

Adjustments in Car Industry Required

By Omichi Yasunori

Reflecting favorable economic expansion and the bubble economy during the late 1980s, automobile sales in Japan advanced very favorably, totalling 7.8 million vehicles in 1990. However, with the recession and the collapse of the bubble economy, two years of consecutive negative growth were recorded for the first time ever in 1991 and 1992. Car sales fell to 7.5 million units in 1991 and 6.96 million in 1992, a 10% reduction from the 1990 market peak. Sales continue to drop in 1993 and the Japanese automotive industry has fallen into an unprecedented slump.

The domestic car market expanded across the board in the latter half of the 1980s. There are now 64 million cars nationwide, an extremely high ratio of one vehicle per 2.3 people, and it is difficult to imagine that the Japanese market can sustain its former growth. The forecast is that demand will be limited to replacement purchases with a fluctuating market dependent on economic cycles.

With the establishment of local manufacturing facilities in the United States, the biggest export destination, and exports to Europe facing restrictions, exports of fully-assembled vehicles began to fall in the late '80s. Moreover, carmakers have been forced to raise prices due to the continual strengthening of the yen, a situation which has made Japanese cars less price competitive. There is little expectation that exports of fully-assembled vehicles will expand in the '90s.

During the late '80s period of increased demand, carmakers all proceeded aggressively with the expansion of manufacturing facilities with new plants being constructed one after another. Nissan Motor built a second plant in Kyushu, Mazda Motor Corp. expanded its Hofu factory, and Toyota Motor Corp. set up a new plant in Kyushu. Carmakers have now been compelled to adjust production due to stagnant long-term demand, operating below capacity and falling below their break-even points. Depreciation charges have greatly increased due to huge investments in plant facilities during the late '80s, personnel costs have risen, and fixed costs have exploded.



The challenges which face the auto industry in its drive to reorganize and rationalize: Nissan closed its Zama plant in favor of concentrating on the factory in Kyushu where motor-driven dollies are used on the assembly line.

As operating capacity has been cut, carmakers have been faced with declining profits due to much higher fixed costs. For example, Nissan Motor's operating profits totalled ¥184 billion as of March 1990, dropped to ¥88 billion in March 1992, and tumbled to an operating loss in March 1993. For Toyota as well, operating profits came to ¥734 billion in June 1990, but fell by half, to ¥376 billion, in June 1992. Moreover, Toyota's midterm operating profits as of December 1992 dropped to ¥160 billion and with a forecast of only ¥300 billion for the current full year, business performance continues to decline.

Along with Nissan and Toyota, all carmakers are faced with slumping sales and higher fixed costs, resulting in worsening results across the board. Only Mitsubishi Motors Corp., with favorable recreational vehicle (RV) sales, managed to maintain operating profits for March 1992 that were similar to the previous year's. Even so, although sales of passenger vehicles and RVs were favorable as of the period

ending March 1993, a slight dip since then has caused operating profits to fall.

Future high growth is not forecast for the car market and, as opposed to limits on volume growth, there is a possibility that carmakers will feel constraints on profitability due to increases in technological costs linked to environmental issues and safety measures, along with costs related to reductions in the numbers of hours worked.

Revitalization through rationalization

To combat this situation, carmakers are aggressively initiating countermeasures to fight slumping business conditions and stagnant operations and are designing other rationalization efforts in attempts to strengthen profitability. An initial rationalization measure has been to cutback facilities investments and to reduce staff. As far as facilities investments are concerned, all manufacturers have greatly reduced their expenses even as they strive

Photo: Nissan Motor Co., Ltd.

to automate as much as possible to cut-back on labor costs.

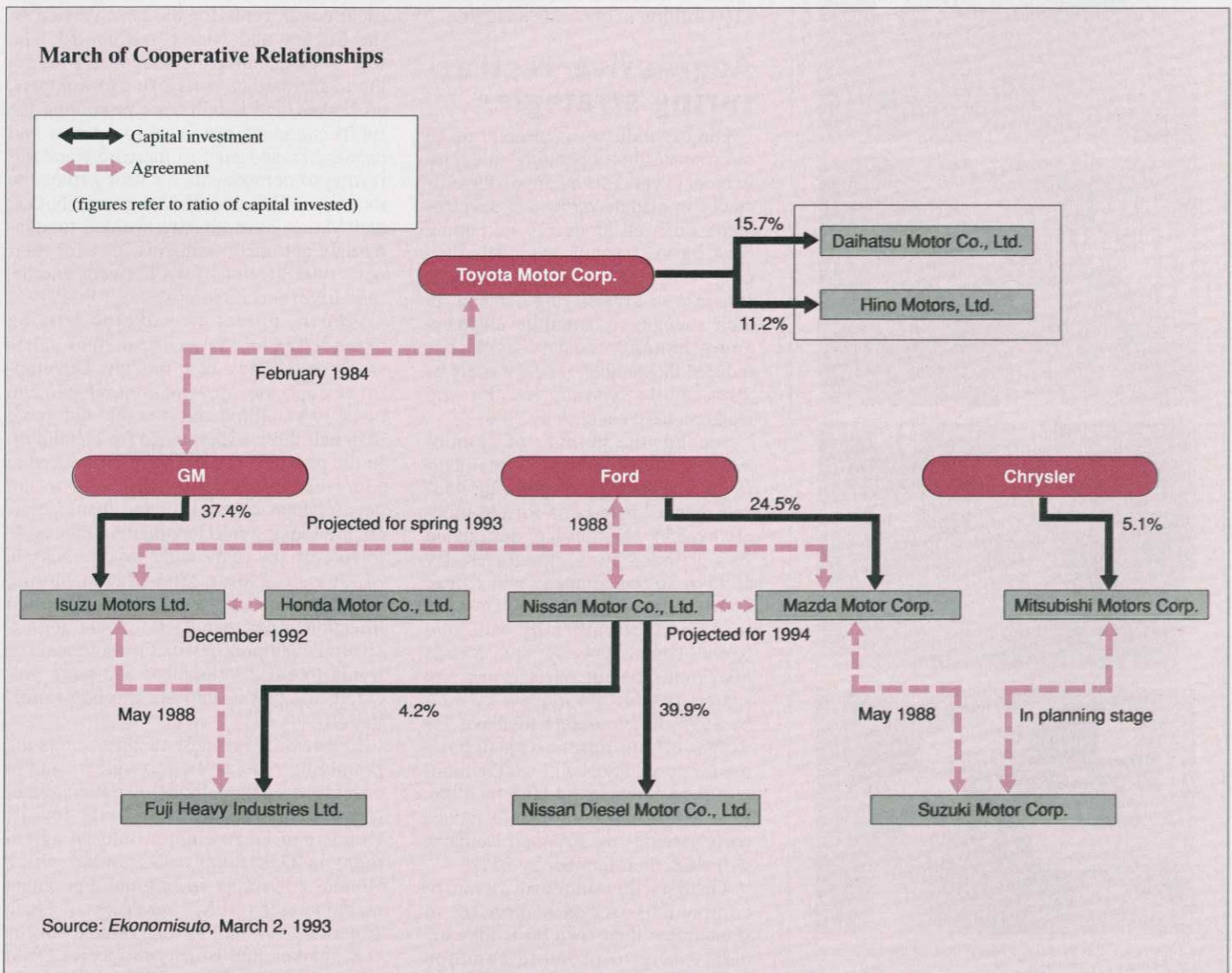
For example, Toyota trimmed its annual budget to ¥4 trillion, a 20% reduction, for the five-year period from 1992. Nissan also plans to reduce its budget for the three-year period from 1992 to 1994 to ¥6 trillion, a 20% cut compared to the previous three years. Investments in plant facilities for 1992 have been adjusted downward from the initial ¥2.4 trillion to ¥2 trillion. Mazda axed its budget for 1992 from ¥1.35 trillion to ¥1.2 trillion and plans to hold it to around ¥900 billion in 1993. Mitsubishi Motors has slashed its 1992 budget to ¥1.25 trillion from ¥1.4

trillion. Finally, Daihatsu cut its initial facilities investment budget for 1992 from ¥550 billion to ¥500 billion, froze construction on the second stage of its No. 2 Shiga factory until 1995, and has also put on hold plans for the construction of a Kyushu facility. Truck makers Hino Motors and Nissan Diesel have also curtailed facilities investments. Hino cut its 1992 budget by 7% to ¥470 billion while Nissan Diesel slashed its budget from ¥250 billion to ¥200 billion.

To achieve personnel cuts Toyota has halted new hires of temporary shift workers for the first time in 14 years. While cutting 1,700 employees by March 1993,

the company is also reducing the employment of university graduates hired for office work by 10% in 1993. Nissan is cutting back on new hires, will cut 4,000 employees by 1994, and will increase the number of staff members transferred to dealers from an additional 1,000 to 2,000 people over three years.

In addition to normal attrition, Mazda will cut approximately 12,000 positions in its second-tier divisions, reducing it to 11,000 by 1996, and 100 people, about 10% of the headquarters sales department, will be transferred to affiliated sales companies. Daihatsu cut 300 from its 2,000-person temporary shift force in 1992 and



at the same time shifted 130 administrative staff members to positions in the sales and technical departments. Fuji Heavy Industries increased out transfers to dealers in 1992 from 100 to 1,100. Nissan Diesel, under a plan to cut personnel by 10%, by the end of September 1992 had cut all of its 1,000 temporary shift workers and reduced new hires to 260 in 1993 compared with 300 in 1992.

Carmakers are also proceeding with vigorous rationalization of their distribution networks in order to slash costs. In an attempt to cut distribution expenses by 10%, Toyota has requested that cooperating parts companies improve shipping efficiency by reducing their volume of truck deliveries. Daihatsu plans to cut distribution costs by ¥300 million annually by 1994 or 1995 and toward that end the company is attempting to boost freight capacity for parts and raise the ratio of fully-assembled vehicles for export sent by sea. Hino will also increase its percent of fully-assembled vehicles exported by sea by 1994 and is attempting to attain ¥100 million in cost cuts annually.

Aggressive restructuring strategies

The car industry is attempting to reformulate their operating strategies in order to cut costs by improving efficiency in manufacturing and development. First, all producers are cutting back on the variety of models they offer, which had rapidly increased in response to diversifying demand, in their attempts to curtail development and production costs. Toyota has reduced the number of new models by 20%, while Nissan, Honda, and Daihatsu have cut back by 30%.

Second, the number of components is being slashed. Toyota plans to cut the number of parts by 45% and reduce spare parts for old models by 35%. Nissan has designated 250 primary parts categories. By 1995 or so the company will reduce component costs 30% by slashing those parts varieties by 40% and overall components by 30%. Mazda also plans to cut parts types and spare parts for old models by 30% by 1995. In an attempt to shave 2% to 3% off its purchasing department's costs, Isuzu will cut the number of components by 80% by 1996. Finally, Fuji Heavy plans to reduce parts varieties by 30% and Daihatsu will slash their number by 25%.

Third is the standardization of components. As carmakers try to standardize their own parts they are also trying to promote common components that can be used by dif-

ferent manufacturers in order to achieve development and manufacturing cost cuts. For example, Toyota is trying to promote the standardization of its own parts such as engines and chassis. When Honda next introduces new models it plans to increase the level of component standardization to more than 50%. Mitsubishi Motors will also have three standard types of suspensions for its passenger cars and RVs.

Fuji Heavy Industries and other truck makers are moving forward, on the other hand, with the standardization of components among manufacturers. The door locks on the Impreza introduced by Fuji Heavy last year are the same as those used by Nissan, as will be the sunroof and electrical components for the next version of the Legacy and Nissan's Bluebird. The four truck manufacturers are also attempting to standardize parts like rear bumpers, air brakes, and U bolts; are promoting the future standardization of fuel tanks and headlights; and plan to increase standardization of components for heavy trucks to more than 70% over the long term. Nissan and Mazda have already decided to standardize automatic transmissions for their new 1995 versions for FR (front engine, rear drive) specifications.

Fourth, model life cycles will be extended. Carmakers incur huge costs when developing new models. Development costs per new passenger car can come to ¥1 billion and it is said that more than half those expenses go for metal dies. In the past new models were introduced at four-year intervals, but in order to cut development costs all of the manufacturers are looking into lengthening that cycle to five or six years with Toyota, Nissan, Mitsubishi Motors and Mazda having already announced they will move in that direction. Auto manufacturers are aggressively developing restructuring strategies, trying to cut development and parts procurement costs as they seek to boost profitability.

Meanwhile, Japanese manufacturers are promoting mutual support agreements in order to strengthen model variation strategies and increase productivity levels. Honda and Isuzu entered into an agreement in December 1992 under which Honda will act as an original equipment manufacturer (OEM) purchaser of Isuzu America's RV, selling the vehicles in the U.S. market, and Isuzu will receive OEM supplies of Honda's passenger cars, sell-



Photos: Toyota Motor Corp.



A giant step from the days of Henry Ford, on the line at one of the many Toyota plants.

ing them in Japan.

Although ranking next after GM and Ford in the American market share, Honda does not have any RVs, an item which has been selling well in the U.S., in its product line. This is why the company will receive OEM supplies from Isuzu, which wants to strengthen sales capabilities. On the other hand, Isuzu will increase the level of transplant operations in the U.S. and will seek to reinforce its base of operations.

At the same time, Isuzu announced in its midterm operational plan that it would withdraw from the passenger car sector. In order to continue supplying domestic dealers with passenger cars, the company will procure 10,000 units annually from Honda to be labeled with the Isuzu brand under the OEM agreement. By doing this Isuzu will stop development of passenger cars and in future will devote operational resources to trucks, RVs, and diesel engines, where the company's strengths lie. The two firms also entered into an agreement pertaining to RVs for the Japanese market at the beginning of 1993. In order to break into the domestic RV market Honda will procure OEM vehicles from Isuzu.

Furthermore, Nissan and Mazda entered into a pact regarding the commercial vehicle sector in January this year. Putting together a mutual support arrangement, Nissan will act as an OEM supplier of vans to Mazda and Mazda will provide OEM light trucks for Nissan. Under this agreement Nissan plans to halt production of the Vanette line and will receive an annual OEM supply of 10,000 Bongo vans from Mazda in 1994. In response to this Mazda will completely overhaul its Familia in the spring of 1994, but will discontinue development of its Familia Van.

Nissan and Mazda are faced with slumping business and are aggressively proceeding with restructuring. These are the reasons behind their attempts to cut costs and increase profitability by disposing of unprofitable commercial-use models.



The increased use of automatic devices and controls in mechanized production lines has decreased the labor-intensive aspect of manufacturing.

Photo: Nissan Motor Co., Ltd.

Evolving structural changes in the 1990s

With the shrinking of the domestic market, declining exports of fully-assembled vehicles, and declining profits due to the strengthening of the yen, the Japanese car industry faces a greatly changed business environment. As mentioned previously, Isuzu has already decided to withdraw from the passenger vehicle segment, leaving eight passenger carmakers. However, with a bleak market environment there are still too many passenger car manufacturers and there is no reason to believe that competition will ease. Because future volume expansion is not foreseen, product and sales strategies will become even more competitive and it is predicted that the 1990s will be a fresh period of realignment.

Toyota manufactures a full line of products, from luxury cars to economical models and RVs, and possesses a diverse array of popular products. The company is strong in sales, has many competitive component makers, and with its efficient manufacturing and sales system should be able to strengthen its position, rather than weakening it. Moreover, Toyota will prob-

ably reinforce cooperative ties with Daihatsu and Hino, with whom it has capital tie-ups, as it develops its future business.

Nissan and the other manufacturers, on the other hand, have weaknesses in their products and sales capabilities and it is conceivable that they may have difficulty surviving as manufacturers of full product lines, depending upon success or failure of their restructuring efforts. Because of this, it is forecast that Japanese makers will proceed even further with mutual support agreements, establishing new groupings.

Therefore, along with the parts industry, the car industry will be swept by a wave of joint ventures, mergers, and shakeouts and will be confronted with more realignments. In any case, it appears that the 1990s will be a time of overwhelming structural changes for the Japanese car and component industries.

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