



Chinese auto industry

April 2010 - Author: Saiyi He, Research Analyst

Background

Within the Chinese industrialization process, the auto industry has played a significant role. It has been one of China's pillar industries and since the 1990s, the government's supportive infrastructure developments and policies have ensured China's auto industry has developed rapidly. The Chinese policy makers originally set out 6 major centres (the so called Old Lions) in 1986 in which auto production should be a core competence as follows:

Beijing	Beijing Auto Industry Corporation (BAIC)
Shanghai	Shanghai Auto Industry Corporation (SAIC)
Changchun	First Auto Works (FAW)
Wuhan	Dongfeng Motor Corp (DMC)
Chongqing	ChangAn Automobile Co
Guangzhou	Guangzhou Automobile Industry Group (GAIG)

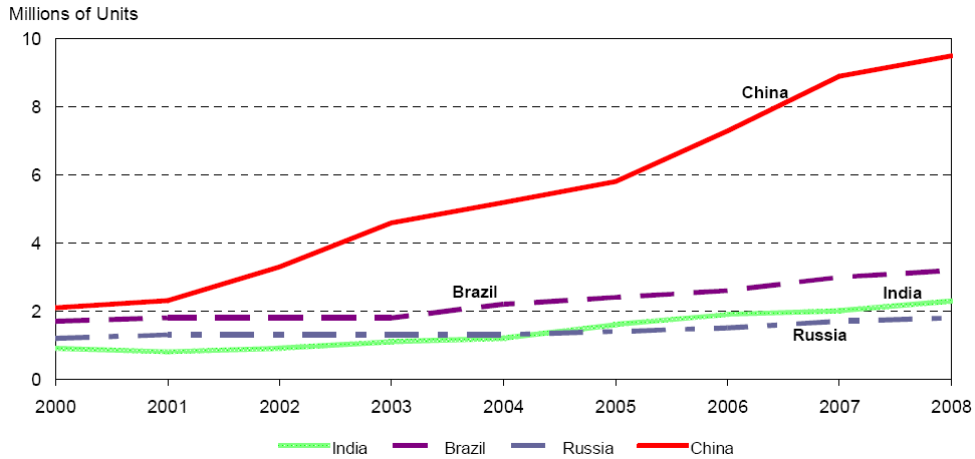
The Government then got local producers to form joint ventures with foreign companies e.g. GM and VW separately with Shanghai Auto Industry Corporation (SAIC), Dongfeng with both Honda and Nissan. The idea was that they would learn from the foreign joint ventures and then build their own, but in actuality, they have built few genuinely new models (e.g. the SAIC Roewe and FAW Besturn) and have been content to be relatively passive partners (i.e. the core competence of design, manufacturing and distribution has remained with the global players). Then in the late 1990s, relatively out of nowhere, came new entrants - the so called 'young tigers'. The three best known of these are: Geely, founded by Li Shufu who originally made refrigerator parts then motorcycles, which has just bought Volvo; BYD, founded by Wang Chuanfu whose company made cell phone batteries and where Buffet made an investment; and Chery, founded by Yin Tongyao who ran a VW assembly plant and was then asked by his local Mayor to build a car plant in the Anhui province if he raised the finance. Chery currently primarily make smaller cars. In 2008 Chery sold 350,000 cars of which 100,000 were exported. These 3 companies haven't yet made global quality standards (source: JD Power – JPM report, 16th June 2009) but are rapidly catching up. The other prevalent issue with these companies is that they have many models resulting in high levels of production yet low profitability per model.

Reaction to the global financial crisis

In November 2008, the Chinese government unveiled a fiscal stimulus package worth Rmb 4 trillion, to boost domestic demand and avert an economic slowdown. In early 2009, the government announced a sales tax cut on smaller cars and offered incentives to promote vehicle sales in rural areas. This has helped auto sales to grow spectacularly at 48%yoy in 2009, the fastest pace since 2003. China also became the world's largest auto producer, partly as US production fell in the global financial crisis, with annual vehicle output increasing from less than 2 million vehicles in the late 1990s to 12 million in 2009. In 2004 China had sales of just 4.8m against 17m in the US. Based on current run-rates, China will become the world's largest car market in 2010, on par with the USA, making up 18% of global market share.

BRIC countries motor vehicle production

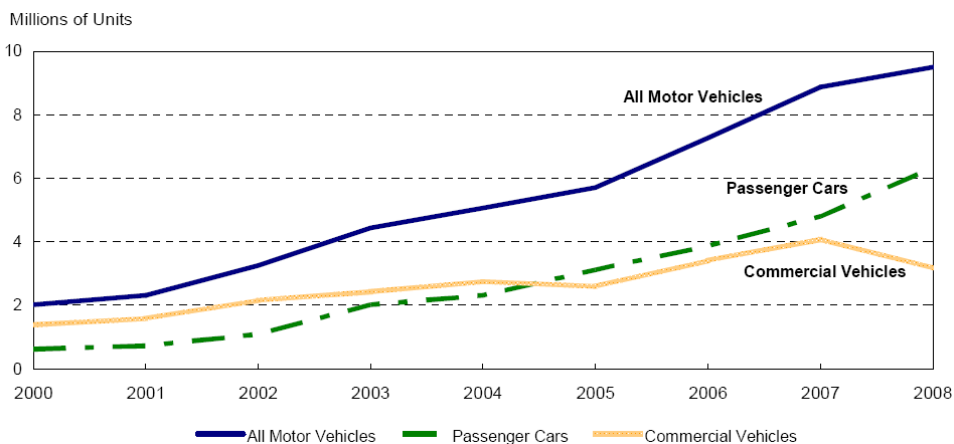
Annual vehicle production, 2000-2008



Source: Congressional Research Service (Automotive News, Market Data Book, 2002, and Global Market Data Book: 2004, 2005, 2007, 2008; Ward's Automotive Yearbook, 2009 [for 2008 data]).

After two decades of rapid economic growth, the auto sales and production mix in China is experiencing dramatic changes. The production of passenger cars started to rise consistently after 2000, generated by the rising demand from the increasing number of middle-class consumers. Since 2000, China's auto output has been driven by passenger vehicles (PVs). In 2001 PVs were only 30% of total vehicle production, but quickly surged to 65% of total production in 2008. Going forward, PVs will continue to be the bulk of auto sales. The central government aims for the auto industry to have a steady 10% yoy growth in sales and production over the next 5 years. This is a reasonable target given there are 4 core drivers for auto demand in China (apart from the "cash for clunkers" subsidy program currently ongoing).

Chinese motor vehicle production

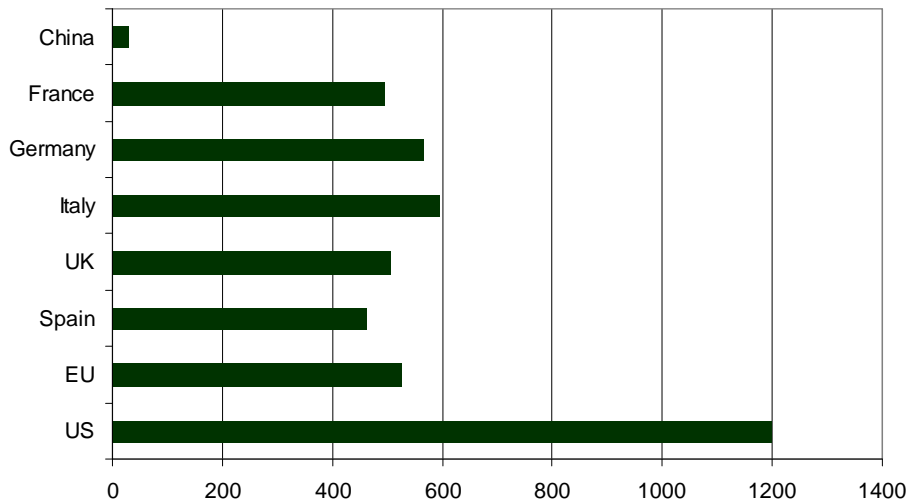


Source: Congressional Research Service (Ward's Automotive Yearbook, 2001-2009).

Notes: Commercial vehicles include trucks and buses, a category that includes light trucks, SUVs and minivans.

First of all, China's car ownership penetration rate is still low, which stood at about 22 cars per 1,000 people in 2008. This ratio is low compared with a global average of 120 per 1,000 and over 600 per 1,000 in the United States. China's rapid economic growth and the rise of the middle-class will keep demand for autos strong.

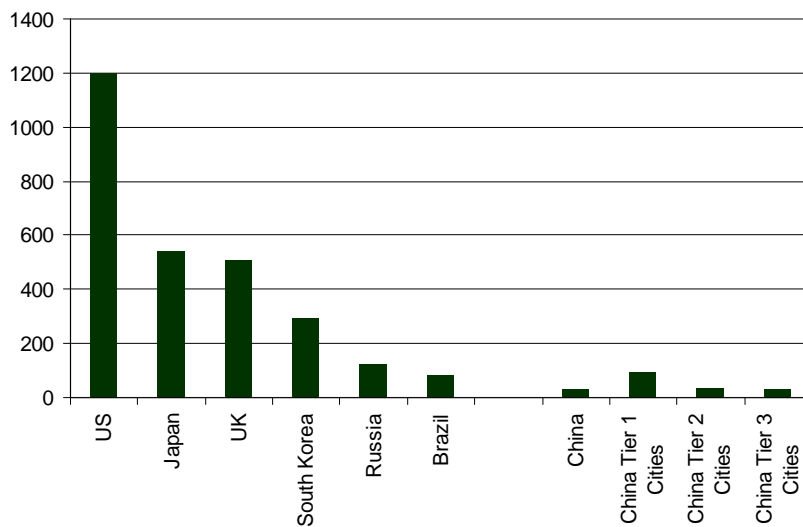
Car ownership in China, Europe and the US (per thousand population)



Source: JP Morgan.

Secondly, since 2002 both foreign and domestic carmakers have expanded production capacity in anticipation of continued strong demand growth. This generated significant competition and falling vehicle prices. In 2007, average car prices across China dropped by nearly 6%yoy, while the per capita income of urban residents raised 12.2%yoy, to USD\$1,942.

Vehicle penetration in China is still behind developed countries



Source: CEIC, Nation Master and Samsung Securities.

The third factor resulting in greater demand for cars is the improvement and expansion of China's road network. Most of China's road network was built within the past 15 years. China has been investing heavily in improving its infrastructure. In just 6 years from 2002 to 2008, China doubled its highway network to 60,000km, making it one of the largest motorway systems in the world, just behind the US interstate system of 75,000 km.

Lastly and the 4th point, only 8% of cars sold in 2008 were financed by auto loans. Clearly this will rise.

Foreign and domestic producers in the Chinese auto industry

Unlike Korea or Japan, China's automotive industry has developed extensively through foreign direct investment, in the form of alliances and joint ventures between international automakers and the big 6 Chinese partners.

Motor vehicle sales in China and market share of selected manufacturers, 2007-2008

	2007		2008	
	000s	%	000s	%
GM	1,032	11.7%	1,074	11.3%
VW	918	10.4%	964	10.1%
TOYOTA	460	5.2%	538	5.6%
HONDA	422	4.8%	470	4.9%
HYUNDAI - KIA	355	4.0%	437	4.6%
CHERY	387	4.4%	356	3.7%
NISSAN	272	3.1%	346	3.6%
FAW	294	3.3%	302	3.2%
GEELY	220	2.5%	237	2.5%
MAZDA	222	2.5%	209	2.2%
TOTAL	8,819	100%	9,541	100%

Source: Congressional Research Service (Ward's Auto InfoBank).

Notes: Totals in above table include sales of other manufacturers not listed and are used to calculate market share of the listed auto makers.

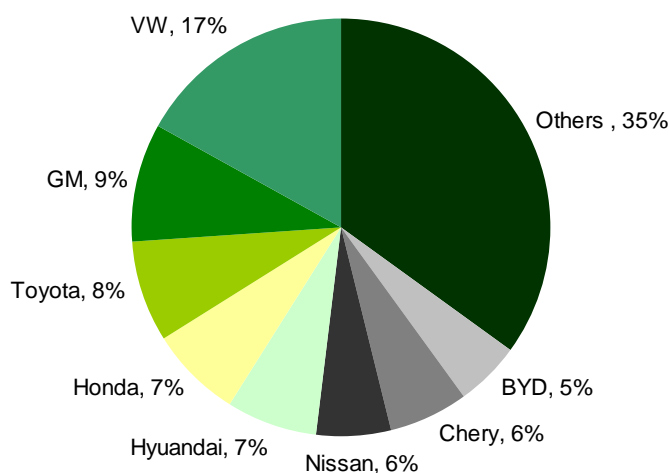
Currently the China auto market is still largely dominated by these international joint venture automakers, particularly in the fastest-growing passenger vehicle category, where about 60% of new cars sold were produced by the international joint venture entities of the big 6. General Motors and Volkswagen are currently the leading vendors, each commanding more than 10% of the market (although at one stage VW had 50% because it was the earliest entrant in 1986). Toyota, Honda, Nissan, Mazda of Japan, and Hyundai-Kia of South Korea all command sizeable market shares in China. Around a quarter of the market is the so called Chinese young tigers (Chery, BYD and Geely). Only 1% is actually cars designed by the so called Chinese 'old lions'.

'Young tiger' vehicles



Source: JP Morgan, J.D. Power and Associates.

Passenger vehicle market share in China (2009)



Source: CMA, Fitch.

Domestic automakers - their role in the domestic and world markets

After two decades of rapid economic growth, the Chinese auto industry has made substantial progress. Many independent domestic automotive manufacturers have emerged and have ambitions to make cars for developed countries. Although they have to overcome hurdles, such as creating their own designs and beginning to meet world standards in terms of product quality, safety, and environmental features, the domestic manufacturers are expanding their market share and moving up the value chain. Geely is in the process of purchasing Volvo from Ford and bought the London taxi manufacturer 'Manganese Bronze'. BYD has formed an alliance with Chrysler in producing electric cars. SAIC already has a controlling stake in Ssangyong of Korea. They also tried to buy Hummer, the very large US SUV formerly owned by GM, but the unknown Chinese purchaser didn't get Government clearance as the acquisition didn't sit easily with their 'green' policies.

In March 2009 China's State Council released the Automotive Readjustment and Revitalization Plan, the latest development blueprint for the auto industry in China. The overall objective is to achieve a 10% average growth in the next three years, using 2009 as the base year.

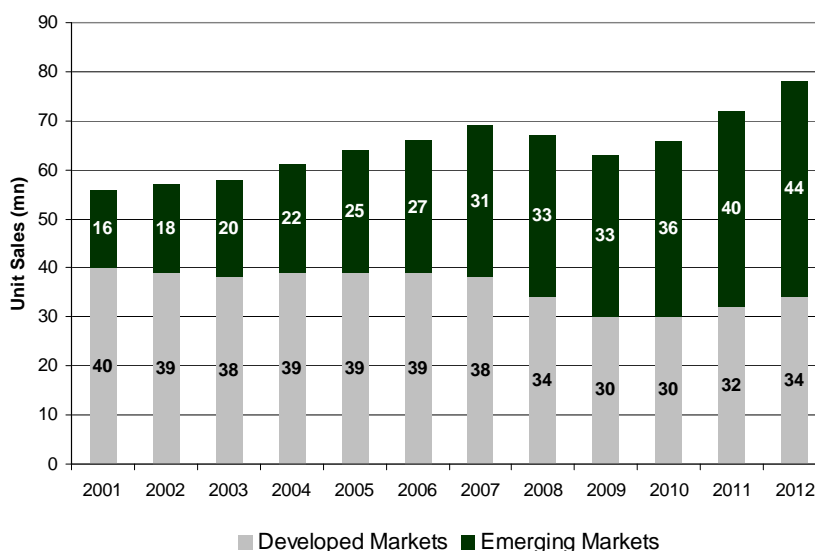
The plan also provides guidance on the composition of automobile production for the Chinese market: small passenger cars with engine displacement of under 1.5 litres are to account for more than 40% of market share, while cars under 1.1 litres, will comprise over 15% of the market. To this end, China has halved the purchase taxes for small cars and started to encourage auto consumption in rural areas with government subsidies. Domestic automakers dominate the smaller-engine auto markets, the plan will help domestic automakers to gain more market share and strengthen their brand and technology base.

The plan also calls for the overall improvement in automotive technologies, including greater fuel efficiency and development of new energy sources, as well as safety features. Support and fiscal incentives from the central government, local provinces and municipalities have spurred a surge in projects to produce alternative energy vehicles and technologies. The Shenzhen city government has announced fiscal support for BYD, the car manufacturing subsidiary of one of the world's largest battery manufacturers. Warren Buffet's investment firm, Berkshire Hathaway, bought a 10% stake in BYD in 2008. The company manufactures electric, dual mode and standard gasoline-powered vehicles. Nissan has signed up to produce an all electric car with Dongfeng by 2011 and assist the government with the building and maintenance of electric car charging facilities in key cities within China

Alternative energy vehicles have strong support from governments at all levels in China. Anyone who buys an electric car will be given a subsidy ranging from RMB3000 to RMB60,000 (i.e. as much as USD8,000 per vehicle) with a target of 500,000 electric vehicles by 2011 (i.e. about 5% of the market) and 10-15% of the market by 2020. Both China and India would like to exploit and rapidly adopt new technologies in the hope of leapfrogging mature countries that are unlikely to experience the same dramatic growth levels in the future.

BRICs countries have already surpassed the developed countries as the world's largest auto markets since 2009. Low penetration rates, rise of the middle-class and improving infrastructure will drive auto sales in BRICs countries. As we already have seen from the example in Korea of Hyundai-Kia and in India with Tata Motors (who bought Jaguar/Landrover), we could see Chinese automakers increasingly extend their footprints into the international markets.

Emerging markets have become the largest auto market from 2009
Sales split between developed and emerging markets



Source: Historic data from Goldman Sachs Research, future sales based on Goldman Sachs projections.



2010 China developments

In the first 2 months of 2010 sales of smaller vehicles, sales to tier 3 cities and thus local brand sales have continued to rise such that their market share is now almost 50% with total sales of over 1m vehicles in January and February. We expect this trend to continue which will benefit these local branded producers who have aggressively expanded capacity. Foreign joint ventures are focussed on medium sized cars and have restricted capacity expansion after over expanding in 2004/5. The capacity expansion in the smaller car segment could result in pricing pressure in 2011, but increasing volumes should expand returns on equity unless subsidy removal leads to a reduction in sales (as forecast in the west). We believe this unlikely given rising wages, low car ownership, aggressive sales and better roads.