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Auto Industry

By Naoki Kuroda

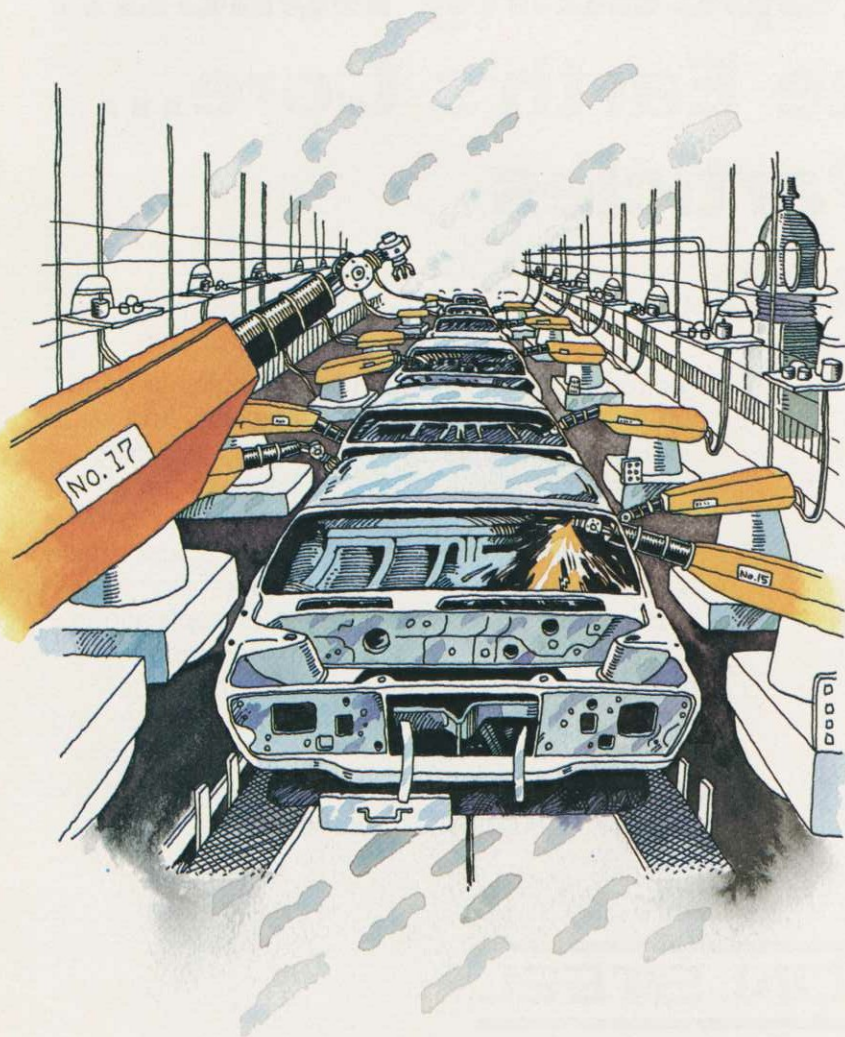
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Japan's automobile industry sprang up before World War II, but it only began to develop rapidly in the 1950s with the help of Japan's high economic growth. On its way to prominence it experienced a number of changes in the business environment, such as the liberalization of car imports in 1965, capital liberalization in 1967-73, curbs on exhaust emissions, and the first and second oil crunches. Having successfully overcome these ordeals, it has matured into one of the nation's representative industries.

There are now 11 automobile and truck manufacturers in Japan—Toyota Motor, Nissan Motor, Honda Motor, Mazda Motor, Mitsubishi Motors, Fuji Heavy Industries, Isuzu Motors, Suzuki Motor, Daihatsu Motor, Hino Motors and Nissan Diesel Motor. Hino and Nissan Diesel specialize in commercial vehicles. In addition, there are two specialized motorcycle makers—Yamaha Motor and Kawasaki Heavy Industries. Honda and Suzuki produce both cars and motorcycles.

The value of production by Japan's auto and auto parts makers topped ¥25,000 billion (about \$104 billion at the exchange rate of ¥240/\$1) in 1983. It accounted for more than 10% of all manufacturing industries' production and more than 30% of production by all machinery industries.

The automobile industry is far-flung. It is a wide range of allied industries that are intimately involved in the processes of production, marketing and application. About 700,000 people are employed in the production of cars and their components. The number rises to 5.6 million when one includes such fields as passenger and cargo transportation, dealer and maintenance services, steelmaking, tire making and glass manufacturing, and such related activities as oil refining, wholesaling and financing. This total work force accounts for more than 10% of



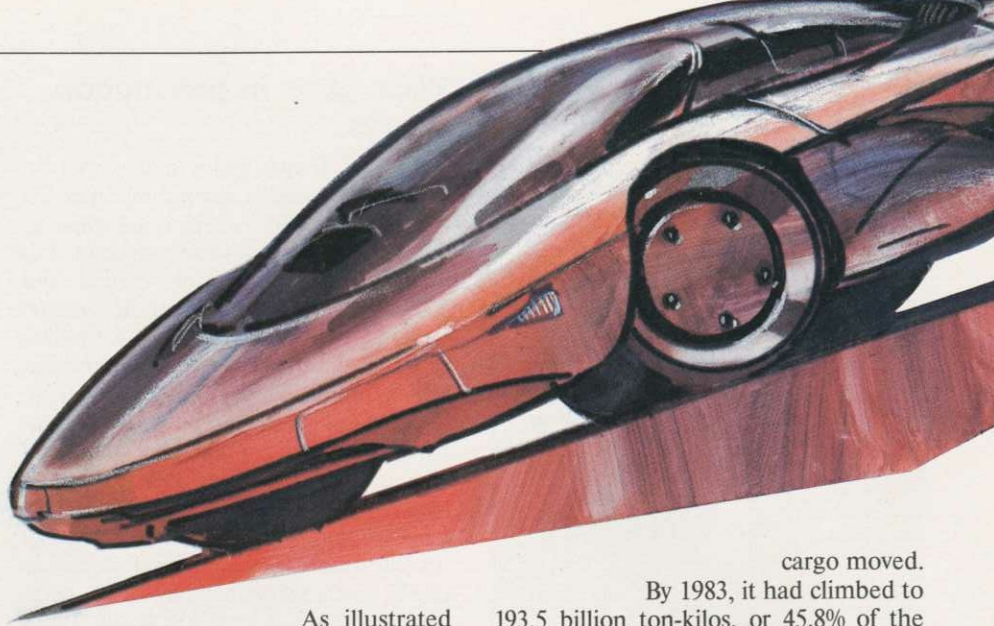
the entire employed population of Japan.

The smooth development of Japan's automobile industry has owed a great deal to the wholesome growth of these many allied industries.

Industry led by domestic demand

Car and truck production in 1960 stood at only 480,000 units. The number leapt to 1,880,000 in 1965, and by 1970 it had grown to 5,290,000 units, surging to 6,940,000 in 1975 despite the first oil crisis. It then shot up to 11,040,000 in 1980, where it remained for three years. In 1984, output reached a record 11,460,000 units, including 7,070,000 passenger cars, or about 62% of the total.

There were only 1,350,000 motor vehicles on the road in Japan in 1960, including trucks and buses. The number leapt to 6,300,000 in 1965, 17,580,000 in 1970, 28,070,000 in 1975, and 44,520,000 at the end of 1984. During this period, the number of licensed drivers steadily increased; as of the end of 1984, there were 50,610,000, corresponding to about 55% of the population over 16 years of age. The number of female drivers in particular has risen 250% over the past decade.



As illustrated by these figures, the growth of Japan's automobile industry has been closely related to the popularization of cars at home and the increase in driver's license holders. As a result, cars in Japan now play an extremely important role in the transportation of both cargo and passengers.

For instance, the volume of cargo transported by road in 1960 registered only 20.8 billion ton-kilos, or 15% of total

cargo moved.

By 1983, it had climbed to 193.5 billion ton-kilos, or 45.8% of the total. In the meantime, the share of railway transportation dropped sharply from 39.2% (54.4 billion ton-kilos) in 1960 to only 6.6% (27.7 billion ton-kilos) in 1983. Almost all foodstuffs and other daily necessities are hauled by motor vehicles.

Passenger transportation by cars in 1960 totaled 55.5 billion man-kilos, a meager 22.8% of the total. But by 1983 it had soared to 464.2 billion man-kilos, or 56.5%.

Table 1 Vital Figures of Major Automakers

(Unit: ¥ million)

	Year ended	Total employees	Output* (unit)	Gross sales**	Cars (KD sets*** inc'd)	Other vehicles (motorcycles inc'd)	Export ratio (%)	Ordinary profit	After-tax profit	Profit / sales ratio (%)	Profit / total assets ratio (%)	Total assets	Total capital	Owned capital	Ratio (%)
Nissan	Mar. 1983	58,962	2,406,169	3,187,722	2,806,273	381,449	54.9	154,347	95,477	3.0	4.3	2,213,232	85,163	1,030,940	46.6
	Mar. 1984	59,615	2,518,491	3,460,124	3,025,491	434,633	55.2	120,863	70,532	2.0	3.0	2,385,075	105,549	1,112,531	46.6
	Mar. 1985	60,500	2,473,191	3,618,076	3,107,814	510,262	58.2	148,184	74,276	2.1	3.0	2,486,871	109,818	1,169,409	47.0
Toyota	June 1982	56,563	3,163,381	3,849,544	3,156,955	692,589	44.1	306,183	141,589	3.7	6.6	2,138,176	100,650	1,313,583	61.4
	June 1983	57,846	3,170,746	4,892,663	3,711,781	1,180,882	46.2	398,591	201,372	4.1	7.2	2,801,874	120,904	1,757,452	62.7
	June 1984	59,467	3,376,224	5,472,681	4,160,749	1,311,932	45.1	521,767	251,567	4.6	8.1	3,096,911	120,904	1,972,328	63.7
Mazda	Oct. 1982	27,513	1,118,943	1,179,684	949,426	230,258	62.5	43,310	25,385	2.2	3.4	741,594	42,709	176,054	23.7
	Oct. 1983	27,395	1,165,928	1,364,229	1,077,865	286,364	64.5	45,225	25,643	1.9	3.4	764,493	42,911	197,153	25.8
	Oct. 1984	27,406	1,148,520	1,431,815	1,110,899	320,916	66.5	55,526	29,673	2.1	4.2	706,560	49,001	236,772	33.5
Mitsubishi	Mar. 1983	23,000	971,269	1,061,375			54.3	18,640	12,666	1.2	1.6	784,768	35,177	105,065	13.4
	Mar. 1984	24,000	978,074	1,173,631			51.4	7,055	5,555	0.5	0.7	798,812	35,177	107,019	13.4
	Mar. 1985	23,000	1,110,362	1,408,307			55.7	20,737	6,637	0.5	0.8	877,346	35,177	110,081	12.5
Honda	Feb. 1983	26,889	1,007,652	1,746,919	997,857	749,062	66.9	50,603	31,320	1.8	3.5	886,135	39,220	344,598	38.9
	Feb. 1984	27,969	1,043,383	1,846,028	1,137,868	708,160	68.6	53,421	24,553	1.3	2.5	972,685	49,065	373,112	38.4
	Feb. 1985	26,913	980,833	1,929,519	1,227,343	702,176	71.1	65,549	32,679	1.7	3.4	963,956	54,581	407,886	42.3
Isuzu	Oct. 1982	15,935	421,468	719,002	526,137	192,865	41.7	8,755	6,038	0.8	0.9	638,018	38,000	94,252	14.8
	Oct. 1983	15,199	391,769	684,624	491,002	193,621	41.1	-2,145	5,285	0.8	0.8	702,507	38,035	97,612	13.9
	Oct. 1984	15,524	403,646	769,071	555,165	213,905	49.3	-5,864	-17,725	-2.3	-2.6	679,624	38,035	76,086	11.2
Daihatsu	June 1982	10,775	458,837	400,687	347,829	52,858	26.1	6,001	5,172	1.3	2.1	248,556	18,950	69,585	28.0
	June 1983	10,721	468,002	425,909	374,496	51,412	23.8	6,230	4,884	1.1	1.8	264,019	18,950	73,009	27.7
	June 1984	10,501	550,280	469,950	410,406	59,542	20.7	10,420	5,017	1.1	1.8	271,476	18,950	76,042	28.0
Fuji	Mar. 1983	13,737	520,510	580,052	483,431	96,621	49.0	34,334	14,325	2.5	3.8	374,510	24,485	103,823	27.7
	Mar. 1984	14,601	542,050	602,735	510,671	92,064	47.0	28,432	15,183	2.5	3.9	389,122	24,620	116,343	29.9
	Mar. 1985	14,535	548,570	672,071	560,175	111,896	46.8	30,074	14,901	2.2	3.5	421,444	24,625	128,221	30.4
Suzuki	Mar. 1983	10,697	618,383	542,319	304,407	237,912	40.0	9,753	6,590	1.2	2.4	271,784	14,100	75,486	27.8
	Mar. 1984	12,042	646,954	524,259	321,216	203,043	38.1	10,818	5,002	1.0	1.8	274,302	14,805	76,693	28.7
	Mar. 1985	12,411	693,009	580,841	360,028	220,813	44.0	17,088	6,027	1.0	1.9	314,303	14,805	82,736	26.3
Hino	Mar. 1983	8,249	57,289	396,440	328,621	67,819	27.4	8,251	4,750	1.2	2.1	225,721	15,461	62,761	27.8
	Mar. 1984	8,300	54,977	392,688	324,738	67,950	18.8	6,353	4,203	1.1	1.8	237,622	15,722	66,192	27.9
	Mar. 1985	8,400	60,024	444,385	375,390	68,995	18.5	8,210	4,240	1.0	1.8	232,325	15,842	69,032	29.7
Nissan Diesel	Mar. 1983	6,970	35,757	265,675	202,756	62,919	35.6	1,437	1,337	0.5	0.6	221,306	9,293	37,029	16.7
	Mar. 1984	6,733	34,001	238,582	172,861	65,721	28.6	-1,086	1,037	0.4	0.4	234,423	9,481	38,117	16.3
	Mar. 1985	6,467	36,219	280,520	207,119	73,401	29.8	2,008	1,027	0.4	0.4	238,307	9,734	40,011	16.8

Notes: *Output figures are based on JAMA data.

**According to the latest figures, Toyota posted ¥648 billion in unconsolidated ordinary profit and ¥308.3 billion in after-tax profit on gross sales of ¥6,064.4 billion for the business year ending June 30, 1985. Daihatsu reported ¥11.5 billion in ordinary profit and ¥6.6 billion in after-tax profit on gross sales of ¥515.9 billion for the same business year.

***A knock-down set consists of parts, the monetary value of which is less than 60% of the value of a completed car.

Sources: Published financial statements, Monthly Auto Statistics by Japan Automobile Manufacturers Association (JAMA), and others.

Table 2
World Ranking of Automakers
(1) Production (1984)

	Total vehicle output (unit)	Passenger cars
GM (U.S.)	5,675,587	4,344,737
Toyota (Japan)	3,429,249	2,413,133
Ford (U.S.)	2,945,392	1,775,257
Nissan (Japan)	2,481,686	1,846,407
Renault (France)	1,644,743	1,429,138
VW (W. Germany)	1,625,569	1,548,050
Chrysler (U.S.)	1,461,170	1,247,785
Peugeot (France)	1,413,640	1,284,151
Fiat (Italy)	1,366,342	1,208,065
Mazda (Japan)	1,133,321	764,309
Mitsubishi (Japan)	1,095,156	547,838
Honda (Japan)	989,036	843,807
GM (Canada)	820,191	546,004
Opel (W. Germany)	795,472	776,486
Suzuki (Japan)	689,871	164,058
D. Benz (W. Germany)	600,991	469,385
Ford (Canada)	596,968	443,305
Daihatsu (Japan)	566,076	162,405
Fuji (Japan)	549,415	242,680
Ford (W. Germany)	539,779	539,779

Source: Figures released by automobile manufacturers associations of countries involved.

(2) Sales (1983)

	Sales (\$ million)
GM (U.S.)	74,581.6
Ford (U.S.)	44,454.6
Toyota (Japan)	19,741.1
Nissan (Japan)	15,697.7
VW (W. Germany)	15,693.4
D. Benz (W. Germany)	15,660.4
Renault (France)	14,467.8
Fiat (Italy)	14,466.5
Chrysler (U.S.)	13,240.4
Volvo (Sweden)	12,963.0
Peugeot (France)	11,244.5
Honda (Japan)	8,771.9
Mazda (Japan)	6,050.0
Mitsubishi (Japan)	5,324.5
BL (Britain)	5,185.4
BMW (W. Germany)	4,675.3
AMC (U.S.)	3,271.7
Isuzu (Japan)	3,088.1
Fuji (Japan)	2,734.5
Saab-Scania (Sweden)	2,707.4

Notes: 1. Figures for non-Japanese makers are based on annual consolidated financial statements and therefore their affiliates are excluded from the ranking.

2. All figures cover sales from non-automotive divisions.

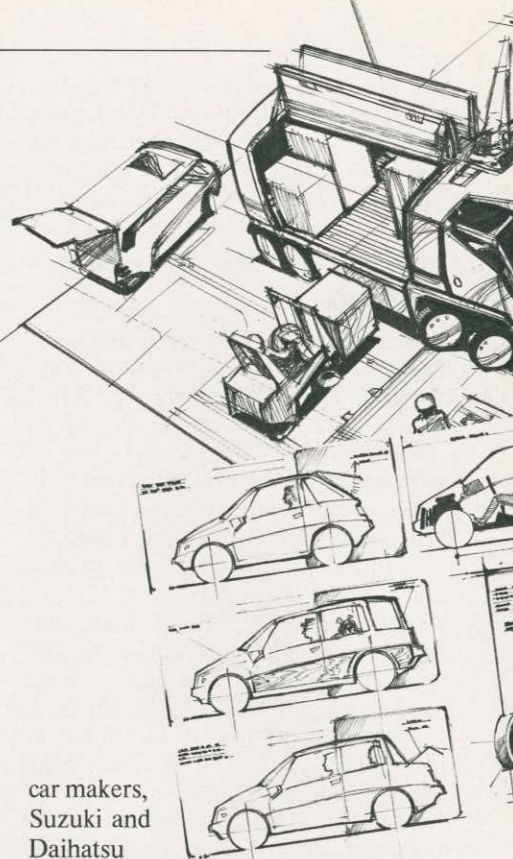
Source: Automotive Industry Handbook by Nissan Motor Co.

Wide gaps in production, profits

Table 1 shows major managerial indexes for Japanese automobile makers. It pinpoints the conspicuous gaps in the scale of Japanese car makers. For instance, Toyota Motor churns out 3,380,000 units, about 30% of the national total. Its capital stands at ¥120.9 billion (\$503 million), and its net worth tops ¥3,000 billion (\$12.5 billion). In contrast, Hino Motors turns out only 60,000 commercial vehicles annually, with its capital and net worth standing at ¥15.8 billion (\$66 million) and ¥230 billion (\$960 million), respectively. The other commercial vehicle maker, Nissan Diesel, is just as small. Even some passenger car companies operate at very low levels. Isuzu Motors turns out only about 400,000 units, Daihatsu 550,000, and Suzuki 690,000, far fewer than Toyota or Nissan.

Japanese automobile makers are generally said to have high export ratios. But this, too, varies widely. They range from those with quite high ratios like Honda and Mazda, to some almost completely oriented to the domestic market, like Daihatsu.

Profits arising from corporate activities also vary by enterprise. Toyota, for example, reported in August 1985 that its ordinary profit for the business year ending in June 1985 totaled ¥648 billion (\$2.7 billion) and net profit ¥308.3 billion (\$1.3 billion)—the largest ever posted by a Japanese enterprise. Nissan had only ¥148.2 billion (\$618 million) in ordinary profit and ¥74.3 billion (\$309.6 million) in net profit for the year ending last March. Hino and Nissan Diesel had ordinary profit of less than ¥10 billion (\$41.7 million) each, while even among passenger



car makers, Suzuki and Daihatsu

both reported earnings in the ¥10 billion range.

Isuzu fared worst of all, running a deficit for the second year in a row in the term ending in October 1984.

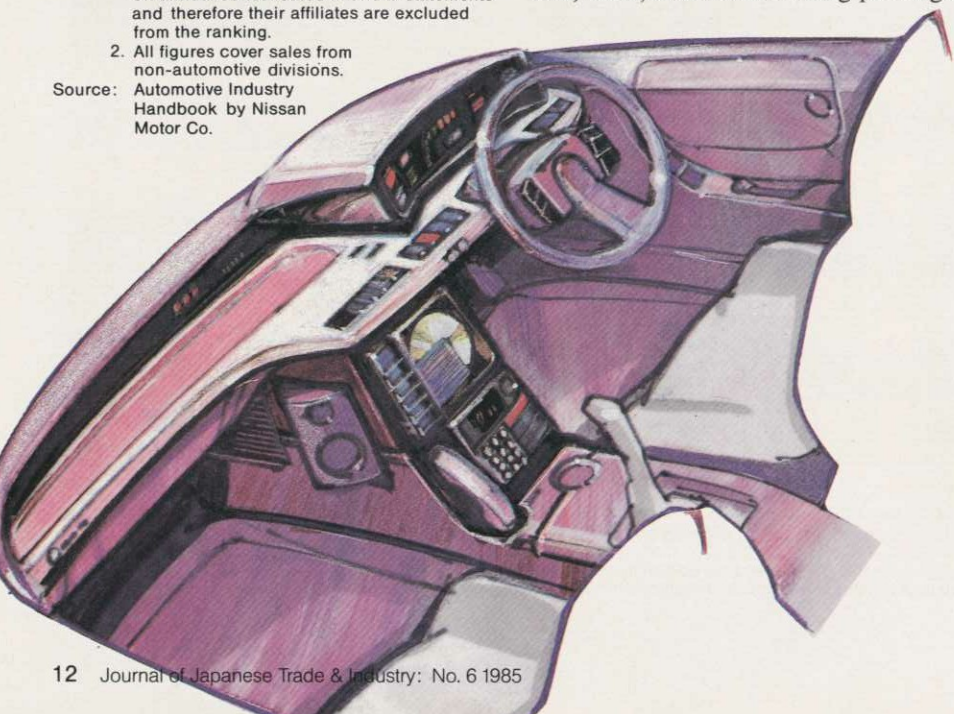
A look at the sales-profit ratios of Japanese car makers shows clearly the huge difference in their earnings. Indeed, the most distinctive feature of Japan's automobile industry may be that there exist so many enterprises with such widely different scales, managerial policies and earnings power.

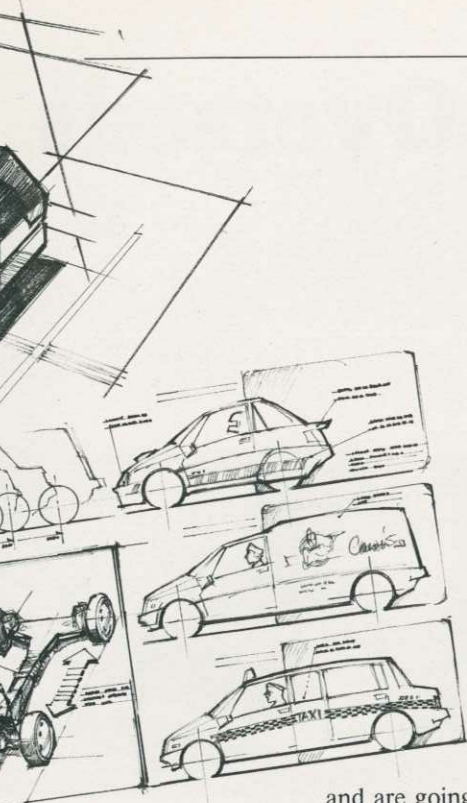
Where they stand internationally

As mentioned earlier, Japanese automobile production in 1984 totaled 11,460,000 vehicles, or 30% of the world total. This gave Japan top ranking in vehicle production for the fifth straight year. In terms of passenger cars alone, however, Japan was second to the U.S., which produced 7,770,000 units.

By company, General Motors remained in front in terms of production, but as many as eight Japanese makers made it into the world's top 20, with Toyota second and Nissan fourth (Table 2-1). By turnover, seven of the top 20 makers were Japanese (Table 2-2).

All this proves that Japanese makers occupy a key place in the global automobile market. But they are not content with where they stand. They are trying to increase their international orientation,





and are going all out to expand production overseas. Business activities in this area are multiple, ranging from capital and technological tie-ups to local knock-down assembly. Japan's automobile production and assembly bases overseas had increased to 185 in 37 countries by 1984.

Domestic market mature

Japan's domestic car market, including passenger and commercial vehicles but excluding mini-cars, reached the 4 million level in 1979 and 1980 on a registration basis. Since 1981, it has fallen back below the 4 million line. Some 3,978,000 cars were registered in 1984, a slight decrease from the previous year. Passenger car registrations alone fell to the 2.9 million level, down 40,000 from 1983.

The Japanese car market today is clearly entering a period of near-maturity, even though car ownership is still at the 45 million level, or one car for every 2.8 people, compared with America's 1.4 person, Canada's 1.8 person and West Germany's 2.3 person ratios. The market is undergoing a structural change from the days of high economic growth.

According to a forecast by the Japan Automobile Manufacturers' Association, domestic automobile demand will increase only slightly in 1985. The general view is that there is no chance of the home market expanding appreciably for years to come.

Japan's automobile exports in 1984 worked out to 6,110,000 units, up 7.7% from 1983. The U.S. market commanded

the largest share at 2.8 million. Exports to China and other Southeast Asian countries rose a marked 22% to 660,000, mostly commercial vehicles. But prospects for future exports are shrouded in uncertainty. One factor auguring ill for the car trade is the continuing slump in exports to Europe, where the market is in the doldrums and currencies have been depreciating against the Japanese yen. In 1984, Japan's exports to Europe slid to 1,270,000 units, off slightly from 1983.

Exports to the Middle East, once the fastest growing market for Japanese cars, have been dropping since 1982, plunging 31.1% in 1984 to 430,000. This is due to sagging income from oil exports, and at this point a favorable turn in the Middle East market seems too much to hope for.

Generally speaking, Japanese car makers themselves are still faring well. But dealers in Japan are hard up indeed. A 1984 survey by the Japan Automobile Dealers Association found 34% of car dealers and more than 60% of truck dealers in the red. This reflected a serious failure to cope with structural change in the automotive market. As the home market matures, dealers will be pressed even harder to gear up for intensifying sales battles. What is really needed is for both makers and dealers to fine tune their sales methods and systems to meet the diversifying needs of their customers.

Local production overseas

Japan's automobile industry faces continued calls for orderly marketing overseas. As part of their overseas marketing strategy, Japanese automakers are pushing ahead with plans to build factories abroad, set up joint ventures with local makers and form capital tie-ups with local interests. In the U.S., Nissan (Tennessee), Honda (Ohio), and Toyota (California, in a joint venture with GM) have already started production. Mazda, Mitsubishi and Toyota, this time on its own, will soon follow suit. Should these local production plans be implemented as scheduled, more than 1 million Japanese cars will be rolling off assembly lines in the U.S. by 1990.

Similar local production, licensed production and joint development projects are under way in Canada and Britain. Local assembly under the knock-down formula is also active, and plans are in the making for such developing countries as China, Taiwan, India and Malaysia.

Such concerted moves toward internationalization are expected to prove an effective strategy for the sustained development of the automobile industry. Japan's auto industry has come far, but it still has a long way to go. ●

