

## **Market Report**



# **Mexican Automotive Market: Passenger Cars, Suppliers and Aftermarket**

**2007/2008 - 2010**

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Globis GmbH

Möllendorffstr. 52, 10367 Berlin

Germany

T.: +49 (0)30 4005 4914 (Sales)

F.: +49 (0)30 4005 4928

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# 1 Summary

With a population of about 105 mio. inhabitants, Mexico is the second largest market in Latin America, after Brazil, and one of the largest markets worldwide. Mexico has managed a growth of its economy which today is called the Mexican miracle. With a GDP per capita of 8343 USD and average monthly wages of 581 USD, Mexico has a good position among emerging economies.

Mexico has a longstanding tradition of car manufacturing. As early as 1930, cars (GM) were assembled in Mexico. Mexico has no own OEM, although some cars are almost seen as local. Today, with about 2 mio. passenger car manufactured every year, Mexico is one of the top car manufacturing locations worldwide.

Mexico passenger car market is characterized through a large, illegal inflow of used cars from the U.S. into Mexico. With closer ties of the Mexican with the U.S. economy, many cars are bought in the U.S. and brought to Mexico by individuals who never register these cars. With the opening of used car imports from the U.S. and Canada which was reversed beginning of 2008, the influx increased further. The imports mainly happen in the Northern regions of Mexico. The new car market suffered from the inflow of used cars and declined over the last years. Starting from 2007, we expect a turnaround of the new car market, but not a fast increase. Although the wealth of the population is increasing, the average Mexican still can not afford a new car and the economic success can hardly make up for the negative impact of the used car imports.

With official used car imports being equal in numbers to new car sales, the Mexican car parc is increasing fast, but over 1 mio. from 2006 to 2007 and further on for the next years. Since a major share of the increase comes from used cars, there is an immediate effect on the aftermarket. While for very cheap cars imported from the U.S. Mexican consumers will not be willing to spend substantial amounts of money for car service, but for higher-value imports they will. The increasing wealth of Mexican consumers especially influences the behaviour regard-

ing car service. We expect the aftermarket (sale of parts) to grow at almost 6% annually at constant prices over the next years.

The distribution system for spare parts is about to organize, with still very few players acting on a truly national level. Also, chain building in the parts shop and the service stations segment, although it started already, still has a tremendous potential.

Financing of cars is widely used but there is still growth potential. With the average Mexican wages increasing further, financing is the only option for many Mexican to buy a new car.

Mexico is ideally positioned as a production hub for cars and components. Mexico has one of the largest trade agreement networks, only topped by Chile. Through NAFTA, the access to the North American market are much easier, also not yet fully free of restrictions and duties. In about 10 years time, however, free trade will become reality. Through an agreement with the E.U., Mexico is also able to deliver to European countries on preferential terms. Investments from U.S. and E.U. companies in Mexico today can be made without any restrictions. The automotive industry in Mexico is very well developed so that is no problem in finding qualified labour. With average wages of 581 USD, cost of labour is still low.

In total, the car market and especially the aftermarket are attractive because of its size and its growth potential, respectively. Mexico is also attractive as a production hub to deliver North America, Europe or Latin America. In this aspect, Mexico is one of the main competitors of the Asian countries.

The major risk in Mexico is the dependency on the U.S. economy. While this has been reduced in recent years, there is still a strong connection between the two economies. With the U.S. economy slowing down, this will also have an impact on Mexico's consumers.

To prepare this market report, we used primary and secondary research methods: expert interviews and consumer surveys – in particular for the market of automotive parts, which is not covered yet by any substantial statistical data – and standard analysis of secondary information available on the topic. Based on our

experience and developed competencies we have built proprietary market models to forecast future market development. The report was compiled in the period from March 2008 to June 2008 and hence includes statistical data until December 2007 and the first quarters of 2008, if available.

Globis is a Germany-based consulting company with broad international coverage regarding strategy development, especially entry strategies into new markets.



## 2 Country Basics

Population (mio.)	105,3
Area (1.000 sq. km.)	1.964,37
Territorial arrangement	31 Regions 1 Federal District
Population density (inhabitants / sq. km.)	52,3
Life expectancy at birth (years)	Male: 72,6 Female: 77,4
Birth rate	2,1
No. of households (mio.)	27,49

*Table 1: Mexico - Country Facts, 2007*

Mexico is the second most populated country in Latin America (see Table 1), still far behind Brazil, but even more from the third in the list, Colombia. Within the subcontinent, it is not only the one with the largest number of inhabitants, it is also the nearest to the U.S. and Canada, what converts it in a “connection gate” between the Northern and the Southern zones of the region.

In general, the proximity to the U.S. strongly influence the way of live and the economy – at least in the Northern parts of Mexico. With full implementation of NAFTA, this influence might be even stronger in Mexico, reaching also the Southern parts.

Mexican population doubled from 1970 to 2000 and will grow further but at a much softer pace (see Figure 1). Eventually, in a few years, the growth trend might also reverse and the population will start to decline.

Official estimates are that about 8 mio. Mexican-born individuals live in U.S.. Remittances from these emigrants reach a value of about 3% of the GDP. These individuals are sometimes still counted as Mexicans. There, official Mexican numbers are likely overstated.

With an average age of 24, Mexico has a very young population. Due to the CONAPO (National Council on Population) policies, natural growth rates fell from 3,1 in 1970-80 to 1,6 in 1995-2000 and hence, the population will grow older over

time. Average life expectancy at birth is 75 years, which is comparable with most industrialized nations.

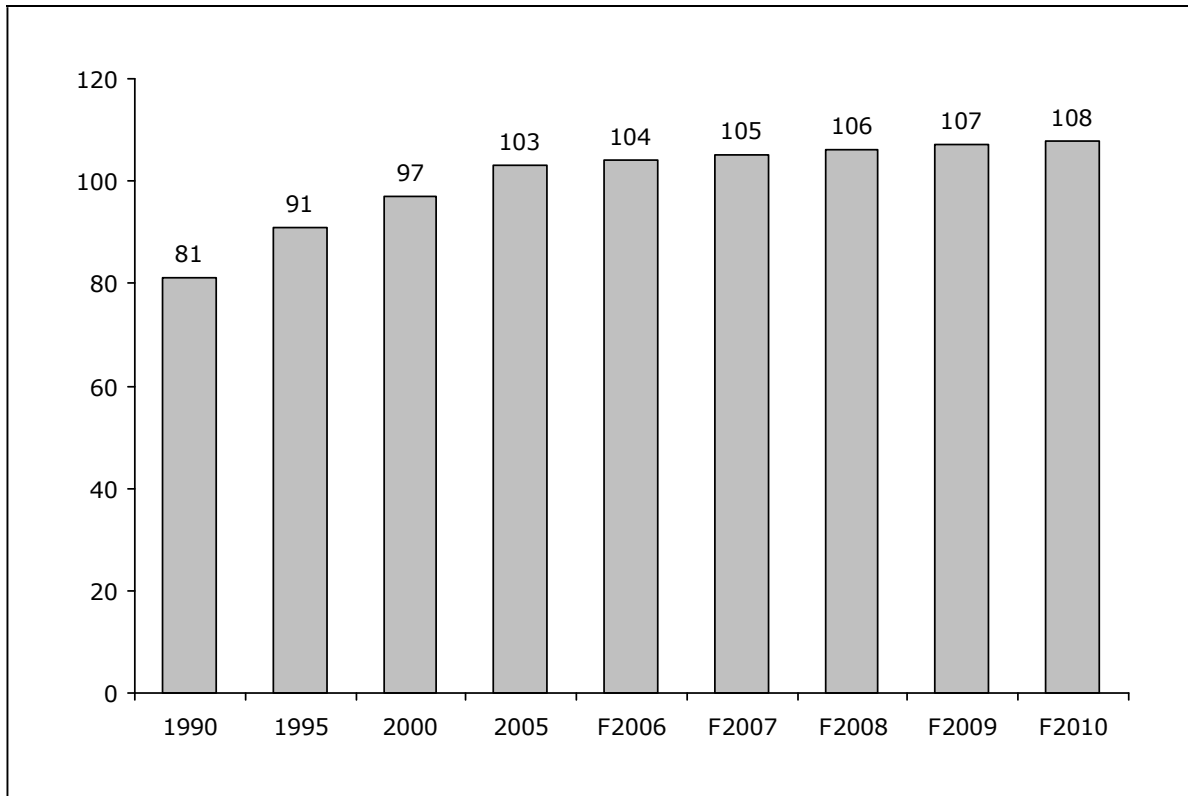


Figure 1: Development of Population in Mexico, in Mio., 1990-2010.

Source: INEGI

The distribution of the population is quite uneven. While regions like Estado de Mexico have a density of 627,21 inhabitants / sq. km., others, like Baja California, have just 6,93. In the whole country, 11 cities have more than one million inhabitants. Regions are geographically determined and differentiated: those at the Northern border are clearly influenced by their proximity to the USA and the existence of vast desertical landscapes; the center of the country is influenced by the Federal District and has the highest population density rates; Southern regions have rainforest landscapes with tropical climate and its populations is formed by peasants and indigenous people (more similar to the bordering Central American countries).

Mexico is divided into 32 regions (see Figure 2). The 10 major regions are Estado de México, Distrito Federal, Veracruz de Ignacio de la Llave, Jalisco,

Puebla, Guanajuato, Chiapas, Nuevo León, Michoacán de Ocampo and Oaxaca. 50% of the population live in metropolitan areas. The biggest metropolitan areas are Ciudad de México (about 19 mio.), Guadalajara (about 4,1 mio.), Monterrey (about 3,7 mio.) and Puebla (about 2,1 mio.).

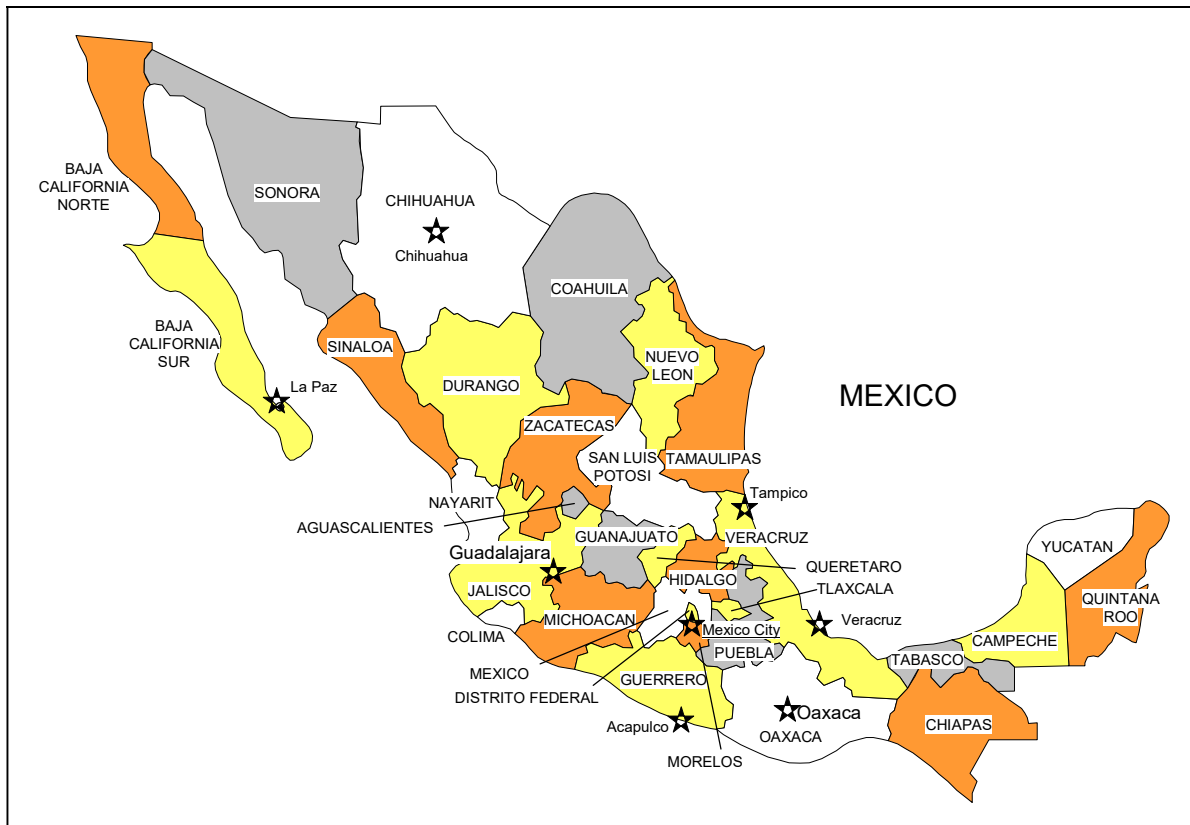


Figure 2: Map of Mexico

## 2.1 Economic Development

Mexico is the 12th strongest economy worldwide in terms of total GDP. The economic growth experienced during the 20<sup>th</sup> century (known as the “Mexican miracle”) prepared a solid basis to resist crisis like the one suffered in 1994. From 1997 to 2007, Mexico trebled its GDP (Figure 3) and most forecasts see sustainable growth in the future. Today, Mexico is the second strongest economy in Latin America after Brazil.

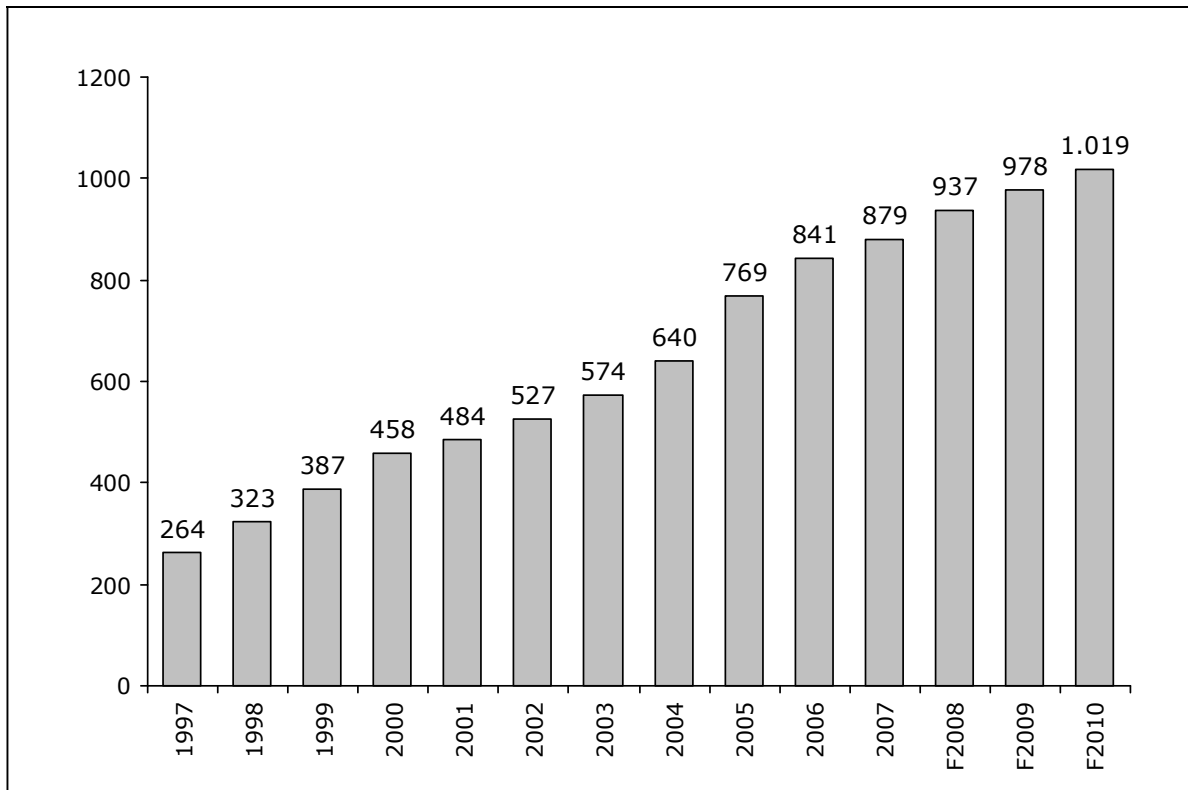


Figure 3: Nominal GDP, bn. USD, 1997-2010

Source: INEGI, World Bank

GDP per capita was at 8.343 USD in 2007 showing that Mexicans are better off than most people in developing countries but that there is also a long way to close the gap to more industrialized countries. Accordingly, average monthly wages are at below 600 USD (see Figure 4) which means, that the majority of people can not afford larger investments like new cars.

Also, Latin America is the world region with the most uneven distribution of wealth, and Mexico is not an exception. The Gini-Index, a measure for the equality of the income distribution of a nation, is at 0,53 and quite lower in rural areas (a Gini-Index of 0 means perfect equality, a GINI-Index of 1 means perfect inequality). The actual richest man of the world, and the poorest municipality in Latin America, are linked to Mexico.

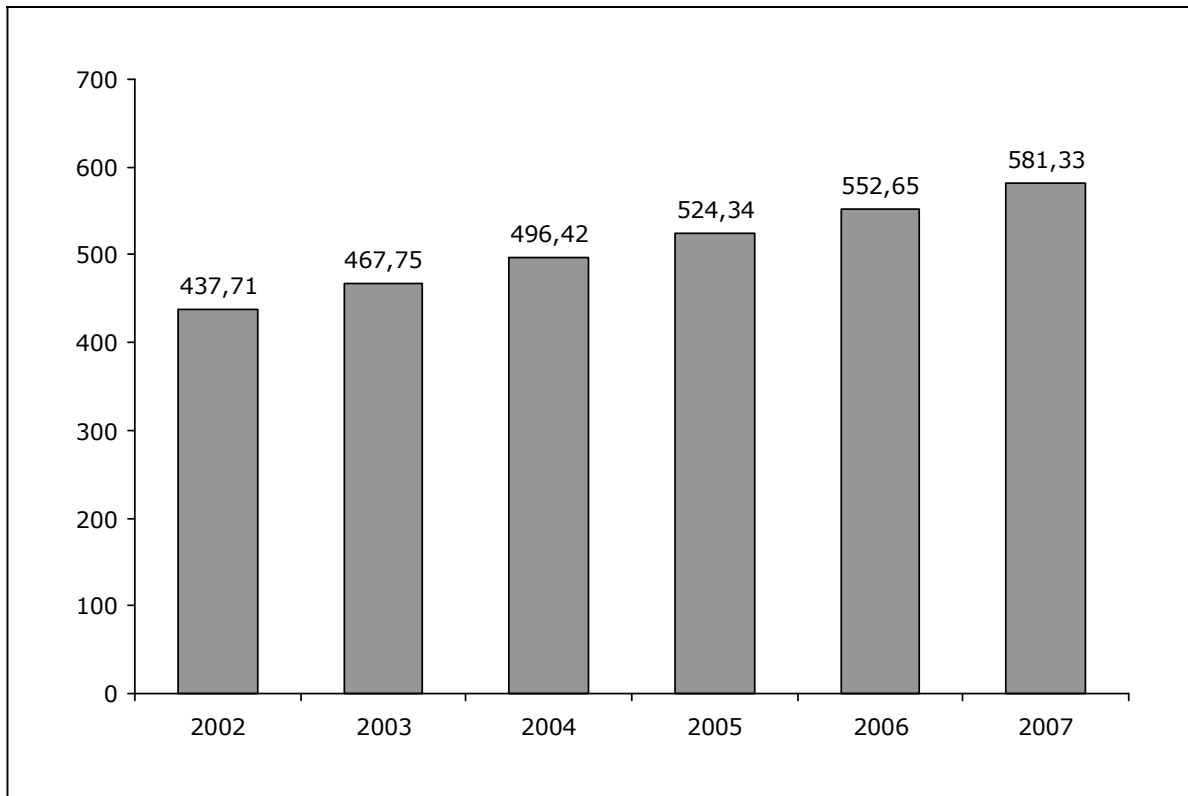


Figure 4: Development of Monthly Wages, in USD, 2002-2007

Source: IMSS, Globis Analysis

Initially, the economic growth was based on the extraction of oil, but a progressive industrialization diversified the wealth sources. Mexico strengthened its industrial infrastructures mainly through foreign investments, one the basis of its wide trade agreement network. Apart from oil and industry, tourism and remittances from Mexicans living in the U.S. drive the economy.

Mexico is an economy which is in constant competition with Asian countries for FDI projects and more recently, is also a very attractive market itself. Its wide trade agreement network makes it an excellent entry point into the largest markets of the world, the U.S. and the E.U.

Remarkable is the way that this country achieved control over its inflation. While inflation was at almost 19% in 1998, today this indicator remains below 4%, and is expected to fall slightly (see Figure 5).

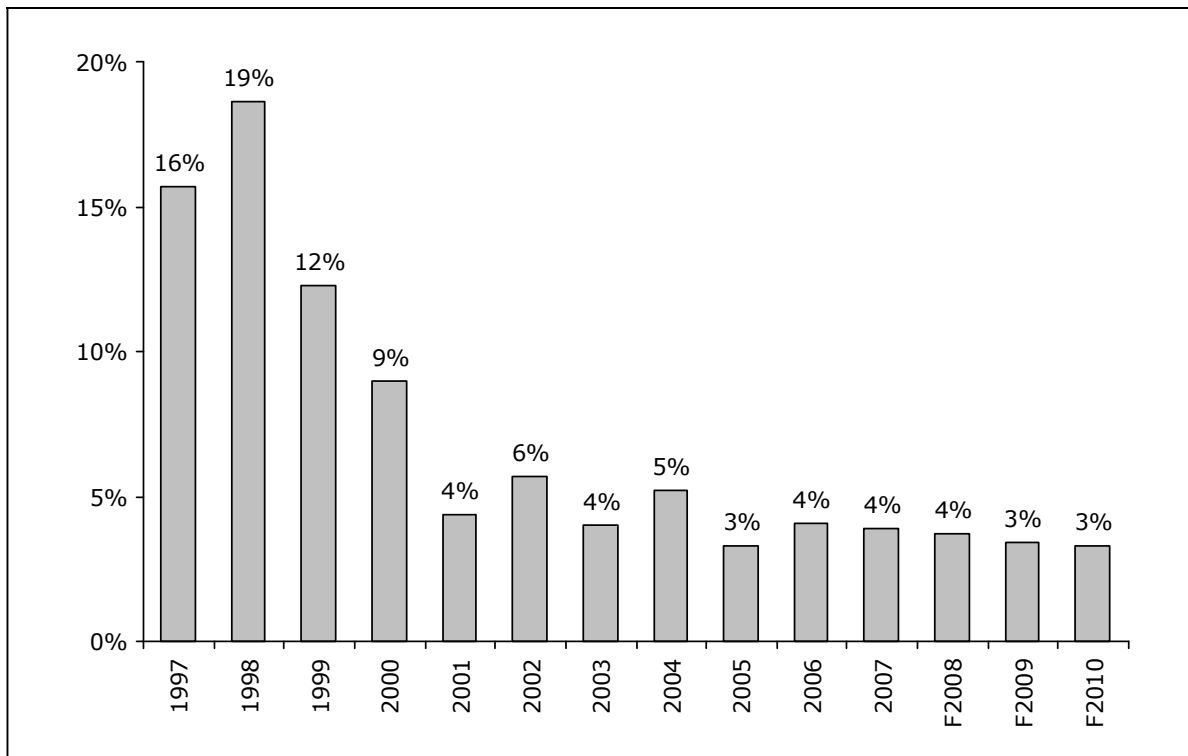


Figure 5: Inflation Rates, 1997-2010

Source: BANXICO, The Economist

## 2.2 Regional Economic Development

Economic growth was traditionally linked to the central states (specially D.F. and Estado de México), but since 1980 started to get decentralized. However, not all regions were affected equally and Southern regions remained excluded. Northern regions, Estado de México and Distrito Federal have the highest development levels, while Oaxaca and Chiapas have the lowest levels. Northern regions are better developed as a result of their proximity to the U.S.. Many investments from the U.S. are made in the border areas just across the borders (the factories are called “maquiladoras”). More than 43% of the industrial production comes from just 4 regions: Distrito Federal (15,8%), Estado de México (11,8%), Jalisco (8,1%) and Nuevo León (7,9%).

GDP per capita reflects these regions differences, but with some deviations. While the Northern regions are also at the top, and with D.F. and Nuevo Leon being the leaders, Jalisco and Estado de Mexico have a lower average GDP per capita due to its larger population (see Table 2).

In total, the regional differences match with the engagement of larger automotive manufacturing sites. Campeche and Quintana Roo are exceptions and get their relative wealth mainly through tourism.

Region	Population, 2005	GDP/Capita (in 1.000 USD)
Aguascalientes	1.065.416	10,1
Baja California	2.844.469	10,8
Baja California Sur	512.170	10,3
Campeche	754.730	14,4
Coahuila de Zaragoza	2.495.200	11,9
Colima	567.996	8,3
Chiapas	4.293.459	3,5
Chihuahua	3.241.444	11,7
Distrito Federal	8.720.916	22,0
Durango	1.509.117	7,7
Guanajuato	4.893.812	6,5
Guerrero	3.115.202	4,8
Hidalgo	2.345.514	4,9
Jalisco	6.752.113	8,2
México	14.007.495	5,9
Michoacán de Ocampo	3.966.073	4,9
Morelos	1.612.899	7,5
Nayarit	949.684	5,0

Region	Population, 2005	GDP/Capita (in 1.000 USD)
Nuevo León	4.199.292	15,6
Oaxaca	3.506.821	3,8
Puebla	5.383.133	5,8
Querétaro Arteaga	1.598.139	9,4
Quintana Roo	1.135.309	12,7
San Luis Potosí	2.410.414	6,6
Sinaloa	2.608.442	6,7
Sonora	2.394.861	9,8
Tabasco	1.989.969	5,5
Tamaulipas	3.024.238	9,7
Tlaxcala	1.068.207	4,7
Veracruz de Ignacio de la Llave	7.110.214	5,2
Yucatán	1.818.948	6,8
Zacatecas	1.367.692	4,9

*Table 2: GDP per Capita by Region, 2007*

Source: INEGI, Globis Analysis

## 2.3 International Agreements / NAFTA

Mexico is a full WTO-member and the only Latin American country at the OECD (since 1994). FDI levels in Mexico are clearly facilitated by the international agreements promoted by the government offices. Some of them were exclusively motivated by the will of supporting the automotive industry. Through this economic network, Mexico offers preferential access to 1 billion consumers in 44 countries (75% of the world GDP). These treaties are:

- 12 Free Trade Agreements (FTAs).



- 6 Economic Complementary Agreements (ECAs).
- 23 Reciprocal Investment Agreements (APRIs).

After Chile, Mexico is the country with the highest number of FTAs. Mexico is not yet member of Mercosur, but it has observer status and negotiations are being held presently in order to become a full member.

Mexico holds FTAs with USA and Canada, Colombia, Bolivia, Chile, Uruguay, Nicaragua, Costa Rica, North Triangle (Honduras, El Salvador, Guatemala), Japan, Israel, AELC-FTA (Switzerland, Norway, Liechtenstein and Iceland) and with the European Union. It has also important commercial agreements (mainly focused on the automotive sector) with Brazil, Argentina, Ecuador, Panama, Paraguay, Peru, South Korea and Australia.

Certainly, Mexico's most important FTA is NAFTA. Through NAFTA, Mexico will be a low cost entry point into the largest market of the world. Eventually, there will not be any duties any more and no restrictions apply. According to NAFTA regulations, the opening happens in successive steps. For used cars, for example, it is not until 2017 that all used cars can be imported from the U.S. to Mexico (while duties will be waived from the beginning of 2009).

## 3 Mexican Passenger Car Market

### 3.1 Mexican Car Parc

Mexico has a vivid automotive industry with many manufacturers but no domestic brand. With over 16 mio. cars the Mexican car parc is the second largest in Latin America, and the 10<sup>th</sup> all over the world. It has been growing continuously over the last years (see Figure 6). One of the mayor characteristics of the Mexican parc is the amount of illegal – not registered – cars. About 20% of vehicles in Mexico are believed to be not officially registered. The main reason is an inefficient registration and control system.

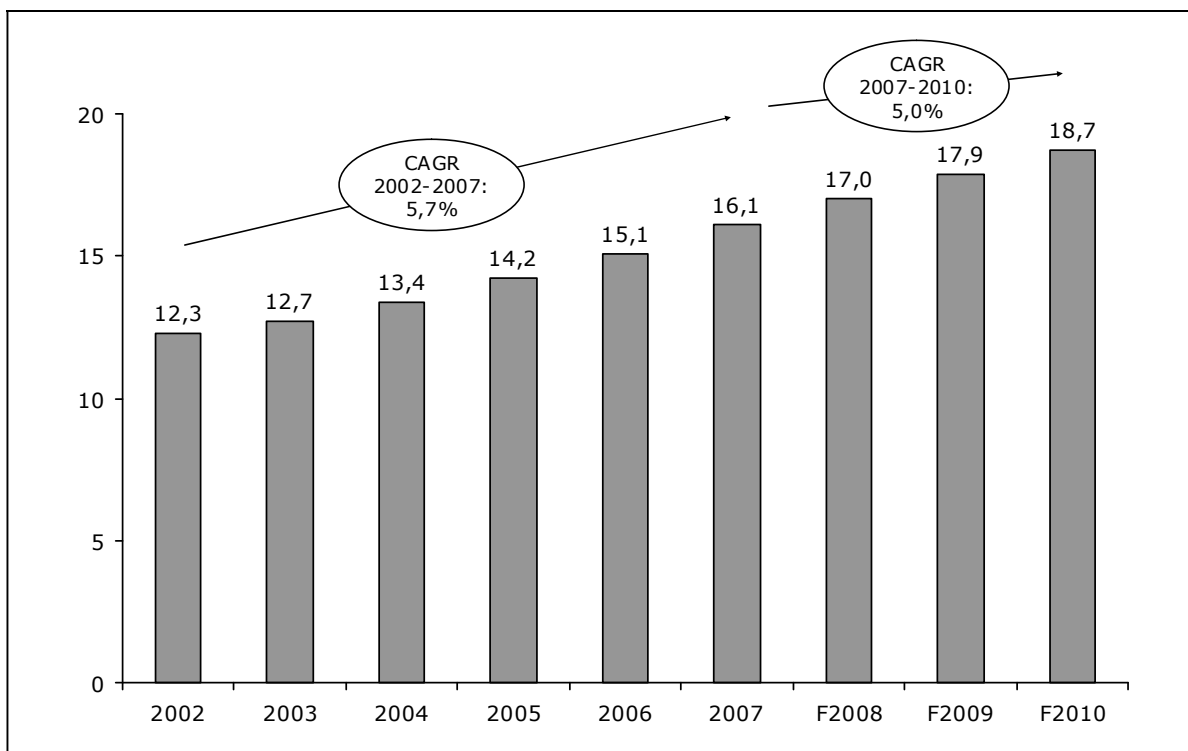


Figure 6: Development of Mexican Passenger Car Parc, in Mio. Units, 2002-2010

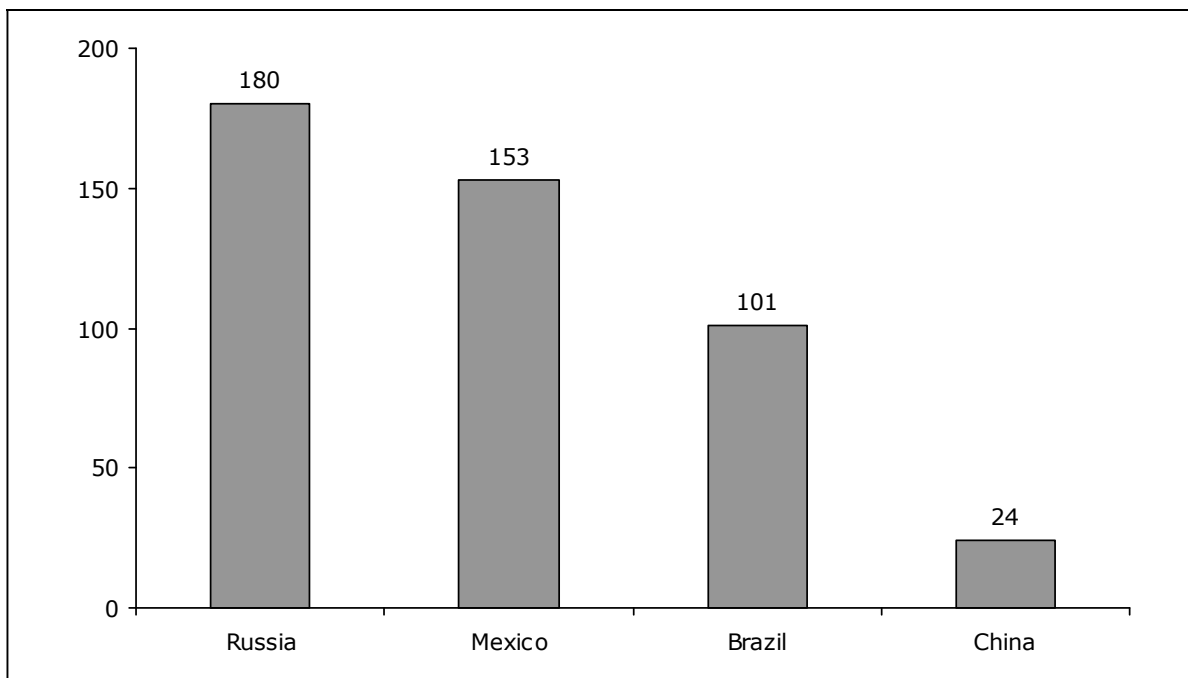
Source: INEGI, Globis Analysis

Another reason is the large amount of used cars brought into Mexico from the U.S., which still have the U.S. licence plate. To reduce this problem, the Mexican

authorities have granted limited time periods in which illegal cars could be officially registered without any consequences. For this reason, in 2000 and 2005, the official car parc size experienced some extraordinary growth. Also, to solve this problem, a new law effective January 1<sup>st</sup>, 2008, stipulates that all the vehicles have to include an identifying chip, attached by the manufacturers, which should improve the quality of the Public Vehicle Register (REPUVE).

The Mexican car parc has been experiencing steady growth. While from 2002 to 2007 the official parc was growing at a rate of 5,7% - partly due to illegal cars being officially registered – over the next years we expect a slightly slower growth of the parc. Imported used cars and sale of new cars contribute equally to the growth.

Mexico is penetrated with cars at a level above most of the BRIC-countries, with the exception of Russia (see Figure 7) – which is the only BRIC-country with a decreasing population. For example Brazil has a passenger car penetration of 101. Car density in Mexico was at 153 in 2007 and will grow to about 170 in 2010.

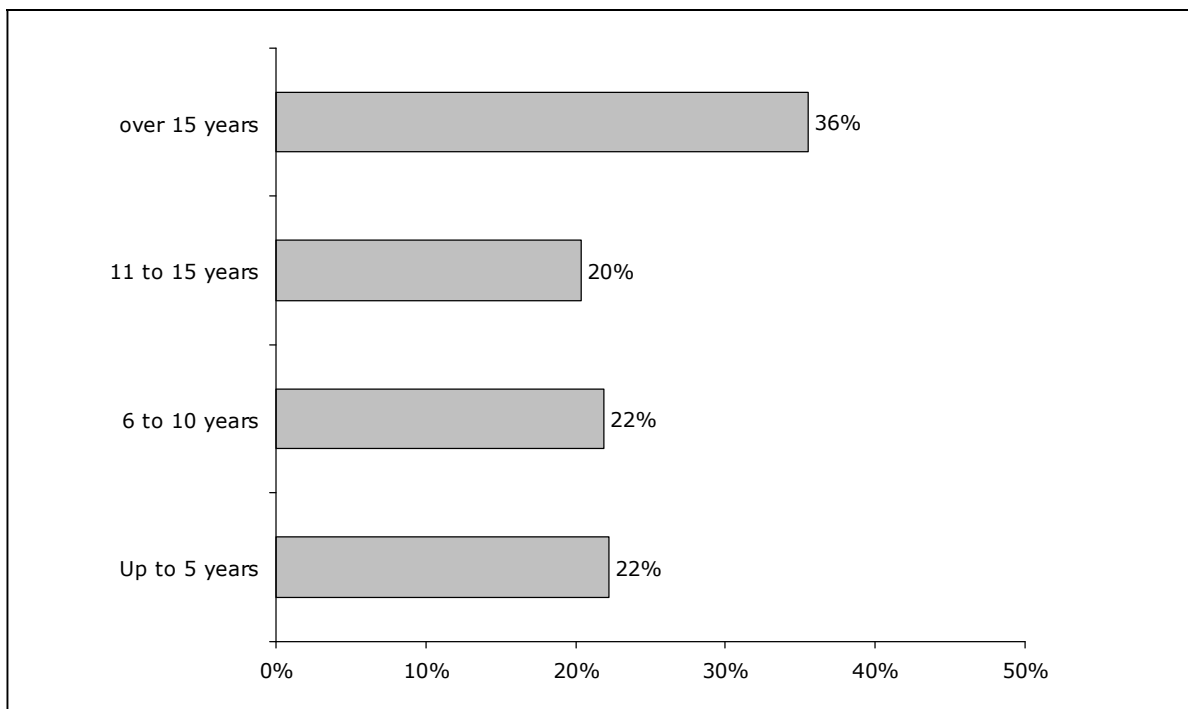


*Figure 7: Car Penetration in Mexico and Selected other Countries, 2007*

Source: Globis

### 3.1.1 Structure of Car Parc by Age

The Mexican car parc is rather old. About 40% of the parc is older than 15 years, with the majority of these even older than 20 years (see Figure 8). Drivers are low renewal rates due to the low car density. Cars are used way beyond cars in Western Europe or the U.S. Another driver are high renewal rates in the U.S. Mexico is the prime destination for many used U.S. cars and many of these imported cars are not registered officially yet. Still, there is also about 20% of cars of an age up to 5 years. The age distribution of the officially registered parc is not as distorted towards older cars than it is in other countries.



*Figure 8: Structure of Mexican Car Parc by Age, 2007*

Source: Globis

A major step towards cementing this age structure was a degree issued in August 2005 which legalized the imports of used automobiles, vintage 1990 to 1995 (e.g. between 10 and 15 years old), from U.S. and Canada. Before that, only trucks older than 10 years could be imported officially into Mexico. This degree is still discussed, due to the negative impact of this regulation for the new car market. Automotive associations are still negotiating with Government authorities in order

to limit this deregulation and avoid an excessive old car parc. The aim is to prohibit the import of cars above a certain age threshold. An eco-tax or a certain compliance with environmental norms, which could also solve at least part of the problem, is currently not discussed.

Liberalization of used vehicle imports according to NAFTA-guidelines will further increase the imports of used vehicles from U.S. and Canada into Mexico. The liberalization is becoming effective over a period from 2009 to 2019. It is currently unclear, whether this will lead to more old cars being imported. With no more customs duty on used cars, it might be worthwhile to import younger and hence more expensive used cars from the U.S. and Canada. Currently, older cars are brought illegally over the border anyway and effective March 1<sup>st</sup>, 2008, the import of used cars until 10 years of age is officially allowed (even though full taxes apply).

There is no regular technical check-up required for cars in Mexico. Cars, however, need to pass a semi-annual emissions test (so-called Verificación) which has to be performed by an authorized service center (designated as “Verificación Vehicular”). The emissions test does not provide for a rejuvenation of the parc; the regulation is not really enforced.

### 3.1.2 Structure of Car Parc by Brand

As mentioned, Mexico does not have a domestic car brand. However, Mexico has a long history of foreign car makers producing cars in Mexico. Companies producing in Mexico are leaders in the parc.

The Mexican car parc is led by 5 brands which have a rather equal share of the parc. Top in parc is GM from the U.S, followed by Ford (see Figure 9). GM's and Ford's parc in Mexico consist of many used cars imported in Mexico from the U.S. The other two brands with a major share in the parc, Nissan and Volkswagen, mainly build their car parc in Mexico through their long local presence. DaimlerChrysler, which in the old merged form is fifth in parc, can be split up into Daimler, which build its share from scratch and Chrysler, which benefitted from imports from the U.S. Other brands surfaced in Mexico larger scale at the end of the Nine-

teeth. Toyota is now sixth in the parc, but has the smallest local production facilities. Other Asian car brands are becoming stronger in the parc as well. In total, there are currently 400 different models sold in Mexico (while in 1998 it was just about 100).

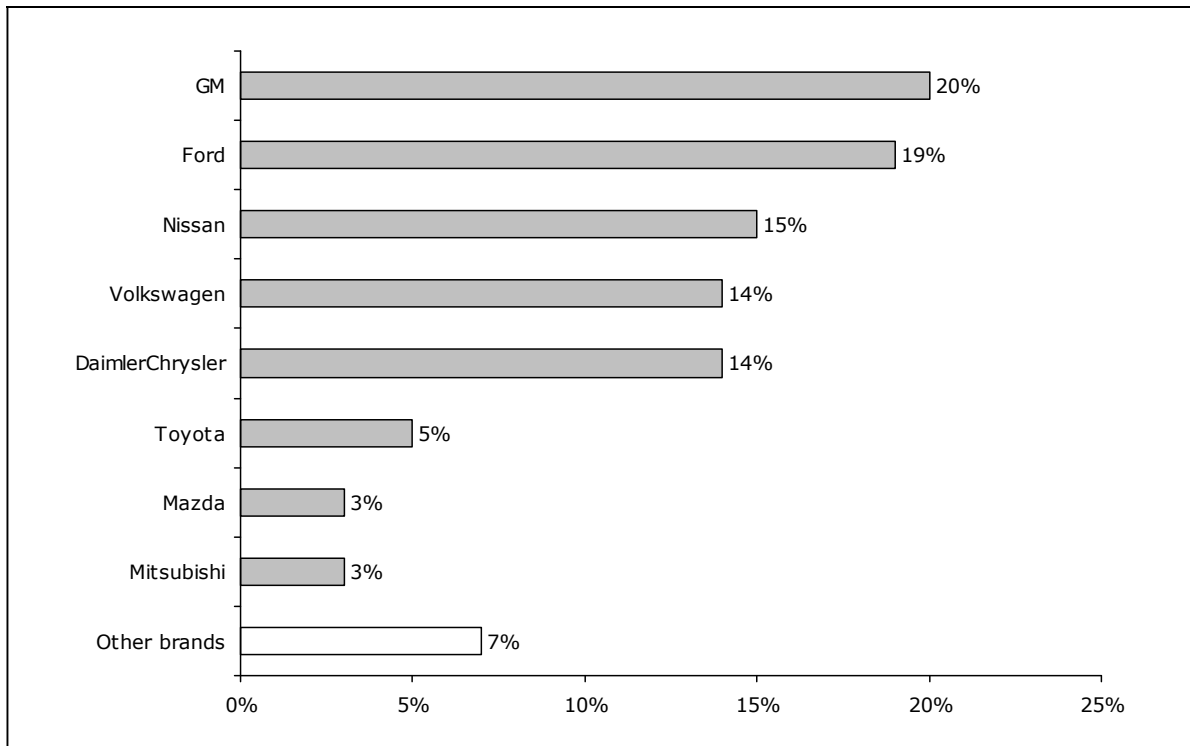


Figure 9: Top 10 Brands in Light Vehicles (Passenger and LCV) Car Parc, 2007

Source: Melgar Asociados, Globis

Smaller cars, especially the subcompact models, make up the largest share of the car parc (with about 26%). Second segment in the parc are MPVs including SUVs, which are frequently used for private transports.

### 3.1.3 Car Parc in Regional Markets

The regional distribution of cars shows clear accumulations. Regions closer to the U.S. border have a car penetration exceeding the Mexican average by more than 100% (see Figure 10) . The highest penetration with almost 500 cars / 1.000 people is found in Baja California Sur, followed by Distrito Federal and Baja California with over 300 cars / 1.000 people. Higher penetrations can also be found in

Nuevo León, Sonora and Tamaulipas all border-regions to the U.S.. Car penetration can also go well under 100 cars / 1.000 people in rural areas such as Chiapas, Campeche, Oaxaca, Puebla and Tabasco (for details see Table 3).

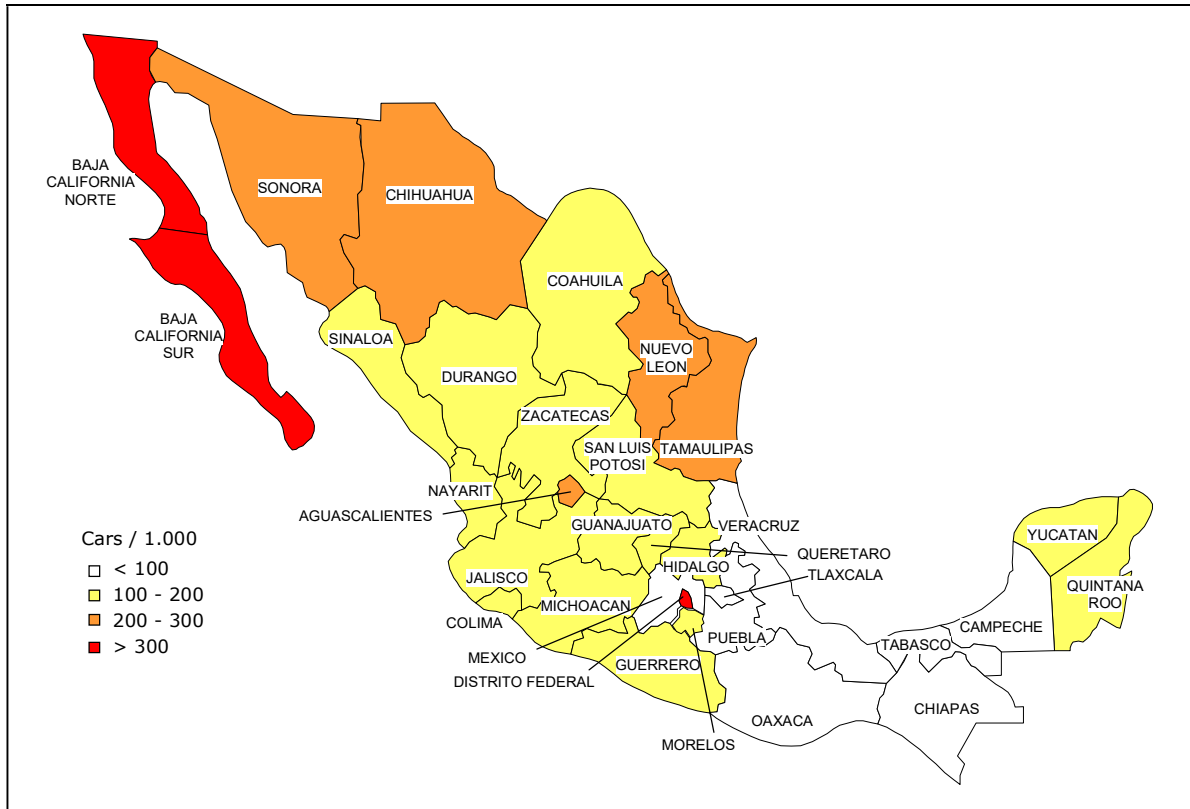


Figure 10: Car Density in Mexican Regions

The geographical distribution of the car parc is clearly uneven. While in the Center and the Northern parts of Mexico 38,7% and 30,7% of all automobiles are registered, the Western, Eastern and Southern regions just comprise 12,2%, 9,1% and 9,1%, respectively, of the car parc.

Name	Car Parc 2007	Cars/1.000 people
Aguascalientes	223.311	209,60
Baja California	977.824	343,76
Baja California Sur	253.835	495,61
Campeche	57.944	76,78

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Name	Car Parc 2007	Cars/1.000 people
Coahuila de Zaragoza	462.802	185,48
Colima	98.056	172,64
Chiapas	166.595	38,80
Chihuahua	670.304	206,79
Distrito Federal	2.713.690	311,17
Durango	207.662	137,60
Guanajuato	511.924	104,61
Guerrero	490.792	157,55
Hidalgo	369.670	157,61
Jalisco	1.300.191	192,56
México	1.254.253	89,54
Michoacán de Ocampo	534.715	134,82
Morelos	202.830	125,75
Nayarit	124.608	131,21
Nuevo León	1.107.519	263,74
Oaxaca	156.087	44,51
Puebla	488.066	90,67
Querétaro Arteaga	167.632	104,89
Quintana Roo	154.448	136,04
San Luis Potosí	335.047	139,00



Name	Car Parc 2007	Cars/1.000 people
Sinaloa	312.090	119,65
Sonora	696.517	290,84
Tabasco	165.026	82,93
Tamaulipas	737.410	243,83
Tlaxcala	77.415	72,47
Veracruz de Ignacio de la Llave	696.595	97,97
Yucatán	251.115	138,06
Zacatecas	168.362	123,10
Total	16.134.335	156,24

*Table 3: Passenger Car Parc by Region, 2007.*

Source: INEGI, Globis

## 3.2 Passenger Car Sales and Imports

### 3.2.1 Size of Market

The Mexican Passenger Car Market, defined as new cars sold, has experience stagnation and even a decline over the last years. While in the late Nineteenth, sales climbed from about 300.000 in 1997 to 713.000 in 2002, since then the market stagnated and starting from 2005, even decreased (see Figure 11). A temporary degree, issued in August 2005, allowing used car imports of cars between 10 and 15 years of age from the U.S. and Canada had strong negative consequences on the new car market. There are however, many other reasons affecting the new car market (see chapter 3.2.4).

For the years until 2010, we expect a recovery, but only with growth rates around 3% annually. In the first month of 2008, there was a slight decline in the sales of passenger cars and it is not clear as of yet, whether the market will grow in 2008. The car market in 2010 will likely be below its peak in 2004, because of further NAFTA-regulations easing the import and cost of import of used cars from North America into Mexico.

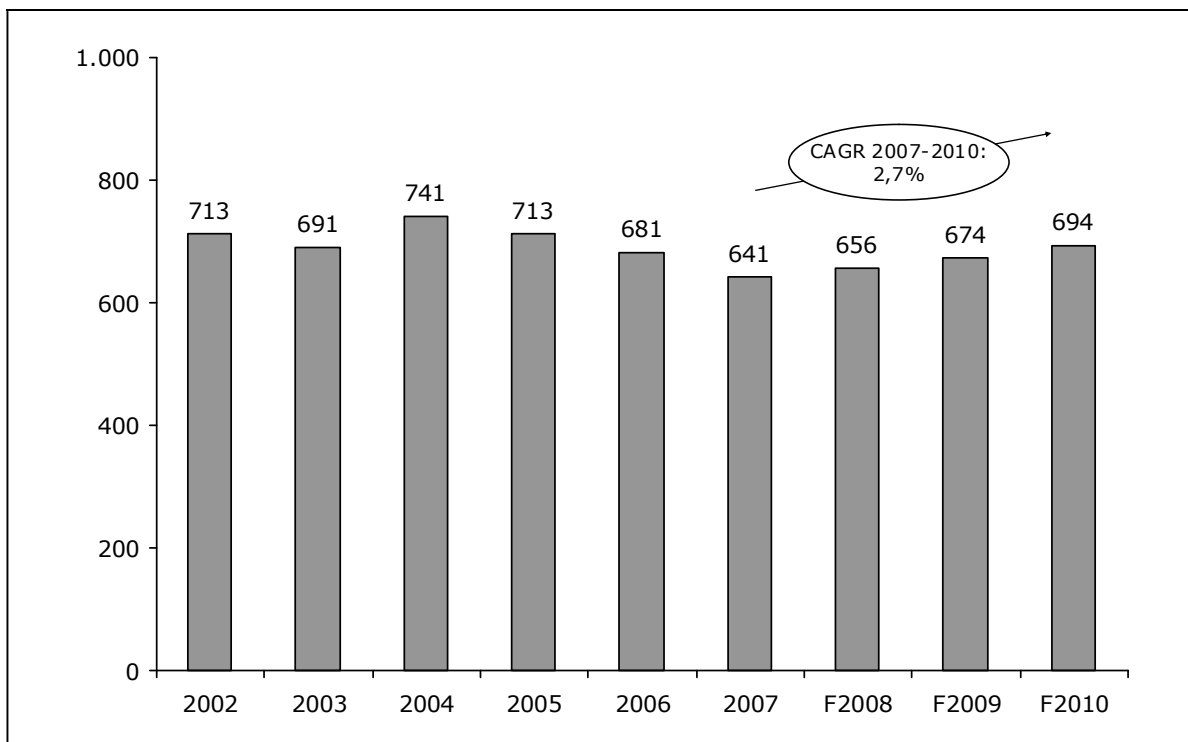


Figure 11: Passenger Car Sales, in 1.000, 2002-2010

Source: AMDA, Globis Analysis

Imports of used cars are fluctuating strongly, depending on actual regulations issued by the Mexican government. Since the majority of “imports” were without proper customs declaration, the real number of imports is hard to track. These illegal cars show up in statistics, when they are officially registered in Mexico – mostly upon a legalization initiative and a long time after they were brought into Mexico. Due to this initiatives, there are strong jumps in the number of “imports”, since these cars are counted as used car imports.

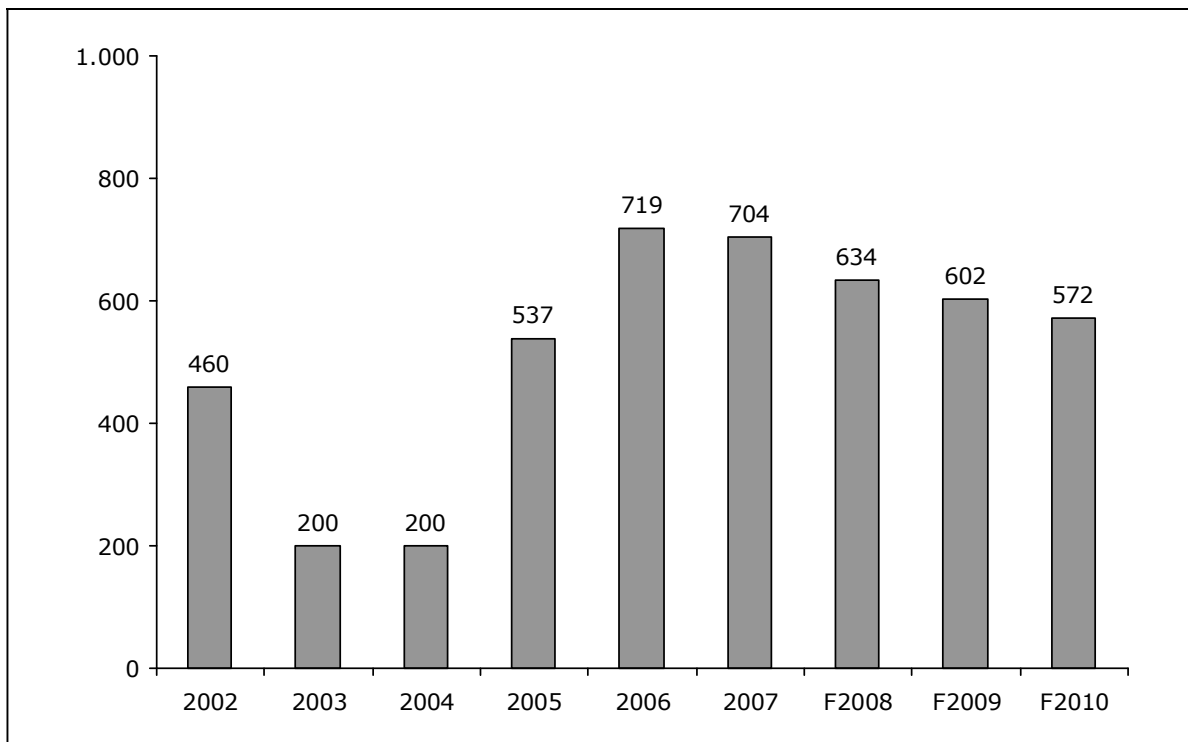


Figure 12: Import of Used Passenger Cars into Mexico, in 1.000, 2002-2010

Source: Globis

In 2006, the number of used car imports peaked (see Figure 12). For the future, we estimate a decline in the number of used car imports. Firstly, many illegal cars were already officially registered, explaining the strong increase from 2004 to 2005 and further to 2006. This backlog in registration now is reduced, although still existent. Secondly, easy imports jeopardize the new car market and there is a strong lobby to implement some form of limitation to the import of used cars.

These rather erratic jumps of used car imports influence the structure of additions to the car parc (see Figure 13). Imports of new cars increased heavily from 2000 onwards, when Mexico negotiated several new free trade agreements. Toyota, Mitsubishi, Mazda, Suzuki, Subaru and Acura started importing cars into Mexico – mainly from the subcompact segment. Today, Asian imports make up about 23% in the passenger car market. Today, however, production in Mexico for the local market increases. Mexico will still be a production base for North America, but less imports of new cars are needed in future to fulfill domestic demand of cars. The Chinese players FAW and Geely are planning to manufacture cheap

cars in Mexico and at least FAW announced, that they are interested only in the Mexican market. Even though this is highly unlikely – a cheap production base in a NAFTA country will ultimately be used to supply the U.S. market – it is a signal that will be many more cars produced in Mexico and offered domestically.

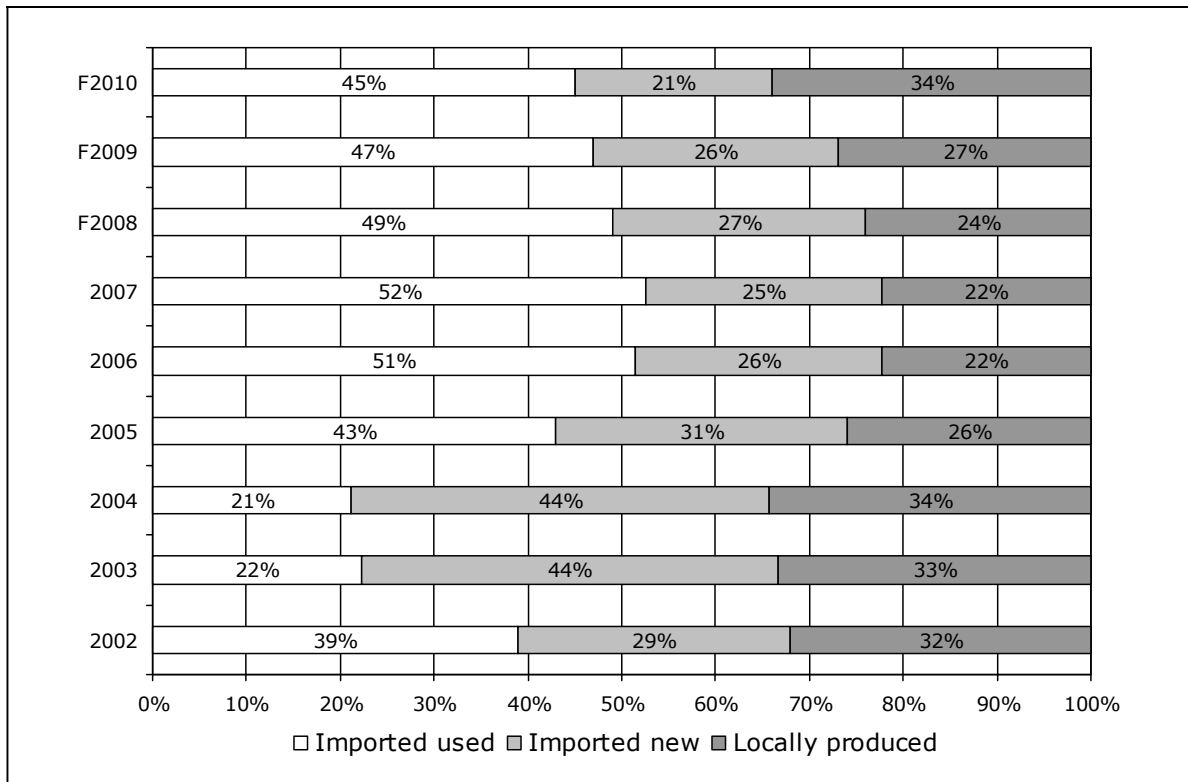


Figure 13: Relative Sales and Import Structure of Car Market, 2002-2010

Source: Globis

Additions to the parc are also strongly influenced by the used car imports or now legalized cars, respectively. Additions to the parc will decline because the first time registrations of used cars will decline (see Table 4).

Year	Total new registrations	Foreign "second-hand" imports	New foreign	
			Imported new	Locally produced
2002	1.172.922	460.000	338.203	374.719
2003	891.042	200.000	393.868	297.174
2004	940.892	200.000	417.199	323.693

Year	Total new registrations	Foreign "second-hand" imports	New foreign	
			Imported new	Locally produced
2005	1.250.048	536.920	392.919	320.209
2006	1.399.696	718.754	370.068	310.874
2007	1.345.387	703.994	341.308	300.085
F2008	1.289.740	633.595	345.537	310.608
F2009	1.275.776	601.915	327.305	346.556
F2010	1.265.896	571.819	268.073	426.004

*Table 4: Sales and Import Structure of Passenger Car Market, 2002-2010*

Source: INEGI, AMDA, Globis Analysis

### 3.2.2 Market Characteristics New Cars Market

Mexico has no domestic brand. However, several car companies were present in Mexico since a long time. GM, for example, entered Mexico as early as 1932, followed by Volkswagen in 1954. The brands with the longest history in the market dominate the sales of new cars.

The top selling company is GM, followed by Nissan (see Figure 14). Nissan has a long presence in Mexico and established its first manufacturing presence in 1966. Different to other brands, Nissan sold a major share of its locally manufactured cars in Mexico and did not use Mexico mainly as a manufacturing base. This partly explains Nissan's success in Mexico.

The two top brands are followed by the other two U.S. companies Ford and Chrysler and Volkswagen. All sell about half the volume of the top sellers. Volkswagen, for example, used Mexico as a central production hub for North and Latin America and did not focus on the local market to the extent Nissan did.

Brands number six and seven are Toyota and Honda, also selling about half the volume of the second-to-top selling group. These seven brands dominate almost 90% of the Mexican passenger car market.

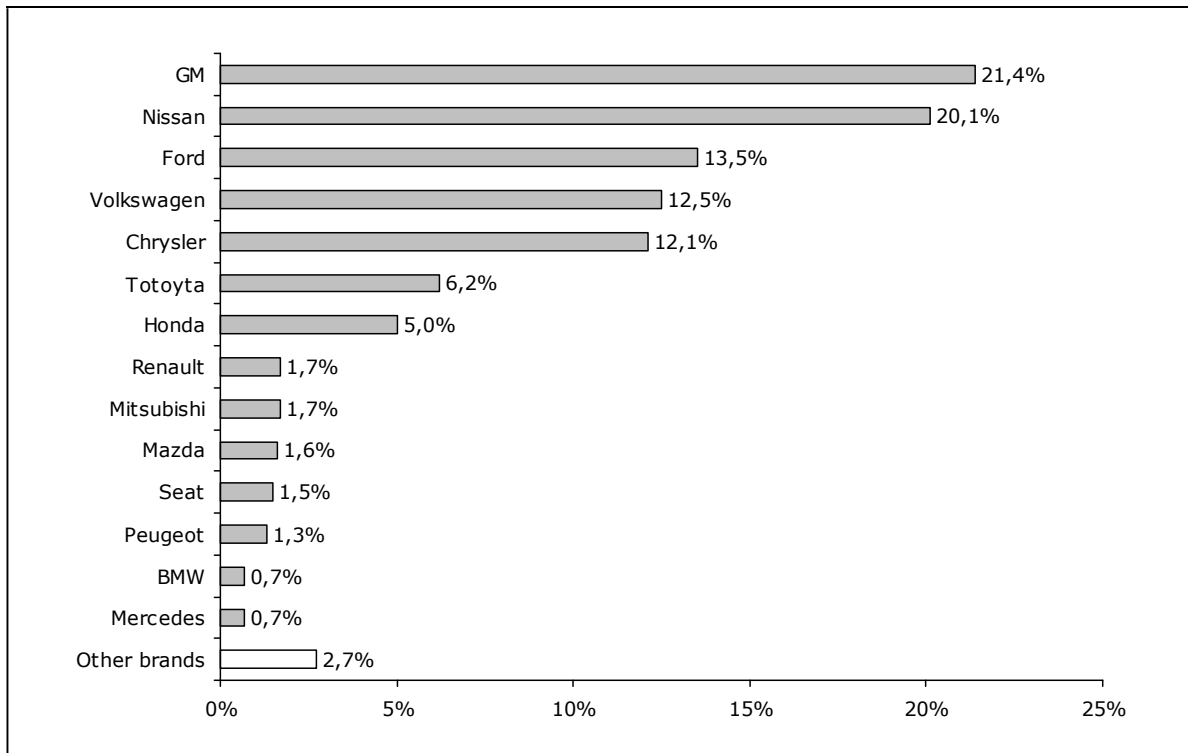


Figure 14: Domestic Sales by Brand, 2007

Source: AMDA.

There is, however, a trend that could change the structure in the near future. All leading brands are losing market share and are even shrinking, while the Japanese brands Toyota, Honda and Mazda are growing heavily (see Table 5). Ford is experiencing the strongest decline with almost -20%, a dramatic loss in sales volume.

The market could change further, with Chinese brands destined to enter the Mexican market. With a good price and increasing quality, these brands could jeopardize the market position of the established brands. FAW currently is the most visible among the Chinese brands, supported by the local Grupo Elektra. Other OEMs like Geely are considering major investments in Mexico as well. The

strategy of the Chinese manufacturers is also not solely focused on Mexico but to also use Mexico as a export base to deliver the U.S.

	Brand	2007	2006	Growth 2007 / 2006
1	General Motors	227.760	240.109	-5,14%
2	Nissan	214.121	228.315	-6,22%
3	Ford Motor	143.817	173.525	-17,12%
4	Volkswagen	133.240	135.027	-1,32%
5	Chrysler	128.541	128.446	0,07%
6	Toyota	66.208	60.088	10,19%
7	Honda	52.951	47.471	11,54%
8	Renault	18.613	20.274	-8,19%
9	Mitsubishi	17.666	16.751	5,46%
10	Mazda	16.604	7.495	121,53%
11	Seat	15.669	19.899	-21,26%
12	Peugeot	13.587	16.068	-15,44%
13	BMW	7.832	7.087	10,51%
14	Mercedes Benz	7.770	6.452	20,43%
15	Other Brands	28.915	23.660	22,21%
	<b>TOTAL</b>	<b>1.093.294</b>	<b>1.130.667</b>	<b>-3,31%</b>

*Table 5: Top Selling Brands (New Cars), 2006-2007*

Source: AMDA, Globis Analysis

The top models show the preferred segments in the Mexican passenger car market. Among the top models only subcompact and compact cars can be found (see Table 6).

Growth is coming mainly through new models. Among the top models, only VW Jetta and VW Bora grew in sales volume while the other models were declining.

Model	Segment	Brand	Sales in 2007	Sales in 2006	Growth 2006/2007
Tsuru	Subcompact	Nissan	63.461	66.243	-4,20%
Chevy	Subcompact	GM	59.621	63.111	-5,53%
Jetta	Compact	VW	44.395	40.690	9,11%
Pointer	Subcompact	VW	28.300	31.609	-10,47%
Tiida	Compact	Nissan	26.424	-	
Bora	Compact	VW	25.104	20.682	21,38%
Sentra	Compact	Nissan	22.309	33.930	-34,25%
Optra	Compact	GM	21.798	-	
Corsa	Subcompact	GM	20.800	33.745	-38,36%
CR-V	MPV	Honda	18.075	-	

*Table 6: Top Selling Models (New Cars), 2006 - 2007*

Source: AMDA, Globis Analysis

The strongest sales segment is still subcompacts with 30%, followed by compacts. MPVs and LCVs make up about 20% of the sales of total light vehicles each. The subcompact segment is the only segment which is currently experiencing a loss of market share (see Figure 15). One reason is the strong imports of used cars. People with less money face the choice of buying a used car or the



cheapest available new car – which is a subcompact. With used car imports from North America made easier, subcompacts suffer in particular. For people who are able to buy higher priced models, used cars are not an option anyway. In addition, the price gap between subcompacts and compacts is narrowing. Many Mexicans upgrade their subcompact therefore for a compact car.

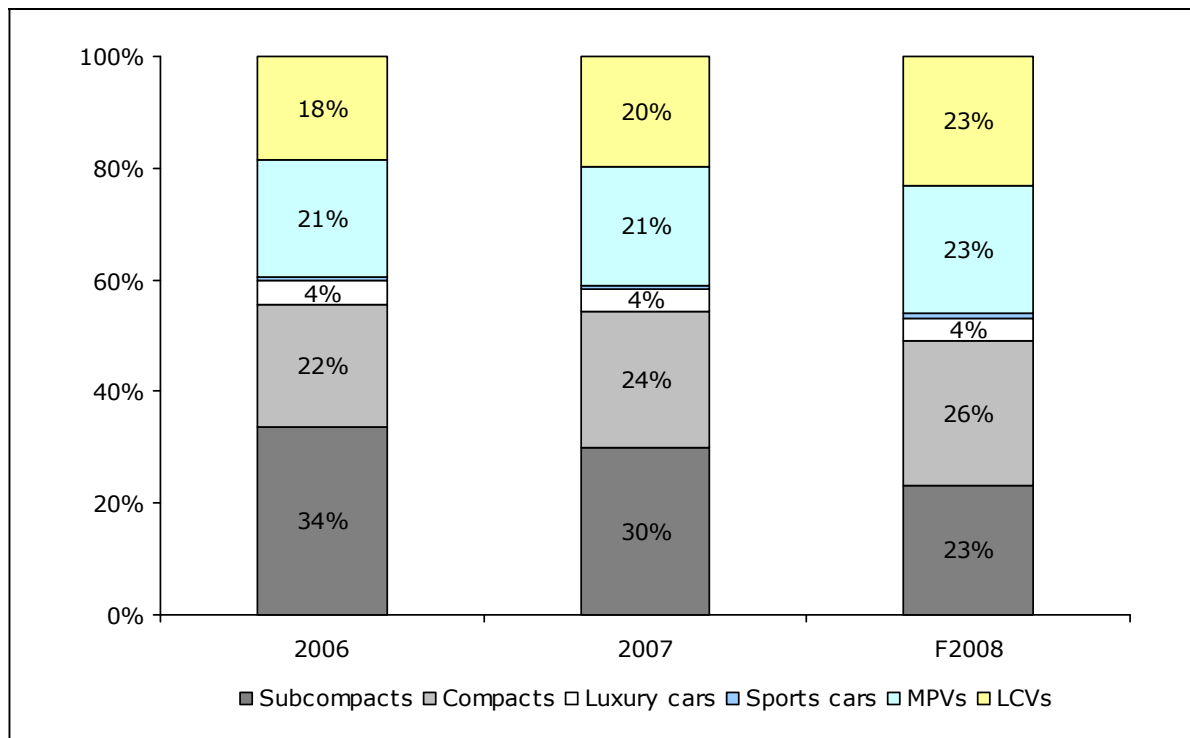


Figure 15: Development of Sales by Segments, 2006-2008

Source: AMDA, Globis

Diesel is not an issue in the Mexican car parc, when it comes to passenger cars. If it is offered at all, many customers shy away because it is difficult to find spare parts and even at the fuel station the nozzle is often too thick to fit into a passenger car’s tank – since it is mainly offered for trucks and buses.

### 3.2.3 Regional Developments New Car Sales

Mexico can not be viewed as one market. As already seen through the regional distribution of the car parc (see chapter 3.1.3), also in terms of sales there are substantial differences among districts in Mexico. The market size of the districts is strongly linked to the economic performance of the districts. D.F., Estado des Mex-

ico, Jalisco and Nuevo Leon are leading in terms of GDP and are also leading as regional new car markets in Mexico. Central and Northern regions are in the lead (see Figure 16).

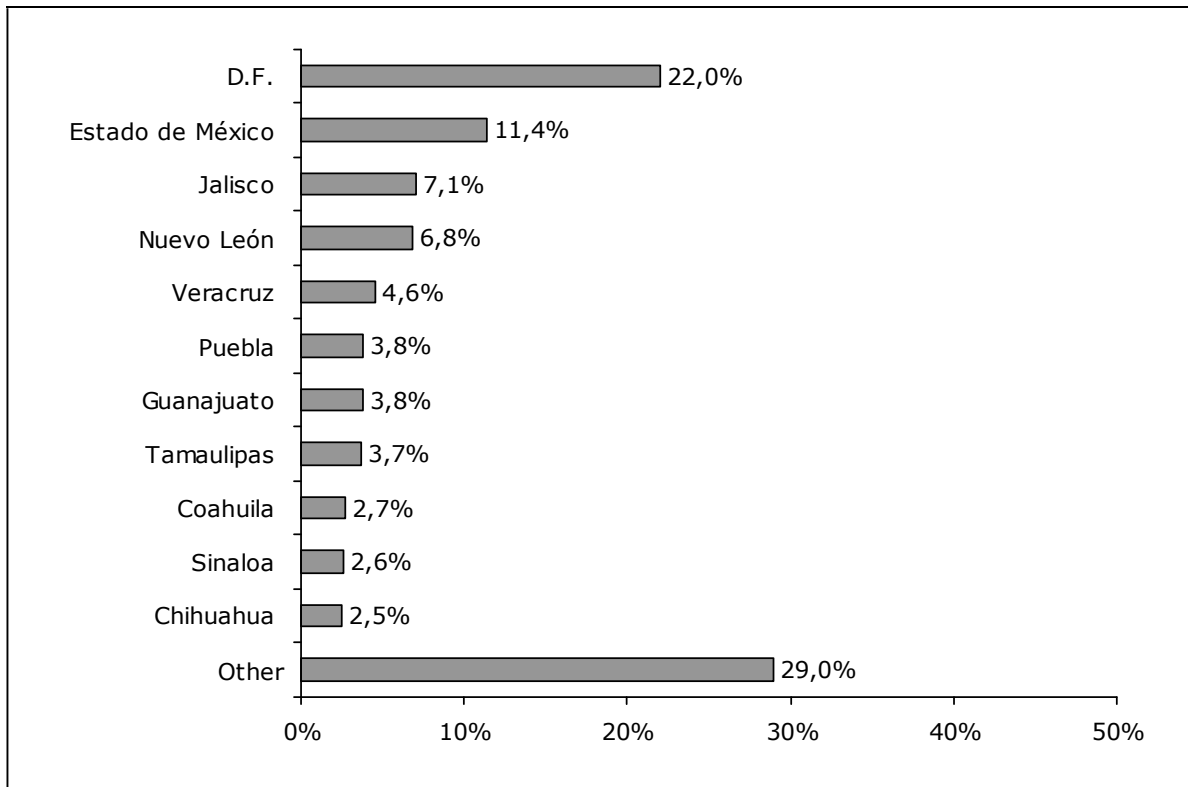


Figure 16: Domestic Sales by Region, 2007

Source: AMDA, Globis Analysis

Distrito Federal is the largest regional car market in Mexico, followed by Estado de Mexico. Both districts are also leaders in the car parc. The other larger new car markets in Mexico are mostly aligned along the U.S. border. The border regions are mainly flooded with cheap used cars. Although this reduces the new car market potential drastically, the economic wealth through the large number of U.S. manufacturing plants (so-called “maquiladoras”) on the Mexican side of the border still allows more people to buy new cars than in most other districts of Mexico.

Among these leading districts, the top-selling brands in all of Mexico are also leading the respective district’s market. Only in D.F., Honda is among the top six players while Toyota is seventh (see Figure 17).

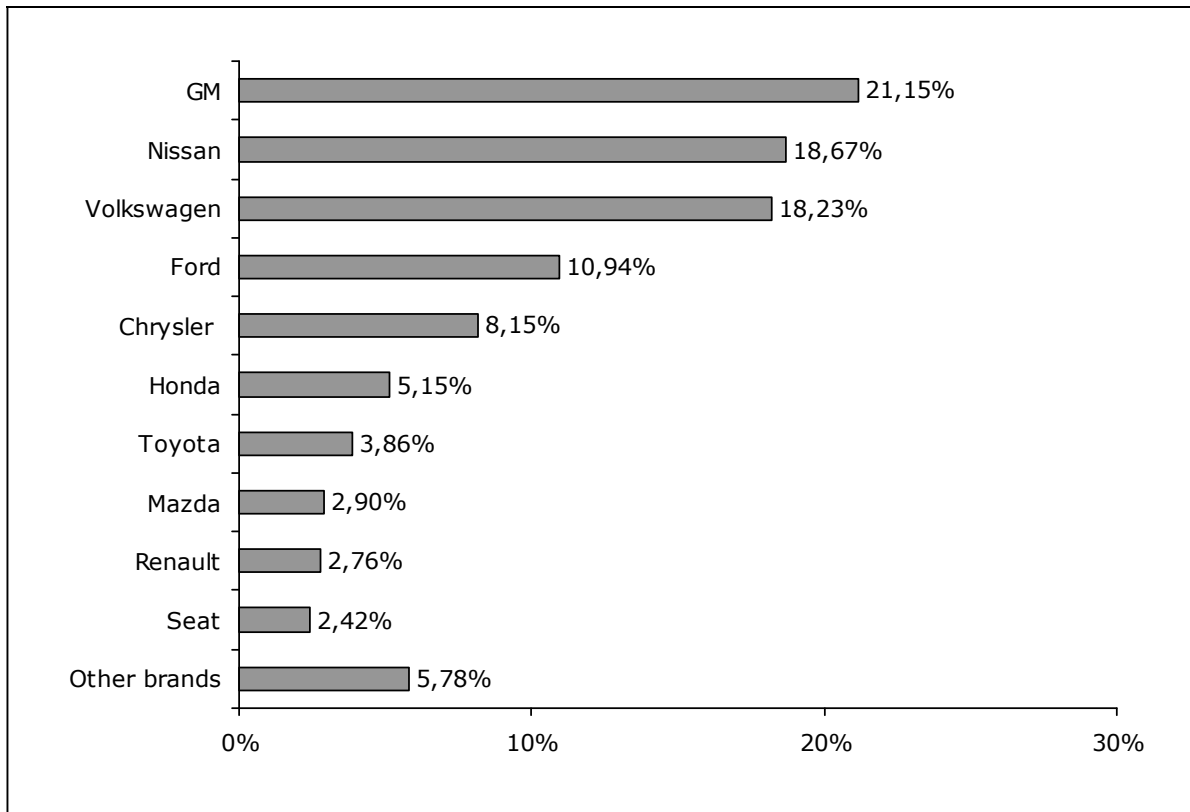


Figure 17: Sale of Light Vehicles in Distrito Federal, 2007

Source: AMDA, Globis Analysis

In all other regions, Toyota is ranking higher (normally sixth as in the overall market, but in Jalisco and Nuevo Leon it is ranking fifth), after GM, Nissan, Volkswagen, Ford and Chrysler. Table 7 shows the details.

	D.F.	Estado de Mexico	Jalisco	Nuevo Leon	Veracruz
GM	21,15%	22,88%	16,81%	19,98%	17,46%
Nissan	18,67%	18,58%	22,24%	19,58%	24,96%
Volkswagen	18,23%	14,38%	7,42%	8,30%	10,84%
Ford	10,94%	14,57%	16,95%	11,44%	16,47%
Chrysler	8,15%	11,29%	13,48%	15,14%	10,43%

Toyota	3,86%	5,85%	7,93%	9,16%	6,81%
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*Table 7: Brand Distribution in Sale of New Cars in Selected Districts, 2007*

Source: AMDA, Globis Analysis

### 3.2.4 Influencing Factors for New Cars Market

The automotive market in Mexico is the most attractive one in Latin America in terms of sales of new cars. However, the market has not shown continuous growth in the past. There are several factors influencing the market size:

- Economic growth and income levels
- Used car imports
- Changing regulatory environment
- Development of car financing
- Car buyer's preferences.

#### 3.2.4.1 Economic Growth and Income Levels

Mexico has experienced strong growth over the last years, in terms of GDP and also in terms of average wages. Today, average monthly wages are just below 600 USD. While this is much more than in many developing countries, it is hardly sufficient to even buy the cheapest new car available. Currently, the average Mexican can not buy a new car. The vast majority of Mexicans depend on used cars if they are to buy a car at all.

The positive development of wages will ultimately increase the share of Mexican who can and want to afford a new car. Wages were growing at a CAGR of 5,8% p.a. over the last 5 years, with inflation being below 4%. With a real growth close to 2% it will still take years for the average Mexican to become a new car buyer, but the growth will increase the share of potential consumers for new cars years by year.

In total, the economy will be a major driver for the growth of the Mexican new car market.

### 3.2.4.2 Used Car Imports

Used car imports strongly affect the market of new cars. Historically imports of used cars were prohibited, with some exceptions applying in certain cases. Nevertheless, especially in the Northern regions close to the border, used cars from the U.S. and Canada were imported illegally. People simply keep the U.S. licence plates and drive around in Mexico. Frequently – 5 times until today – there are regularizations of used cars, meaning that all illegally imported cars (so-called “chocolates”) could be registered officially upon the payment of customs duty and taxes. During these regularization time frames, the official parc grows heavily. With Mexicans knowing that there will be another regularization period in the future, illegal imports continue. The used car market in Mexico is not yet developed very well so that there is a strong demand to import used cars from abroad.

Starting from 2009, through NAFTA, imports of used cars from the U.S. and Canada will be officially allowed, according to the following scheme in Table 8.

Year of change	Chance coming into effect
2009	All cars equal or older than 10 years can be imported
2011	All cars equal or older than 8 years can be imported
2013	All cars equal or older than 6 years can be imported
2015	All cars equal or older than 4 years can be imported
2017	All cars equal or older than 2 years can be imported
2019	No more limitations on imports of used cars

*Table 8: NAFTA Regulations for Imports of Used Cars, 2009-2019*

Source: Globis

Starting from 2009, for cars imported under the NAFTA regime, customs duty will be waived.

However, a decree on August 2005 accelerated the opening, by allowing 10- to 15-years-old cars to be legally imported. Along with this measure, owners of illegal cars (cars brought to Mexico but not registered officially) were given the opportunity to regularize (register officially without any penalties) their vehicles in this age bracket which. Today, up to 2,5 mio. vehicles are illegal cars driven with old U.S. licence plates or no tags at all.

A similar decree in 2000 permitted the import of pick-up vehicles as well as the correspondent regularization of pick-ups already existing in the country but without registration. About 1,5 mio. units were officially registered due to this decision.

With the 2005 opening, used car imports grew heavily, especially during the months of October, November and December, where 50.000 to 100.000 vehicles are imported monthly.

Subsequently, even the import of cars of an age up to 10 years was allowed for some time (but is not anymore now), when imported from the U.S. or Canada. However, for these imports all relevant taxes apply:

- Customs duty (IGI): 10% of the value of the car
- VAT (IVA): 15%
- Tax on “New” Cars (ISAN; applies also to cars until 10 years of age): 5-17%, depending on value of the car
- Custom’s fee (DTA): 180 Pesos.

This decree also provides for certain eco-standards imported cars need to fulfill. Also, used cars effectively not running any more are prohibited from import. The latter two measures protect the local automotive industry to some extent even after 2009, when NAFTA rules apply. Independent of the rules applicable for imports from the U.S. and Canada, used car imports from other destinations will still be forbidden.

The opening up of the market for used cars has an impact on the new car market, which is reducing or not growing. The import on car production in Mexico is limited, since most cars are manufactured for exports and not for sale in Mexico.

However, recently (in February 2008), a new decree is now forbidding car imports when cars are over 10 years of age, which effectively allows only imports of cars which are exactly 10 years – leading to a run on 1998 car models for the U.S.. This was mainly done to protect local car dealers. Also, pollution and traffic congestions had become too dramatic.

From 2005 when the market was opened to older cars until the beginning of 2008, about 1,8 mio. cars older than 10 years were imported into Mexico.

#### 3.2.4.3 Changing regulatory environment

The automotive lobby in Mexico is continuously trying to regulate used car imports from North America. So far they had limited success – and NAFTA regulations will not be changed anyway. Apart from regulations affecting used car imports – which have a strong influence on the new car market – there are other regulations which affect the market strongly.

Since 2004, through NAFTA, imports of new cars from the U.S. and Canada are duty free – if the car was produced to 62,5% in the NAFTA-region and if certain preconditions of more administrative nature were met. The new car market did decline in the years following this opening but the main reason was more the overall state of the economy than this particular change in the regulatory environment. The biggest U.S. manufacturers were producing in Mexico already (although not their full model range) and U.S. cars did not get cheaper in Mexico following the introduction of this regulation, since instead of customs duty VAT and ISAN apply.

More important are changes of the latter taxes upon the purchase of new cars: New cars in Mexico are subject to VAT (Impuesto al Valor Agregado) at a rate of 15% (10% in the international land border areas), to ISAN (Impuesto Sobre Auto-

mobiles Nuevos) at a rate of 5-17% (depending on the value of the vehicle) and to an annual registration fee (Tenencia) – which will be abandoned in 2012.

ISAN was reduced recently for some type of new cars: ISAN was waived for automobiles with a price up to 150.000 Pesos (about 13.800 USD) and reduced by 50% for cars with a price between 150.000 and 190.000 Pesos (13.800 and 17.500 USD). This measure applies to imports of used cars as well and hence has a limited impact on the new cars market.

Today, there are also no regular technical check ups required. This might change in future but will likely happen only after the market is more mature with many families owning a car.

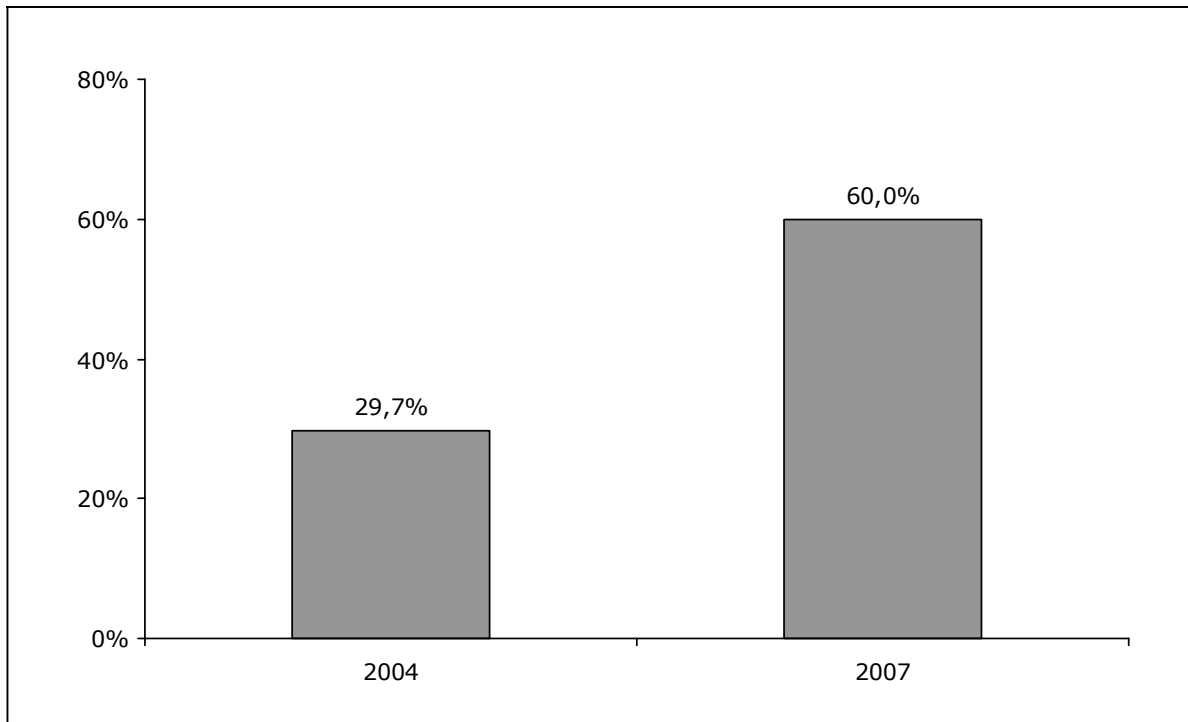
#### 3.2.4.4 Development of Car Financing

During the economic crisis in Mexico 1995 to 1996, the car financing market virtually broke down. Consumer car lending portfolios lost about 90% of its value and it took years for the market to recover. In general, Mexico is rather “un-banked”, with the vast majority of population still not owning a bank account. In addition, financial institutions are more wholesale oriented and less active in retail banking. Given this situation, loan application procedures can be difficult, with no credit history available anywhere. However, cars are mostly bought by people who do not have problems in giving evidence about their credit history.

Today, car financing is dominated by financing arms of car makers, like GMAC (General Motors Acceptance Corporation), which is the leader providing financing for its brands GMC, Chevrolet, Cadillac, Hummer, Pontiac and Saab. Only the third institution is a bank, BBVA Bancomer, which has a market share in the new car financing market of about 13%. Car financing is widely seen as a key to success in the automotive market. Volkswagen, for example, is planning its own bank in Mexico to recover its loss in market share.

Today, about 60% of all new car purchases are financed, coming from about 30% 3 years ago (see Figure 18). In the time period from 2000 to 2004, the share of financing developed only slowly.





*Figure 18: Share of New Car Financing in Mexico, 2004-2007*

Source: Globis Expert Interviews

Terms of car financing mostly appear rather expensive – lending institutions still try to be on the save side after the economic crisis ten years ago. However, with enough downpayment and a short repayment cycle, interest rates can be very attractive. Today, the average minimum downpayment is about 20%, with about 48 month payback period and an average interest rate of 13%.

Leasing is not yet widespread for car financing of private individuals. The leasing market in Mexico is just forming.

#### 3.2.4.5 Car Buyer's Preferences

The most important criteria when buying a car is its price – as it is the case in many developing and even industrialized markets. The segment of subcompact cars is the largest among passenger cars. However, this segment is loosing its marekt share and compact cars are increasing, showing the increasing wealth of Mexican consumers.

Also increasing is the segment of larger cars – MPV including SUV and pick-ups. Mexico is following the overall trend to larger cars (but not the one to very small, low cost cars). There are practical reasons for this: In the countryside, pick-ups are the most preferred models, since they offer benefits in terms of load capability and resistance on unpaved roads.

SUVs, as in most other countries, are not so much bought for practical reasons. According to a study of Merc GfK, the following qualities of SUVs are appreciated most:

- Comfort
- Design
- Safety
- Passenger capacity
- General quality of the product and the components
- Easy handling
- Low noise levels.

Service is not a major issue for Mexican consumers purchasing a new car.

## 4 Mexican Components and Aftermarket

### 4.1 Mexican Automotive Industry

The automotive industry is among the most important and dynamic industrial branches in Mexico. This sector represents about 2,5% of the GDP (or 16,7% of the GDP of manufacturing sectors).

Automobiles are by far the most important product group in the production sector. The second product group is iron blankets, which is only one-fifth of the volume of the automotive products. Cement, drinks and cigars are the other larger product groups. This situation shows the importance of the automotive industry for Mexico. While most other important product groups are products developed easily and with a higher share of labour, the automotive industry is a driver for R&D and the development of engineering capabilities in Mexico.

In the 1960s, the Mexican government tried to support the local industry requesting OEMs to provide for a majority of local content in the cars assembled. This percentage has been reduced during the last decade, in order to open the market to foreign suppliers. One main reason was not to fall behind in the global competition to attract FDI.

The industry is focused on exports – Mexico is mainly used as a low cost country. The new car market, as explained, is large compared to many other countries in Latin America. But compared to the US market Mexico is clearly positioned to be a production-hub for the US market. To a lesser extent, exports are shipped to other Latin American countries.

With several OEMs manufacturing in Mexico, it is an attractive country for component suppliers and all kinds of service providers. For spare parts the story is similar to the new car market. However, Mexico itself with its relatively old and large car parc is also attractive to foreign parts producers.

Of course it is not only low cost that make Mexico a very attractive automotive location. Through NAFTA, vehicles and parts produced in Mexico can ship more or less freely to the US (at least starting from 2009). Mexico therefore is a low cost country with the largest car market of the world in the backyard. In addition, through its vast trade agreement network, Mexico can also be used to get a preferential entry into the E.U. with which it has a free trade agreement since 2000.

For example, the component and spare parts company ArvinMeritor, one of the top 20 worldwide providers, is closing manufacturing sites in USA and establishes a manufacturing plant in Mexico in order to reduce labor force and raw material cost.

Given these interconnections between Mexico and the U.S. in the automotive market, the state of the Mexican automotive industry depends strongly on the U.S. economy. Also, production numbers are strongly affected by developments of the U.S. economy.

## 4.2 Car Production and Components Market

### 4.2.1 Car Production

As mentioned before, there exists no truly Mexican car brand. Many foreign producers, however, have a long standing history of production in Mexico. Volkswagen, for example, started production of its famous model Beetle in 1964 in Mexico – although ten years before it opened a production site in Brazil.

Currently, there are seven car makers active in Mexico. In 2007, the largest one in terms of production numbers of passenger cars and LCV was Nissan (see Table 9). Nissan focuses – compared to the other car makers – more on the Mexican car market. In 2006 Nissan produced over 40% of its total production for the local market overall, with even 50% of LCVs produced for the Mexican market. Honda follows tight but is a much smaller producer in Mexico. The other car mak-

ers have ratios below 20%. Renault, which is a small player in Mexico in terms of production, even produces 100% for the local market (at the site of Nissan).

Car Maker	Passenger Cars Manufactured 2007F, in 1.000	Passenger Cars Manufactured 2006, in 1.000	Growth 2006 / 2007
Chrysler	284	313	10,36%
Ford	304	350	15,05%
GM	468	503	7,46%
Nissan	498	408	-18,03%
Renault	11	10	-6,54%
Volkswagen	410	347	-15,27%
Honda	26	24	-8,01%
Toyota	32	33	2,98%
Total	2.033	1.989	-2,17%

*Table 9: Passenger Cars & LCV Manufactured in Mexico, in 1.000, 2006-2007*

Source: AMIA, Globis Analysis

GM, production leader in 2006, rank second in 2007. GM produces a wide range of brands and models in Mexico. GM produces 90% of their LCVs and about 65% of passenger cars for the U.S. market. GM has, as the only current manufacturer, relatively precise plans to expand its presence in Mexico and to add capacity within the next 3 to 4 years.

Volkswagen is third in terms of production. It only concentrates on passenger cars and produces no LCVs. The Beetle is its traditional main model produced in Mexico (the new Beetle was produced starting from 2003 onwards), but in recent years the production numbers of Bora, the American adaptation of the Jetta, are substantially higher than that of the Beetle.

Ford has been phasing out the production of the Escort and the Focus in Mexico and added the Fusion as the main model being produced in Mexico. Ford has plans for Mexico but details have not been fixed yet.

Chrysler is producing the PT cruiser and various LCV-models like the RAM-series in Mexico, mostly for export to the U.S.. It is likely, that the production output will decrease over the years if there are no other Chrysler models being produced in Mexico. There are no detailed plans heard of yet, but it seems clear that, given Chrysler's need to save cost and to manufacture competitive, Mexico will play an important role in the manufacturing strategy of Chrysler.

Honda has a limit production range in Mexico and produces less than one-tenth than the rest of the producers. Honda, however, produces to a strong extent for the domestic market and does not rely too much on exports to the U.S. or other Latin American countries.

Renault produces at the site of Nissan for the domestic market. The production numbers are small and comprise almost all cars of Renault sold in Mexico.

Toyota currently is only manufacturing LCVs in Mexico. The entire production is exported, mostly to the U.S.

For some of the cars, Mexico is the exclusive manufacturing location in world. These models are:

- Volkswagen Bora/Jetta A5
- Volkswagen New Beetle
- FORD Fusion
- FORD Milan
- FORD Zephyr
- GM HHR
- DC PTCruiser.

Other OEMs are looking at the attractive potential of Mexico as well, currently especially Chinese companies.

FAW, one of the most important automobile manufacturers in China, has already signed an agreement with the Mexican conglomerate Elektra-Salinas Group to distribute and eventually produce locally low-cost automobiles. After an successful pilot test for the Mexican market, FAW plans to set up an assembly plant in Michoacan to supply the Mexican and Central American demand (and likely also the U.S. market). The investment for this greenfield project will be approximately 150 mio. USD throughout a three-year period. Planned capacity is at 100.000 vehicles annually. Michoacan was chosen due to its logistic advantages: the Pacific Ocean allows a better communication with Asia than the northern border. FAW plans prices substantially below current market average in Mexico, allowing larger segments of the Mexican population to buy new cars. FAW targets sales prices of about 60.000 Pesos (5.500 USD) or lower. Grupo Elektra-Salinas, the partner to the project, will make the cars even more accessible through Banco Azteca's (Grupo Salinas) financing.

Another Chinese car maker, Geely, is negotiating at this time with Bergé Group (through its subsidiary in Latin America, SK Bergé) the conditions for the establishment of a manufacturing plant in Mexico. An investment of 500 mio. USD should provide for a capacity of 800.000 units annually, which would be exported to USA. It is unlikely that such a capacity will be utilized within the foreseeable time. However, the signs are clear. Chinese car makers target the Americas and do not stop before the U.S. market.

Both greenfield projects, when realised, provide for a substantial business opportunity for suppliers of all kind. Chinese car makers do not have an international network of suppliers. It will be interesting to see, whether Chinese car maker cooperate with international tier 1 suppliers – not just for the Mexican market but medium-term also for the Chinese market.

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Brand	Model	Plant	Year
Buick	CUV	Ramos Arizpe	2009
Cadillac	BRX	Ramos Arizpe	2009
Chevrolet	Avero	San Luis Potosí	2008
Chevrolet	CUC	San Luis Potosí	2011
Chevrolet	Corsa	San Luis Potosí	2012
Chevrolet	Cobalt	San Luis Potosí	2009
Chrysler	PT Crusier	Toluca	Continuity to 2009
Dodge	Journey	Toluca	2008
Ford	Focus	Hermosillo	2011
Ford	FC-Max	Hermosillo	2011
Ford	F250350	Cuautltlan	2009
Hummer	H4	Ramos Arizpe	2010
Hyundai	Accent	To define	2011
Nissan	CUV	Agusacalientes	2011
Nissan	Tsuru	Cuernavaca	Until 2009
Pontiac	G3Wave	San Luis Potosí	2010
Saab	9-4X	Ramos Arizpe	2009
Saturn	VUE	Ramos Arizpe	2007
Toyota	Yaris	To define	2011

*Table 10: Planned Production Projects 2007-2012*

Source: Reforma



Other car makers are planning to expand their presence in the market as well. Chrysler for example is planning to manufacture the V6-motor “Finish” in Mexico and will manufacture its Dodge Journey with a capacity of 200.000 in Toluca. Table 10 gives an overview over planned production projects.

It is clear, that production in Mexico will be expanded over the next years. In total, we estimate a further increase of car production in Mexico. While from 2003 to 2007 production output was growing by over 11%, we estimate growth of about 7% annually in the years until 2010. In 2010 passenger car production will reach about 1,7 mio. cars (see Figure 19 for details).

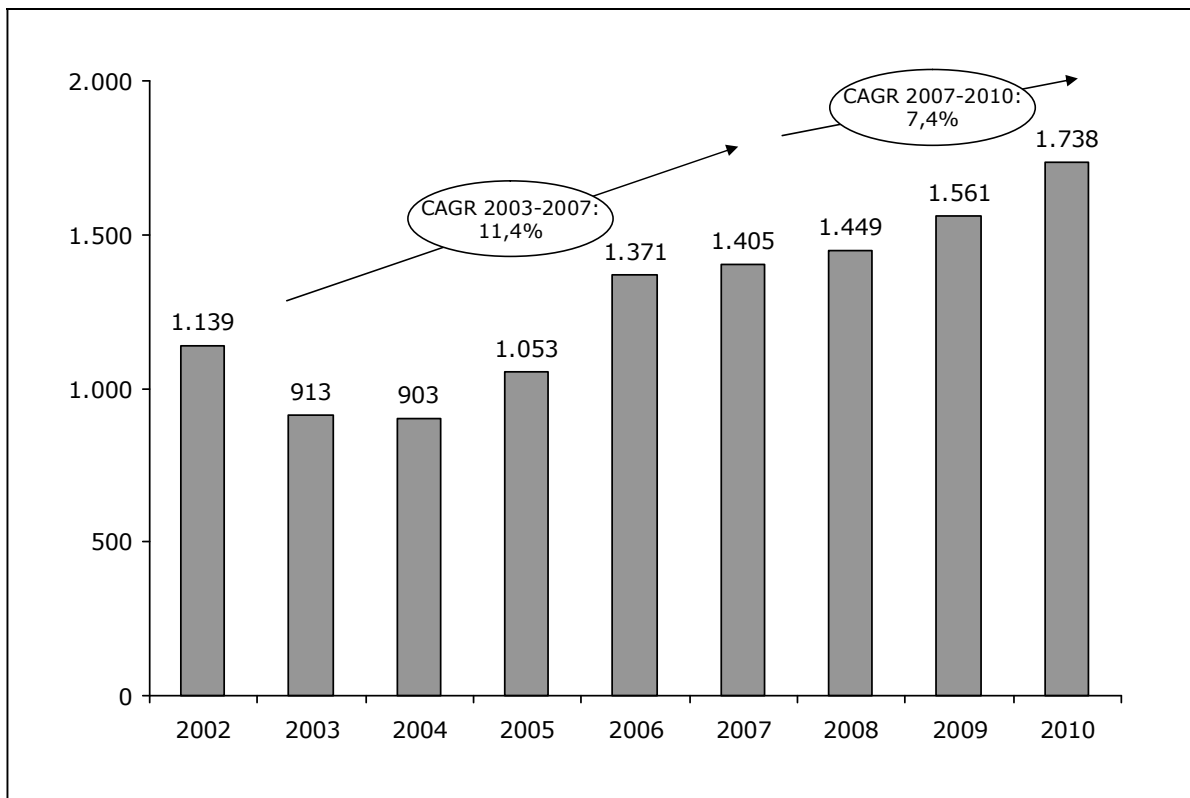


Figure 19: Production of Passenger Cars in Mexico, in 1.000, 2002-2010

Source: AMIA, Globis Analysis

The growth of total production of light vehicles (passenger cars and LCVs) combined will be slower (see Figure 20). We estimate future growth at 5,9% annually, with total production reaching around 2,4 mio. in 2010.

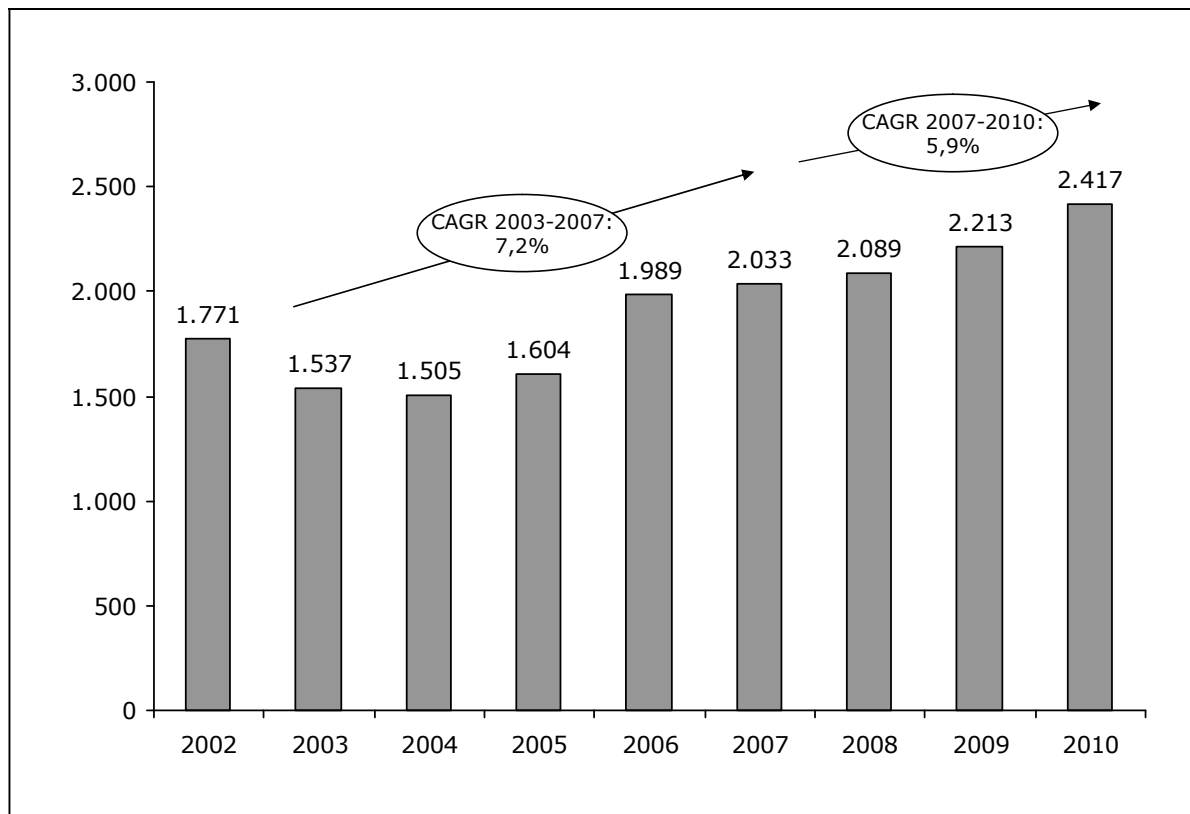


Figure 20: Total Light Vehicle Production in Mexico, in 1.000, 2002-2010

Source: Amia, Globis Analysis

As in other countries, the automotive industry is clustered in certain regions, mainly around the OEM manufacturing sites. The Coahuila region is the main automotive cluster in Mexico, which comprises a total investment of over 5 bn. USD so far. The presence of General Motors and Chrysler is the most important reason for the development of the cluster. The latter is planning to invest further 570 mio. USD to build a new motor-manufacturing plant. In Saltillo, the capital of the region, about 50% of all motors and about 35% of all cars are being produced. About 60% of all trucks are manufactured in this region. 298 companies, including component manufacturers and assemblers are present in this zone. The potential growth of this cluster is not saturated. For example, an additional investment of 300 mio. USD is planned by the truck company Freightliner, in order to increase its capacity to 30.000 units.

The geographical location of the automotive industry in Mexico is divided in four areas: Norte, Centro, Bajío, Noroeste (see Figure 21).

Norte, along the northern border, comprises the regions of Baja California Norte, Chihuahua and Sonora with Ford, Toyota and Kenworth (trucks) having their manufacturing sites in these districts.

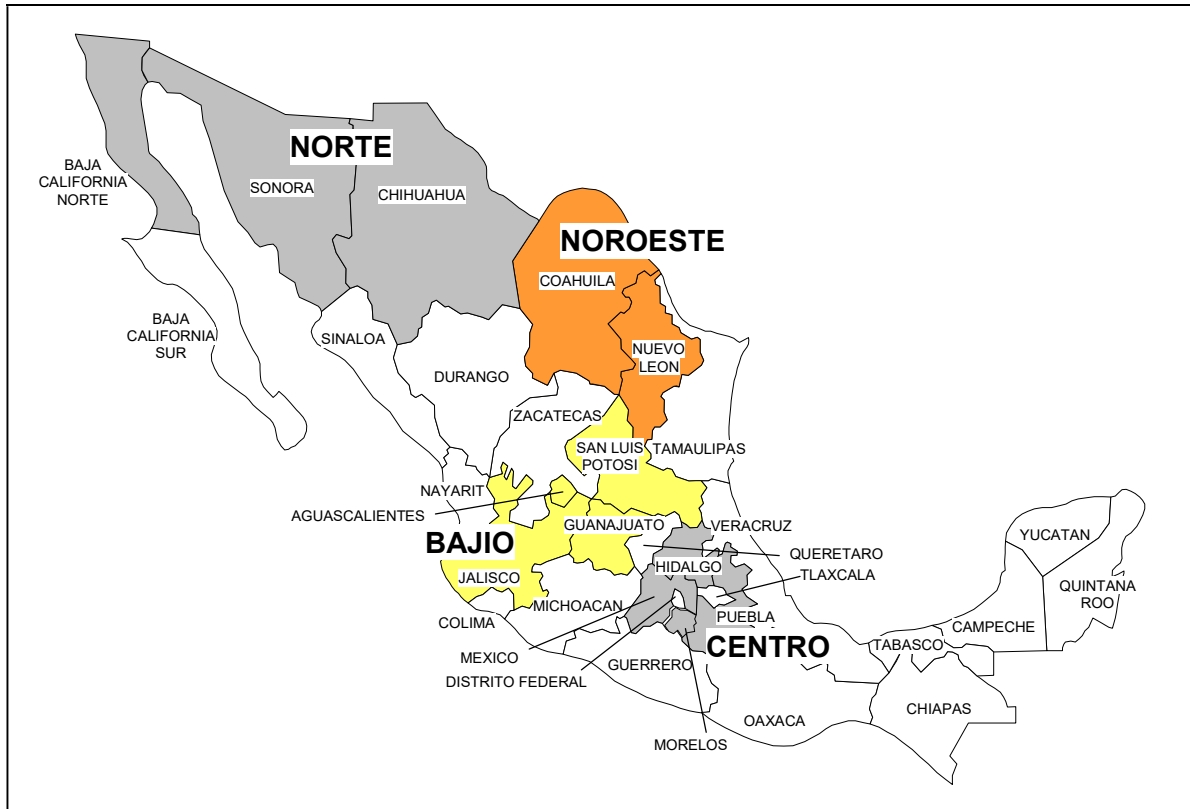


Figure 21: Automotive Clusters in Mexico

Noroeste in the Northeast comprises the districts of Coahuila and Nuevo León, with GM, Chrysler and Navistar (buses) in these regions.

Bajío comprises the regions of Aguascalientes, San Luís Potosí, Guanajuato and Jalisco with Nissan, Renault, Honda, Scania (trucks) and Marco Polo (buses) in the these regions.

Centro comprises the districts of Hidalgo, Puebla, México D.F., Morelos and Estado de México with GM, VW, Nissan, Renault, Chrysler, Mercedes Benz, Volvo and Ford with their manufacturing facilities in these regions.

There is a vast number of tier 1 companies present in Mexico, distributed around the manufacturing sites of the OEMs.

Table 11 gives a good overview over the most important production facilities of OEMs in Mexico.

Location	Region	Brand	Year	Product	Capacity
Tecate	Baja California Norte	Toyota	2002	Pick Ups TACOMA (assembly)	n.a.
Hermosillo	Sonora	Ford	1986	Fusion, Milan, MKZ	160.000
Chihuahua	Chihuahua	Ford	-	4-cylinder motors	435.000
Ramos Arizpe	Coahuila	Chrysler	-	V8 and L4 motors	n.a.
Ramos Arizpe	Coahuila	General Motors	-	Chevy, HHR, Rendezvous; 4 and 8 cylinder motors; printing, transmissions	n.a.
Saltillo	Coahuila	Chrysler	-	Chrysler Ram	140.000
San Luis de Potosí	San Luis de Potosí	General Motors	under construction	-	n.a.
Puebla	Puebla	Volkswagen	1954	New Beetle, Jetta, Heavy Commercial Vehicles	200.000
				4-cylinder motors	200.000
				Printing; foundry	-
Aguascalientes	Aguascalientes	Nissan	1982	Clio (Renault), Platina, Sentra, Tiida	202.500
				4-cylinder motors	648.000
				Printing; foundry	-
				Aluminium fudge	11.280 tons
				Transmission axle	168.000

Location	Region	Brand	Year	Product	Capacity
El Salto	Jalisco	Honda	1995	Accord	15.000
Cuernavaca	Morelos	Nissan	1966	Tsuru	140.000
				Pick-up	90.000
Silao	Guanajuato	General Motors	1992	Escalade, Avalanche, Silverado 3500, Sierra, Suburban, Cheyenne	200.000
Toluca (Zona Industrial)	Estado de México	Chrysler	1968	PT Cruiser	180.000
Toluca (Zona Industrial)	Estado de México	General Motors	1935	Kodiak, Silverado 1500/2500.	n.a.
				4 and 8 cylinder motors	n.a.
				Foundry	n.a.
Cuautitlán	Estado de México	Ford	1932	Ikon, Serie F	159.000
Parque Industrial Lerma	Estado de México	Nissan	-	Foundry	193.800 tons

Table 11: Total Light Vehicle Production in Mexico, in 1.000, 2002-2010

Source: AMIA

## 4.2.2 Components Market

The components market, that is the delivery of components to the assembly line in Mexico, depends on the volume of new cars assembled and produced in Mexico, the pricing of components and the local value-added of the manufacturers.

The value of the market for external components used in Mexican-produced passenger cars grew at a rate of almost 15% annually from 2002 and has reached 11 bn. USD today (see Figure 22). We expect growth to increase, mainly on the basis of new production projects planned. In 2010 we expect a value of 15 bn. USD in total.

The main drivers for this development are the degree of locally generated value added delivered in Mexico (although there are no localization rules requiring a certain degree of local content) and the growth of the production volume in total.

However, car manufacturers tend to co-operate with suppliers on a basis of worldwide standards, so as to minimize co-ordination efforts, ensure quality and reduce prices. The prime suppliers follow the OEMs and almost all major tier 1 supplier are present in the Mexican market. Therefore, a substantial share of the market is captive. A chance could be the settlement of Chinese brands in Mexico. Their suppliers will mostly not be present in Mexico and new supplier-relationships could emerge.

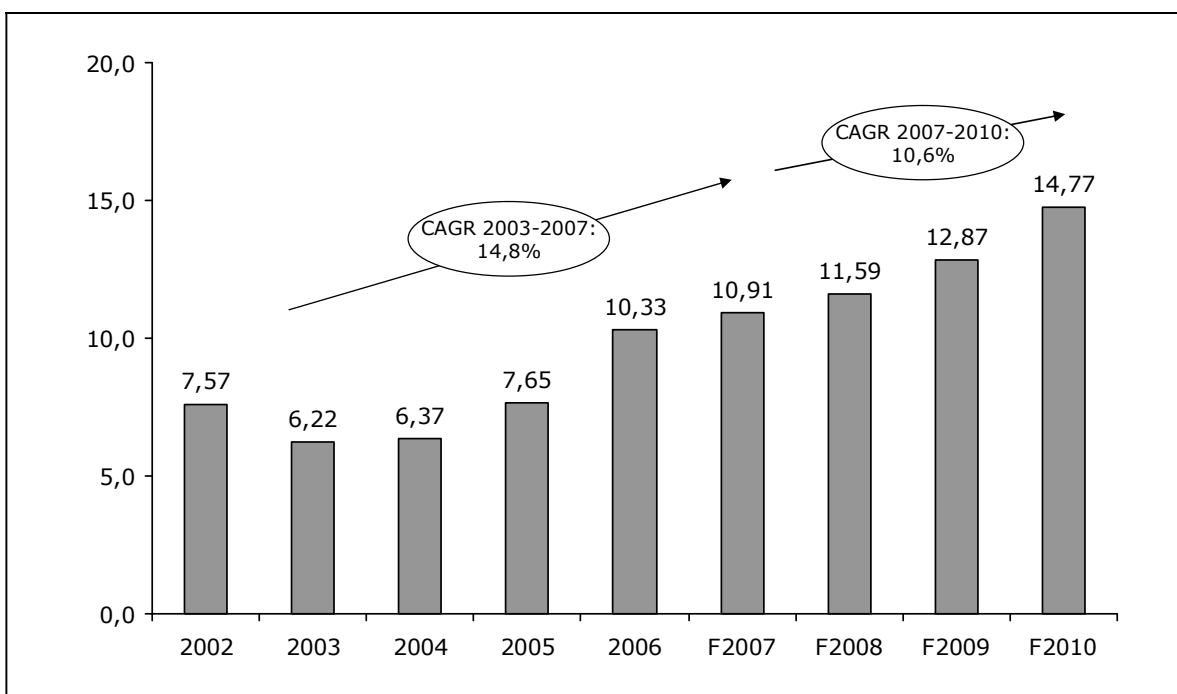


Figure 22: Development of Automotive Components Market in Mexico, in bn. USD, 2002-2010

Source: Globis

A large share of these components used in Mexican manufacturing facilities is imported. Imports also show the characteristic slow down of the market until 2003 / 2004. Figure 23 shows the development.

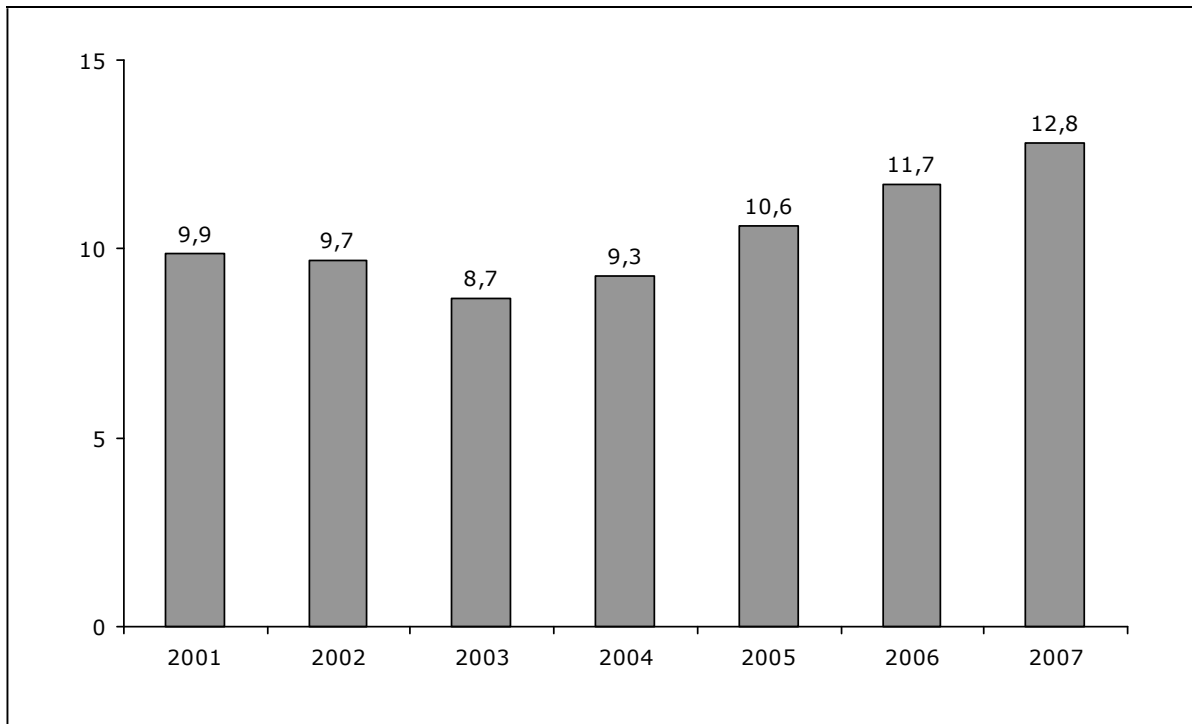


Figure 23: Imports of Components, in Millions USD, 2001-2007

Source: INEGI

Most of imports originate from the U.S. (53%), supplying directly to the assembly lines of U.S. OEMs which make up the largest part of OEMs present in Mexico. Germany is second, with 12% share in imports, followed by Brazil (mainly to VW assembly lines) and Japan (see Figure 24).

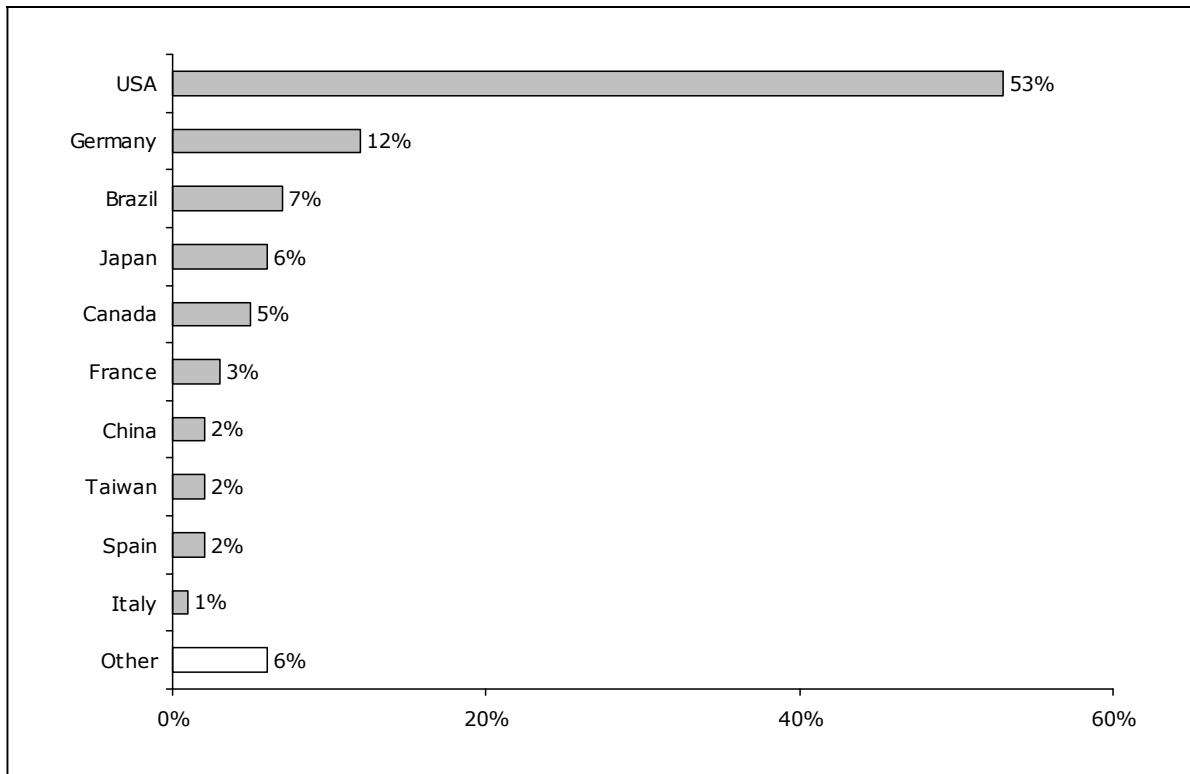


Figure 24: Imports of Automotive Parts by Origin, 2007.

Source: INA

Tier 2 and 3 products today are still mainly covered through imports. This means that Mexican companies are not yet ready to supply required products at the required quality and timing. Hence, in this area foreign companies are still able to grow substantially. Local manufacturers are still looking for reliable supply sources within the country.

The total production volume of components did not experience the same downturn. Driven by exports, total volume has been growing steadily with 14,1% annually since 2001 (see Figure 25).



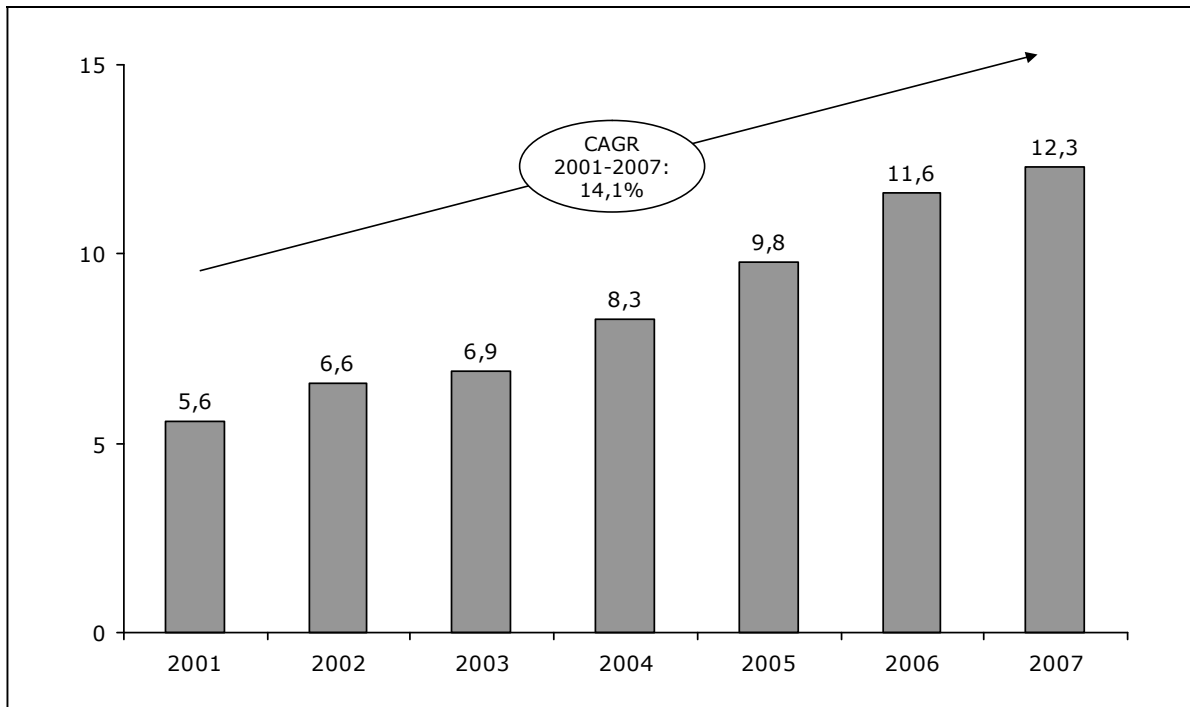


Figure 25: Exports of Components, in Millions USD, 2001-2007

Source: INEGI

In 2007, demand at local assembly lines and exports both contributed almost equally to the growth of production for major components. Electrical parts and motor pieces are the largest contributors to the overall component production in Mexico (see Table 12).

Product (data for first half of year)	Growth 2006-20	Share 2007
Oils, lubricants, liquids	7,7%	7,3%
Tires and wheels	4,5%	3,2%
Oilskin products	-0,3%	2,2%
Accessoires	9,5%	2,3%
Windscreens and glasses	1,4%	1,4%
Electric parts	11,3%	16,5%
Bodyworks	83,2%	6,6%

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Product (data for first half of year)	Growth 2006-20	Share 2007
Fuel motors	-19,3%	8,1%
Motor pieces	-0,4%	21,8%
Transmissions, clutches and components	22,6%	9,5%
Suspension, steering and components	11,4%	5,3%
Brakes and components	0,3%	3,0%
Textil parts, carpets, seats	5,7%	4,3%
Other parts	-4,4%	8,6%
Total	6,0%	100,0%

*Table 12: Production by Components, 2006-2007*

Source: INEGI; INA

Today there are over 1.000 suppliers and service providers to the automotive industry in Mexico, both of Mexican and of foreign origin, with 14 OEMs present. About 70% of these companies have foreign capital invested. The majority of these companies are tier 2. Table 13 gives an overview of the industry.

	OEM	Tier 1		Tier 2		Tier 3	
		Mexican companies	Foreign companies	Mexican companies	Foreign companies	Mexican companies	Foreign companies
Current (Total)	14	345		600		115	
Expected growth until 2010	..	30	30	150	100	200	50

*Table 13: Supply Chain Structure in Mexico*

Source: ProMexico Auto Division

The tier 1 sector is widely seen as almost saturated, with fixed relations between OEMS and suppliers. An opportunity, however, is seen when Chinese OEMs realize their plans to assemble in Mexico. They do not have established relationships in the region, although Chinese suppliers like Wanxiang are actively entering the U.S. market. In addition, the tier 2 and tier 3 sector is widely believed to provide substantial opportunities.

There are many companies in Mexican hands among all tiers. They are not limited to tier 2 and tier 3 as in many other developing markets. Table 14 lists some of the largest automotive supplier companies in Mexico, which are still in Mexican hands.

Company	Production of
Auto Mecanica Roel	Car hydraulics
AHMSA	Steel mill
Grupo ENEJH	Cables
Distribuidora de Auto Industrias	Rubber-metal parts
Dinamex Group	Brake system moduls, fuel injection, PCV valves, fuel pumps
Walmi	Different types of filters – mainly for aftermarket
Grupo Condumex	Engine cylinder liners, electric harnesses, piston rings and liners
Grupo Gonher	Oil, air and fuel filters
Interfil	Various filters
Lombra de Guadalajara	Tail, corner and front lamps – mainly for aftermarket
Manufacturas Diversas	Various gaskets
Radiadores Automotrices	Heaters

Company	Production of
Radiadores Unidos	Heaters, air condition, electrical systems
Refacciones Automotrices Huante	Motion claps, engine seals, drum brakes, parts for clutches

*Table 14: Major Mexican Component Suppliers*

Source: Globis

There is also a large number of foreign suppliers in Mexico already. Some of them are planning to expand their operations, using Mexico as a production base for the U.S.. Mexico is ideally located to serve the major automotive market in the world, the U.S. As an example, Table 15 lists a non-representative list of major foreign component suppliers (tier 1 and 2) in the area of Saltillo.

Company	Production of
A.O. Smith	Air compressors and ventilation motors
Alcoa Fujikura	Electrical distribution system solutions
Benteler	Chassis Components: Axles, Frames, Cradles, Control arms
Brown Corporation	Automotive instrument panel reinforcements
Caterpillar	Off road tractor parts
CMI	Spot-coolers and hoses for air conditioners
Collins & Aikman	Plastic injection molding for control panels and bumpers for Dodge Ram
Condumex and Dana Corporation	Joint venture. Aluminum foundry that produces automotive pistons
Delphi	Automotive electronics
Findlay Industries	Interior trim components

Company	Production of
Flambeau Plastics	injection and blow molded thermoplastic components
Honeywell	Branded filters, spare plugs and car care products
Irving Automotive	Interior trims and accessories
John Deere	Tractor parts
Johnson Controls	Interiors and controls
Kay Automotive	high-quality automotive trim
Lear Seating	Automotive interiors, including seat systems, interior trim
Linamar	Aluminum pistons and other parts
Magna International Mannesmann-Sachs G	Seating systems
Magna Seating Systems	Seating systems
Metaldyne	Connecting rods
Oxford Automotive	Specialized metal-formed modules, assemblies
PSA Wiring Products	Wiring for electric motors for automobiles
Sachs Mexico	Clutches for commercial vehicles (class 6-8)
San Luis Rasinni	Multi-leaf and parabolic leaf springs, coil springs and torsion bars
Technotrim	Interior trims
Textron Automotive	Door panels and other inside trim products such as arm rests
TWB	Supplier of laser welded blanks

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Company	Production of
Vehyco	Pistons

*Table 15: Major Foreign Component Suppliers (Tier 1 and 2) in Saltillo, Mexico*

Source: Industry Canada

## 5 Mexican Aftermarket

### 5.1 Market Segments Aftermarket (OE, IAM, Fakes)

Mexicans mostly use parts from the independent aftermarket for routine service and minor repairs after end of guarantee, to about 50% (see Figure 26) When cars are within the guarantee period, the level is at over 60% of owners, who prefer original parts. After end of guarantee, original parts are used at a level around 25%, which is quite high for a developing automotive market with a good supply of alternatives. The level of faked spare parts used for routine service in Mexico is also high, estimated at around 20%. The vast Mexican automotive parts industry provides for a steady flow of fakes products.

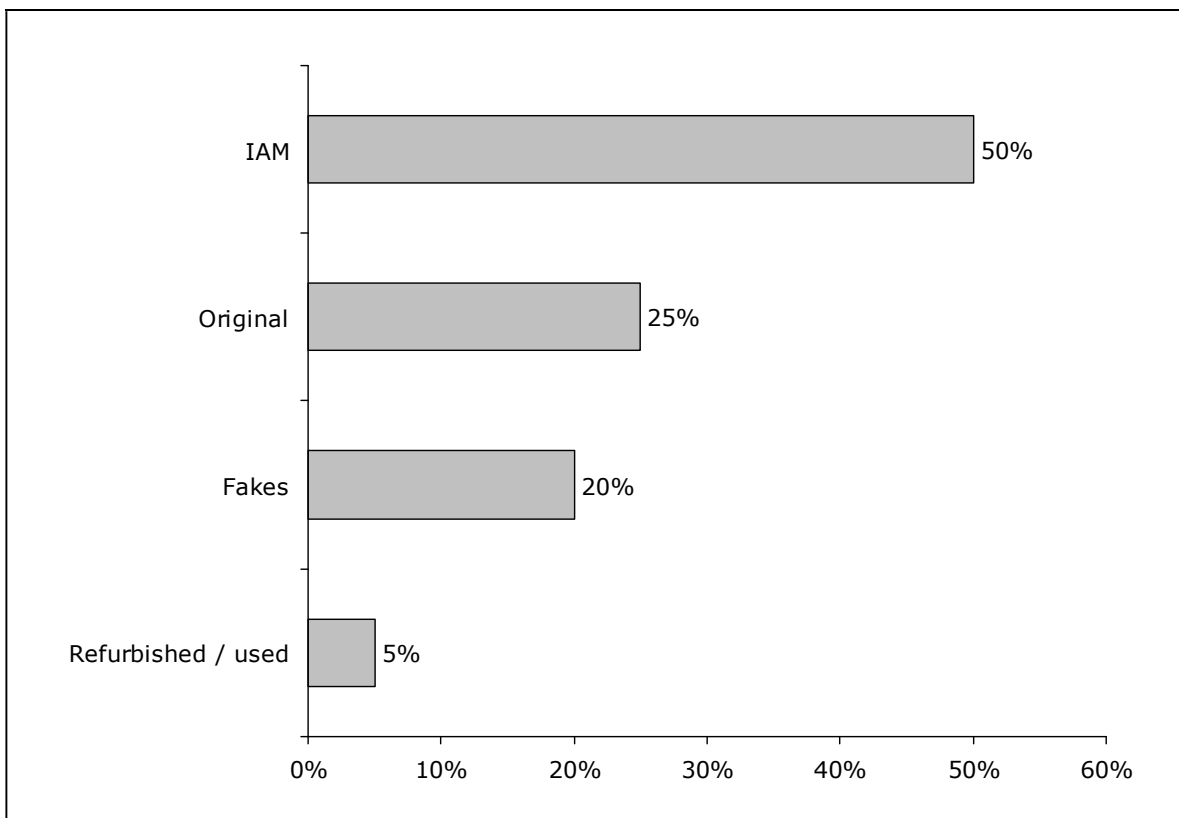


Figure 26: Share of OE-, IAM-, Fake-, Used-Parts for Routine Service, 2007

Source: Globis

In a country with a very old car parc and a large parc of very old, illegal cars originating from the U.S., the usage of IAM, faked and refurbished parts follows a clear logic.

In general, Mexicans who visit authorized OEM dealers for service, have a stronger tendency for original parts but it is only about 20% of owners using original service after end of warranty.

## 5.2 Market Size Aftermarket

The spare parts market is mainly determined by the major characteristics of the car parc, e.g. its size as well as age, brand and model distribution. Of course, the personal income situation in respective households is also decisive. Apart from these generic derivatives for the market, there are country-specific factors which influence the parts market:

- Availability and usage of OE, IAM, recycled and faked parts
- Quality of cars, spare parts, fuel and lubricants used
- Regulations, like mandatory routine inspection
- Service center system and servicing habits
- External conditions like road conditions, climate, driving habits.

The usage of OE, IAM, faked or used parts affects directly the value of the market. Indirectly, the quality of the respective part leads to either a faster wear out and a sooner need for replacement or vice versa. Faked and IAM parts are sold at substantial discounts compared to original parts. The price for used and refurbished parts strongly depends on the actual quality of part but is also substantially lower than that for original parts. The share of respective parts segments is given in chapter 5.1. With a very old car parc, the usage of non-original parts after end of guarantee period is widespread. Faked parts are used at a rate of 20%.

The quality of cars, parts, fuel and lubricants today is not worse than in developed automotive markets. A problem as it persisted in China a very years ago with local brands actively learning how to build cars does not exist in Mexico. All OEMs are established international players. The principal life cycle of components



and parts is comparable. Faked parts, however, do have substantially higher rates for replacements, since their quality often is substandard.

The availability of spare parts (original or IAM) for whatever model is sufficient, with the normal exception of parts for outdated models or even brands. The supply system for spare parts is sophisticated, with large importers and distributors on top, followed by regional distributors or spare part shops, which then sell to consumers or distribute to service stations which sell to consumers. See chapter 5.3 for details.

There is no regular technical check-up required for cars in Mexico today. Only an emission test is prescribed. In other countries mandatory checks are a major driver for the aftermarket – one which is missing in Mexico.

There are over 20.000 official service stations in Mexico (original and mostly independent). Many of them are organized in chains with more or less stringent quality standards. In addition, there is a large number of smaller, mostly not officially registered repair shops in private backyards. These shops are mostly providing service for the large number of very old and partly illegal cars. Often, the owner of the cars is just using the “facilities”. In total, to get car service is not a problem. The structure of the service system today does encourage the usage of cheaper parts – recycled or faked. Because of this, the IAM parts segment is comparatively small in Mexico. This mentality effectively reduces the value of the new parts market to some extent.

External conditions in Mexico also have a small impact on the parts market. The road system is not yet developed very well; about 70% of the roads network in Mexico were unpaved roads. The Climate in Mexico is diverse, with tropical climate in the South and deserts in the North. The long coastlines with oceans lead to humid, salty air. Climate does affect drive increase the size of the parts market compared to other countries with better conditions. In addition, Mexican driving habits are worse than in other countries.

Based on our market model, the total spare part market in Mexico in 2007 was around 5,6 bn. USD. Based on today’s pricing, this market will grow to 6,6 bn. (see

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Figure 27) USD in 2010. The growth is mainly driven by an increase in the car parc and a further increase in the professionalism of the car service market. The growth of the aftermarket outperforms the growth in the car parc. These numbers include the market for tyres but neither form of lubricants.

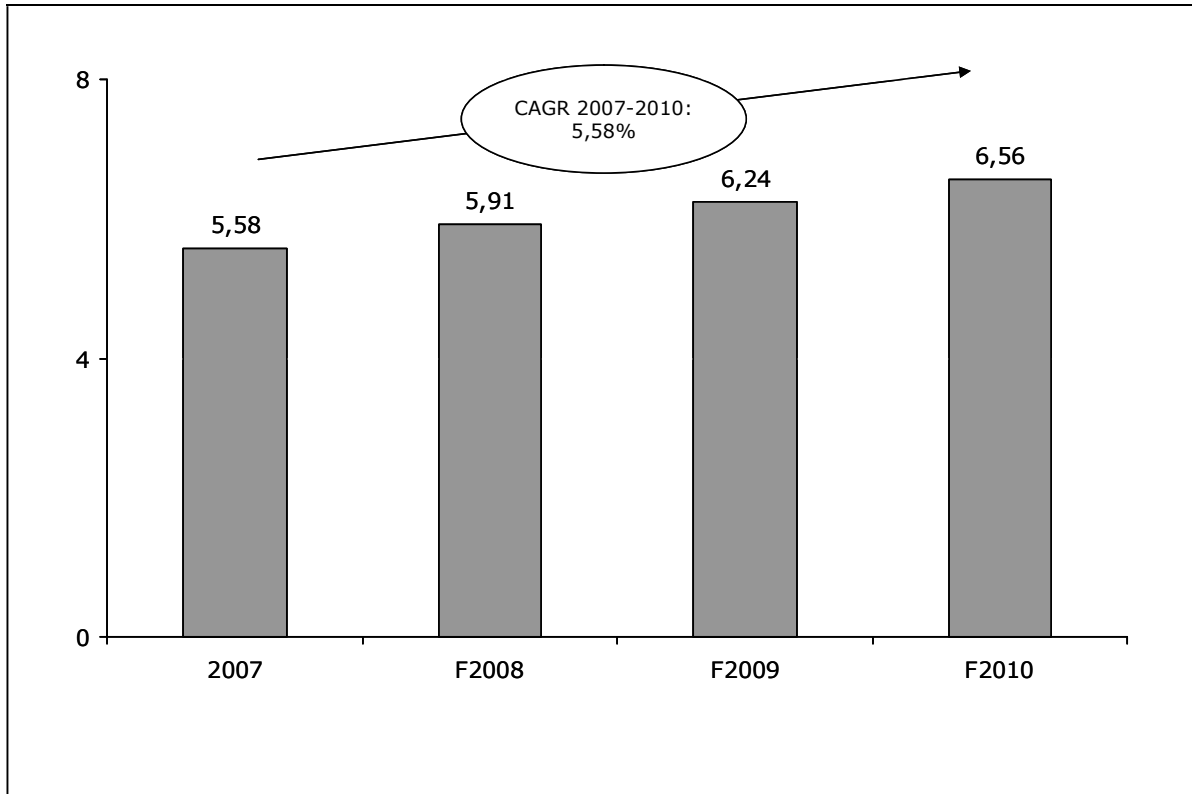


Figure 27: Size of Mexican Aftermarket, in bn. USD, 2007-2010

Source: Globis

The top markets are, in order of size, tyres, brake shoes, batteries and shock-absorbers followed by various filters. Figure 28 gives an overview of important parts markets.

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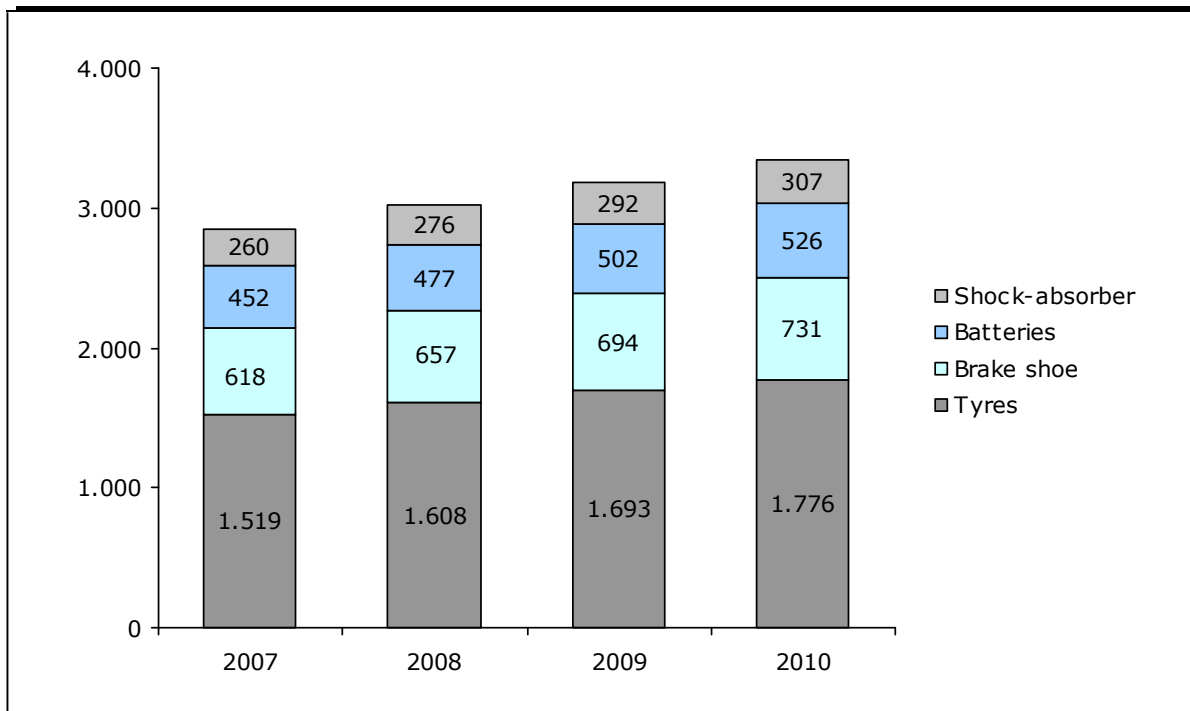


Figure 28: Size of Aftermarket for Important Spare Parts, USD mio., 2007-2010

Source: Globis

## 5.3 Distribution System for Spare Parts

Car spare part distribution in Mexico follows a common structure found in other countries as well. There is a large organized independent sector, with independent parts importers and distributors and also many service and part shop chains. Figure 29 gives an overview of the main distribution channels and the approximate number of players on the respective level.

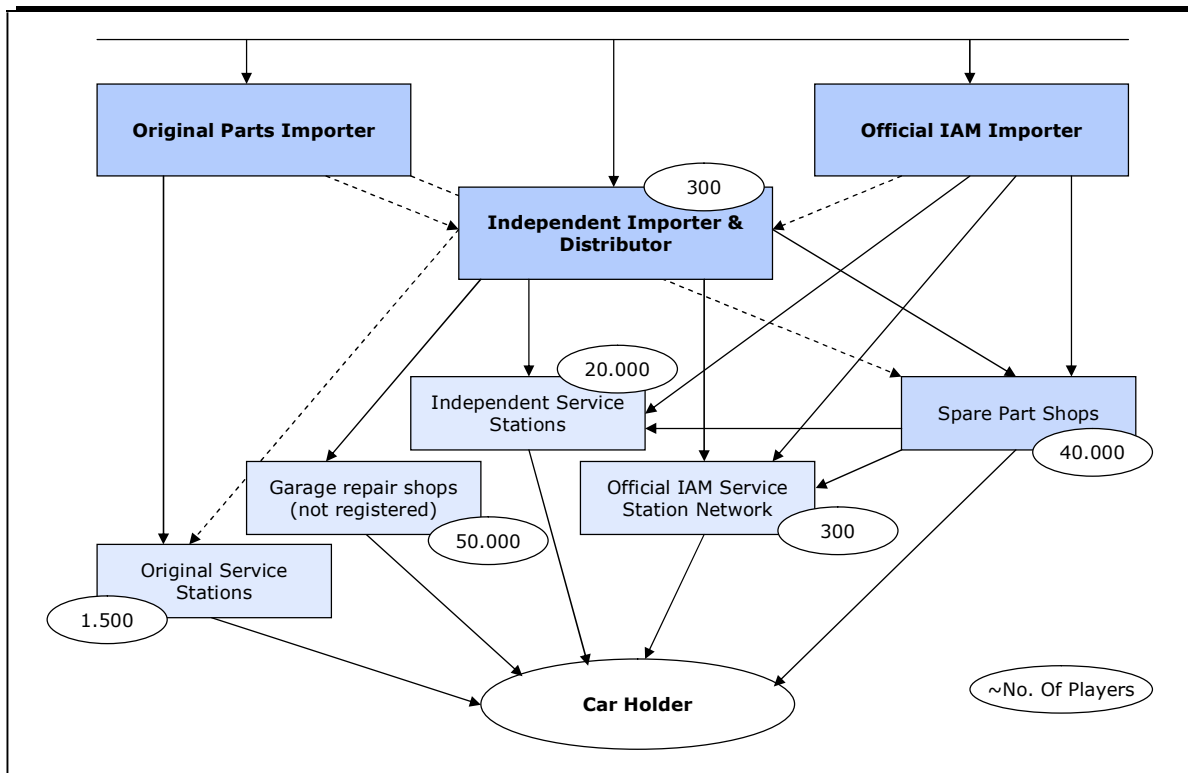


Figure 29: Main Distribution Channels for Spare Part Distribution to Car Holders, 2007

Source: Globis

The distribution system is still developing, along with increasing professionalism in car service. With an estimate of about 50.000 none registered smaller repair shops (some estimates even are substantially higher!), about 2 mio. cars with illegal status and a very old car parc which does not need or justify professional service, there is room for development.

The service network of OEMs will develop with the market. Most independent chains in Mexico originate from the U.S. (mostly franchise like SpeeDee or Auto-zone) and will expand to reach better penetration. With imports of used cars declining in favour of an increase in the new car market, there will be growing need for better car service. None-registered repair garages will either transform into official ones and grow or stop existing.

Large importers and distributors will further increase their coverage. There is only a handful of companies which can be said to operate on a truly national level. Most of the distributors claim national presence but today do have a clear regional focus.

The most important channel for car holders to buy parts are service stations (see Figure 30), most of them original or independent ones. The second supply source are the numerous spare part shops, which are needed for self repair and often for the usage of non-registered repair garages. Spare part shops are also a complementary supply source for independent service stations. We estimate about 25% of non-original spares are being bought through shops. Rarely, spares are bought in a shop and then brought to official service stations to have them build in (but much more often the non-registered repair garages). Internet does not play an important role as supply channel for spares. About 6% of spare parts are bought on open-air-markets.

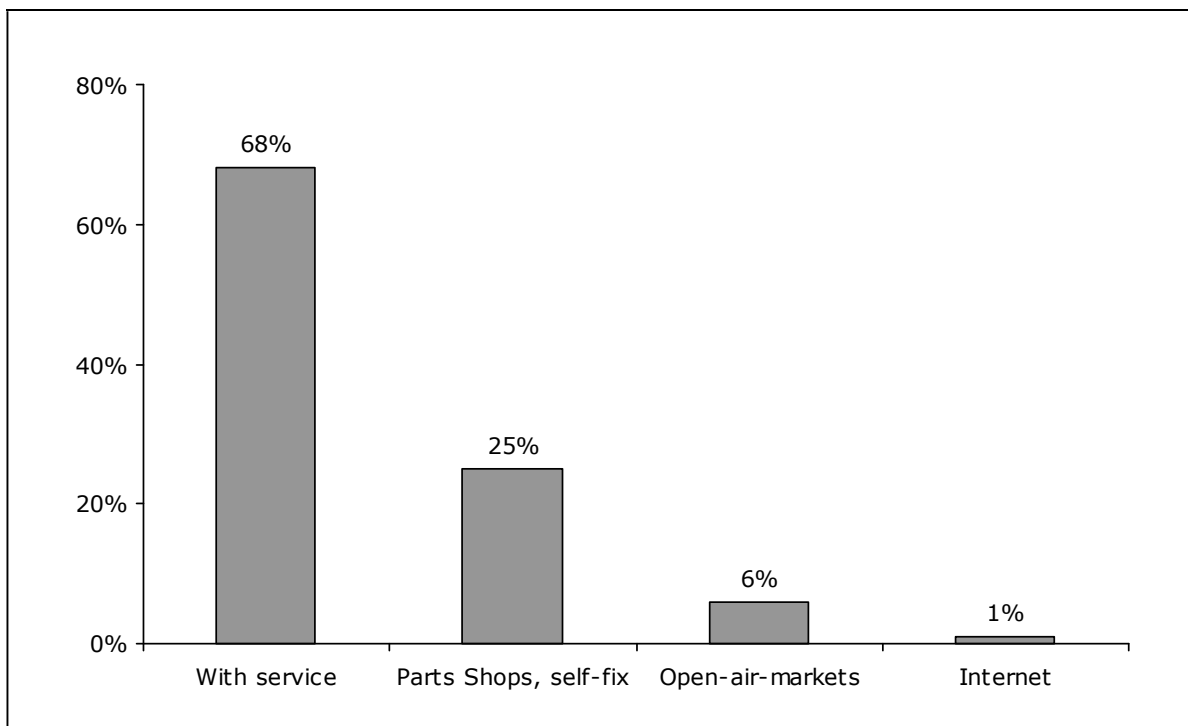


Figure 30: Shares of Spare Parts Sales Channels for Non-OE, 2007

Source: Globis

### 5.3.1.1 Parts Importers and Distributors

Non-original spare parts are mostly imported through major wholesale distributors into Mexico. The Mexican market is scattered, with some large and several smaller distributors. There are also the local offices of large suppliers who import directly but mostly sell through one of these distributors.

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The wholesaler mostly sell through local representatives and ship from a central warehouse. Some of the larger wholesaler have more than one distribution center to ensure fast shipments. A few wholesaler also operate their own parts shops which sell to official and non-official service centers as well as car owners.

For parts manufacturers, the wholesale distributors are a main channel to sell products in Mexico. Table 16 gives an overview of some major distributors in Mexico.

Parts distributor	Number of Sales Outlets / Partners	Comments
Grupo Morsa de Mexico	15 distribution centers, 25 spare part shops under the name of Morsa Grupo Automotriz, 3 specialized parts shops for diesel under name of Culiacán Autopartes	
Ormautopartes	18 distribution centers	
Auto Todo Mexicana	9 distribution centers	Subsidiary of Genuine Parts Company from U.S.A.
Refaccionaria Ramon Jaime	12 distribution centers	
Mayoreo de Autopartes y Aceites	3 distribution centers, 10 outlets	
Mercado de Refacciones de Mexicali	2 distribution centers, 19 outlets	part of Aftermarket Auto Parts Alliance, Inc. (brand: Auto Value)
RAE Mexico	6 distribution centers	
Distribuciones Sagaji	6 distribution centers	
Alvado Automotriz	Central warehouse, 30 regional representatives	

*Table 16: Major Independent Importers and Distributors of Spare Parts*

Source: Globis

Wholesaler are an important part of any strategy to enter the Mexican after-market. Their distribution function is a necessity to reach good coverage. Using only one exclusive distributor will mostly not be sufficient to reach national coverage.

#### 5.3.1.2 Spare Part Shops

Spare part shops are a main distribution channel for parts to service stations as well as to the car owner. There is an estimated 40.000 spare part shops with different specialisations in the Mexican market. A very small fraction is part of a wholesale parts distributor like Morsa Grupo Automotriz, which is part of Grupo Morsa de Mexico. Almost all of these shops are buying parts from wholesalers, complemented by parts they buy directly from local suppliers or suppliers with a local sales office. Some of them also import directly, mostly from the U.S. The advantage of the shops is, of course, its proximity to the customer (garage or car owner). They have both a logistics and financing function.

There are some chains of spare part shops, like

- Refaccionaria California, with 72 outlets all over Mexico
- AutoZone from the U.S. with 120 outlets in Mexico
- AutoValue, part of Grupo DIR, with 35 outlets in Mexico
- Aftermarket Auto Parts Alliance, a marketing network of spare part businesses, with 8 shareholders in Mexico.

Chains will develop further and the market will consolidate along with more professionalism in the entire automotive market.

Spare part shops are an integral part of any strategy to enter the Mexican parts market. Since this part of the market is not organized very well, substantial efforts have to be made to achieve a push through wholesaler as well as to reach the shop owners and the car owners directly.

### 5.3.1.3 Service Stations

In Mexico there are currently over 20.000 officially registered service stations for cars. This results in a little less than 1.000 cars per service station, which is an average coverage. Since these official stations are catering to car owners with officially registered cars of a certain value, the coverage is even better. About 1.500 of these service stations are authorized stations of car makers.

Apart from the officially registered service stations there is a large number of private garage repair shops, where private individuals have some kind of infrastructure for car service. Their number is at about 50.000 all over Mexico, which some estimates even going up to 150.000. These private repair shops do mostly cater to low value cars, most of them are illegal cars coming from the U.S. The garages are also for self-repair for oneself or respective friends.

Given these numbers, non-registered repair shops with 40% make up the major share of service channels, followed by independent service stations and then original service stations. For routine repair and maintenance, about 10% is done through self-fixing (see Figure 31).

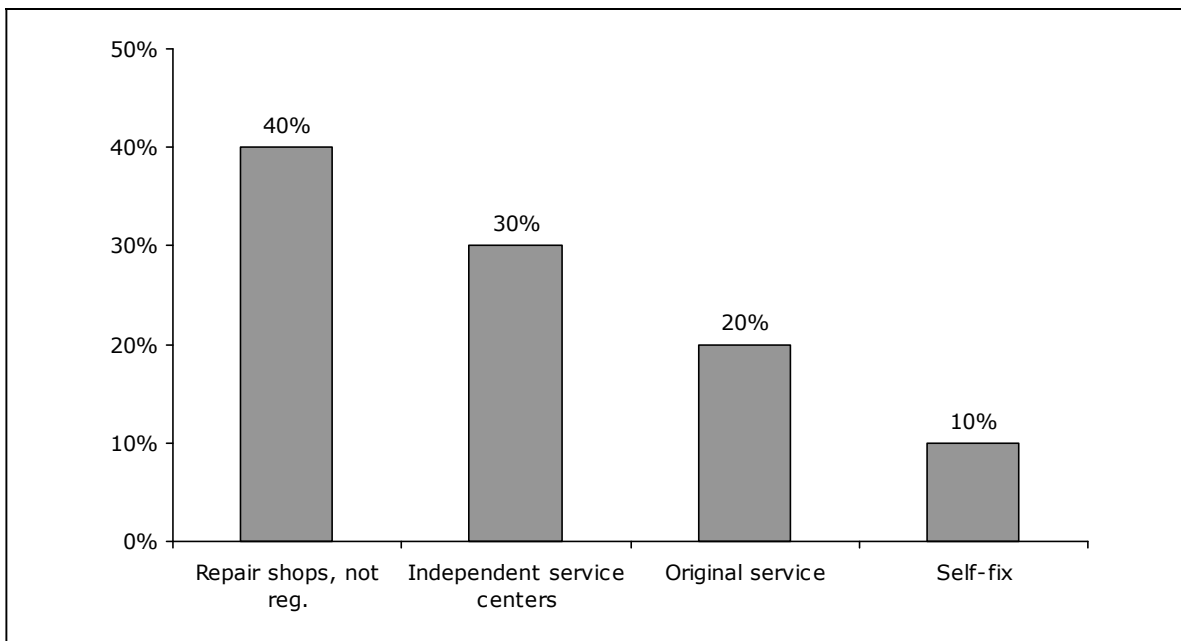


Figure 31: Share of Service-Channels after Guarantee-Period, 2007

Source: Globis



Service station buy parts through wholesaler or parts shops, in rare cases import themselves or are attached to importers and wholesalers. Non-registered garages buy normally through parts shops. Their volume is just too low to justify any other sourcing efforts.

In the distribution to the car holder, service station play an important role, since the majority of parts bought by car owners are bought together with service. It is here, where the purchase decision for a large fraction of the aftermarkets are made. In many instances it is the service, not the car owner, who actually decides which parts are used.

Currently wholesaler have not formed own service center networks to a large extent to bind their customers exclusively to them. ACDelco could be seen as such a network, but is eventually affiliated with GM.

There is also not a large number of independent service center chains in Mexico (see Table 17). Most of them are coming from the U.S. and have a good coverage in the Northern parts of Mexico. Larger automotive parts suppliers like Bosch also have not yet formed substantial networks in Mexico. Bosch still only has 7 Bosch Car Service centers in Mexico.

Name	No. of Stations	Description
Grease Monkey	49	U.S. company with over 300 stations in U.S. and Mexico
ACDelco	25	Part of GM but providing service for all brands
Speedee Oil Change and Tune-Up	55	U.S. franchisor mit masterlicencee in Mexico
Meineke Car Care Center	21	U.S. franchisor mit masterlicencee in Mexico
Autopartes Nacionales y Importadas Pepess	14	Mexican, partly franchise
Bosch Car Service	7	Part of Bosch group of Germany

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Name	No. of Stations	Description
Desarrolladora de Proyectos EPS	4	Mexican

*Table 17: Service Chains not Bound by Parts Distributors, 2007*

Source: Globis

#### 5.3.1.4 Other Supply Channels

There are also other supply channels for customer to get spare parts. The internet does not play any role yet. Open-air-markets are still a good supply source for recycled or used parts and these are the places where fakes are sold as well. The customers on these markets are mostly people who self-fix their cars or run non-registered repair shops. In most cases the parts bought are installed in older or illegal cars.

The role of the open-air-markets will reduce, but only slowly. The Internet will gain share most rapidly, but comes from an insignificant level and will not change the competitive landscape within the next years.

## 6 Risks and Opportunities

Mexico currently bears no major political, legal, administrative or financial risk, although the legal framework is not fully developed, enforcement is not perfect and Mexico's administration can be very bureaucratic. Mexico's automotive sector is one of the drivers of the economy. Government will continue to provide for preferential conditions. Protective measures to block out foreign players are unlikely, since this would mean the loss of the majority of investments into the industry. Mexico has a wide network of international trade and investment agreements, which provide for stability especially for investors from the U.S. and the E.U.

Mexico strongly depends on the economic development of the U.S., through FDI, as an export market and through remittances from Mexican living in the U.S.. In case the North American economy is getting into major trouble – which is not an unrealistic scenario, the Mexican economy will decline as well. This is the major economical risk involved in doing in Mexico.

Mexico is an attractive market for the automotive industry. With about 650.000 new cars sold in 2007, Mexico is an attractive car market although behind stronger markets like China or Russia. It is one of the largest markets in Latin America. Opportunities for OEM arise especially through the growth of the new car market. This growth will be driven through the increasing wealth of consumers and decreasing used car imports. The major risk is the development of the used car market. In recent years, the new car market declined because of increasing supply of used cars from the U.S. The Mexican government always wanted to limited the legal and illegal inflow and usage of used cars. So far, it has not released any effective measures, for example in the form of mandatory regular technical inspections. On the contrary, it regularly legalized illegally imported cars and therefore provides no incentive to play by the rules.

Opportunities in the aftermarket exist as well. The aftermarket – parts import and distribution, service centers – is still getting organized and larger players are still forming. While the growing wealth is not sufficient for most consumers to buy a

new car, the second hand car market or imports of used cars will benefit. These cars have to serviced and parts for exchange or repair are needed. With growing wealth, consumers will opt more frequently to get better parts and better service.

The main challenge for aftermarket participants will be to find the best sales channels possible. Since at importer / distributor level the industry is highly fragmented, some sales channels can be found. Access to or preferred presentation in sales channels with a higher reach is more difficult. With almost all part shops and service stations still independent, getting a good coverage all over Mexico is a big challenge. For larger manufacturers or importers / distributors, however, there are chances to bind some stations as exclusive sales channels.

For companies wanting to manufacture in Mexico, wages are very attractive compared to the U.S. or Western European countries. For companies from outside the the U.S. or E.U., Mexico is a very good entry point into these markets. Through its free trade agreement network, goods flow more or less freely into these markets.

# 7 Appendices

## 7.1 Regions in Mexico

South / South-East	Center / West	Center	North-East	North-West
Campeche	Aguascalientes	Distrito Federal	Chihuahua	Baja California
Chiapas	Colima	Hidalgo	Durango	Baja California Sur
Guerrero	Guanajuato	Estado de México	Coahuila	Sinaloa
Oaxaca	Jalisco	Morelos	Nuevo León	Sonora
Puebla	Michoacán	Querétaro	Tamaulipas	
Quintana Roo	Nayarit	Tlaxcala		
Tabasco	San Luis Potosí			
Veracruz	Zacatecas			
Yucatán				

*Table 18: Regions in Mexico*

Source: INEGI

## 7.2 Population and Area in Regions

	Region	Capital	Population	Area sq. km.	Population Density
01	Aguascalientes	Aguascalientes	1.065.416	5.625	189,41
02	Baja California	Mexicali	2.844.469	71.546	39,76
03	Baja California Sur	La Paz	512.170	73.943	6,93
04	Campeche	Campeche	754.730	57.727	13,07
05	Coahuila de Zaragoza	Saltillo	2.495.200	151.445	16,48
06	Colima	Colima	567.996	5.627	100,94
07	Chiapas	Tuxtla Gutiérrez	4.293.459	73.681	58,27
08	Chihuahua	Chihuahua	3.241.444	247.487	13,10
09	Distrito Federal	Ciudad de México	8.720.916	1.484	5876,63
10	Durango	Victoria de Durango	1.509.117	123.367	12,23
11	Guanajuato	Guanajuato	4.893.812	30.621	159,82
12	Guerrero	Chilpancingo de los Bravo	3.115.202	63.618	48,97
13	Hidalgo	Pachuca de Soto	2.345.514	20.856	112,46
14	Jalisco	Guadalajara	6.752.113	78.630	85,87
15	México	Toluca de Lerdo	14.007.495	22.333	627,21
16	Michoacán de Ocampo	Morelia	3.966.073	58.667	67,60
17	Morelos	Cuernavaca	1.612.899	4.892	329,70
18	Nayarit	Tepic	949.684	27.862	34,09

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	Region	Capital	Population	Area sq. km.	Population Density
19	Nuevo León	Monterrey	4.199.292	64.203	65,41
20	Oaxaca	Oaxaca de Juárez	3.506.821	93.343	37,57
21	Puebla	Heroica Puebla de Zaragoza	5.383.133	34251	157,17
22	Querétaro Arteaga	Santiago de Querétaro	1.598.139	11.658	137,09
23	Quintana Roo	Chetumal	1.135.309	42.535	26,69
24	San Luis Potosí	San Luis Potosí	2.410.414	61.165	39,41
25	Sinaloa	Culiacán Rosales	2.608.442	57.331	45,50
26	Sonora	Hermosillo	2.394.861	179.516	13,34
27	Tabasco	Villahermosa	1.989.969	24.747	80,41
28	Tamaulipas	Ciudad Victoria	3.024.238	80.148	37,73
29	Tlaxcala	Tlaxcala de Xicohtécatl	1.068.207	3.997	267,25
30	Veracruz de Ignacio de la Llave	Xalapa-Enríquez	7.110.214	71.856	98,95
31	Yucatán	Mérida	1.818.948	39.671	45,85
32	Zacatecas	Zacatecas	1.367.692	75.416	18,14

*Table 19: Population and Area in Regions*

Source: INEGI, 2005

## 7.3 Major Mexican Cities

	Name	Region	Population
1	Iztapalapa	Distrito Federal	1.820.888
2	Ecatepec de Morelos	México	1.687.549
3	Guadalajara	Jalisco	1.600.894
4	Heróica Puebla de Zaragoza	Puebla	1.399.519
5	Juárez	Chihuahua	1.301.452
6	Tijuana	Baja California	1.286.187
7	Gustavo A. Madero	Distrito Federal	1.193.161
8	León de los Aldama	Guanajuato	1.137.465
9	Ciudad Nezahualcóyotl	México	1.136.300
10	Monterrey	Nuevo León	1.133.070
11	Zapopan	Jalisco	1.026.492
12	Naucalpan de Juárez	México	792.226
13	Chihuahua	Chihuahua	748.518
14	Álvaro Obregón	Distrito Federal	706.265
15	Guadalupe	Nuevo León	691.434
16	San Luis Potosí	San Luis Potosí	685.934
17	Tlalnepantla	México	674.417
18	Aguascalientes	Aguascalientes	663.671
19	Mexicali	Baja California	653.046



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20	Saltillo	Coahuila de Zaragoza	633.667
21	Coyoacán	Distrito Federal	628.063
22	Acapulco de Juárez	Guerrero	616.394
23	Morelia	Michoacán de Ocampo	608.049
24	Culiacán Rosales	Sinaloa	605.304
25	Santiago de Querétaro	Querétaro Arteaga	596.450
26	Torreón	Coahuila de Zaragoza	548.723
27	Tlalpan	Distrito Federal	547.848
28	Tlaquepaque	Jalisco	542.051
29	Cancún	Quintana Roo	526.701
30	Chimalhuacán	México	524.223
31	Cuauhtémoc	Distrito Federal	521.348
32	Tuxtla Gutiérrez	Chiapas	490.455
33	Cuautitlán Izcalli	México	477.872
34	San Nicolás de los Garza	Nuevo León	476.761
35	Ciudad López Mateos	México	471.904
36	Toluca de Lerdo	México	467.712
37	Victoria de Durango	Durango	463.830
38	Venustiano Carranza	Distrito Federal	447.459
39	Azcapotzalco	Distrito Federal	425.298
40	Xochimilco	Distrito Federal	396.852
41	Iztacalco	Distrito Federal	395.025

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42	Ciudad Apodaca	Nuevo León	393.195
43	Tonalá	Jalisco	374.258
44	Benito Juárez	Distrito Federal	355.017
45	Miguel Hidalgo	Distrito Federal	353.534
46	Mazatlán	Sinaloa	352.471
47	Irapuato	Guanajuato	342.561
48	Cuernavaca	Morelos	332.197
49	Xico	México	331.321
50	Celaya	Guanajuato	310.413

*Table 20: Major Mexican Cities*

Source: Various

## 7.4 Top-10 Car Sales by Model and Average Prices

	Brand	Model	Average Price USD
1.	Nissan	Tsuru	\$12.487,87
2.	General Motors	Chevy	\$9.976,48
3.	Volkswagen	Jetta	\$18.610,44
4.	Volkswagen	Pointer	\$9.683,94
5.	Nissan	Tiida	\$16.294,42
6.	Volkswagen	Bora	\$20.967,84
7.	Nissan	Sentra	\$19.802,32
8.	General Motors	Corsa	\$12.032,30
9.	General Motors	Optra	\$14.651,60
10.	Ford	Fiesta sedan	\$12.894,11

*Table 21: Top-10 Car Sales by Model and Average Price*

Source: AMDA, 2007

## 7.5 Most Sold Automobiles by Segment

### Subcompacts

Model	Brand	% of segment
Tsuru	Nissan	20%
Chevy	GM	18%
Pointer	VW	9%
Corsa	GM	6%
Fiesta sedan	Ford	6%
Other		41%

### Compacts

Model	Brand	% of segment
Jetta	VW	16%
Tiida	Nissan	10%
Bora	VW	10%
Sentra	Nissan	8%
Optra	GM	8%
Other		48%

### Luxury Cars

Model	Brand	% of segment
Altima	Nissan	16%
Camry	Toyota	16%

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Model	Brand	% of segment
Accord	Honda	16%
325i	BMW	5%
C 280	Mercedes	5%
Other		42%

**Sports Cars**

Model	Brand	% of segment
Mustang	Ford	29%
Cooper S	Mini	16%
León	Seat	15%
Golf GTI	VW	13%
Eclipse	Mitsubishi	10%
Other		17%

**MPVs**

Model	Brand	% of segment
CR-V	Honda	14692
Ecosport	Ford	11694
RAV4	Toyota	9427
Escape	Ford	8560
Xtrail	Nissan	6847
Other		131821

**LCVs**

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Model	Brand	% of segment
Chasis Largo	Nissan	12%
Ranger	Ford	8%
Silverado 2500	GM	9%
Tornado Pick-up	GM	7%
Lobo	Ford	6%
Other		58%

*Table 22: Top selling Automobiles by Segment*

Source: AMDA, Oct 2007

## 8 Abbreviations

AMDA	Mexican Association of Automobile Distributors
AMIA	Mexican Association for the Automotive Industry
Bn	Billion
CAGR	Compounded Annual Growth Rate
EU	European Union
F	Forecast
FDI	Foreign Direct Investment
FTA	Free Trade Agreement
GDP	Gross Domestic Product
IAM	Independent Aftermarket
INA	Automobile Parts National Industry
INEGI	National Institute for Statistics, Geography and Informatics
LCV	Light Commercial Vehicle
Mio.	Million
MPV	Multi-Purpose Vehicle
No.	Number
OEM	Original Equipment Manufacturer
PC	Passenger Car

Sq. km.	Square Kilometre
SUV	Sport Utility Vehicle
USD	US-Dollar
VAT	Value Added Tax
WTO	World Trade Organisation



## **Globis Consulting**

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For questions or further information, please contact us at:

Globis GmbH  
Möllendorffstr. 52  
10367 Berlin  
Germany

T.: +49 (0)30 4005 4914

F.: +49 (0)30 4005 4928

<https://www.globis-consulting.com>

[request@globis-consulting.com](mailto:request@globis-consulting.com)