
The Socioeconomic Situation Surrounding the Automobile Industry

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1 Introduction

The global economy suffered a major slowdown in 2009 due to the financial crisis that echoed around the world in the wake of the collapse of the Lehman Brothers financial services firm in the autumn of 2008. Although the first half of 2010 saw a return to growth, the downturn then returned in the second part of the year. As a result, despite an overall negative trend at the beginning of 2012, there were signs by the end of the year indicating that the global economy had bottomed out.

The U.S. economy enjoyed a gradual recovery. Countering weaker production and lower investment by the corporate sector due to concerns about the government's financial policies (the so-called fiscal cliff), robust personal consumption and greater investment in home building due to an uptick in the housing market dragged the economy upward.

The European economy remained in the doldrums despite a reduction of the risk created by the debt crisis. Lower domestic demand in Southern European countries caused by severe fiscal austerity acted to prolong the poor economic situation. Worsening external factors such as the economic problems in Southern Europe and weakening emerging markets also had a knock-on effect on the German economy. In contrast, the real economic growth rate in the UK increased in the July-to-October quarter in 2012, the first upturn for four quarters. However, this was a temporary boost due to the London Olympics and the annual rate of growth was lower than the previous year.

In China, the real economic growth rate fell for the second successive year. This was mainly caused by lower growth in personal consumption due to fiscal tightening implemented up to the middle of 2011 to control inflation, as well as by a slowdown in exports to developed countries. In reaction, the government implemented stimulus measures such as reforming the tax-

ation system and lowering vehicle duty (by applying tax incentives for energy-saving and new energy vehicles) from the autumn of 2011 to April 2012. The government also implemented additional measures to stimulate consumption from May 2012, such as lowering interest rates, providing incentives to buy energy-efficient electric appliances, expanding investment in the public sector, and so on. As a result, the real economic growth rate for October to December 2012 increased for the first time in eight quarters, indicating that the economy is showing signs of recovery.

Economic slowdowns in Brazil, Russia, and India continued due to worsening external demand as a result of the sluggish global economy. These countries were particularly affected by the weak economies in Europe. Lower internal demand due to the effects of high inflation also affected the economies in these countries.

The economies of the ASEAN countries remained relatively robust despite the global economic slowdown. Overall growth was maintained by internal demand that compensated for a reduction in exports.

The Japanese economy showed signs of strength due to reconstruction demand after the earthquake and tsunami, the incentive system for environmentally friendly vehicles, and so on. However, vehicle sales fell after the incentive system ended in September. Combined with worsening external demand, economic growth was negative for three successive quarters after April 2012. Despite this, there were signs that the economy had bottomed out in November. However, certain risk factors remain for the future, such as the effects of a worsening in Japan-China relations due to the dispute over the Senkaku/Diaoyu Islands on external demand.

In this economic environment, overall vehicle sales were up, with slight decreases in Europe offset by recovery in the U.S., China and other emerging markets, and Japan.

Table1 Real economic growth rate in major countries.

	2009	2010	2011	2012
Japan	-6.3%	4.4%	-0.6%	2.0%
U.S.	-2.6%	3.0%	1.8%	2.2%
Euro zone	-4.1%	1.9%	1.4%	-0.6%
Germany	-4.7%	3.6%	3.1%	0.9%
France	-2.5%	1.4%	1.7%	0.0%
Italy	-5.2%	1.8%	0.4%	-2.4%
UK	-4.9%	2.1%	0.9%	0.2%
China	9.2%	10.4%	9.3%	7.8%
India	6.8%	10.6%	7.7%	4.0%
Brazil	-0.6%	7.5%	2.7%	0.9%
Russia	-7.8%	4.3%	4.3%	3.4%

Source : IMF World Economic Outlook (April 2013)

2 Political and Economic Situation

2.1. The global economy (Table 1)

The global economy grew by 3.2% in 2012, continuing the downward trend from the rate of 4.0% recorded in 2011. Economic activity weakened due to fiscal austerity implemented as Europe's debt problem deepened. The economies of emerging markets also slowed due to lower exports to Europe as the economic situation there worsened, as well as due to fiscal tightening. The U.S. economy gradually picked up due to signs of recovery in the key housing market.

2.1.1. U.S.

In the U.S., the real economic growth rate recovered gradually to 2.2% in 2012 from 1.8% in 2011.

This was mainly due to stabilization of the financial markets and an upturn in the housing market. Japanese automakers also contributed to this improvement by restoring supply chains disrupted by the earthquake and tsunami in Japan in 2011, thereby resolving the production restrictions in their North American plants. U.S. production of natural gas expanded greatly, led by the exploitation of shale gas reserves. As a result, U.S. energy costs have fallen below those in other countries. This natural gas effect also had a positive influence on the industrial sector by helping to reduce manufacturing costs through lower raw material and electricity prices, thereby boosting the competitiveness of North American production. This helped to increase demand for American-manufactured goods both inside and outside the U.S., which increased the proportion of exports within overall GDP (i.e., the export dependency of the economy) above the level before the global financial crisis. At the end of 2012, the government extended the tax cuts introduced by Bush Administration for another two years and

froze the sequestration of government spending for two months. This prevented the economy from falling over the fiscal cliff and avoided an economic crisis. However, these measures simply delayed the onset of economic crisis and actions to address the fundamental issues must be taken in the future.

2.1.2. Europe

The financial problems in Greece, which came to the fore in October 2009, continued, dragging down the whole European economy. Internal demand, such as personal consumption continued to weaken and the real economic growth rate in 2012 was -0.6%. Future recovery remains unlikely. This situation is the result of fiscal austerity and the poor economic situation in Southern European countries. This is causing an increase in unemployment and a further rise in non-performing loans, which in turn, are depressing internal demand. In addition, Germany, which plays a central role in the European economy, also began to feel the effects of the situation around Europe. However, previous half-hearted efforts by European countries to help the economies of Southern European countries were supplemented by bond purchasing measures and the European Stability Mechanism (ESM) after the autumn of 2012, which gave the heavily indebted countries of Southern Europe a way to procure funds. In addition, the European Central bank (ECB) is also pushing forward with the idea of unified supervision of the banking system to build a more stable financial foundation. However, it will require a certain amount of time before the full effect of these crisis measures is felt and the unsettling elements in the European economy will not completely disappear.

2.1.3. China

In 2012, the real economic growth rate was 7.8%, down from the 9.3% recorded in the previous year. However, growth increased at the end of 2012, showing signs that the economy is picking up. One possible reason for this positive development was higher domestic demand caused by wage growth inside China. Although the central bank (the People's Bank of China) continued with its program of monetary easing, companies in the unsettled real-estate sector and manufacturers with a surplus of production equipment were more circumspect about investment. As a result, a substantial recovery is not likely in the future. In November 2012, Xi Jinping was selected as the General Secretary of the Chinese Communist Party, marking a new generation of leadership in

China after the government centering on Hu Jintao and Wen Jiabao that had been in place since 2002. The direction of the new government will be a focus of attention in the future. Based on the policies announced at the 18th National Congress of the Communist Party of China, there are expectations for investment due to increasing demand for environmentally friendly infrastructure. However, the scale of such investment will be comparatively lower than the real-estate and industrial sectors. Plants built with foreign capital are increasingly shifting toward emerging markets with lower labor costs such as Indonesia and the like, creating concerns about adverse effects on the Chinese economy.

2.1.4. Emerging markets

In Brazil, the real economic growth rate in 2012 was 0.9%, a further reduction from the 2.7% recorded in the previous year. Inflation has continued at a high level since 2011. Brazil has close trade and financial ties with Europe and is strongly affected by the uncertainty in the European economy that is continuing to drag on.

In Russia, the real economic growth rate in 2012 was 3.4%, down from the 4.3% recorded in the previous year. This was caused by lower domestic demand and sluggish exports to key western European countries. In addition, poor weather in 2012 resulted in a greatly reduced harvest, boosting food prices and causing a spike in inflation. The competitiveness of Russian companies is also declining due to rising prices and wages. Energy is Russia's main export but this sector was overshadowed by lower demand in economically slowing European countries.

In India, the real economic growth rate fell from 7.7% in 2011 to 4.0% in 2012, prolonging the economic slowdown. Concerned about an expanding budget deficit and accelerating inflation, the Indian government decided not to implement active financial and monetary policies. As a result, high interest rates resulted in a continuing downswing, primarily focused on capital investment and the consumption of durable goods. At the same time, India's mainstay precious metal exports fell due to the worsening of the economic situation in Europe. Exports of machinery, vehicles, and the like to the Middle East were also down. Realizing the need to address this situation, the government implemented a number of economic reform measures starting in September 2012 to boost productivity. These included reducing the budget deficit by lowering subsidies on diesel oil and the like and selling off shares in public utilities, as well as easing re-

strictions on foreign investment, and so on. As a result, although share prices increased and the depreciation of the rupee was halted, high inflation remains a concern. The Indian economy is looking for a recovery in external demand since the outlook for higher spending on domestic public works projects remains slim due to the substantial budget deficit.

In the five ASEAN countries, internal demand remained robust, primarily in Thailand and Indonesia. In Thailand, the economy grew by 6.4% as it recovered from the flood damage. The export powerhouse of resource-rich Indonesia grew by 6.2%.

2.2. The Japanese economy

In 2011, the real economic growth rate was -0.6% due to the effects of the Great East Japan Earthquake and so on. 2012 saw a turnaround and positive growth of 2.0%. Domestic demand was robust due to recovery from the earthquake and tsunami, higher vehicle sales due to the incentive system for environmentally friendly vehicles, and so on.

However, Japan's trade deficit in 2012 was 6.9307 trillion yen, due to lower exports to Europe and China, and rising import prices for liquid natural gas (LNG) and crude oil.

Furthermore, bills related to the integrated reform of the social security and tax systems, centered on an increase in the Consumption Tax, were passed in August 2012. In December, Prime Minister Abe formed a new government, with power passing from the Democratic Party of Japan (DPJ) to the Liberal Democratic Party of Japan (LDP). This new government is expected to introduce financial and monetary policies to boost the economy. It is also likely to bring a new focus on external diplomacy, such as by entering into negotiations to join the Trans-Pacific Partnership (TPP), which is closely relevant to the automotive industry.

3 Current Situation of the Automotive Industry

3.1. Inside Japan (Tables 2 and 3)

New vehicle sales in 2013 were 5.37 million units (127.5% of the previous year). In the first half of the year, demand was stimulated by the preferential tax scheme and incentive system for environmentally friendly vehicles, resulting in a major increase in sales compared to the previous year, which had been badly affected by the earthquake and tsunami. In the second half of the

Table2 Sales trends in Japanese vehicle market.

Unit: 1,000 vehicles

	2008		2009		2010		2011		2012	
	Volume	% of previous year								
Total	5 082	94.9%	4 609	90.7%	4 956	107.5%	4 210	84.9%	5 370	127.5%
Registered vehicles	3 212	93.5%	2 921	90.9%	3 230	110.6%	2 689	83.3%	3 390	126.1%
Passenger cars	2 801	94.8%	2 640	94.3%	2 928	110.9%	2 386	81.5%	3 015	126.3%
Standard	1 251	96.3%	1 160	92.7%	1 420	122.4%	1 140	80.3%	1 412	123.8%
Small	1 550	93.7%	1 480	95.5%	1 508	101.9%	1 246	82.7%	1 603	128.6%
Trucks	396	85.2%	268	67.7%	289	108.0%	292	101.1%	364	124.4%
Standard	147	85.3%	88	59.8%	102	115.6%	107	105.5%	136	127.1%
Small	250	85.2%	181	72.3%	188	103.7%	185	98.6%	227	122.8%
Buses	15	98.2%	13	82.0%	13	98.3%	11	83.4%	12	112.1%
Mini-vehicles	1 870	97.4%	1 688	90.3%	1 726	102.3%	1 521	88.1%	1 979	130.1%
Passenger cars	1 427	98.6%	1 283	89.9%	1 285	100.1%	1 139	88.6%	1 558	136.8%
Trucks	443	93.7%	405	91.4%	442	109.1%	382	86.6%	422	110.3%

Source: Monthly Statistics of the Japan Automobile Manufacturers Association (JAMA)

Table3 Trends of vehicle imports to Japan.

Unit: vehicles

	Passenger vehicles		Commercial vehicles		Total	
	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year
2000	267 767	98.6%	7 685	113.2%	275 452	99.0%
2001	268 560	100.3%	6 719	87.4%	275 279	99.9%
2002	272 994	101.7%	4 071	60.6%	277 065	100.6%
2003	275 194	100.8%	3 610	88.7%	278 804	100.6%
2004	269 198	97.8%	3 682	102.0%	272 880	97.9%
2005	264 729	98.3%	3 383	91.9%	268 112	98.3%
2006	259 562	98.0%	2 712	80.2%	262 274	97.8%
2007	262 996	101.3%	2 090	77.1%	265 086	101.1%
2008	206 278	78.4%	12 953	619.8%	219 231	82.7%
2009	167 889	81.4%	10 638	82.1%	178 527	81.4%
2010	213 283	127.0%	11 800	110.9%	225 083	126.1%
2011	260 707	122.2%	14 937	126.6%	275 644	122.5%
2012	300 594	115.3%	15 399	103.1%	315 993	114.6%

Source: Statistics of the Japan Automobile Importers Association (JAIA)

year, sales remained unchanged compared to the previous year after the incentive system for environmentally friendly vehicles came to a conclusion toward the end of September. As a result, sales for the while year were substantially higher than 2011.

Sales of imported vehicles increased by 114.6% to 316,000 vehicles. In this total, sales by non-Japanese manufacturers increased by 117.3% to 242,000 vehicles and sales of vehicles produced outside Japan by Japanese manufacturers increased by 106.7% to 74,000 vehicles.

The new products launched in 2012 included a number of mini-vehicles with a fuel economy of more than 30 km/L (according to the JC08 test cycle) as well as environmentally friendly full-sized vehicles that approached

the 30 km/L figure. The popularization of environmentally friendly vehicles was further underlined by the launch of enhanced and new electric, hybrid, and plug-in hybrid models.

Despite the continuation of the preferential tax scheme for environmentally friendly vehicles, the outlook for 2013 is uncertain because of the ending of the environmental incentives. In the long-term, there are concerns that demand will contract due to a falling and aging population, as well as an increasing lack of interest in cars by young people.

3.2. Outside Japan (Table 4)

3.2.1. U.S.

Due to continuing recovery from the economic down-

Table4 Region-by-region trends of vehicle exports from Japan.

Unit: 1,000 vehicles

	2008		2009		2010		2011		2012	
	Volume	% of previous year								
Total	6 727	102.7%	3 616	53.8%	4 838	133.8%	4 464	92.4%	4 801	107.5%
North America	2 318	94.4%	1 379	59.5%	1 727	125.3%	1 585	91.8%	1 886	119.0%
Europe	1 589	106.1%	685	43.1%	936	136.7%	995	106.3%	849	85.3%
Central and South America	518	90.9%	244	47.1%	396	162.5%	358	90.4%	347	96.8%
Africa	352	106.3%	145	41.2%	189	130.1%	149	78.8%	168	113.3%
Middle East	953	117.4%	428	44.9%	584	136.4%	420	71.9%	526	125.3%
Asia	525	119.0%	379	72.2%	573	151.3%	572	99.3%	571	99.7%
Oceania	461	106.2%	348	75.5%	425	122.2%	380	89.3%	449	118.2%
Other	12	133.3%	8	66.7%	7	89.8%	5	68.5%	5	110.8%

Source: Monthly Statistics of the Japan Automobile Manufacturers Association (JAMA)

turn caused by the financial crisis, vehicle sales in 2012 in the U.S. reached 14.79 million units (113.4% of the previous year), the third successive year-on-year increase. Positive factors included pent-up demand from the period of the financial crisis and lower gas prices. However, consumers continued to prioritize economy in their purchases, as evidenced by the increase in the compact and small car segments.

Based on the nationality of the automaker, sales by U.S. manufacturers increased by 107.6% to 6.45 million vehicles (share: 44.5%), sales by European manufacturers increased by 120.9% to 1.44 million vehicles (share: 10%), and sales by Korean manufacturers, which saw a major expansion in 2011, increased by 111.4% to 1.26 million vehicles (share: 8.7%). Sales by Japanese manufacturers, which fell in 2011, increased by 119.9% to 5.34 million vehicles (share: 36.9%).

3. 2. 2. Europe

Vehicle sales in the 18 countries of Western Europe in 2012 decreased to 13.42 million units (91.4% of the previous year). Due to the market downturn caused by the prolonged European debt crisis, sales fell in four out of the five major countries. Although sales increased in the UK (103.9%), Italy (79.0%), Spain (84.7%), France (86.7%), and Southern European countries were particularly affected. Car scrapping incentive schemes launched by various governments to offset the struggling economic caused by the financial crisis went some way to support demand. However, the economic downturn that accompanied the debt crisis meant that some cars could not be sold even at discounted prices, exacerbating the problem of excess production capacity.

In Russia, vehicle sales in 2012 increased to 2.94 million units (110.6% of the previous year), although the rate of increase did not match that in 2011 (138.7%). The vehicle

market remained strong due to Russia joining the World Trade Organization (WTO) in August and because of the trade surplus caused by stable high energy prices, such as for crude oil and the like. However, the market stalled after October due to the effects of the European debt crisis in the second half of the year.

3. 2. 3. China

In China, vehicle sales in 2012 increased to 19.30 million units (104.3% of the previous year), cementing China's status as the world's largest vehicle market. However, the market has not grown strongly since 2009 and decreasing plant utilization rates is becoming an issue as manufacturers increase production capacity to match the expansion of the market.

3. 2. 4. Asia

Vehicle sales in India, South Korea, Taiwan, the ASEAN countries, and Pakistan increased to 9.09 million units (113.8% of the previous year).

Of these countries, sales grew particularly strongly in Thailand to 1.42 million vehicles (179.3% of the previous year), as a result of increased demand for compact vehicles reflecting the government's preferential tax scheme for fuel-efficient smaller models.

Following on from 2011, vehicle sales in some countries continued to grow robustly. For example, sales in India increased by 108.8% to 3.58 million vehicles, sales in Indonesia increased by 125.0% to 1.12 million vehicles, sales in the Philippines increased by 110.6% to 160,000 vehicles, and sales in Malaysia increased by 104.6% to 630,000 vehicles. In contrast, vehicles sales in other countries fell. Sales in South Korea decreased to 1.56 million vehicles (97.9% of the previous year), sales in Taiwan decreased to 370,000 vehicles (96.7%), sales in Pakistan decreased to 160,000 vehicles (96.8%), sales in Vietnam decreased to 80,000 vehicles (73.4%), and sales in Singapore decreased

Table5 Production trends in Japanese vehicle market.

Unit: 1,000 vehicles

	2008		2009		2010		2011		2012	
	Volume	% of previous year								
Total	11 596	101.0%	7 935	68.5%	9 629	121.3%	8 399	87.2%	9 943	118.4%
Registered vehicles	9 701	102.9%	6 279	64.7%	7 874	125.4%	6 893	87.5%	7 920	114.9%
Passenger cars	8 503	103.5%	5 605	65.9%	7 006	125.0%	6 042	86.2%	6 939	114.8%
Standard	5 864	119.3%	3 460	59.8%	4 846	140.1%	4 180	86.3%	4 686	112.1%
Small	2 639	79.9%	2 145	79.0%	2 159	100.7%	1 861	86.2%	2 253	121.0%
Trucks	1 084	96.9%	587	55.1%	759	129.3%	747	98.4%	859	115.0%
Standard	719	102.8%	372	50.6%	521	140.1%	512	98.3%	583	113.8%
Small	366	87.2%	215	65.2%	239	111.2%	235	98.3%	276	117.7%
Buses	114	128.2%	87	62.6%	109	125.3%	104	95.4%	122	117.4%
Mini-vehicles	1 895	92.0%	1 656	88.5%	1 755	106.0%	1 506	85.8%	2 023	134.3%
Passenger cars	1 441	93.8%	1 257	88.1%	1 305	103.8%	1 117	85.6%	1 615	144.6%
Trucks	454	86.9%	398	89.6%	450	113.1%	389	86.4%	407	104.6%

Source: Monthly Statistics of the Japan Automobile Manufacturers Association (JAMA)

Table6 Production trends of Japanese automakers outside Japan.

Unit: 1,000 vehicles

	2008		2009		2010		2011		2012	
	Volume	% of previous year								
Total	11 652	98.2%	10 118	86.8%	13 181	130.3%	13 384	101.5%	15 825	118.2%
North America	3 576	88.3%	2 688	75.2%	3 390	126.1%	3 069	90.5%	4 254	138.6%
Europe	1 876	94.9%	1 228	65.5%	1 356	110.4%	1 411	104.1%	1 484	105.2%
Asia	4 877	107.8%	5 145	105.5%	7 127	138.5%	7 546	105.9%	8 503	112.7%
Central and South America	921	102.9%	791	85.9%	982	124.1%	1 030	104.9%	1 235	119.9%
Other	401	96.6%	265	66.1%	326	123.0%	327	100.3%	350	106.9%

Source: Monthly Statistics of the Japan Automobile Manufacturers Association (JAMA)

to 17,000 vehicles (80.8%).

3.2.5. Other markets

Vehicle sales in Brazil increased by 104.7% to 3.80 million vehicles, a higher rate of growth than the 103.4% recorded in 2011. Since the appreciation of the real adversely affected the competitiveness of the domestic automotive industry, the government introduced the Industrial Products Tax (IPI) as a protection measure. Various automakers declared their intention to boost capacity in Brazil and to launch new models. Automakers are forecasting that a domestic demand-driven economy will lead to the mid- to long-term expansion of the vehicle market

In Turkey, the vehicle market expanded for four consecutive years from 2008. However, in 2012, sales fell to 818,000 vehicles (89.8% of the previous year), falling back to 2010 levels. One of the reasons for this drop was the increase in the Special Consumption Tax (SCT) in September. However, the effects of this increase are ex-

pected to be temporary and the market is highly likely to recover.

Vehicle sales in Australia reached a record high of 1.11 million vehicles (110.3% of the previous year), the third successive year that sales exceeded the one million mark. This was achieved due to the robust domestic economy, lower interest rates for vehicle loans, and the resolution of supply issues by Japanese manufacturers.

3.3. Production (Tables 5 and 6)

Stimulated by domestic demand due to government measures such as the preferential tax scheme and incentive system for environmentally friendly vehicles, production in Japan in 2012 up to August increased by 140.7% to 6.98 million units. However, production fell from September and the total figure for the whole year was 9.94 million units (118.4% of the previous year). However, the production of mini-vehicles continued to increase throughout the year, reaching 1.62 million units

(144.6% of the previous year).

In addition to the preferential tax scheme and incentive system for environmentally friendly vehicles, truck and bus production was also boosted by recovery after the earthquake and tsunami, pent-up demand, and increase in North America after a drop in 2011. As a result, truck production increased by 115.0% to 859,000 vehicles and bus production increased by 117.4% to 122,000 vehicles.

4 Issues of the Automotive Industry —

Although markets in developed countries have recovered from the drop in sales after the global financial crisis, uncertain factors still remain, such as the slowdown caused by the debt crisis in Europe. For this reason, it is difficult to forecast major growth for these markets. In contrast, strong growth has spread from the BRICS to emerging nations such as Thailand and Indonesia. Attention is now likely to turn to resource-rich countries in Africa. Consequently, automakers will have to identify the wide-ranging needs of customers in these countries before developing appealing products that can be sold around the world and building the necessary production systems.

In addition, automakers are facing greater demands on their limited business resources for increasingly diverse technological development. For example, automakers must adapt to new energy supply flows, such as the use of the shale gas resources that is being actively promoted in the U.S., vehicle electrification through the introduction of electric, hybrid, plug-in hybrid, and fuel cell vehicles, new powertrain technologies such as engine downsizing using turbochargers and clean diesel engines, as well as new telematics services. The automotive industry will have to develop ways of addressing these issues, including the idea of forming alliances with other companies.

The appreciation of the yen saw a continued shift of production by all automakers outside Japan. The new Japanese government has taken action to help reverse this trend and has also made positive steps toward participation in the TPP. A revision of industrial strategy will be an urgent task.

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