THE SOCIOECONOMIC SITUATION SURROUNDING THE AUTOMOBILE INDUSTRY

1 Introduction

Over the past six years the global economy has fallen into a serious crisis on two separate occasions, first, the global financial crisis, and then the European debt crisis. These crises caused the economies of the major developed countries to fall significantly, but during this same period, emerging markets, such as China and the ASEAN nations, showed strong economic growth and this growth largely drove the global economy forward.

The growth of the global economy slowed down in 2012 due to the effects of the European government debt crisis, but after this it seemed to recover at a gradual pace.

In 2014, weakness was seen in the economies of China and some other emerging markets, but the recovery of the U.S. economy and improvements in Europe allowed an overall moderate recovery to continue centered on developed markets. However, a significant decline in crude oil prices in the second half of the year caused a rapid deceleration in the economies of some resource-rich countries, especially Russia.

On a region-by-region basis, the real GDP growth rate in the U.S. showed its most significant decline since the financial crisis between January and March of 2014 due to the effects of a major cold wave during the early spring. However, steady expansion continued after this, led by private sector demand. In Europe, there were growing concerns about deflation due to the increasing weakness in domestic demand. Therefore, the European Central Bank (ECB) continued to implement a series of monetary easing measures to promote a weaker euro and dispel deflationary pressure.

China continues to implement changes to the economic conditions that have supported its strong growth to try and address the various economic distortions that have accompanied this growth, such as rising wages, excessive accumulation of capital stock, and serious air pollution problems. New policies that aim to achieve both economic structural reforms and economic growth as the "new normal" were hammered out at the Central Economic Work Conference in December. It is thought that the Chinese government will continue to tolerate this economic slowdown, but there is also a need to quickly implement various economic structural reforms to achieve more stable growth, such as reducing excessive capital investment and avoiding an overheated real estate market.

The economies of emerging markets remained basically stagnant as governments raised interest rates in anticipation of the end of the third round of quantitative monetary easing (QE3) by the U.S. This has led to growing public discontent and a series of changes of government, especially in leading emerging nations such as India and Indonesia.

Given this economic environment, the vehicle market in 2014 continued grow gradually and even the U.S. market, which was greatly depressed by the global financial crisis that occurred in the wake of the collapse of the Lehman Brothers financial services firm, rebounded in 2014 to exceed the 15.6 million vehicles that were sold in 2013. In contrast, the world's largest vehicle market of China slowed to single digit growth and the Japanese market continues to be stagnant following the increase in the consumption tax. In addition, negative market growth was seen across the board in countries such as Thailand, Russia, and Brazil, so there are great differences in the vehicle markets in different regions.

2 Political and Economic Situation

2. 1. The global economy (Table 1)

In April 2015, the International Monetary Fund (IMF) announced that the 2014 global economic growth rate was an average of 3.4%, unchanged from the rate in 2013.

As China makes efforts to transition from high to stable growth, the continued self-sustaining economic re-

Table 1 Real economic growth rates in major countries.

	2009	2010	2011	2012	2013	2014
Japan	−6.3%	4.4%	−0.6%	1.4%	1.6%	−0.0%
U.S.	−2.6%	3.0%	1.8%	2.8%	2.2%	2.4%
Euro zone	−4.1%	1.9%	1.4%	−0.7%	−0.5%	0.9%
Germany	−4.7%	3.6%	3.1%	0.9%	0.2%	1.6%
France	−2.5%	1.4%	1.7%	0.0%	0.3%	0.4%
Italy	−5.2%	1.8%	0.4%	−2.4%	−1.7%	−0.4%
Spain			0.4%	−1.6%	−1.2%	1.4%
UK	−4.9%	2.1%	0.9%	0.3%	1.7%	2.6%
China	6.8%	10.4%	9.3%	7.7%	7.8%	7.4%
India	−0.6%	10.5%	7.7%	4.7%	6.9%	7.2%
Brazil	−0.6%	7.5%	2.7%	1.0%	2.7%	0.1%
Russia	−7.8%	4.3%	4.3%	3.4%	1.3%	0.6%

Source: IMF World Economic Outlook (April 2014 , April 2015)

covery in the U.S. economy provided underlying support for a continuing overall gradual recovery. However, the major drop in crude oil prices during the second half of 2014 caused an economic deceleration in some resource-rich countries, especially Russia. Since this is increasing concerns about an economic slowdown in Europe, which has strong economic ties to Russia, uncertainty about the direction of the world economy has intensified.

2. 1. 1. U.S.

In the U.S., the real economic growth rate in 2014 was 2.4%, marking moderate growth compared to the rate of 2.2% in 2013.

Despite the negative growth between January and March of 2014 due to the heavy snows and cold wave that swept much of the country, there was relatively high growth from April to June onward, indicating an accelerating economic recovery. Six years have passed since the great recession resulting from the financial crisis. During that time, various economic measures were implemented through bold monetary easing to help boost various economic indicators, such as stock prices, capital investment, and employment. Vehicles sales in 2014 reached 16.52 million (up 5.9% from the previous year), exceeding the 16.15 million sales in 2007, indicating that the market has recovered to the level before the financial crisis. Furthermore, the amount of excessive debt held by households, which was a major encumbrance on economic recovery, fell, while rising stock and home prices have increased the value of assets. This has also helped improve the balance sheets of many households. This self-sustaining recovery of the U.S. economy is widely expected to continue in 2015, but it will be necessary to pay attention to the impact that rising interest rates and the end of monetary easing will have on the economy.

2. 1. 2. Europe

The real economic growth rate in Europe (euro zone) in 2014 was 0.9%, the first positive growth in three years. Germany continued to support the wider European economy, achieving a real economic growth rate in 2014 of 1.6%, the highest level for three years. Although there were economic headwinds generated by the Russia-Ukraine crisis, the German economy was supported by domestic demand, mainly due to consumer spending and strong exports. These are expected to continue to be the main pillars of the German economy in 2015 as well.

Economic stagnation continues in France and Italy, but economies are recovering steadily in Spain and Portugal thanks to expanding exports due to lower labor costs. However, there are disparities in the pace of economic recovery amongst the countries of southern Europe.

In contrast, continued economic recovery in the UK is being driven by consumer confidence thanks to rising home and stock prices. In its winter economic forecast on February 5, 2015, the European Commission forecasted a real GDP growth rate in the EU in 2015 of 1.7%. Although there are positive elements, such as the drop in crude oil prices and the introduction of the quantitative easing policy by the European Central Bank (ECB), there are also economic risks to consider, such as the debt crisis in Greece, the continuing unrest in the Ukraine, and the economic slowdown in China, which is a major destination for European exports. It will also be necessary to closely watch the future implementation of fiscal and structural reforms in EU member states.

2. 1. 3. China

The real economic growth rate in China in 2014 was 7.4%, slightly lower than the rate of 7.8% in 2013. It also was lower than the target growth rate of 7.5% that was set by the government for 2014. In fact, this was the first time in 16 years since the Asian currency crisis in 1998 that economic growth was lower than the government's target. The Chinese government is promoting structural reforms to eliminate excess production and equipment, excess credit, and the like, with the aim of stabilizing growth, and has been implementing policy management with an emphasis on the quality of economic growth. Since taking office, Prime Minister Li Keqiang has guided efforts to make structural reforms and transition from an investment-dependent economy to one driven by consumer spending, without the need for any hasty monetary easing. The state in which the economy slows down and stabilizes from high to medium/low-speed growth is being called the "new normal" by the Chinese government. It is thought that the real economic growth rate in 2014 fell almost exactly within the desired range. However, as economic growth has slowed, the problems brought on by excess production and credit due to the previous growth-at-all cost policies have become obvious. Therefore, from 2015, the Chinese government is likely to continue prioritizing stable growth and see how far economic reforms can be implemented.

2. 1. 4. Emerging markets

In Brazil the real economic growth rate in 2014 was 0.1%, a major slowdown from the 2013 rate of 2.7%.

This downturn is being driven by inflation due to currency depreciation and sustained wage growth, and is also necessitating monetary tightening. This downturn is predicted to continue in 2015.

In the presidential election held in October 2014, the incumbent president, Dilma Rousseff, was re-elected by a narrow margin and there is still uncertainty about the prospects for urgently needed financial reforms.

The appointment of new Finance Minister, Joaquim Levy, who will focus on instilling fiscal discipline, has been well received, but there are still concerns about a further downward swing in the economy due to the external environment in 2015, such as possible changes in U.S. monetary policy and declining prices for natural resources.

In Russia, the real economic growth rate in 2014 was 0.6%, a further slowdown from the 2013 rate of 1.3%. In addition to stagnant new investment continuing from 2013, more stringent economic sanctions imposed by the U.S. and Europe over the situation in the Ukraine, a significant decline in crude oil prices, and a historic depreciation of the ruble are affecting the economy. These factors resulted in falling production, investment, and consumption across the board in Russia.

An urgent issue for the Russian government is to prevent a vicious cycle of currency depreciation and increasing inflation. Therefore, the central bank has no choice but to maintain its current monetary tightening stance and, as a result, investment in Russia is expected to slow down even further. It is also thought that the decline in real income due to this inflation will cause consumer spending to continue to remain stagnant.

The Indian government announced on February 9, 2015 that the real GDP growth rate for the third quarter of the 2014 fiscal year (October to December 2014) was 7.5% compared to the same quarter of the previous year. The government changed the calculation base year for the GDP growth rate at the end of January, and this was the first announcement using this new standard. At the same time the estimated growth rate for the full FY 2014 was announced to be 7.4%, the first time since FY 2011 that the growth rate in India exceeded 7%, even under the old calculation standard. Inflation in India has trended downward since the start of Prime Minister Modi's administration, thanks in part to the drop in crude oil prices, and it is expected that consumer spending will recover as real incomes increase in the future. Furthermore, the Reserve Bank of India (the central bank) cut interest rates in January, which is expected to encourage corporate investment. In contrast, there are also concerns that a divided Indian Parliament (opposition parties control a majority of the upper house) will become a major roadblock to needed financial reforms.

In the ASEAN nations, the real GDP growth rate in Thailand during the fourth quarter increased 2.3% compared to 0.6% in the same quarter in the previous year, indicating a significant recovery. This improvement was driven in part by a rise in exports, which were up 4.9% compared to the same period in the previous year (exports were down by 3.8% in the same period of the previous year). In contrast, consumer spending weakened due to high levels of household debt and a slump in prices for agricultural products. Capital investment was also sluggish, resulting in a full-year 2014 growth rate of 0.7% that was below the growth rate of 2.9% in the previous year. In 2015, a gradual consumption and investment-led recovery is expected in response to political stabilization and fiscal stimulus. In addition, lower crude oil prices compared to the previous year are also likely to become a boon to the economy.

In Indonesia, the real GDP growth rate for 2014 was 5.02%, lower than the rate of 5.58% recorded in the previous year. The main cause of this slowdown is a downturn in domestic demand and exports. Enthusiasm for new investment has been dulled by continued uncertainty about the direction of government policies and high interest rates. The downturn in exports is being caused by lower commodity prices, such as for natural gas, due to export restriction measures on raw ore and low crude oil prices. Consumption has slowed down due to inflationary pressure caused by the reduction of fuel subsidies and the depreciation of the rupiah. However, the Indonesian economy is expected to recover led by domestic demand as a result of the policies of the new government and the effects of low crude oil prices. The government is predicting a real GDP growth rate of 5.7% in 2015 and a strong recovery in the Indonesian economy is expected for 2015 and on.

2. 2. The Japanese economy

Although the real GDP growth rate for the calendar year of 2014 was 0.0%, fourth quarter growth was 0.4% compared to the previous quarter. This was an annualized increase of 1.5% and the first positive growth in three quarters. Exports are picking up due to the weak yen, but there has been only a gradual recovery in consumer spending. This is due to the fact that incomes have not caught up to the rise in commodity prices, including higher import prices and the effects of the consumption tax hike. Even though corporate capital investment has increased slightly, there is a definite lack of momentum in both this and consumer spending.

Large-scale monetary easing and the postponement of the next increase in the consumption tax suggest that gradual recovery is expected to continue in 2015. Accordingly, corporate results, especially those of export-related companies, are expected to recover due to the weak yen and factors such as low crude oil prices, which should have a positive effect on the overall economy as well. The Abenomics policies implemented by Prime Minister Abe's administration since the end of 2012 seek to further promote economic growth. However, there are many issues, such as regulatory reform, that still remain. 2015 will be a year in which the true value of these policies will be tested.

3 Current Situation of the Automotive Industry

3. 1. Inside Japan (Tables 2 and 3)

New vehicle sales in 2014 were 5.563 million vehicles, an increase of 3.5% compared to the previous year, and the third successive year-on-year increase. Although sales of registered vehicles increased slightly by 0.8% to 3.290 million units, mini-vehicles continued to be the strongest sellers with 2.273 million units sold, a 7.6% increase compared to the previous year. This set a new record for mini-vehicle sales for the second consecutive year and accounted for 40.9% of all vehicles sold in Japan in 2014.

Total sales of new imported vehicles, including those from Japanese manufacturers, fell by 2.9% to approximately 336,000 units. However, sales of non-Japanese manufacturers increased by 3.4% to 290,000 units, the fifth consecutive year-on-year increase. Vehicles from non-Japanese manufacturers now account for 8.8% of all registered vehicles in Japan, indicating a growing presence in the Japanese market.

Sales of high-priced luxury vehicles were robust due to active product development by non-Japanese manufacturers and the wealth effect due to high stock prices.

New vehicles sales in 2014 indicated a poor recovery in demand for vehicles after April due to a negative reaction to the consumption tax hike. However, the last-minute demand for vehicles until March created an order backlog and continued strong sales of mini-vehicles led to an increase in the total number of vehicles sold.

Originally, another increase in consumption tax (from 8% up to 10%) was planned for 2015, but this has been postponed. The reduction in taxes on environmentally friendly vehicles that was also due to go into effect in 2015 did survive, but the criteria to qualify for these tax reductions were strengthened, so the tax burden on many vehicle models will become heavier. It will be necessary to monitor the impact of this increased tax burden on vehicle sales, including any last-minute demand prior to the changes to the tax reduction criteria and the reaction to these changes, since demand is not expected to make a full-fledged recovery after the increase in the consumption tax.

3. 2. Outside Japan (Table 4)

3. 2. 1. U.S.

Vehicle sales in the U.S. in 2014 reached 16.52 million

Table 2 Sales trends in the Japanese vehicle market.

Unit: 1,000 vehicles

	2009		2010		2011		2012		2013		2014	
	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year
Total	4 609	90.7%	4 956	107.5%	4 210	84.9%	5 370	127.5%	5 376	100.1%	5 563	103.5%
Vehicle registrations	2 921	90.9%	3 230	110.6%	2 689	83.3%	3 390	126.1%	3 263	96.2%	3 290	100.8%
Passenger cars	2 640	94.3%	2 928	110.9%	2 386	81.5%	3 015	126.3%	2 872	95.3%	2 860	99.6%
Standard	1 160	92.7%	1 420	122.4%	1 140	80.3%	1 412	123.8%	1 399	99.1%	1 438	102.8%
Small	1 480	95.5%	1 508	101.9%	1 246	82.7%	1 603	128.6%	1 473	91.9%	1 423	96.6%
Trucks	268	67.7%	289	108.0%	292	101.1%	364	124.4%	379	104.2%	418	110.2%
Standard	88	59.8%	102	115.6%	107	105.5%	136	127.1%	143	105.3%	165	115.3%
Small	181	72.3%	188	103.7%	185	98.6%	227	122.8%	236	103.9%	253	107.1%
Buses	13	82.0%	13	98.3%	11	83.4%	12	112.1%	11	93.8%	12	108.9%
Mini-vehicles	1 688	90.3%	1 726	102.3%	1 521	88.1%	1 979	130.1%	2 113	106.8%	2 273	107.6%
Standard	1 283	89.9%	1 285	100.1%	1 139	88.6%	1 558	136.8%	1 690	108.5%	1 839	108.8%
Trucks	405	91.4%	442	109.1%	382	86.6%	422	110.3%	423	100.2%	434	102.5%

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

Table 3 Trends of vehicle imports to Japan.

Unit: vehicles

	Passenger cars		Commercial vehicles		Total	
	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year
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%
2013	331 286	110.2%	14 847	96.4%	346 133	109.5%
2014	319 677	96.5%	16 283	109.7%	335 960	97.1%

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

vehicles. This was an increase of 5.9% from the 15.6 million vehicles sold in 2013 and it marked a recovery to the high level of sales prior to the global financial crisis. Sales in January and February 2014 fell due to the historic wave of cold weather, but from the middle of the year onward, sales of large vehicles were strong due to low gasoline process that increased overall vehicle demand. Based on the nationality of the automaker, sales by U.S. manufacturers increased by 6.0% compared to the previous year, sales by European manufacturers increased by 1.6%, sales by Korean manufacturers increased by 4.0%, and sales by Japanese manufacturers increased by 7.1%. As a result, the market share of Japanese automakers was 37.6%.

3. 2. 2. Europe

The number of new vehicles sold in the EU and the 30 member countries of the EFTA in 2014 was 13 million vehicles. This was an increase of 5.4% compared to the previous year and was the first rise for seven years. Within the five major European markets, sales in Germany increased by 2.9% to 3.04 million vehicles (the first increase in three years). Sales in Italy also rose by 4.2 % to 1.36 million vehicles and registered passenger vehicle sales in France also recovered slightly by 0.3% to 1.8 million vehicles. The UK reported sales of 2.48 million vehicles, 9.3% higher than the previous year and the third consecutive year-on-year increase. Spain showed the largest recovery with sales increasing by 18.4% to 860,000 vehicles.

3. 2. 3. China

Sales in China in 2014 increased by 6.9% to 23.49 million vehicles. Although down from the 13.9% increase achieved in 2013 due to the economic slowdown, China remained the largest vehicle market for the sixth con-

Table 4 Region-by-region trends of Japanese vehicle exports.

Unit: 1,000 vehicles

	2009		2010		2011		2012		2013		2014	
	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year
Total	3 616	53.8%	4 837	133.8%	4 464	92.3%	4 804	107.6%	4 675	97.3%	4 466	104.7%
North America	1 379	59.5%	1 727	125.2%	1 585	91.8%	1 886	119.0%	1 887	100.0%	1 662	113.5%
Europe	685	43.1%	936	136.6%	995	106.3%	849	85.3%	709	83.5%	744	95.3%
Central and South America	244	47.1%	396	162.3%	358	90.4%	347	96.9%	362	104.3%	306	118.4%
Africa	145	41.2%	189	130.3%	149	78.8%	168	112.8%	179	106.8%	184	97.4%
Middle East	428	44.9%	584	136.4%	420	71.9%	526	125.2%	584	111.0%	626	93.3%
Asia	379	72.2%	573	151.2%	572	99.8%	573	100.2%	540	94.3%	560	96.4%
Oceania	348	75.5%	425	122.1%	380	89.4%	449	118.2%	407	90.7%	376	108.4%
Other	8	66.7%	7	87.5%	5	71.4%	5	109.0%	5	100.0%	8	71.1%

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

secutive year. Vehicle production was 23.72 million vehicles, up 7.3% from the previous year. Sales of passenger vehicles, including strong-selling sports utility vehicles (SUVs), increased by 9.9% to 19.70 million units, while the impact of the economic slowdown caused sales of commercial vehicles to fall. The competition between Japanese, German, and U.S. manufacturers in the passenger vehicle market is becoming fiercer. Continuing from 2013, German brands held the top market share, while the share held by Japanese brands shrank. Sales of new energy vehicles (such as hybrids and fuel cell vehicles) have surged in China due to the implementation of support measures by the government and rising awareness about these vehicles in society. Sales of these vehicles increased by 323.8% from the previous year to 70,000 units.

3. 2. 4. Asia

Vehicle sales in India, Thailand, and Indonesia all decreased in 2014 compared to 2013.

In India, the administration of the new Prime Minister, Narendra Modi, was inaugurated in May 2014. Although some last-minute demand was expected when the excise tax reduction, which was due to expire at the end of July, was extended until the end of December, full-year sales in 2014 decreased by 2.0% to 3.18 million vehicles.

In contrast, the number of vehicles produced in India stayed almost the same as the previous year, falling only 1% to 3.84 million vehicles.

2014 sales in Thailand plummeted by 33.7% to 880,000 vehicles due to political turmoil and falling prices for agricultural products. However, this level of sales was second only to the level achieved in 2013 after the rapid increase in vehicles sales in 2012 due to the FIRST CAR BUYER incentive program. This program refunded the excise tax for people who purchased vehicles, but ended at the end of 2012. In addition to this significant drop in domestic vehicle sales in Thailand, sluggish growth in exports to Australia and the Middle East caused vehicle production in Thailand to fall 23.5% to 1.88 million units.

Sales in Indonesia in 2014 decreased by 1.8% to 1.21 million vehicles. These results were impacted by a slowdown in economic growth due to the depreciation of the rupiah with respect to the U.S. dollar, persistently high interest rates, and a hike in fuel prices. This was the first time in five years since the 2009 global financial crisis that sales decreased from the previous year.

In contrast, sales of low-cost green cars (LCGCs) remained strong at 172,120 vehicles, which accounted for 14.2% of the entire vehicle market. The number of vehicles produced in Indonesia in 2014 was around 1.3 million, 7% higher than the previous year. This level of production is nearly 70% of that in Thailand and the difference between the two countries is shrinking.

3. 2. 5. Other markets

New vehicle sales in Brazil in 2014 fell by 7.1% to 3.50 million vehicles, the second consecutive year-on-year decline. In addition to the stagnation of the domestic economy, this drop in sales was affected by the rise in vehicle prices due to the additional cost of airbags and ABS brakes, which are now required on all new vehicles as of January, and the lower number of selling days in 2014 due to Brazil hosting the soccer World Cup. Sales in Australia decreased by 2.0% to 1.11 million vehicles, sales in Argentina decreased by 35.7% to 600,000 vehicles, and sales in South Africa decreased by 0.7% to 650,00 vehicles.

Vehicle sales in Russia in 2014 were boosted by some last-minute demand due to the drop in the value of the ruble in November to December. However, year-on-year sales fell for all eleven months between January and

Table 5 Production trends in the Japanese vehicle market.

Unit: 1,000 vehicles

	2009		2010		2011		2012		2013		2014	
	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year
Total	7 935	68.5%	9 629	121.3%	8 399	87.2%	9 943	118.4%	9 630	96.9%	9 775	101.5%
Vehicle registrations	6 279	64.7%	7 874	125.4%	6 893	87.5%	7 920	114.9%	7 520	95.0%	7 481	99.5%
Passenger cars	5 605	65.9%	7 006	125.0%	6 042	86.2%	6 939	114.8%	6 507	93.8%	6 409	98.5%
Standard	3 460	59.8%	4 846	140.1%	4 180	86.3%	4 686	112.1%	4 618	98.5%	4 658	100.9%
Small	2 145	79.0%	2 159	100.7%	1 861	86.2%	2 253	121.0%	1 889	83.8%	1 751	92.7%
Trucks	587	55.1%	759	129.3%	747	98.4%	859	115.0%	881	102.5%	933	105.9%
Standard	372	50.6%	521	140.1%	512	98.3%	583	113.8%	580	99.5%	605	104.3%
Small	215	65.2%	239	111.2%	235	98.3%	276	117.4%	301	108.9%	328	108.9%
Buses	87	62.6%	109	125.3%	104	95.4%	122	117.3%	133	108.8%	140	105.1%
Mini-vehicles	1 656	88.5%	1 755	106.0%	1 506	85.8%	2 023	134.3%	2 110	104.3%	2 293	108.7%
Passenger cars	1 257	88.1%	1 305	103.8%	1 117	85.6%	1 615	144.6%	1 683	104.2%	1 868	111.0%
Trucks	398	89.6%	450	113.1%	389	86.4%	407	104.6%	428	105.0%	425	99.3%

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

Table 6 Production trends of Japanese automakers outside Japan.

Unit: 1,000 vehicles

	2009		2010		2011		2012		2013		2014	
	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year
Total	10 117	86.8%	13 181	130.3%	13 383	101.5%	15 823	118.2%	16 756	105.9%	17 476	104.3%
North America	2 688	75.2%	3 390	126.1%	3 069	90.5%	4 254	138.6%	4 541	106.7%	4 786	105.4%
Europe	1 228	65.5%	1 356	110.4%	1 411	104.1%	1 484	105.2%	1 537	103.6%	1 654	107.6%
Asia	5 145	105.5%	7 127	138.5%	7 546	105.9%	8 501	112.7%	9 056	106.5%	9 113	100.6%
Central and South America	791	85.9%	982	124.1%	1 030	104.9%	1 235	119.9%	1 284	104.0%	1 591	123.9%
Other	265	66.1%	326	123.0%	327	100.3%	350	107.0%	339	96.8%	333	98.1%

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

November. Full-year sales fell by 10.3% to 2.49 million vehicles.

3. 3. Production (Tables 5 and 6)

Vehicle production in Japan in 2014 was 9.78 million vehicles (up 1.5% from the previous year), the first increase in two years. Although production of registered vehicles fell to 7.48 million (down 0.5%), the production of mini-vehicles increased by 8.7% to 2.29 million units.

The number of vehicles produced outside Japan by Japanese manufacturers in 2014 was 17.5 million (up 4.3% from the previous year) due to increases in North America, Europe, Asia, the Middle East, and other key regions.

4 Issues of the Automotive Industry

Although strong growth in the U.S. market is expected to continue, the slower growth of the Chinese economy, which has driven the overall market since the global financial crisis, and economic slowdowns in other emerging markets, such as Brazil, Indonesia, and Thailand, are likely to further intensify the competitive environment.

Japanese automakers are benefiting from the weak yen and corporate performance is generally good. Challenges include developing advanced driving support systems in addition to the tightening environmental regulations in many countries.

The development of advanced driving support systems will lead to further technological innovations such as automated driving assistance systems, which will accompany the adoption of IT-based functions (next generation telematics) over the medium to long-term. It is predicted that the entire business model may change as part of a transformation from individual vehicles into products that operate in conjunction with other social systems to produce new value and benefits. Japanese automakers must respond nimbly to these changes in the automotive field.

Each company in the Japanese automotive industry has traditionally tackled technological development independently. In contrast, the European automotive industry has built up an efficient development system utilizing research associations to conduct joint research before companies start to compete with each other.

In April 2014, eight Japanese automakers came together for the first time to jointly establish the Research Association for Automotive Internal Combustion Engines (AICE).

While automotive technology is undergoing a period of major transformation, Japanese automakers have realized that a strategy for cooperation is now as important as a strategy for competition to gain a competitive advantage over international competition via next-generation technologies.

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