % change)	-1.6	-5.0	0.0	-6.3	-10.7	-13.3	1.0	-11.9	-8.3	-14.4	-21.5	-21.5
Total employment (annual % change)	nd	nd	-5.8	-6.6	-8.6	-5.5	nd	nd	-5.4	-7.7	-11.5	-10.2
Industry	nd	nd	-2.7	-3.9	-6.0	-7.5	nd	nd	-6.9	-9.4	-14.9	-14.5
Services	nd	nd	-3.1	-3.4	-5.6	-2.2	nd	nd	2.7	1.3	-1.4	-3.0
Gasoline sales (annual % change)	7.0	-2.1	1.6	3.4	-15.7	-2.4	5.5	5.5	5.9	12.6	-1.0	-6.7
Total air traffic (transported pass., annual % change)	22.1	nd	-12.6	-15.2	-31.5	-40.4	22.7	nd	-13.4	-24.8	-25.8	-26.2
Domestic	37.3	nd	-8.5	-8.5	-28.5	-35.8	22.5	nd	-13.3	-24.8	-25.9	-26.2
From abroad	-8.1	nd	-25.9	-34.7	-40.4	-56.2	369.4	nd	-33.8	-34.8	-20.6	-25.6
Federalized resources (real annual % change)	7.7	5.8	13.9	6.2	8.0	-11.2	3.4	14.7	5.0	14.5	3.7	-6.3
Participations (Branch 28)	10.9	7.1	8.5	15.9	12.0	-23.0	1.4	14.5	9.6	15.7	16.6	-14.4
Contributions (Branch 33)	5.0	4.6	19.8	-3.3	5.0	2.2	5.3	14.8	0.5	13.2	-7.7	2.2
Foreign direct inv. (annual accum. flows, US\$ million)	187.3	33.4	127.2	91.8	33.4	15.4	878.1	1443.7	1507.3	1427.6	1443.7	1504.1
Remittances (annual % change)	-6.9	-6.7	-10.7	-1.6	-0.7	3.2	8.6	1.8	2.8	0.6	-1.5	-5.3

Chihuahua

Coahuila

-45.8 24.6 41.5
24.6 41.5
41.5
17.6
32.9
116.4
48.4
-16.7
-89.4
51.4
-11.4
-5.3
-2.4
-8.2
-13.2
0.0
-2.0
-24.4
-20.4
-49.4
-7.4
-16.0
1.0
946.0
3.6
6061304791071809405561

Region: Industrialized

0			Jali	sco				State of Mexico 007 2008 2008 3008 4008 3.0 0.2 3.8 1.5 4.7 3.6 -8.0 -9.2 -15.3 2.9 0.0.8 31.9 28.7 38.7 44.4 44.5 -19.8 -19.5 -31.5 -10.5 0.0.2 -25.5 -29.1 -38.9 -11.3 9.8 140.1 145.7 179.6 112.6 0.63 -64.8 -90.3 16.6 -29.8 32.4 39.0 54.3 42.4 26.3 30.4 -4.8 -11.7 7.6 -29.2 6.3 21.6 113.7 8.2 50.8 3.5 0.2 0.7 -2.9 -3.3 1.1 -0.5 3.4 -4.2 -5.2 1.8 0.8 0.0 0.4 2.4 nd nd -1.9 -2.8 -5.6 nd nd				
	2007	2008	2008	3008	4Q08	1009	2007	2008	2008	3008	4008	1Q09
Manufacturing production (annual % change)	-3.3	-2.0	0.4	-1.4	2.5	-2.6	3.0	0.2	3.8	1.5	-4.7	-12.0
Construction** (annual % change)	2.1	-6.6	12.5	-0.5	-31.0	-7.4	23.6	-8.0	-9.2	-15.3	2.9	-13.9
Public work	-37.9	10.8	21.8	25.1	-11.1	42.4	20.8	31.9	28.7	38.7	44.4	32.2
Private work	17.3	-10.1	10.5	-4.6	-34.7	-21.6	24.5	-19.8	-19.5	-31.5	-10.5	-31.6
Building	19.3	-6.8	6.7	-4.1	-34.8	-32.8	20.2	-25.5	-29.1	-38.9	-11.3	-17.1
Watering and drainage	-37.2	8.0	31.8	86.1	-8.9	14.4	9.8	140.1	145.7	179.6	112.6	-21.4
Electricity and communications	74.9	-5.1	6.6	-61.8	-33.3	466.1	206.3	-64.8	-90.3	16.6	-29.8	302.4
Transportation	-29.3	13.4	39.6	34.9	8.7	43.2	62.4	39.0	54.3	42.4	26.3	0.9
Oil and petrochemicals	-89.2	-22.6	nd	-42.7	nd	nd	50.4	-4.8	-11.7	7.6	-29.2	-43.8
Other work	-12.1	-40.0	10.0	-34.9	-64.0	-24.7	-16.3	21.6	113.7	8.2	50.8	-39.9
Electricity distribution (annual % change)	4.8	1.0	1.6	-2.2	-2.4	-5.5	3.5	0.2	0.7	-2.9	-3.3	-6.1
Retail sales (annual % change)	2.0	2.9	6.4	0.6	0.5	-6.1	1.1	-0.5	3.4	-4.2	-5.2	5.0
Wholesale sales (annual % change)	3.9	-1.5	-2.0	-2.6	-3.5	-3.9	1.8	0.8	0.0	0.4	2.4	-1.4
Total employment (annual % change)	nd	nd	-3.6	-4.6	-6.6	-2.8	nd	nd	-1.9	-2.8	-5.6	-2.3
Industry	nd	nd	-1.9	-3.9	-7.1	-6.7	nd	nd	-6.2	-6.8	-9.3	-5.9
Services	nd	nd	2.4	1.7	0.5	2.1	nd	nd	2.9	1.9	-1.5	1.0
Gasoline sales (annual % change)	-4.4	1.2	5.4	4.2	-3.0	0.3	3.4	5.3	9.2	5.3	2.5	1.2
Total air traffic (transported pass., annual % change)	13.7	nd	0.3	-12.6	-12.9	-13.7	66.5	nd	34.6	13.7	-20.3	-41.0
Domestic	26.4	nd	3.1	-11.3	-14.3	-15.9	69.3	nd	34.1	14.5	-19.9	-40.4
From abroad	-0.7	nd	-3.9	-14.7	-11.0	-11.1	-28.6	nd	86.3	-43.5	-46.3	-72.3
Federalized resources (real annual % change)	8.1	7.7	13.0	8.9	11.1	-8.3	2.7	8.2	27.4	1.2	13.1	-8.8
Participations (Branch 28)	10.1	8.9	11.2	17.0	17.6	-16.8	-0.3	11.9	14.2	21.3	19.0	-20.4
Contributions (Branch 33)	6.3	6.5	15.5	-0.6	5.0	4.1	5.9	4.6	48.7	-17.5	7.3	7.2
Foreign direct inv. (annual accum. flows, US\$ million)	268.5	-67.8	182.7	30.7	-67.8	33.7	509.3	813.4	903.8	1115.1	813.4	1207.8
Remittances (annual % change)	0.0	-3.3	-2.5	-7.1	-0.1	0.2	2.9	-3.5	-0.2	-7.8	-1.8	-5.9

Nuevo León

Querétaro

Manufacturing production (annual % change) 3.1 3.5 9.3 5.6 -1.5 -15.0 4.3 -1.0 1.4 Construction** (annual % change) 25.6 -2.9 -10.8 0.2 -1.5 -16.2 -11.7 10.0 16.6	-1.0 17.1	-1.0	-3.5	-16.9
Construction** (annual % change) 256 -29 -108 02 -15 -162 -117 100 166	17.1	171		
		17.1	-0.3	-22.3
Public work 14.4 9.6 -7.4 17.8 35.5 21.7 -17.9 -15.0 -16.3	2.3	2.3	16.3	-10.1
Private work 30.0 -7.1 -11.8 -6.3 -13.3 -27.9 -9.1 19.4 34.4	21.2	21.2	-4.2	-24.8
Building 37.9 -11.7 -19.8 -10.6 -19.7 -33.8 3.1 18.6 18.6	9.8	9.8	10.8	-28.9
Watering and drainage -26.1 -37.7 -33.9 -69.0 -56.0 -75.3 -48.5 -15.0 -29.3	125.7	125.7	-94.6	-40.1
Electricity and communications 160.6 -42.1 -23.8 -79.4 -27.3 38.5 -12.7 -44.9 -18.8	-83.6	-83.6	26.3	-23.4
Transportation 36.6 35.1 14.7 47.2 79.8 60.5 -33.9 11.6 -18.8	79.9	79.9	29.1	62.1
Oil and petrochemicals -51.3 50.3 96.4 1272.4 1374.7 326.6 -71.1 -27.5 161.1	389.7	389.7	nc	l nd
Other work -23.9 0.9 18.4 11.1 -17.1 -28.0 79.0 22.0 30.0	34.7	34.7	-44.4	-26.6
Electricity distribution (annual % change) 0.0 4.5 11.7 5.0 -5.6 -9.8 -8.4 0.4 31.4	-17.8	-17.8	-15.9	42.6
Retail sales (annual % change) 3.8 -1.1 2.4 -2.0 -4.4 -2.3 8.2 4.4 6.5	2.9	2.9	0.3	-4.0
Wholesale sales (annual % change) 4.5 1.2 11.5 -0.5 -9.6 -18.1 18.0 -1.1 2.9	-10.7	-10.7	-3.3	-5.8
Total employment (annual % change) nd nd 1.4 0.9 -1.7 -2.4 nd nd -4.6	-5.6	-5.6	-8.0	-3.3
Industry nd nd -0.9 -1.5 -4.7 -7.9 nd nd -8.1	-9.2	-9.2	-12.3	-7.5
Services nd nd 4.7 4.3 2.1 2.3 nd nd 3.9	3.1	3.1	0.8	2.0
Gasoline sales (annual % change) 5.2 4.1 7.2 3.1 0.4 0.2 7.2 -0.2 5.9	1.8	1.8	-11.9	0.7
Total air traffic (transported pass., annual % change) 25.0 nd 0.4 -15.0 -18.0 -18.9 187.4 nd -9.8	-29.1	-29.1	-61.7	-58.0
Domestic 29.8 nd 1.7 -15.3 -17.0 -17.5 319.5 nd -11.6	-33.1	-33.1	-72.0	-67.8
From abroad -0.6 nd -8.2 -12.6 -24.7 -29.4 -6.2 nd 2.4	-1.0	-1.0	4.8	6.3
Federalized resources (real annual % change) 3.6 13.6 13.4 13.2 13.3 -9.5 2.2 12.0 12.3	5.5	5.5	10.1	-6.9
Participations (Branch 28) 1.7 16.3 8.0 23.9 18.7 -17.1 0.3 11.2 10.2	13.4	13.4	17.5	-14.2
Contributions (Branch 33) 6.0 10.3 23.7 -2.1 7.2 4.3 3.9 12.8 14.7	-2.6	-2.6	4.1	2.1
Foreign direct inv. (annual accum. flows, US\$ million) 3327.1 1130.2 2883.8 947.6 1130.2 1232.6 131.4 142.4 164.3	171.9	171.9	142.4	109.2
Remittances (annual % change) 2.0 -7.7 -4.8 -12.0 -9.5 -0.8 -3.6 -6.8 -6.0	-13.5	-13.5	-1.1	-4.0

Region: Industrialized

			Son	ora			Z007 2008 2Q08 3Q08 4Q08 1.0 -2.4 -0.8 0.4 -9.2 17.9 -2.6 1.4 -1.5 -23.8 91.5 -10.3 -2.9 -11.6 -43.2 -17.8 6.1 6.1 7.7 5.1 -17.2 14.7 14.3 21.9 23.6 74.3 -2.9 91.8 8.4 9.4 -37.4 -22.5 -17.7 49.1 -6.0 53.2 23.6 15.5 6.3 -3.2 104.7 -22.2 -9.3 -32.9 -67.7 -3.7 -9.9 -25.7 4.7 -9.3 18.2 -2.3 0.6 -13.6 -13.7 7.9 3.4 4.6 3.0 -3.3 -4.6 1.1 3.9 -3.6 -1.5 nd nd -2.7 -4.4 -7.7 nd nd 2.2 0.9 -0.7					
	2007	2008	2008	3Q08	4Q08	1Q09	2007	2008	2008	3008	4Q08	1Q09
Manufacturing production (annual % change)	-1.7	-1.1	-0.9	-3.3	6.1	-27.2	1.0	-2.4	-0.8	0.4	-9.2	-17.8
Construction** (annual % change)	-10.0	-27.3	-25.7	-22.0	-37.3	-18.8	17.9	-2.6	1.4	-1.5	-23.8	-33.6
Public work	-27.8	-8.9	-9.5	2.9	-19.0	36.7	91.5	-10.3	-2.9	-11.6	-43.2	-49.9
Private work	2.2	-36.2	-31.4	-35.6	-49.9	-43.5	-17.8	6.1	6.1	7.7	5.1	-12.7
Building	-0.9	-35.8	-22.5	-37.5	-47.7	-46.0	-17.2	14.7	14.3	21.9	23.6	-14.5
Watering and drainage	100.5	-13.2	62.5	-30.8	-51.2	-37.7	74.3	-2.9	91.8	8.4	9.4	120.5
Electricity and communications	-83.5	82.5	-44.9	142.2	113.4	6.5	-37.4	-22.5	-17.7	49.1	-6.0	21.6
Transportation	12.6	-1.0	-9.1	6.2	-12.9	66.3	53.2	23.6	15.5	6.3	-3.2	-0.1
Oil and petrochemicals	-43.5	nd	nd	nd	nd	nd	104.7	-22.2	-9.3	-32.9	-67.7	-78.0
Other work	-22.9	-36.0	-63.6	42.3	-49.4	-12.1	-3.7	-9.9	-25.7	4.7	-9.3	22.5
Electricity distribution (annual % change)	3.8	1.9	5.4	-5.7	6.4	-15.1	18.2	-2.3	0.6	-13.6	-13.7	-15.8
Retail sales (annual % change)	0.6	7.3	8.3	7.7	6.7	4.3	7.9	3.4	4.6	3.0	-3.3	-0.8
Wholesale sales (annual % change)	-2.9	-0.8	-0.9	2.3	2.5	0.1	-4.6	1.1	3.9	-3.6	-1.5	-16.5
Total employment (annual % change)	nd	nd	-8.6	-9.5	-12.7	-8.5	nd	nd	-2.7	-4.4	-7.7	-7.3
Industry	nd	nd	-3.8	-7.1	-10.5	-12.4	nd	nd	-1.9	-4.5	-9.4	-12.4
Services	nd	nd	3.8	2.6	-0.3	0.4	nd	nd	2.2	0.9	-0.7	0.1
Gasoline sales (annual % change)	7.1	5.5	5.3	9.0	1.1	-2.7	5.0	6.4	9.2	9.4	1.0	0.3
Total air traffic (transported pass., annual % change)	12.2	nd	9.1	-10.2	-16.2	-19.8	21.2	nd	13.2	-6.1	-7.6	-8.4
Domestic	13.6	nd	8.7	-10.8	-15.5	-18.8	21.8	nd	11.8	-6.9	-8.3	-7.9
From abroad	-6.5	nd	15.2	1.0	-26.0	-32.3	6.6	nd	49.5	20.2	15.5	-22.5
Federalized resources (real annual % change)	4.8	6.4	14.6	7.3	5.3	-12.1	3.4	7.9	15.7	5.5	4.2	-7.7
Participations (Branch 28)	3.4	12.1	14.7	10.0	18.6	-14.0	4.5	9.7	12.3	11.3	19.8	-15.4
Contributions (Branch 33)	6.2	0.6	14.5	2.9	-8.0	-9.9	2.5	6.3	19.5	-0.5	-8.1	-0.5
Foreign direct inv. (annual accum. flows, US\$ million)	639.9	1289.5	1188.9	812.9	1289.5	1202.1	406.8	356.1	376.7	342.8	356.1	312.5
Remittances (annual % change)	0.4	-5.2	-1.2	-11.1	-11.5	-10.6	2.6	-1.9	-1.7	-6.3	-4.1	-11.2

Región: Turística

Baja California Sur

Quintana Roo

Manufacturing production (annual % change)	6.5	-2.6	-3.1	-1.5	-3.6	-5.3	1.9	0.2	-3.3	2.8	3.1	1.1
Construction** (annual % change)	32.1	30.4	93.4	7.3	6.5	65.4	9.7	-14.3	2.2	-25.9	-26.5	-47.9
Public work	13.1	36.2	116.3	65.7	12.8	88.1	-4.0	-21.8	-47.6	-12.0	52.4	-7.5
Private work	42.9	27.7	84.3	-10.7	3.9	55.6	13.6	-12.5	15.6	-29.2	-36.4	-56.0
Building	63.0	34.1	118.9	-1.7	-10.6	34.9	9.9	-16.5	1.5	-24.3	-28.1	-36.6
Watering and drainage	150.2	28.2	nd	nd	nd	nd	-68.4	14.0	16.7	67.9	-76.1	-79.3
Electricity and communications	-56.3	-38.2	-55.8	-27.7	nd	29.7	-26.2	-51.3	-49.1	-71.1	226.1	217.8
Transportation	-3.1	44.2	87.1	63.5	39.3	20.4	22.1	16.6	-0.2	64.5	4.0	-55.9
Oil and petrochemicals	nd	-0.9	nd	nd	nd	24.0	163.7	nd	nd	nd	nd	nd
Other work	-26.1	-11.7	-71.9	-27.4	126.3	685.4	60.6	-21.8	9.9	-60.0	-44.1	-80.3
Electricity distribution (annual % change)	9.3	10.3	10.9	6.6	8.8	6.1	17.1	7.5	10.2	6.9	-2.3	-3.7
Retail sales (annual % change)	3.0	-5.1	-9.4	-4.5	1.5	7.4	8.6	4.8	10.0	6.8	3.3	11.2
Wholesale sales (annual % change)	14.4	-14.5	-4.9	-23.7	-26.1	-24.7	0.9	5.7	9.6	5.8	2.6	-11.1
Total employment (annual % change)	nd	nd	-5.1	-9.6	-17.0	-10.7	nd	nd	-1.9	-4.0	-5.6	-0.8
Industry	nd	nd	3.4	-6.1	-16.0	-20.3	nd	nd	-3.2	-11.3	-16.5	-20.5
Services	nd	nd	2.8	-1.4	-6.7	-3.0	nd	nd	1.2	0.2	-0.7	5.0
Gasoline sales (annual % change)	9.0	4.0	5.4	4.3	-0.8	-3.8	nd	nd	nd	nd	nd	nd
Total air traffic (transported pass., annual % change)	13.6	nd	-14.5	-20.8	-23.1	-8.8	20.6	nd	16.9	13.8	6.9	0.6
Domestic	46.9	nd	-34.9	-34.7	-41.3	-11.9	20.4	nd	13.5	13.0	1.5	-8.2
From abroad	-0.4	nd	-3.0	-9.5	-11.6	-7.6	20.7	nd	18.4	14.3	9.4	3.4
Federalized resources (real annual % change)	5.8	8.8	8.9	2.2	4.8	-2.4	7.5	15.0	11.9	3.8	8.4	-6.0
Participations (Branch 28)	6.2	13.0	3.1	10.6	11.1	-7.2	8.8	19.7	11.1	9.3	14.5	-13.1
Contributions (Branch 33)	5.6	6.0	15.8	-5.0	0.6	2.0	6.5	11.3	12.8	-1.9	3.7	2.4
Foreign direct inv. (annual accum. flows, US\$ million)	290.7	123.4	213.4	223.8	123.4	87.8	266.0	58.5	243.0	255.1	58.5	25.6
Remittances (annual % change)	11.0	9.6	9.9	4.5	11.9	5.1	-2.5	0.1	3.9	-2.2	-4.0	-7.4

Region: High Development

Mexico City

	2007	2008	2008	3008	4Q08	1009
Manufacturing production (annual % change)	-0.3	0.2	1.5	-1.5	1.0	-10.0
Construction** (annual % change)	1.2	-4.0	3.1	-16.2	-14.3	-3.3
Public work	12.8	-29.9	-33.1	-43.1	-34.3	20.3
Private work	-9.1	24.4	50.9	11.5	4.9	-21.6
Building	-9.2	2.2	18.1	-15.3	-20.4	-38.4
Watering and drainage	17.8	-3.2	14.0	-12.0	-33.6	11.3
Electricity and communications	-74.9	374.8	473.2	444.7	389.2	137.1
Transportation	32.6	-45.1	-57.7	-48.9	3.7	156.3
Oil and petrochemicals	nd	nd	nd	nd	nd	nd
Other work	24.1	25.7	47.4	21.3	8.4	-32.3
Electricity distribution (annual % change)	2.5	2.2	2.9	-0.9	-2.0	-0.5
Retail sales (annual % change)	2.9	2.8	7.8	1.4	-0.7	-3.7
Wholesale sales (annual % change)	0.3	3.8	9.2	5.6	2.5	1.3
Total employment (annual % change)	nd	nd	0.3	-0.9	-2.4	-0.8
Industry	nd	nd	-2.4	-4.3	-6.3	-5.9
Services	nd	nd	1.2	0.3	-1.1	0.8
Gasoline sales (annual % change)	3.1	0.8	1.5	2.1	-0.7	-0.9
Total air traffic (transported pass., annual % change)	5.0	nd	-5.2	-5.5	-0.4	4.4
Domestic	5.6	nd	-8.5	-7.8	4.2	14.9
From abroad	4.1	nd	1.1	-1.5	-8.0	-12.5
Federalized resources (real annual % change)	2.5	9.9	9.2	9.9	3.3	-2.2
Participations (Branch 28)	2.2	14.7	2.7	15.8	9.7	-15.0
Contributions (Branch 33)	2.9	4.1	21.8	1.6	-4.1	22.3
Foreign direct inv. (annual accum. flows, US\$ million)	11,404	11,925	11,713	11,026	11,925	8697
Remittances (annual % change)	-9.8	-19.6	-13.9	-23.5	-15.2	-0.7

* Value of finished work, at constant prices (deflated with the construction prices index) Source: INEGI, IMSS, Pemex, SCT, Sectur, CNBV, Banxico and SHCP-UCEF

44 Economic Research Department



For further information please contact:

Economic Research Department

Av. Universidad 1200

Col. Xoco

03339 México D.F.

Tel. (52) (55) 5621 5994

Fax (52) (55) 5621 3297

j.sicilia@bbva.bancomer.com

www.bancomer.com

Economic Research Department BBVA Group

Chief Economist

José Luis Escrivá

Unit Heads

North America: Jorge Sicilia Mexico: Adolfo Albo Macroeconomic Analysis Mexico: Julián Cubero United States: Nathaniel Karp

Spain and Europe: Rafael Doménech Europe: Miguel Jiménez Spain: Miguel Cardoso

Emerging Markets: Alicia García-Herrero Emerging Markets Analysis: Sonsoles Castillo South America: Joaquín Vial Argentina and Uruguay: Gloria Sorensen Chile: Alejandro Puente Colombia: Juana Téllez Peru: Hugo Perea Venezuela: Oswaldo López China: Li-Gang Liu Asia exc. China: Ya-Lan Liu

Economic and Financial Scenarios: Mayte Ledo Sector Analysis: Ana Rubio Financial Scenarios: Daniel Navia Quantitative Analysis: Giovanni di Placido Global Trends: David Tuesta

Other publications

North America Economic Research Dept.

Jorge Sicilia **Mexico** Adolfo Albo Javier Amador David Aylett Fernando Balbuena Carlos Herrera Alma Martínez Fco. Javier Morales Juan Luis Ordaz

Eduardo Torres

a.albo@bbva.bancomer.com javier.amador@bbva.bancomer.com david.aylett@bbva.bancomer.com fernando.balbuena@bbva.bancomer.com alma.martinez@bbva.bancomer.com francisco.morales@bbva.bancomer.com juan.ordaz@bbva.bancomer.com e.torres@bbva.bancomer.com

Macroeconomic Analysis Mexico

Julián Cubero Liliana Castilleja Fernando González Octavio Gutiérrez Ociel Hernández Cecilia Posadas Pedro Uriz

United States

Nathaniel Karp Hakan Danis Jeff Herzog Kristin Lomicka Marcial Nava Ignacio San Martin

Fernando Tamayo

Art Elisa Sánchez juan.cubero@bbva.bancomer.com liliana.castilleja@bbva.bancomer.com f.gonzalez8@bbva.bancomer.com o.gutierrez3@bbva.bancomer.com o.hernandez@bbva.bancomer.com c.posadas@bbva.bancomer.com pedro.uriz2@bbva.bancomer.com

nathaniel.karp@bbvacompass.com hakan.danis@bbvacompass.com jeff.herzog@bbvacompass.com kristin.lomicka@bbvacompass.com marcial.nava@bbvacompass.com ignacio.sanmartin@bbvacompass.com

elisa.sanchez@bbva.bancomer.com fernando.tamayo@bbva.bancomer.com



This document has been prepared by BBVA Bancomer Economic Research Department with information that is believed to be reliable; however, it is not intended as a recommendation for the purchase or sale of financial instruments.

The opinions, estimates, forecasts and recommendations in this document are based on information obtained from sources considered trustworthy but BBVA Bancomer does not guarantee, implicitly or explicitly, the accuracy, veracity or correctness.