The Socioeconomic Situation surrounding the Automobile Industry

1 Introduction

The global economy suffered a major slowdown in the autumn of 2008 due to the financial crisis that occurred in the wake of the collapse of the Lehman Brothers financial services firm. Although the first half of 2010 saw a return to growth, the economic downturn then continued in the second part of the year due to the exposure of problems in the fiscal and monetary policies of various countries. Further signs of economic recovery started to appear in 2013, but the pace of this recovery was only modest.

Over the last four years, the situation surrounding the global economy has changed. The U.S. was the epicenter of the financial crisis in 2009 and the resulting economic trends in the U.S. had an impact on the futures of the economies of the other major developed countries. In addition to the effects of long-lasting deflation, low economic growth in Japan continued due to the impact of the Great East Japan Earthquake in 2011. The slow pace of the economic recovery in the U.S. also had a significant effect on foreign exchange rates. The policy of monetary easing in the U.S. hampered efforts to reduce the difference in interest rates between the U.S. and Japan, causing the yen to strengthen and the U.S. dollar to weaken significantly. Markets reacted to the prolonged low interest rate policies in the U.S. and Japan, and with nowhere else to go, began to shift investment money to emerging nations. This in turn caused the stock markets in these emerging nations to trend upward and economic growth to greatly exceed that in developed countries.

By 2013, four years after the economic downturn, developed countries were showing signs of economic recovery, while in comparison, the growth in the BRICs nations and other emerging countries had slowed. The problem of the "fiscal cliff" in the U.S., which was caused by the expiration of tax cuts and the implementation of mandatory spending reductions, was avoided through

the passing of the American Taxpayer Relief Act of 2012 in early 2013. Private-sector demand has also started to recover and the current economic outlook is positive. The debt problems in Europe have responded well to a series of financial support measures and the financial turmoil there appears to be beginning to calm down. Japan has also begun showing signs of economic recovery due to monetary easing and fiscal stimulus measures under the policies of Abenomics. On the other hand, capital outflow from emerging countries has expanded against the backdrop of an economic recovery in the U.S. and concerns about a slowdown in China. This has caused exchange rates, stock prices, and credit prices to plunge in these countries. The depreciation of currencies has contributed to inflationary pressure and consumer spending has also slowed.

In this economic environment, overall vehicle sales were up in 2013, with slight decreases in India, Brazil, and Russia being offset by increased sales in other countries.

2 Political and Economic Situation

2.1. The global economy (Table 1)

The global economy grew by 3.0% in 2013, continuing the downward trend from the rate of 3.2% recorded in 2012. This reflects the signs of economic recovery in major developed countries and regions, such as the U.S., Japan, and Europe, which had been mired in long-term stagnation. However, it also reflects lower growth in emerging countries due to the slowdown in the Chinese economy and increased amounts of capital being raised within the U.S. as the U.S. economy has recovered.

2.1.1. U.S.

In the U.S., the real economic growth rate declined from 2.8% in 2012 to 1.9% in 2013. Although the U.S. economy began 2013 with concerns over the fiscal cliff, the effects of the quantitative easing policy, which started in early 2009, began to appear in earnest and private-

		-			
	2009	2010	2011	2012	2013
Japan	-6.3%	4.4%	- 0.6%	1.4%	1.5%
U.S.	-2.6%	3.0%	1.8%	2.8%	1.9%
Euro zone	-4.1%	1.9%	1.4%	- 0.7%	-0.5%
Germany	-4.7%	3.6%	3.1%	0.9%	0.5%
France	-2.5%	1.4%	1.7%	0.0%	0.3%
Italy	- 5.2%	1.8%	0.4%	-2.4%	-1.9%
Spain			0.4%	- 1.6%	-1.2%
UK	- 4.9%	2.1%	0.9%	0.3%	1.8%
China	6.8%	10.4%	9.3%	7.7%	7.7%
India	- 0.6%	10.5%	7.7%	4.7%	4.4%
Brazil	- 0.6%	7.5%	2.7%	1.0%	2.3%
Russia	-7.8%	4.3%	4.3%	3.4%	1.3%

Table 1 Real economic growth rate in major countries.

Source: IMF World Economic Outlook (April 2013, April 2014)

sector demand also began to gradually recover due to the money being pumped into the system. Investments in housing continued to increase and the unemployment rate decreased from 7.9% in January to 7.0% in November. At the same time, the manufacturing competitiveness of U.S. companies was greatly improved due to the shale gas revolution, which held down energy prices, and various other incentives offered by the Obama administration, such as tax breaks. In contrast, parts of the federal government closed down in October due to difficulties in budget negotiations and there were also fears of a debt default by the U.S. Treasury. Thankfully, this was avoided through an agreement reached in December. The U.S. economy continues to recover gradually, but the effects of the exit strategy from monetary easing on the U.S. and global economies must be watched closely in 2014.

2.1.2. Europe

The real economic growth rate in Europe showed a slight recovery from -0.7% in 2012 to -0.5% in 2013. The European economy finally emerged from the negative growth that had continued for a year and a half. This emergence started over the period of April to June 2013 and was brought about in part by two separate interest rate cuts by the European Central Bank (ECB). The economy now appears to be turning gradually toward a recovery after finally bottoming out. Trends in the financial markets also continued to be comparatively stable and the financial measures of the EU and International Monetary Fund (IMF) for Spain and Ireland were completed in November 2013 and January 2014. According to Eurostat, the statistical office of the EU, exports from Portugal, Greece, and Spain in December 2013 increased by 4 to 5% compared with the same period in 2012. However, the root problems that caused the

debt crisis in the first place, such as the weak growth potential of southern European countries (the 2013 real economic growth rates in both Italy (-1.9%) and Spain (-1.2%) remained negative) and the increasing volume of non-performing loans in the financial sector, remain deeprooted issues. Consequently, this is a situation that will require more time before Europe can return to the path of sustainable economic growth.

2.1.3. China

The real economic growth rate in China in 2013 was 7.7%, virtually unchanged from the previous year. Since 2000, the annual growth rate in China has continued to be very high at 8% and even exceeded 10% from 2004 to 2007. Therefore, a rate of 7.7% is relatively low for China. In mid-July, Chinese Prime Minister Li Keqiang said that "the lower limit for growth is 7.5% and the lowest line is 7%." In November, the Chinese government indicated that 7.2% growth is necessary for stable employment, which underlined official willingness to maintain the pace of economic growth at around 7% for the time being. At the Third Plenary Session of the 18th Central Committee of the Communist Party of China that was held in November, a position that aims to launch a wide range of structural reforms was articulated. This seems to indicate that the Chinese economy is viewed as transitioning toward a period of stable growth and will likely continue to gradually slow in the medium term. It also means that greatly accelerating the pace of economic growth again in the future will be more difficult. However, because the Chinese economy is supported by recovering exports to developed nations and domestic demand that still has growth potential, the growth rate in 2014 is expected to be similar to that in 2013, and China is likely to continue playing the role of the main driver of economic growth in the world.

2.1.4. Emerging markets

In Brazil, the real economic growth rate in 2013 was 2.3%. This was a recovery from the rate of 1.0% in 2012 and gradual growth is continuing. In addition to the infrastructure investments that Brazil is making to host the 2014 FIFA World Cup and 2016 summer Olympics, there was also greater capital investment by the private sector, and all this investment is driving economic growth. In contrast, growth consumer spending, which has driven economic growth up in the past, did not keep pace with the overall growth rate. This is because of a decline in real purchasing power due to inflation and also the result of lower consumer confidence after protests against the government that occurred across the country in June. It is believed that a gradual economic recovery will be maintained in 2014 as inflationary pressure eases due to the end of the depreciation of the real and additional increases in investment are also expected.

In Russia, the real economic growth rate in 2013 was 1.3%, which continued the decline from the rate of 3.4% in 2012. Both exports and investment declined from the second half of 2012. Russian exports were affected by the stagnation of the European economy, and the amount of oil and natural gas that was exported to Europe also decreased. This led to a decline in corporate profits and investment growth also slowed. According to the 31st Russian Economic Report by the World Bank, demand is sluggish and international political tensions will also continue due to the situation in Ukraine. If this leads to an increase in funding costs for banks and corporations, then the Russian economy may slip into negative growth in 2014. The situation in Ukraine will require continued attention as its effects may spread from the Russian economy to the economies of Western Europe and the U.S.

In India, the real economic growth rate in 2013 was 4.4%, which was a further deceleration from the rate of 4.7% in 2012. Vehicle sales showed a year-on-year decline for three consecutive quarters and the production of capital goods also declined from August. The wholesale inflation rate accelerated to +7.0% in October compared to the previous year. Combined with a further rise in interest rates, this caused a further cooling in domestic demand. The real economic growth rate in India in 2014 is predicted to be +5.4%, below the potential growth rate, which is in the low 6% range. Furthermore, if current exchange rate levels continue, inflationary pressure may

push prices upward by as much as 3% by the middle of 2014. This is expected to exert downward pressure of about 0.3 to 0.4% on the real economic growth rate. However, the impact from the weaker currency in 2013 should lessen by the second half of 2014 and the inflation rate is expected to decline somewhat. However, inflationary pressure is expected to remain deeply rooted in the economy due to supply constraints.

The overall real economic growth rate for the five ASEAN countries in 2013 was 5.2%, which was slightly lower than the rate of 6.2% in 2012. Consumer confidence in Thailand deteriorated due to political unrest. In Indonesia, the depreciation of the rupee due to the current account deficit and the impact of interest rate hikes and inflation has become a factor in slowing economic growth.

2.2. The Japanese economy

The real economic growth rate in 2013 was 1.5%, which was only up +0.1% compared to 2012. Following the inauguration of the second Abe administration in December 2012, there were clear signs of a recovery in the real economy, such as in demand, production, and income after the effects of the government's financial policies reached the financial markets (depreciation of the yen, high stock prices, and strong bond sales = lower interest rates) and economic sentiment (higher business confidence of both households and corporations). In the middle of these changes, the Abe administration has come to substantiate and realize a more progressive economic growth strategy. In addition, the final decision was made to increase the consumption tax rate as the first step toward fiscal reconstruction.

In 2014 the effects of the new Japan Revitalization Strategy to encourage growth are expected to gradually emerge, such as the encouragement of more domestic capital investment. The increase in the consumption tax will have a large impact and will doubtlessly inhibit economic growth. However, it is hoped that underlying growth has produced a positive growth cycle to help the economy overcome the tax increase. A real economic growth rate in the low 1% range is expected, which will exceed the potential growth rate.

3 Current Situation of the Automotive Industry

3.1. Inside Japan (Tables 2 and 3)

New vehicle sales in 2013 were 5.376 million units, a

			_							Unit: 1,	000 vehicles
		2009		2010		2011		2012		2013	
		Volume	% of previous	Volume	% of previous						
			year		year		year		year		year
Tota	al	4 609	90.7%	4 956	107.5%	4210	84.9%	5 370	127.5%	5 376	100.1%
Vehicl	e registrations	2 921	90.9%	3 230	110.6%	2689	83.3%	3 390	126.1%	3 263	96.2%
Pa	assenger cars	2 640	94.3%	2 928	110.9%	2 386	81.5%	3 015	126.3%	2 872	95.3%
	Standard	1 160	92.7%	1 420	122.4%	1 140	80.3%	1 412	123.8%	1 399	99.1%
	Small	1 480	95.5%	1 508	101.9%	1 246	82.7%	1 603	128.6%	1 473	91.9%
T	rucks	268	67.7%	289	108.0%	292	101.1%	364	124.4%	379	104.2%
	Standard	88	59.8%	102	115.6%	107	105.5%	136	127.1%	143	105.3%
	Small	181	72.3%	188	103.7%	185	98.6%	227	122.8%	236	103.9%
E	Buses	13	82.0%	13	98.3%	11	83.4%	12	112.1%	11	93.8%
Min	i-vehicles	1 688	90.3%	1 726	102.3%	1 521	88.1%	1 979	130.1%	2 113	106.8%
Pa	assenger cars	1 283	89.9%	1 285	100.1%	1 139	88.6%	1 558	136.8%	1 690	108.5%
T	rucks	405	91.4%	442	109.1%	382	86.6%	422	110.3%	423	100.2%

Table 2 Sales trends in Japanese vehicle market.

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

300 594

331 286

Table 3 Trends of vehicle imports to Japan.										
Unit: vehicle										
	Passeng	ger cars	Commerci	al 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%	2712	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%	275644	122.5%				

15 399

14 847

103.1%

96.4%

315 993

346 133

Table 3 Trends of vehicle imports to Japan.

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

115.3%

110.2%

similar level to 2012 (5.37 million vehicles). Although sales of registered vehicles declined to 96.2% of the number in 2012, mini-vehicles continued to be strong sellers (106.8% of 2012) and compensated for the decrease in registered vehicle sales. Mini-vehicles accounted for 39% of all vehicle sales in Japan in 2013.

2012

2013

Sales of imported vehicles were around 346,000 vehicles (109.5% of the previous year). Although sales of luxury brands increased due to the effects of Abenomics, sales of imported vehicles in general were driven by comparatively affordable new models with the same fuel economy as vehicles from Japanese manufacturers. These models included the Volkswagen Golf, which was the first vehicle in history from a non-Japanese manufacturer to win the Japan Car of the Year Award.

The period from January to March 2014 is likely to see a big spike in demand as consumers rush to make purchases before the consumption tax hike. Although there will be a large increase in vehicle sales during that period, the expected negative rebound from April must be monitored carefully. The new tax system affecting the future vehicle market in Japan is also a key point. Tax system reforms to be implemented in FY 2015 stipulate that the vehicle acquisition tax will be abolished in October 2015 at the same time that the consumption tax is set at 10%. As a result of these changes, a new tax system to help compensate for the reduction in local tax revenues is to be implemented and vehicle fuel economy regulations are to be strengthened in an effort to reduce the tax on environmentally friendly vehicles.

114.6%

109.5%

3.2. Outside Japan (Table 4)

3.2.1. U.S.

The vehicle market in the U.S. in 2013 was 15.9 million vehicles, 7% higher than the 14.8 million vehicles sold in

									Unit: 1,000	vehicles
	20	09	2010		2011		2012		2013	
	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%
North America	1 379	59.5%	1 727	125.2%	1 585	91.8%	1 886	119.0%	1 887	100.0%
Europe	685	43.1%	936	136.6%	995	106.3%	849	85.3%	709	83.5%
Central and South America	244	47.1%	396	162.3%	358	90.4%	347	96.9%	362	104.3%
Africa	145	41.2%	189	130.3%	149	78.8%	168	112.8%	179	106.8%
Middle East	428	44.9%	584	136.4%	420	71.9%	526	125.2%	584	111.0%
Asia	379	72.2%	573	151.2%	572	99.8%	573	100.2%	540	94.3%
Oceania	348	75.5%	425	122.1%	380	89.4%	449	118.2%	407	90.7%
Other	8	66.7%	7	87.5%	5	71.4%	5	109.0%	5	100.0%

Table 4 Region-by-region Trends of Japanese Vehicle Exports.

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

2012. This was the first time since the 2008 global financial crisis that vehicle sales exceeded 15 million, and is evidence of a remarkable recovery. Sales were driven by the strong performance of large vehicles as a result of stable gasoline prices. Based on the nationality of the automaker, sales by U.S. manufacturers increased by 9.0% compared to the previous year, sales by European manufacturers increased by 4.2%, and sales by Japanese manufacturers increased by 8.3%. In contrast, sales by Korean manufacturers decreased by 0.4%. As a result, the market share held by Japanese manufacturers that had fallen to 35.0% in 2011 recovered to 37.5% in 2013.

3.2.2. Europe

The number of new vehicles sold in the EU and the 30 member countries of the EFTA in 2013 was 12.31 million vehicles. This was a decrease of 1.8% compared to the previous year and marked the sixth consecutive year-on-year drop. Within the five major European markets, sales in Germany decreased by 4.2% to 2.95 million vehicles, and sales in France decreased by 5.7% to 1.79 million vehicles. In both cases, this continues the negative trend from the previous year. Sales in Italy also fell by 7.1% to 1.30 million vehicles due to tax increases affecting consumption. However, sales in the UK rose by 10.8% to 2.26 million vehicles, the second successive yearon-year increase. In Spain, the government extended policies to encourage the purchase of newer more fuel efficient vehicles to replace older vehicles. This prompted an increase in sales of 3.3% to 720,000 vehicles, the first increase in two years.

Sales in Russia in 2013 were 2.78 million vehicles, a decrease of 5.5% compared to the previous year. Even though this reversed a trend of increasing sales that had continued for three years until 2012, these sales results

were the second highest in Europe, behind only Germany.

3.2.3. China

Sales in China in 2013 increased by 13.9% to 21.89 million vehicles. This double-digit growth was surprising after the slowdown in recent years. Underlying factors contributing to this growth include recovering sales of Japanese vehicles, which were affected by deteriorating relations between China and Japan, and a surge in demand over concerns that vehicle ownership restrictions will soon be implemented in some regional cities. Vehicle production was 22.12 million vehicles, an increase of 14.8% compared to the previous year. The Chinese government announced a policy in September 2013 to subsidize new energy vehicles, such as electric (EVs), plug-in (PHVs), and fuel-cell vehicles (FCVs). Passenger vehicles are eligible for support up to 200,000 yuan for a FCV, 60,000 yuan for an EV, and 35,000 yuan for a PHV. Commercial vehicles are eligible to receive up to 500,000 yuan. This is expected to encourage the adoption of environmentally-friendly vehicles by consumers in the future.

3.2.4. Asia

Although vehicle sales in India, Thailand, and South Korea in 2013 decreased compared to the previous year, Indonesia registered a double-digit increase.

Sales in India in 2013 decreased by 9.3% to 3.24 million vehicles. This was the first decrease in excess of 2% since 2002. In addition to continuing high interest rates and high fuel prices, the decision by many corporations to hold back on investing in anticipation of the general election in May 2014 has put downward pressure on the entire economy, including vehicle demand. Vehicle production also decreased by 7.1% to 3.81 million units.

								01110. 1,0	00 vehicles
2009		2010		2011		2012		2013	
Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year	Volume	% of previous year
7 935	68.5%	9 629	121.3%	8 399	87.2%	9 943	118.4%	9 630	96.9%
6 279	64.7%	7 874	125.4%	6 893	87.5%	7 920	114.9%	7 520	95.0%
5 605	65.9%	7 006	125.0%	6 042	86.2%	6 939	114.8%	6 507	93.8%
3 460	59.8%	4 846	140.1%	4 180	86.3%	4 686	112.1%	4 618	98.5%
2 145	79.0%	2 159	100.7%	1 861	86.2%	2 253	121.0%	1 889	83.8%
587	55.1%	759	129.3%	747	98.4%	859	115.0%	881	102.5%
372	50.6%	521	140.1%	512	98.3%	583	113.8%	580	99.5%
215	65.2%	239	111.2%	235	98.3%	276	117.7%	301	108.9%
87	62.6%	109	125.3%	104	95.4%	122	117.4%	133	108.8%
1 656	88.5%	1 755	106.0%	1 506	85.8%	2 023	134.3%	2 1 1 0	104.3%
1 257	88.1%	1 305	103.8%	1 117	85.6%	1 615	144.6%	1 683	104.2%
398	89.6%	450	113.1%	389	86.4%	407	104.6%	428	105.0%
	Volume 7 935 6 279 5 605 3 460 2 145 587 372 215 87 1 656 1 257	Volume % of previous year 7 935 68.5% 6 279 64.7% 5 605 65.9% 3 460 59.8% 2 145 79.0% 587 55.1% 372 50.6% 215 65.2% 87 62.6% 1 656 88.5% 1 257 88.1%	Volume % of previous year Volume 7 935 68.5% 9 629 6 279 64.7% 7 874 5 605 65.9% 7 006 3 460 59.8% 4 846 2 145 79.0% 2 159 587 55.1% 759 372 50.6% 521 215 65.2% 239 87 62.6% 109 1 656 88.5% 1 755 1 257 88.1% 1 305	Volume % of previous year Volume % of previous year 7 935 68.5% 9 629 121.3% 6 279 64.7% 7 874 125.4% 5 605 65.9% 7 006 125.0% 3 460 59.8% 4 846 140.1% 2 145 79.0% 2 159 100.7% 587 55.1% 759 129.3% 372 50.6% 521 140.1% 215 65.2% 239 111.2% 87 62.6% 109 125.3% 1 656 88.5% 1 755 106.0% 1 257 88.1% 1 305 103.8%	Volume % of previous year Volume % of previous year Volume 7 935 68.5% 9 629 121.3% 8 399 6 279 64.7% 7 874 125.4% 6 893 5 605 65.9% 7 006 125.0% 6 042 3 460 59.8% 4 846 140.1% 4 180 2 145 79.0% 2 159 100.7% 1 861 587 55.1% 759 129.3% 747 372 50.6% 521 140.1% 512 215 65.2% 239 111.2% 235 87 62.6% 109 125.3% 104 1 656 88.5% 1 755 106.0% 1 506 1 257 88.1% 1 305 103.8% 1 117	Volume % of previous year Volume % of previous year Volume % of previous year 7 935 68.5% 9 629 121.3% 8 399 87.2% 6 279 64.7% 7 874 125.4% 6 893 87.5% 5 605 65.9% 7 006 125.0% 6 042 86.2% 3 460 59.8% 4 846 140.1% 4 180 86.3% 2 145 79.0% 2 159 100.7% 1 861 86.2% 587 55.1% 759 129.3% 747 98.4% 372 50.6% 521 140.1% 512 98.3% 215 65.2% 239 111.2% 235 98.3% 87 62.6% 109 125.3% 104 95.4% 1 656 88.5% 1 755 106.0% 1 506 85.8% 1 257 88.1% 1 305 103.8% 1 117 85.6%	Volume % of previous year Volume % of previous year Volume % of previous year Volume % of previous year Volume 7 935 68.5% 9 629 121.3% 8 399 87.2% 9 943 6 279 64.7% 7 874 125.4% 6 893 87.5% 7 920 5 605 65.9% 7 006 125.0% 6 042 86.2% 6 939 3 460 59.8% 4 846 140.1% 4 180 86.3% 4 686 2 145 79.0% 2 159 100.7% 1 861 86.2% 2 253 587 55.1% 759 129.3% 747 98.4% 859 372 50.6% 521 140.1% 512 98.3% 276 87 62.6% 109 125.3% 104 95.4% 122 1 656 88.5% 1 755 106.0% 1 506 85.8% 2 023 1 257 88.1% 1 305 103.8% 1 117 85.6% <	Volume % of previous year 7 935 68.5% 9 629 121.3% 8 399 87.2% 9 943 118.4% 6 279 64.7% 7 874 125.4% 6 893 87.5% 7 920 114.9% 5 605 65.9% 7 006 125.0% 6 042 86.2% 6 939 114.8% 3 460 59.8% 4 846 140.1% 4 180 86.3% 4 686 112.1% 2 145 79.0% 2 159 100.7% 1 861 86.2% 2 253 121.0% 587 55.1% 759 129.3% 747 98.4% 859 115.0% 372 50.6% 521 140.1% 512 98.3% 583 113.8% 215 65.2% 239 111.2% 235 98.3% 276 117.7% 87 62.6% 109 125.3%	Volume % of previous year Volume 7 935 685.5% 9 629 121.3% 8 399 87.5% 7 920 114.9% 7 520 5 605 65.9% 7 006 125.0% 6 042 86.2% 6 939 114.8% 6 507 3 460 59.8% 4 846 140.1% 4 180 86.3% 4 686 112.1% 4 618 2 145 79.0% 2 159 100.7% 1 861 86.2% 2 253

Table 5 Production trends in Japanese vehicle market.

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

Table 6 Production trends of Japanese automakers outside Japan.

					-			-	Unit: 1,0	00 vehicles
	2009		2010		2011		2012		2013	
	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%
North America	2 688	75.2%	3 390	126.1%	3 069	90.5%	4 254	138.6%	4 541	106.7%
Europe	1 228	65.5%	1 356	110.4%	1 411	104.1%	1 484	105.2%	1 537	103.6%
Asia	5 145	105.5%	7 127	138.5%	7 546	105.9%	8 501	112.7%	9 056	106.5%
Central and South America	791	85.9%	982	124.1%	1 030	104.9%	1 235	119.9%	1 284	104.0%
Other	265	66.1%	326	123.0%	327	100.3%	350	107.0%	339	96.8%

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

However, vehicle exports increased by 3.9% to 670,000 units, a record high.

Sales in Thailand in 2013 fell by 7.4% to 1.33 million vehicles. This is thought to be a reaction to the end of the so-called First Car Buyer tax refund at the end of 2012. In contrast, finished vehicle exports increased by 9.8% to 1.12 million units. Vehicle production increased slightly by 0.1% to 2.46 million units, roughly the same as the previous year.

Sales in Indonesia in 2013 increased by 10.2% to 1.23 million vehicles despite the negative impact on demand caused by a 40% increase in gasoline prices after the government reduced subsidies in June 2013, and the effects of the policy to address the depreciation of the rupiah by raising interest rates in stages from 5.75% to 7.5%. Double-digit year-on-year growth was maintained due to rising wages in the Jakarta metropolitan area and the start of sales of vehicles that complied with the government's Low Cost Green Car (LCGC) policy in September

of 2013. Vehicle production continued to increase and is being driven by strong domestic demand. In 2013, 1.21 million vehicles were produced in Indonesia, an increase of 13.4% over the previous year.

3.2.5. Other markets

Vehicle sales in Brazil in 2013 decreased by 0.9% to 3.77 million vehicles, the first year-on-year decrease for ten years. In addition to lower consumer spending after anti-government demonstrations, an increase in defaults led banks to limit the number of car loans. Reductions in the vehicle tax were first implemented in May 2012, but the effect of these is weakening and impacting the market for new vehicle sales. Sales in Australia increased by 2.2% to 1.14 million vehicles, sales in Argentina increased by 16.0% to 930,000 vehicles, and sales in South Africa increased by 3.2% to 660,00 vehicles.

3.3. Production (Tables 5 and 6)

Vehicle production in Japan in 2013 was 9.63 million vehicles (96.9% of the previous year). Although produc-

tion of registered vehicles fell to 7.52 million (95.0% of the previous year), the production of mini-vehicles increased to 2.11 million (104.3% of the previous year). The reduction in registered vehicle production is the result of an increasing shift to local production at plants outside Japan.

The number of vehicles produced outside Japan by Japanese manufacturers in 2013 was 16.7 million (105.9% of 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 developed markets have recovered from the economic downturn after the global financial crisis, each country is still facing financial problems and significant economic growth is not expected in the future. Since the BRICs, which drove economic growth during the 2000s, have been losing steam expectations are now riding on economic growth in emerging nations such as Indonesia coming up behind the BRICs. As the number of countries with significant vehicle markets continues to expand, developing new products and building up production systems will be necessary to respond to the diversity of needs in these new markets.

The development of new technologies and a wide variety of new power trains will also continue to be necessary as energy sources continue to diversify, such as the increase in the supply of shale gas. In addition, vehicle controls are becoming more sophisticated and fields such as autonomous driving are quickly becoming new areas of competition. Consequently, each company is seeking to make effective use of its limited business resources and there is an urgent need to consider a variety of solutions and measures, including the idea of forming alliances with other companies.