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Japan's Automakers Face *Endaka*

Give me 180/dollar yen and I'll show you how to compete.

— Lee Iacocca, chairman of Chrysler, March 1986[1]

You can't be a slave to exchange rate movements. The only certainty is that things are going to change. This puts a premium on foresight, flexibility, and luck.

— John F. Device, general manager of Ford Motors, Asia, December, 1986[2]

The question is not how to avoid endaka hell, but which hell to choose.

— Kazuo Inamori, chairman of Kyocera Corp., June 1995[3]

In the spring of 1995, the Japanese yen hit a post-World War II high against the U.S. dollar. After appreciating 12% over the course of 1994, the yen had continued its relentless climb in 1995. In April, it briefly rose as high as ¥81 to the dollar; just ten years earlier it had hovered consistently between ¥200 and ¥250 to the dollar. Japan had entered "Super *Endaka*."

While the rise of the yen spoke to Japan's astounding record of economic and financial development, it also entailed significant costs for Japanese manufacturers. By mid-1995, these costs appeared to have reached a breaking point. For over a decade, Japan's exporters had adjusted to the rising yen by skimping on wage increases, squeezing suppliers, and turning off the lights. Now the heightened value of the yen was forcing them to consider far more drastic maneuvers. According to a survey conducted by *Nihon Keizai Shimbun*, Japan's leading business daily, 59% of the country's

[1] *Forbes*, March 24, 1986, p. 144.
[2] *Wall Street Journal*, December 15, 1986, p. 18.
[3] *Tokyo Business Today*, June 1995, p. 26.

Professor Debora Spar prepared this case with the assistance of Research Associates Julia Kou and Elizabeth Stein and Karen Gordon, MBA Class of 1996, as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

manufacturers were seriously considering moving their production facilities abroad. If even a portion of these manufacturers actually made the move, they would radically transform Japan's industrial landscape. But if they stayed, they would have to continue battling against the yen.

The Birth of *Endaka*

First coined in 1986, the term *endaka* translates literally as "high yen." It entered popular discourse after the 1985 Plaza Accord, the inter-governmental arrangement that had launched the yen's meteoric rise. During the first half of the 1980s, the dollar had continuously strengthened against the yen. Pulled up by the high interest rates of the early Reagan years, the dollar appreciated 30% between 1981 and 1985. Its rise, in turn, led to massive increases in the U.S. trade deficit and sudden inflows of foreign capital. In the United States, many also blamed the high dollar for declining employment levels in core manufacturing sectors such as steel, textiles, and automobiles. By mid-1985, with protectionist sentiment in the United States running strong, business and labor leaders were loudly demanding that the U.S. government take action to lower the dollar's value. As Ford Motor Company executive John V. Deaver explained, "[a] strong dollar got us into this fix and a weak dollar will help get us out."[4] Facing such strong and concerted demands, Republicans and Democrats united in a rare protectionist coalition and rallied around legislation to restore a "healthy" trade balance.

The upshot of this concern was the Plaza Accord. In September 1985 the finance ministers of the world's largest capitalist economies—Britain, France, West Germany, Japan, and the United States—met at New York's Plaza Hotel to coordinate an intervention into their respective foreign exchange markets. The meeting occurred under the auspices of the United States, but all the participants shared an interest in lowering the value of the dollar relative to the yen. If the dollar were depreciated enough, they expected, the persistent and growing U.S. trade imbalance would reverse itself. As a result, protectionist demands in the United States would almost certainly lessen.

In an obliquely worded statement issued from the Plaza, the world's most powerful financial officials asserted that the dollar was overvalued because currency traders had given too little weight to "economic fundamentals."[5] As a result, they claimed, the underlying conditions of the world's economies "had not been reflected fully in exchange markets."[6] To address these imbalances the government of Japan agreed to pursue "flexible management of monetary policy with due attention to the yen rate." The next day, the U.S. Federal Reserve Bank sold massive quantities of dollars, and the Bank of Japan reportedly dumped $3 billion in the New York and Tokyo markets in exchange for yen.

The economic impact of the Plaza Accord was sudden and strong. Prior to the Accord, the dollar had traded at ¥240; one year later it was down to ¥150. Many large companies that had failed to sell dollars forward quickly enough suffered huge exchange losses; Japan Airlines, for example, reported a ¥10 billion ($70 million) currency exchange loss in fiscal 1986.[7] But it was exporters, especially small- and medium-sized exporters, who suffered the real brunt of *endaka*. Shoichiro

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[4]Julia Horn, "General Motors and the Dollar," HBS Case Number 9-389-094, p. 4.
[5]*New York Times*, September 23, 1995, p. D12.
[6]U.S. Department of Treasury Press Release, September 22, 1985. Quoted in I. M. Destler and C. Randall Henning, *Dollar Politics: Exchange Rate Policymaking in the United States*, Washington, DC: Institute for International Economics, 1989, p. 42.
[7]The loss stemmed from exchange contracts the company concluded with foreign exchange banks in the summer of 1985 to buy $300 million each year from fiscal 1986 through fiscal 1996 at an average rate of ¥185.

Toyoda, president of the Toyota Motor Corporation, compared the first anniversary of the Plaza Accord to *isshuki*, the first anniversary of someone's death.[8] By 1986, most financial observers acknowledged that the strong yen was a market correction. *Endaka* had come to stay.

In response to this substantially stronger yen, Prime Minister Yasuhiro Nakasone called on the Japanese to begin to restructure their economy, giving exports less emphasis than they had been awarded in the past. Though it was an obvious strategy for dealing with *endaka*, Nakasone's call also represented a radical reversal of Japan's economic strategy. Since the end of World War II, exports had fueled Japan's growth and developed its powerful industrial sector. In 1985, net exports comprised 3.5% of Japan's GNP, making the country more dependent on trade than any other country in the world.[9]

If the Japanese were to heed Nakasone's advice, therefore, they would have to abandon many of their traditional practices, moving away from long-established export markets and key industrial lines. Over the long run, this shift was liable to be beneficial, since it promised to increase the purchasing power of Japan's citizens and push Japanese firms into higher value-added sectors. In the short run, though, change would be painful, especially for firms in the traditional export sectors. One such sector was automobiles.

Endaka and Japan's Auto Manufacturers

When *endaka* hit in 1985, Japanese automakers were enjoying an unprecedented and largely unexpected period of prosperity. Although Japan's powerful Ministry of International Trade and Investment (MITI) had never targeted passenger vehicles as a high priority sector for industrial development, Japan's automakers had nevertheless managed to create a domestic automobile industry. Gradually, they also began to introduce their products into the world market. After the global oil shocks of 1973 and 1979, Japan's small and fuel-efficient cars found ready acceptance with buyers in Europe and North America. Indeed, Japanese cars proved so competitive in these markets that, by the early 1980s, domestic manufacturers in Europe and the United States were already complaining bitterly of the "Japanese invasion." By 1985, imports from Japan accounted for a full 20% of passenger car sales in the United States and 10% of sales in Europe. In Japan, export sales accounted for 58% of total vehicle production, making the Japanese auto industry one of the most export-reliant manufacturing sectors in the world.

It is difficult to calculate precisely what constituted Japan's competitive advantage in automobile manufacturing. The vehicles that led Japan's export invasion were lighter, more fuel-efficient, and arguably better designed than their European and American competitors. They were also cheaper. Prior to the signing of the Plaza Accord, Japanese manufacturers had a reported cost advantage per similar vehicle of roughly $1,500 to $2,000. Part of this advantage was presumably due to labor differences and technical efficiencies — Japanese automakers, for example, used fewer people to build their cars, yet still took only 39 hours per car versus the Americans' 72.[10] Part of the advantage, though, was the lower exchange value of the yen. With *endaka*, this piece of Japan's cost advantage was largely obliterated.

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[8] *New York Times*, September 22, 1986, p. D6.

[9] In fact, the only time that any country had ever attained a higher ratio was in 1946, when U.S. exports had poured into the devastated states of Europe. *Economist*, June 21, 1986, p. 44.

[10] According to *Ward's Automotive Yearbook*, a leading industry publication, one third of the advantage was attributed to cheaper labor and greater efficiencies; the remainder was due to the lower exchange value of the yen. *Ward's Automotive Yearbook*, 1984, p. 10.

To make matters even worse for the Japanese automakers, the advent of *endaka* did little to quell protectionist sentiment in the U.S. market. Instead, even as the value of the yen increased, U.S. dollar-denominated trade figures actually showed the trade deficit to be widening. Thus, cries for protectionism remained strong, particularly in the politically sensitive automobile sector. Since 1981, the Japanese had responded to these cries by "voluntarily" agreeing to limit their exports to the U.S. market — initially to 1.68 million units and then, in 1983, to 1.85 million. When *endaka* came, though, the automakers found themselves doubly constrained. Just as they were trying to cut their costs and maintain their hard-won position among the world's largest automakers, Japan's producers also had to limit their sales in the lucrative U.S. market.

The Japanese Response

To meet this complex challenge, the Big Four producers — Toyota, Nissan, Honda, and Mazda — resorted to a tough but imaginative combination of tactics. They started, not surprisingly, by cutting costs. Between 1985 and 1988, Japan's auto companies maintained an austerity program described by industry observers as "squeezing water out of a dry rag."[11] To tighten its belt, Toyota trimmed overtime in its plants and overhead in its offices. In some factories, the company declared Thursday and Friday the "weekend," so that work could continue on Saturday and Sunday, when the cost of electricity was lower. Less dramatically, the car makers were also able to use the strong yen to lower the price they paid for many foreign inputs.[12]

For Toyota, already considered the most cost efficient car manufacturer in the world, these cost-cutting measures allowed the company to remain profitable throughout the late 1980s. Lacking Toyota's efficiencies and $10 billion cash reserves, however, Japan's other major car manufacturers did not fare nearly as well. Or as a 1986 article in *Forbes* calculated:

> . . . A hypothetical Japanese car wholesaled to the United States for $10,000 at 220 yen to the dollar would bring the Japanese 2.2 million yen. Figure the car cost 1,870,000 yen to build plus 330,000 yen for profit. At 180 yen to the dollar, the same car when exported brings only 1.8 million yen, but it still costs 1,870,000 yen to build. Good-bye profit.[13]

To address this basic imbalance, therefore, the automakers had to adopt a more radical response. Rather than try to export from the higher-priced Japanese market, they began to move production facilities directly into the U.S. market.

Even before *endaka*, several Japanese auto firms had already opened overseas plants — or "transplants," as they became known — in the United States.[14] In October 1983, Honda opened an assembly plant at Marysville, Ohio with a projected capacity of 500,000 cars; Nissan followed suit with a 220,000-car plant in Smyrna, Tennessee. The following year, Toyota joined the fray, forming New United Motor Manufacturing, Inc. (NUMMI), an innovative joint venture with General Motors. The real rise of the transplants, however, came after 1985, as Mazda, Diamond-Star Motors, and Subaru/Isuzu all scrambled to gain a direct foothold in the suddenly less expensive U.S. market. Between 1980 and 1988, the stock of Japanese investment in the U.S. auto industry grew from $1.4

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[11] *Financial Times*, December 7, 1988, p. 111.
[12] Reportedly, cheaper input prices allowed Toyota to save at least ¥20 billion a year. See *Los Angeles Times*, February 23, 1988, p. 18.
[13] *Forbes*, March 24, 1986, p. 144.
[14] This section draws heavily on John B. Goodman, Debora Spar, and David B. Yoffie, "Foreign Direct Investment and the Demand for Protection," *International Organization*, 50, 4, Autumn 1996, pp. 565-91.

billion to $4.0 billion, and U.S. affiliates' automotive manufacturing sales increased from $6.7 billion to $16 billion.[15] By the end of 1989, Japanese transplant facilities employed over 26,000 American workers and produced 30.6% of the total Japanese vehicles available in the U.S. market. At this point, the transplants had become a significant feature of the industrial landscape of the United States.[16] They were also a key component of the Japanese automakers' global operations.

The final two prongs of the automakers' strategy were diversification and price increases. Though obvious in some respects, both responses represented significant departures for the Japanese manufacturers. Until 1985, the automakers' success in foreign markets had come almost entirely from low-end, compact cars such as the Toyota Corolla and Honda Civic. Now, constrained by the high yen and voluntary restraints, as well as by new competition from low-cost Korean and East European entrants, the Japanese firms began to migrate into higher-margin segments. In 1986, Honda leapt from its low-end Civic to introduce the upscale Acura and Integra models into the United States. Nissan and Toyota soon followed suit with the introductions of their upgraded Maxima and Cressida models. By 1989, with the highly-publicized introduction of the Toyota Lexus and Nissan Infiniti, all of the major Japanese producers had offerings not only in the mid-range, but also at the very top of the luxury market.

Yet, even as they moved up-market, the Japanese manufacturers were loath to raise prices, especially in the highly competitive U.S. market. In 1986, for instance, despite the yen's 35% appreciation against the dollar, prices for Japanese cars sold in the United States rose only by 10%. As a result, Nissan alone saw its U.S. import income drop by 27%. Expressing his frustration, the president of Nissan USA, Kazutoshi Hagiwara, commented that "[d]espite what happened to the yen, we know that our prices have to remain competitive. We can't pass along all the appreciation of the yen if we want to maintain our sales level and market share."[17]

As the yen continued to appreciate, however, this resolve eventually broke down. Between 1985 and 1988, sticker prices for Japanese cars rose by 40%.[18]

Results

Despite these increases and a host of other inconveniences, though, the consensus by the late 1980s was that Japan's automakers had managed to survive, and perhaps even thrive on, the pangs of *endaka*. By 1990, 26% of all cars sold in the United States were imported, and another 15% came from Japanese transplant operations. Astonishingly, the Japanese firms had increased their share of the U.S. market even as the yen rose sharply against the dollar. Reflecting on this turn of events, Ford's Chairman Donald E. Petersen warned that "growing excess capacity in the global auto market during the early 1990s will cause competition to escalate from a fight for market share to a battle for survival." Chrysler's Lee Iacocca, as usual, was more blunt. "They're murdering us," he claimed.[19] In 1990, Japan's automakers collectively enjoyed record sales.

But then, just as the worst seemed over for Japan's Big Four, the auto industry was pummeled by a new round of challenges. In 1991 a global recession reduced demand for new cars, leaving the automakers with considerable excess capacity. Price pressures caused car dealers to sacrifice profits on each sale, while the last decade's proliferation of models and options weighed

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[15] Donald H. Dalton, "Foreign Direct Investment in the U.S. Automotive Industry," *Foreign Direct Investment in the United States* (Washington, D.C.: U.S. Department of Commerce, 1991) p. 53.
[16] *Ibid.*, p. 56.
[17] Charles Hart, "Japan Takes Aim at the Luxury End," *Focus*, May 21, 1986, p. 56.
[18] James Risen, "Detroit Still Sings the Blues," *Los Angeles Times*, May 25, 1988, Part 4, p. 1.
[19] Both quotes are taken from Goodman, Spar, and Yoffie.

heavily on the manufacturers' formerly lean production systems. In 1991, all of Japan's automakers posted production and sales declines.

In 1993, these problems were compounded by a second wave of exchange rate shifts. With the onset of "super *endaka*," a newly appreciating yen drove the dollar price of Japanese cars higher and higher. With over 40% of total capacity in Japan's auto industry still devoted to exports, super *endaka* led to continued sales declines, especially in the U.S. market. And in the European community, where the price effects of *endaka* were less severe, explicit trade barriers prevented Japanese manufacturers from expanding exports sufficiently to compensate for their U.S. losses. By the first quarter of 1995, Japan's auto assembly plants were operating at just 78% of capacity, with no recovery in sight.

Take Two: Responding To Super *Endaka*

On April 18, 1995, the yen hit a record level of ¥80.63 to the dollar. At this exchange rate, Japan's adjusted GDP came within one-fifth of a percentage point of the United States'. Considering that Japan had but one-half the population of the United States and one-twenty-fifth of its land mass, the comparison was stunning.

The impact on Japan's corporations, and particularly its automakers, was equally staggering. Even the all-powerful Toyota revealed that each one-point increase in the value of the yen erased ¥10 billion ($111 million) in dollar-dominated profits.[20] Industry analysts agreed that Toyota, like all of Japan's auto firms, would be squeezed almost unbearably by the financial impact of super *endaka* . According to one observer at Kleinwort Benson, a British merchant bank, "Toyota is looking at paper-thin margins and declining profits, and it's unlikely that there will be any resurgence."[21]

To combat the effects of the yen, Japan's car makers turned first to the strategies that had protected them in the late 1980s. They cut costs even further, raised prices selectively, and pressured their suppliers to reduce the cost of components. By pushing dramatically on these fronts, the manufacturers managed to forestall some of the harshest impact of super *endaka*. Honda, for instance, had already decided to design 50% of its new 1994 Accord model using parts directly from its 1991 generation. Aiming to break even at ¥80 to the dollar, Toyota had restructured its Notomachi plant in northern Japan and minimized its use of expensive robots. And firms across Japan were maintaining labor costs as a percent of sales close to their 1981 level.[22] But as the yen pushed higher, Japan's automakers realized that traditional cost-cutting measures would no longer suffice. If they were to prosper through super *endaka*, they had to consider far more radical changes.

Selective Price Increases

An obvious place for change was prices, since the first round of *endaka* had already demonstrated that the demand for Japanese cars allowed for some upward movement in prices. Accordingly, once super *endaka* hit, the Japanese automakers raised both wholesale and retail prices, pushing the bulk of the increase onto the wholesale level and leaving dealers with smaller profit margins and less opportunity for showroom bargaining. The price increases also fell heaviest on low-volume cars and trucks, leaving family sedans, the core segment of Japan's overseas car market,

[20] *Automotive News*, March 13, 1995, p. 34.
[21] Henry Sender, "Nippon's Choice," *Far Eastern Economic Review*, June 8, 1995, p. 42.
[22] *Ibid.*

relatively unaffected. Toyota, for instance, raised the price of its popular Camry LE sedan only 1.7%, from $21,508 to $21,878. Its Super Turbo, by contrast, jumped 8.2% to $47,800. Even with selective tinkering of its price levels, though, Toyota still lost an average of $45 on every vehicle sold.[23] Nissan, Honda, and Mazda showed a similar restraint with their sticker prices — and similar losses on their vehicle sales. Nissan actually reduced the price of its up-market Maxima sedan, for example — and lost an average of $374 on every vehicle sold in 1994. Chrysler, meanwhile, recorded per unit profits of $1,259.[24]

In an effort to boost sales volumes in the face of higher prices, Japan's Big Four supported their most popular vehicles with an array of new advertising and marketing strategies. Previously, with their plants operating close to capacity, the Big Four had avoided promotion programs. As capacity accumulated, however, increased sales volume became critical to maintaining production efficiencies. As a result, Japan's automakers filled 1994 with consumer rebates and dealer sales bonuses. Leasing became a central marketing tool, with low interest rates allowing the companies to keep monthly payments competitive with U.S. models. Despite continued pressure on profits, advertising budgets were also kept intact. "They never had used good, American-based marketing the way they are now," noted George Patterson, president of Auto Pacific Group, a Santa Ana auto industry research firm. "They've taken a page out of the domestics' book, and it's worked."[25]

Outsourcing and Domestic Shifts

As they adjusted their U.S. marketing efforts, Japan's automakers were also contemplating a more fundamental shift in their global strategy. Expanding upon their already successful programs of transplant production, several were thinking simply of leaving Japan. They were not alone. Indeed, even before the yen's peak in the spring of 1995, a trend toward outsourcing was already underway throughout Japan. According to a survey published by Japan's Export-Import Bank in January 1995, nearly all Japanese industries planned significant increases in their overseas production facilities. In 1993, overseas production had accounted for 16.1% of the total production of Japanese companies. By 1997, officials of the bank predicted, this level would rise to 21.7%.[26] Export data revealed a similar trend: whereas capital goods had accounted for 47% of total exports in 1995, they hit nearly 60% in 1994. Some of these exports were traditional goods, such as machines and machine tools, destined for countries such as South Korea. Increasingly, though, Japan's capital goods exports were comprised of components bound for the offshore subsidiaries of Japan's own manufacturing companies.

Whereas the first round of *endaka* had led Japanese firms, and particularly the auto firms, to invest directly in the U.S. and European markets, the second round led them instead to Asia. By 1994, as the yen climbed 16% against the dollar, Japan's investment in Asia climbed 47% to a record $9.7 billion — one-fourth of Japan's total overseas investment. Leading this surge were the automakers, who saw particular attractions in Asia's vast, low-wage, and untapped markets. During 1994, all of Japan's Big Four firms negotiated to build or expand production facilities in the region. Mazda, for example, which had an existing alliance with China's Fuzhou Solid Motors Corporation, planned to boost production of pickup trucks more than tenfold, to 30,000 units a year,[27] and Toyota announced plans to produce 150,000 passenger cars in China beginning in 1996. Honda boosted its capacity in

[23] *Financial Post*, May 19, 1995, p. 3.
[24] *Ibid.*
[25] Quoted in J. L. Sullivan, "Japanese Carmakers: We're Back," *Orange County Business Journal*, June 27, 1994, p. 5.
[26] "That Sinking Feeling," *Time*, March 20, 1995, p. 15.
[27] *Japan Economic Almanac 1995*, p. 94.

Thailand and the Philippines, and Nissan planned a series of expansions designed to triple its Asian-Pacific output between 1994 and 1997.[28]

As the automakers launched these aggressive Asian plans, however, the flip side of their overseas expansion became apparent. Expanding in Asia meant reducing production, and thus employment, back home in Japan. And this reduction would be traumatic, both for the automakers and for Japan.

In May 1995, the Japanese public learned that, for the first time ever, Toyota was considering cuts in its domestic production capacity. Representatives for the company tried to soften the blow. "We recognize we have responsibility to the domestic economy," explained one spokesperson. "In our company, we have huge arguments about this, and we haven't reached a conclusion yet. Logically, it's natural to decrease domestic production in the future."[29] To forestall its move from Japan, Toyota also described its efforts to develop a "world car," a new subcompact that could be produced competitively in Japan even if the yen stayed at ¥80-90 to the dollar. In the meantime, though, Japan's most successful auto company planned to boost its 1996 offshore production 60% above its 1993 level. Nissan also reduced its exports from Japan by 26% and correspondingly increased its overseas production by 22%.[30] And Honda announced that by 1996 all Honda Civics sold in the United States would come directly from its plant in Marysville, Ohio.

Japan's Dilemma

By 1995, Japan's auto manufacturers had been battling the effects of *endaka* for nearly a decade. Expecting the dollar to rise in 1993, the U.S. Federal Reserve Bank had doubled short-term interest rates. Yet the dollar continued its decline against both the yen and the German mark. Two years later, with low inflation and solid growth in the United States, Washington had little incentive to tinker any further with monetary policy. Moreover, as Robert Hormats, vice chairman of Goldman Sachs International explained, "Fiscal virtue in America won't solve Japan's yen problem."[31]

Most economists agreed that super *endaka* was the result of a complex interplay of variables. The U.S economy was marked by low savings rates and high government borrowing, while Japan's economy had long been geared to produce more than the Japanese people consumed. In addition, Japan's complicated domestic web of regulation, retail practices, and commercial customs served as a further impediment to import penetration of the domestic market.

None of these factors were liable to change very rapidly. Indeed, some seemed nearly permanent features of the international economy. And thus the carmakers, ten years into *endaka*, struggled to concoct a more permanent response. If they raised export prices along with the true exchange value of the yen, sales would inevitably fall. This would increase their excess capacity just as the Japanese economy remained mired in recession. If they only increased prices modestly, their losses would continue to mount. Even worse, low prices in the U.S. market were likely to incite the U.S. Big Three to challenge the Japanese producers with antidumping lawsuits.

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[28] "A review of Japan's expanding presence in the Pacific Rim," *Japanese Motor Business*, 3rd quarter 1995, p. 14-33.
[29] Sender, p. 42.
[30] *Business Week*, November 15, 1993, p. 154.
[31] *New York Times*, April 21, 1995, p. A1.

Meanwhile, although shifting production to overseas facilities appeared an appropriate solution on economic grounds, it would inevitably be complicated by Japan's domestic politics. As with most Japanese companies, the Big Four Japanese automakers faced strong internal pressure to maintain domestic production levels and uphold their commitment to life time employment. When Nissan disclosed that it would shut its outdated production line at Zama and reduce its workforce by 8,000, the shock waves reverberated across Japan. The impact was magnified by the revelation that unemployment in Japan had hit 3% in 1995, a record by Japanese standards. Under these circumstances, Japanese companies that invested abroad were widely criticized for their disloyalty, and for seizing unfair advantages for themselves.

As of mid-1995, the cultural and political pressures of loyalty had prevented most Japanese companies, and particularly the automobile companies, from transferring significant production capacity out of Japan. Rather than lose market share or close factories, many seemed willing to let themselves bleed. Critics of this response, including Sony chairman Akio Morita, argued that Japanese corporations needed to shift their strategic focus from a policy of maintaining market share to one of boosting profit margins. "The situation is terrible," warned Smith Barney Tokyo's chief economist, "and there is no easy way out."[32]

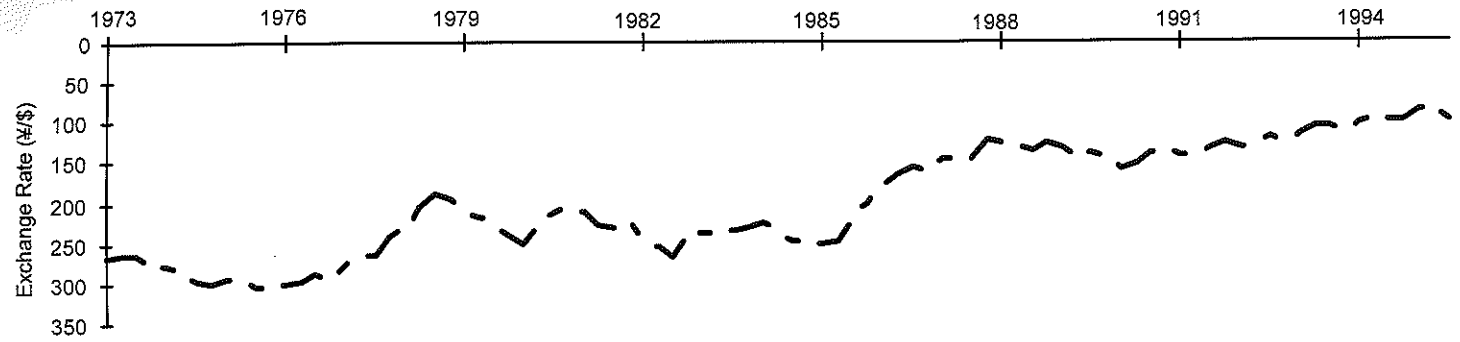
[32]*Los Angeles Times*, August 8, 1994, p. D4.

Exhibit 1 Appreciation of the Japanese Yen

1874	Emperor Meiji sets the yen at parity with the U.S. dollar, both currencies being fixed at 1.5g. of gold.
1949	U.S. occupying forces set the yen at ¥360/dollar in the hope that a low exchange rate will help Japan's exporters and jump-start the economy.
1952	Japan enters the International Monetary Fund (IMF). The yen's value is pegged at ¥360 to the dollar.
1971	After President Nixon "closes the gold window," the yen is revalued to ¥308/dollar.
1973	After the final collapse of the Bretton Woods system of fixed exchange values, Japan moves to a floating exchange rate system
1978	The second oil crisis, stemming from the Islamic revolution in Iran, brings down the dollar's rate to ¥250.
1981-1985	U.S. dollar appreciates consistently against most major world currencies.
1985	Plaza Accord is reached in a meeting of finance ministers and central bank governors of the Group of Five (G-5) industrialized countries. The yen appreciates to ¥200 to the dollar.
February 1987	Meeting of the Group of Seven (G-5 plus Canada and Italy), known as the Louvre Accord, agrees to stabilize the dollar's rate.
October 1987	Black Monday affects global stock markets and pushes the yen up to ¥120 to the dollar
1992	After Britain secedes from the European Exchange Rate Mechanism, the dollar falls to ¥110.
1993	A coalition government is organized under the leadership of Prime Minister Morihiro Hosokawa. The yen rises briefly to ¥100/dollar in Tokyo.
June 1994	The yen rises to ¥99/dollar.
December 1994	The Mexican currency crisis triggers another fall of the dollar.
February 1995	The dollar's value drops agains major currencies after U.S. President Bill Clinton's Budget Message shows the federal deficit expanding for the first time in four years.
March 1995	The dollar falls below ¥90. Though the Bank of Japan tries to lower short-term money market rates, the dollar continues dropping to ¥86.
April 1995	The yen hits a new high of ¥80.63 to the dollar. The Japanese government announces measures to restrain the yen's further appreciation, while the Bank of Japan cuts the official discount rate to 1%.

Source: Compiled from *Japan Economic Newswire*, April 19, 1995; *Financial Times*, April 20, 1995, p. 4

Exhibit 2 Yen/Dollar Exchange Rate, 1973-1995



Source: Adapted from The Bloomberg online service

Exhibit 3 Japan's Balance of Payments, 1984-1994 (US$ billions)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Current Account	35.00	49.17	85.83	87.02	79.61	56.99	35.87	72.91	117.64	131.51	129.24
Exports	168.29	174.02	205.59	224.62	259.77	269.55	280.35	306.58	330.87	351.31	384.18
Imports	(124.03)	(118.03)	(112.77)	(128.20)	(164.77)	(192.66)	(216.77)	(203.49)	(198.47)	(209.74)	(238.25)
Trade balance	44.26	55.99	92.82	96.42	95.00	76.89	63.58	103.09	132.40	141.57	145.93
Net services	(7.75)	(5.17)	(4.93)	(5.72)	(11.27)	(15.62)	(22.19)	(17.69)	(10.14)	(3.97)	(9.21)
Net transfers	(1.51)	(1.65)	(2.06)	(3.68)	(4.12)	(4.28)	(5.52)	(12.49)	(4.62)	(6.09)	(7.48)
Capital Account											
Direct investment	(5.97)	(5.81)	(14.25)	(18.35)	(34.73)	(45.22)	(46.29)	(29.37)	(14.52)	(13.64)	(17.00)
Portfolio investment	(23.60)	(43.07)	(101.38)	(94.37)	(66.11)	(28.76)	(4.81)	39.66	(28.72)	(63.77)	(48.78)
Other capital	(7.00)	(4.65)	42.15	67.35	34.62	26.00	29.56	(82.14)	(63.31)	(26.19)	(20.33)
Change in reserves	(2.12)	0.58	(14.84)	(37.94)	(16.52)	12.76	6.59	6.62	(.63)	(27.66)	(25.28)
Errors and omissions	3.69	3.78	2.49	(3.71)	3.13	(21.82)	(20.91)	(7.67)	(10.47)	(0.28)	(17.77)

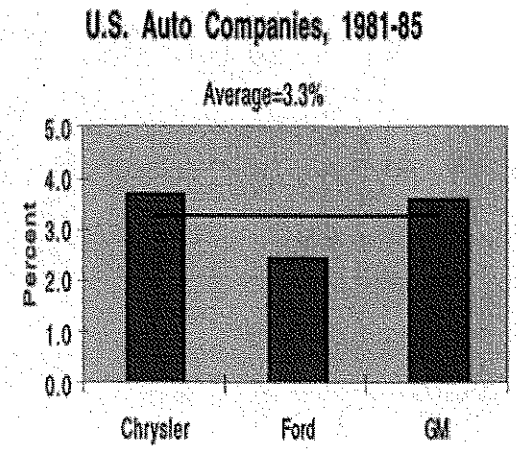
Source: Compiled from International Monetary Fund, *International Financial Statistics Yearbook*, various issues

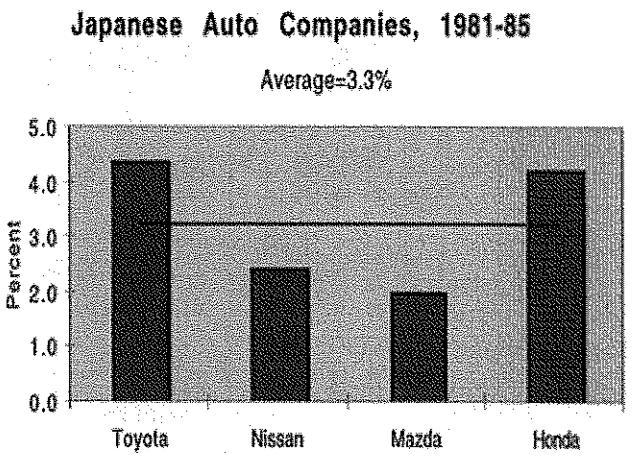
Exhibit 4 U.S. Balance of Payments, 1984-1994 (US$ billions)

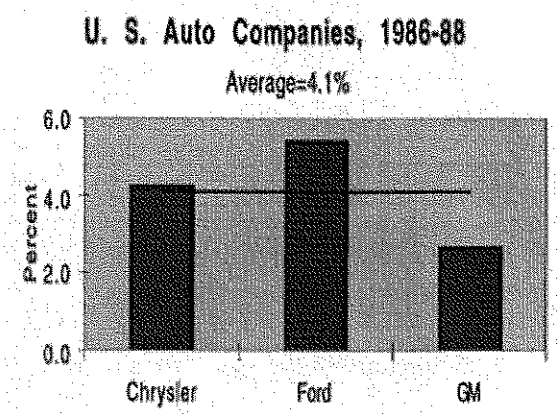
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Current Account	(99.84)	(125.58)	(151.36)	(167.31)	(128.46)	(102.98)	(91.97)	(7.20)	(68.29)	(104.36)	(156.16)
Exports	219.93	215.91	223.35	250.21	320.23	362.13	389.31	416.92	440.36	456.87	502.73
Imports	(332.41)	(338.09)	(368.41)	(409.77)	(447.19)	(477.38)	(498.33)	(490.98)	(536.46)	(589.44)	(669.09)
Trade balance	(112.48)	(122.18)	(145.06)	(159.56)	(126.96)	(115.25)	(109.02)	(74.06)	(96.10)	(132.57)	(166.36)
Net services	33.39	19.74	18.05	15.51	23.71	38.55	50.98	60.48	60.28	60.80	44.78
Net transfers	(20.75)	(23.14)	(24.35)	(23.26)	(25.21)	(26.28)	(33.93)	6.38	(32.47)	(32.59)	(34.58)
Capital Account											
Direct Investment	13.82	6.61	18.52	31.04	41.82	30.90	17.97	(5.21)	(31.12)	(36.50)	1.63
Portfolio Investment	28.74	64.41	71.59	31.06	40.30	43.50	(33.00)	8.55	16.64	(17.55)	33.43
Other capital	37.24	36.80	(2.62)	52.56	22.44	(7.71)	36.99	21.52	57.34	68.21	112.12
Change in reserves	(.72)	(5.80)	33.78	56.86	36.27	(16.93)	29.81	21.78	42.20	68.65	41.75
Errors and omissions	20.59	23.39	29.89	(4.44)	(12.59)	52.97	39.96	(39.71)	(17.18)	21.09	(33.24)

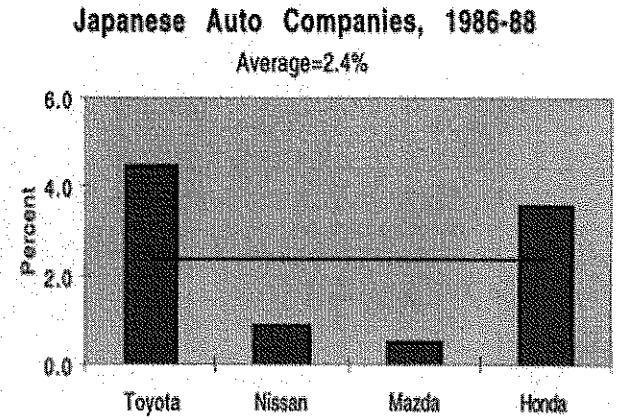
Source: Compiled from International Monetary Fund, *International Financial Statistics Yearbook*, various issues

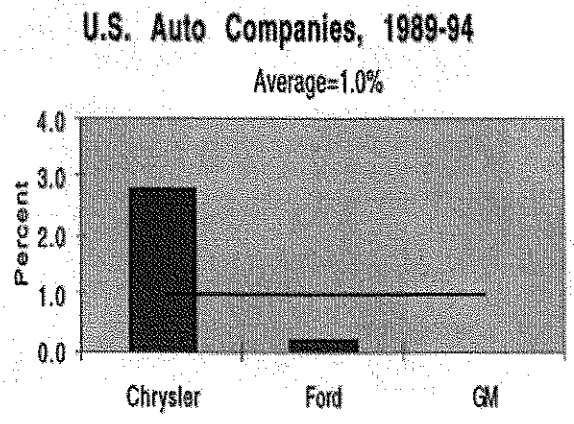
Exhibit 5 U.S. and Japanese Auto Companies: Net Return on Sales, 1981-1994[a]

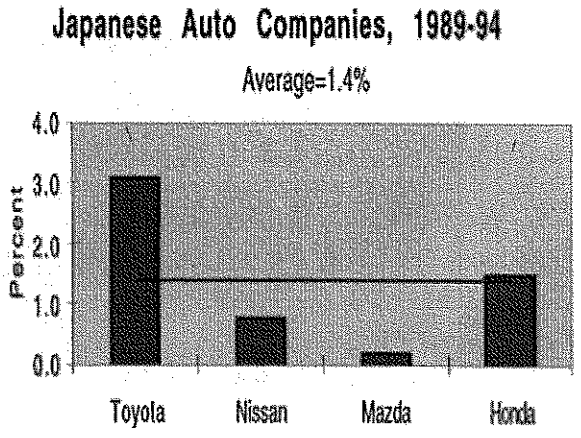












Source: Complied from "General Motors and the Dollar"; company reports

[a]GM data for 1992 do not include the cumulative effect of an accounting change enacted in that year.

Exhibit 6 Consolidated Financial Summary of Selected Japanese Automakers, 1984-1994 (¥ billions)

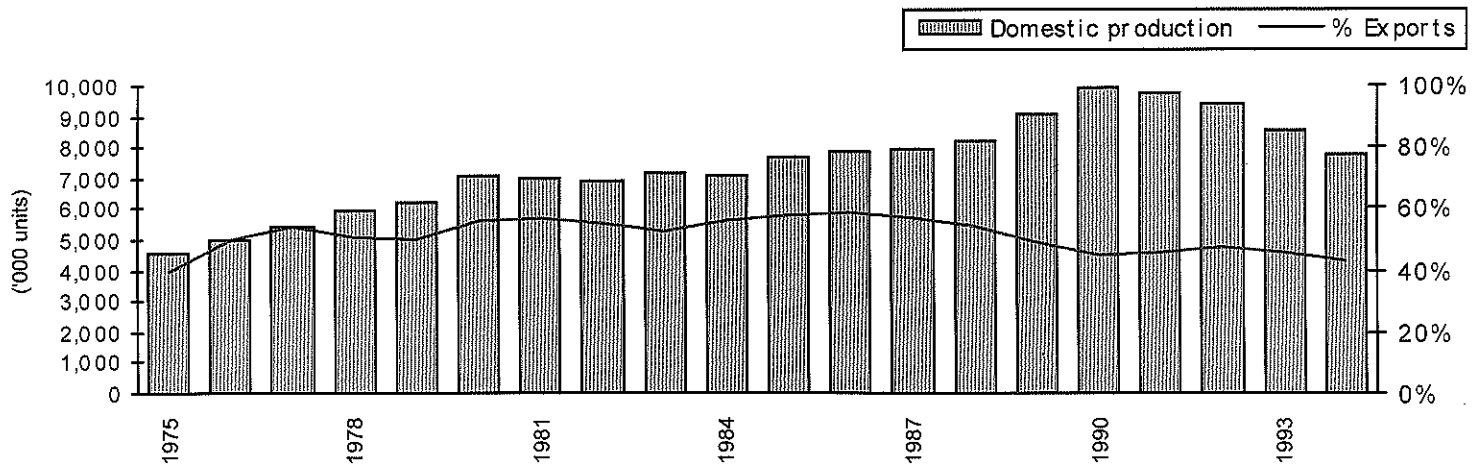
	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Net Sales											
Toyota	5,909	6,770	6,646	6,675	7,216	8,021	9,193	9,855	10,163	10,211	9,363
Nissan	4,308	4,626	4,628	4,273	4,244	4,812	5,645	5,965	6,418	6,198	5,801
Mazda	1,530	1,669	1,728	1,691	2,003	862[a]	2,402	2,714	2,722	2,593	2,188
Honda	2,374	2,740	3,009	2,961	3,499	3,489	3,853	4,300	4,392	4,132	3,863
Mitsubishi	NA	NA	NA	1,749	2,008	2,186	2,361	2,798	3,087	3,180	2,947
Cost of Sales											
Toyota	4,736	5,286	5,392	5,601	5,989	6,705	7,479	8,227	8,772	8,946	8,152
Nissan	3,328	3,516	3,672	3,547	3,424	3,782	4,219	4,670	5,023	4,960	4,747
Mazda	1,287	1,402	1,537	1,533	1,809	771[a]	2,122	2,358	2,377	2,270	1,970
Honda	1,459	1,736	1,917	2,111	2,547	2,544	2,764	3,134	3,199	2,988	2,820
Mitsubishi	NA	NA	NA	NA	1,668	1,816	1,918	2,798	3,087	2,672	2,474
Net Income											
Toyota	295	406	346	261	311	346	441	431	238	176	126
Nissan	74	82	36	20	65	115	116	49	101	(56)	(87)
Mazda	35	40	15	5	10	7[a]	23	27	9	1	(49)
Honda	96	129	147	84	108	97	82	76	60	37	24
Mitsubishi	NA	NA	NA	11	13	19	21	26	30	26	6
Capital Investment											
Toyota	189	265	409	369	360	428	526	804	768	556	339
Nissan	120	123	150	200	192	299	475	665	630	507	283
Mazda	71	109	188	135	95	49[a]	72	166	214	115	85
Honda	NA	148	281	224	211	279	333	261	238	168	122
Mitsubishi [b]	NA	NA	NA	NA	NA	120	140	160	164	140	100

Source: Company annual reports

[a] Mazda's fiscal 1989 year was abbreviated to five months from November-March 1989.

[b] Mitsubishi's non-consolidated capital investment estimates were obtained from *Japan Company Handbook*, various issues.

Exhibit 7 Japanese Passenger Car Industry, 1975-1994



Source: Compiled from Japanese Automobile Manufacturers Association, *Motor Industry of Japan*, various years; Economist Intelligence Unit, *Japanese Motor Business*, 2nd quarter 1995

Exhibit 8 Motor Vehicle Exports from Japan by Destination, 1986-1995 (thousands of units)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995[a]
Asia	456	473	474	513	569	566	633	744	594	302
Europe	1,564	1,643	1,705	1,709	1,750	1,709	1,608	1,281	1,053	455
Middle East	188	204	225	223	284	377	516	380	275	101
North America	3,719	3,380	2,979	2,725	2,522	2,363	2,049	1,792	1,758	775
Central America	184	150	105	98	110	113	140	128	115	58
South America	85	81	98	96	106	161	238	236	226	143
Africa	126	148	230	120	129	138	144	126	102	72
Oceania	261	195	265	382	344	309	325	318	328	145
Others	22	30	21	18	16	17	17	12	9	3
Total	6,605	6,305	6,102	5,884	5,830	5,753	5,670	5,017	4,460	2,054

Source: Compiled from *Japanese Motor Business*, various issues

[a] January-June 1995

Exhibit 9 Japanese Overseas Production of Motor Vehicles, 1989-1994 (thousands of units)

	1988	1989	1990	1991	1992	1993	1994
North America							
Honda	416	449	541	550	562	504	603
Mazda (including Ford-badged vehicles)	163	217	184	165	169	218	125
Nissan	307	359	372	408	473	572	636
Toyota	148	364	382	369	489	550	604
Europe							
Honda	5	4	26	36	35	48	52
Nissan	132	164	156	196	256	330	309
Suzuki	22	18	21	22	33	44	36
Toyota	—	—	4	6	7	37	85
Southeast Asia and Others							
Honda	73	77	79	86	96	NA	NA
Nissan	47	54	56	NA	NA	NA	130
Toyota	293	NA	NA	NA	NA	NA	392

Source: Compiled from *Japanese Motor Business*, various issues

Exhibit 10 New Car Sales in the United States, 1979-1994 (thousands of vehicles)

	Total	Import Sales	% Total	Transplant Sales	% Total	Big 3 Sales	% Total
1979	10,600	2,332	22	-	-	8,268	78
1980	8,976	2,397	27	-	-	6,579	73
1981	8,619	2,327	27	-	-	6,292	73
1982	7,939	2,223	28	-	-	5,716	72
1983	9,182	2,387	26	43	0.5	6,752	74
1984	10,390	2,439	23	293	3	7,658	74
1985	10,978	2,774	25	299	3	7,905	72
1986	11,404	3,189	28	540	5	7,675	67
1987	10,186	3,106	30	678	7	6,402	63
1988	10,543	3,004	28	804	8	6,735	64
1989	9,777	2,699	28	1,036	11	6,042	62
1990	9,300	2,403	26	1,415	15	5,482	59
1991	8,174	2,038	25	1,461	18	4,675	57
1992	8,213	1,944	24	1,460	18	4,816	58
1993	8,518	1,784	21	1,584	19	5,151	60
1994	8,991	1,750	19	1,841	21	5,414	60

Source: Compiled from *Ward's Automotive Yearbook*, various issues

Exhibit 11 Production of Passenger Cars in the United States (thousands of units)

Year	Chrysler	Ford	General Motors	Transplants
1979	936	2,043	5,092	173
1980	639	1,307	4,065	197
1981	749	1,320	3,904	168
1982	601	1,104	3,173	84
1983	904	1,548	3,975	154
1984	1248	1,775	4,345	213
1985	1266	1,636	4,887	286
1986	1298	1,764	4,316	401
1987	1109	1,830	3,603	556
1988	1073	1,806	3,501	733
1989	916	1,677	3,214	1,016
1990	727	1,377	2,755	1,218
1991	510	1,172	2,401	1,356
1992	523	1,334	2,393	1,417
1993	495	1,490	2,457	1,540
1994	551	1,661	2,601	1,787

Source: Compiled from *World Motor Vehicle Data*, 1992; *Ward's Automotive Yearbook*, 1995

Exhibit 12 Japanese Auto Assembly Plants in the United States

	Production Start-Up	1991 Production	1994 Production	1994 Production Capacity	1994 Number of Employees
Honda	1982	451,197	498,710	500,000[a]	10,100
Nissan	1985	133,504	312,654	450,000	6,000
NUMMI (Toyota/GM JV)	1985	206,634	229,327	370,000[b]	4,600
Mazda	1987	165,314	247,004	240,000	3,800
Toyota	1988	187,726	275,678	400,000[c]	6,000
Diamond-Star Motors	1988	153,936	169,829	240,000	3,900
Subaru/Isuzu	1989	57,945	54,002	170,000	2,220
Total		1,356,256	1,787,204	2,370,000	36,620

Source: Adapted from *Ward's Automotive Yearbook*, 1995

[a]Includes capacity for 120,000 motorcycles

[b]Includes 220,000 cars and 150,000 compact pickups

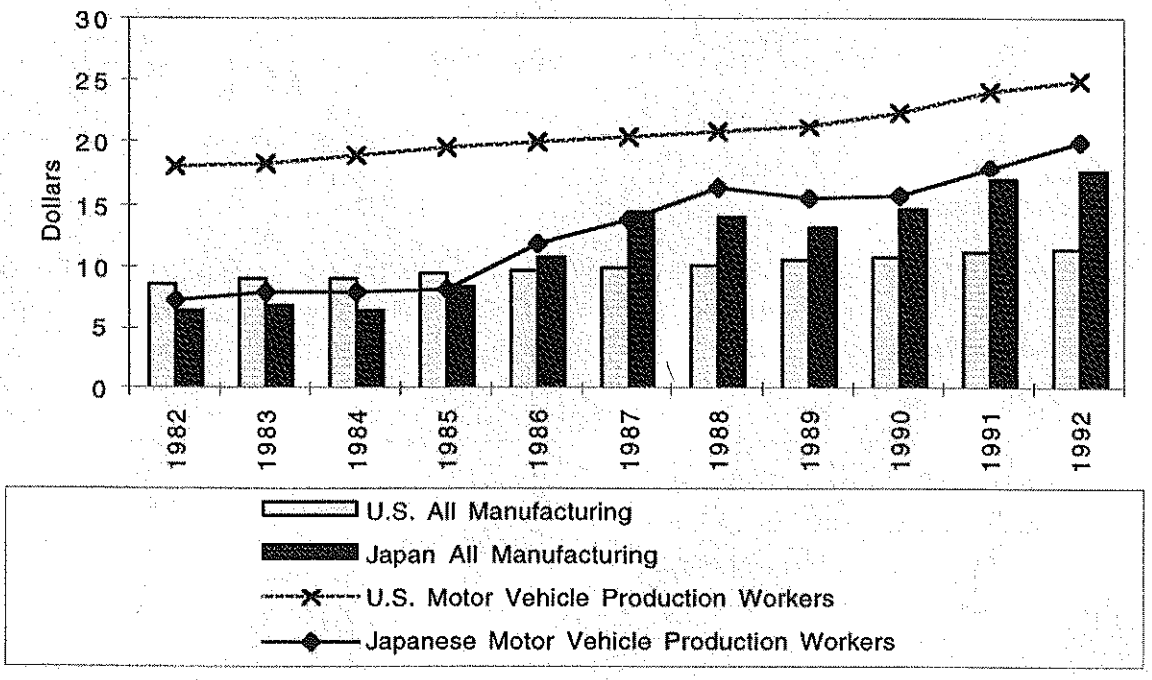
[c]Does not include capacity for an additional 500,000 engines

Exhibit 13 Selected New Car Prices by Year ($US)

	1984	1986	1988	1990	1992	1994
Pontiac Bonneville	9,545	10,663	14,579	16,279	19,154	20,999
Chevy Celebrity	8,304	9,345	11,450	12,845	NA	NA
Olds Cutlass Supreme	9,943	11,286	13,598	15,050	16,300	17,900
Olds 98 Regency	14,651	16,489	18,520	20,545	25,195	26,500
Buick LeSabre	10,615	13,026	14,885	16,555	19,250	21,435
Buick Century	9,697	10,642	12,218	13,700	14,295	16,020
Cadillac Deville	18,125	20,490	23,929	28,090	32,340	33,615
Ford Escort (Hatchback)	6,143	6,849	7,588	8,476	9,858	10,265
Ford Mustang	7,472	7,563	9,209	9,861	11,163	13,840
Lincoln Town Car	18,595	21,288	24,897	28,541	32,137	35,375
Toyota Corolla 4-door sedan	6,498	7,148	8,998	9,013	9,713	12,303
Toyota Camry	8,148	9,378	10,998	11,853	14,663	16,823
Honda Accord DX	8,549	9,299	11,175	12,590	13,515	14,680
Honda Civic 2-door hatch	5,249	5,479	8,635	8,940	9,940	NA
Nissan Sentra	6,549	6,899	8,659	8,549	9,850	10,979
Nissan Maxima	11,399	13,699	17,449	18,749	21,115	23,679

Source: Compiled from *Ward's Automotive Yearbook*, various years

Exhibit 14 Hourly Compensation in the U.S. and Japanese Auto Industries, 1982-1992



Source: Compiled from U.S. Bureau of Labor Statistics, *Employment and Earnings*, various issues; Japan Bureau of Statistics, *Monthly Statistics of Japan*, various issues; *Ward's Automotive Yearbook*, 1994