

---

## Impact of the Strong Dollar on the US Auto Industry

G. MUSTAFA MOHATAREM

2002 is shaping up to be another banner year for auto sales in the United States. Calendar-year-to-date sales have been running at a pace slightly above 17 million units. If this pace were maintained through the remainder of the year, 2002 would go down as the fourth best sales year ever. Annual auto sales have exceeded the 17 million mark—a level that was considered unattainable as recently as the mid-1990s—for three straight years, including the recession year of 2001.

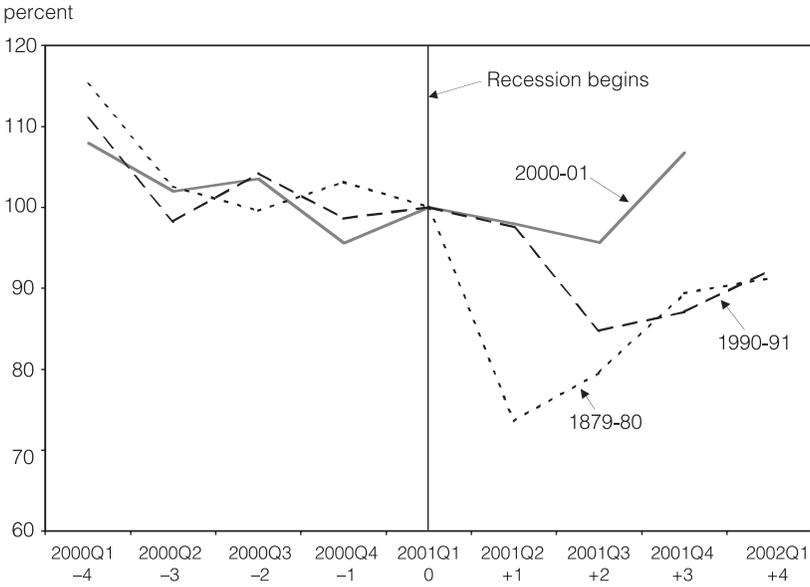
Given the strength of auto sales, one would think that US auto manufacturers, auto suppliers, and their workers would be celebrating. But we are not. Despite the strong sales, auto manufacturers and suppliers are struggling to turn a profit, and many autoworkers have been laid off or are threatened with layoffs. Credit ratings for US auto manufacturers have been downgraded, and many suppliers are faced with bankruptcy. While there are many reasons for the current challenges facing American-owned auto manufacturers, the strong dollar—and the artificially weak Japanese yen—stand out among the primary causes.

Before I address why the strong dollar is depressing profits for domestic auto manufacturers and their suppliers, let me briefly discuss the recent performance of the US auto industry.

---

*G. Mustafa Mohatarem has been chief economist at General Motors Corporation since 1995. He was the lead contact for General Motors with the United States and other governments during the Uruguay Round of General Agreement on Tariffs and Trade (GATT) negotiations, as well as the negotiations for the Canada-US Free Trade Agreement and the North American Free Trade Agreement.*

**Figure 6.1 Vehicle sales around business cycle peaks (business cycle peak = 100 percent)**



Source: General Motors.

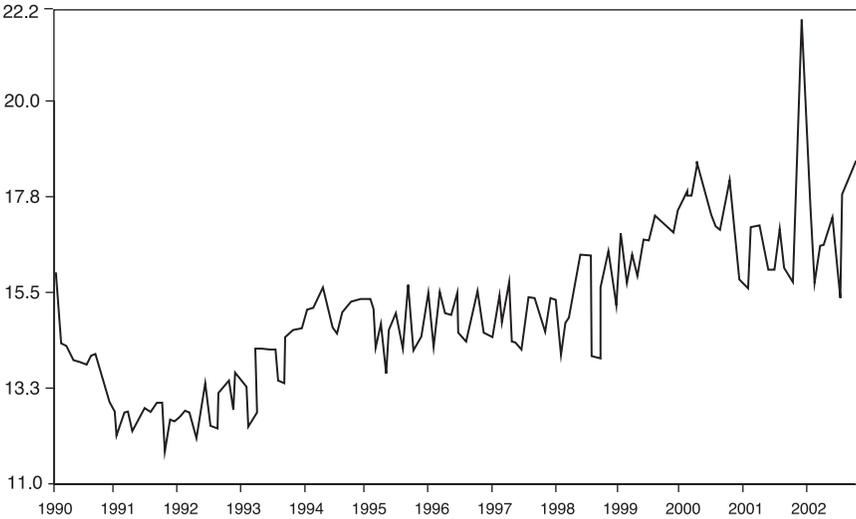
Immediately after the terrorist attacks of September 11, 2001, consumer confidence fell by roughly 10 points. Historically, falling consumer confidence has led to sharp reductions in vehicle sales: “When the economy catches a cold, the auto industry catches pneumonia.” It looked like it would be no different this time. In the days immediately after September 11, vehicle sales fell by more than 35 percent. Customer traffic in our showrooms evaporated, suggesting that sales would remain depressed.

We recognized that without some bold measures, the industry could be headed for a deep downturn. At GM, we responded with our “Keep America Rolling” program, which offered consumers zero-interest financing on all GM products. The response to this and similar programs by many of our competitors exceeded all expectations. Vehicle sales surged to a record 21.5 million annual rate in October 2001 and remained a strong 18.2 million in November. The industry ended the year having sold over 17.4 million vehicles in 2001, the third best year ever.

Figure 6.1 illustrates the impact of early incentives on vehicle sales by contrasting auto sales in this recession and the recessions of 1990-91 and 1979-80. As the figure shows, in a typical recession, auto sales can drop off 15 to 25 percent from their trend level. In this downturn, auto sales maintained their very strong pace. Alan Blinder noted in an op-ed piece (*Washington Post*, December 11, 2001) that the sales stimulus provided by “Keep America Rolling” and similar programs drove “auto sales to record

**Figure 6.2 Unit sales, vehicles (cars and light trucks), 1990-2002**

unit sales (millions)



Source: Bureau of Economic Analysis.

highs while other categories of consumer spending were slumping. . . . The zero percent financing programs thus amounted to a kind of ‘privatized’ stimulus policy—wonderfully timed, well-targeted, and effective. Would that Congress have done so well?”

GM estimates that for the industry as a whole, the zero percent interest programs generated roughly 500,000 additional sales. This is a very conservative estimate, as it assumes that the US economy would have stabilized after the September 11 attacks even without our incentive programs. In any case, using Bureau of Labor Statistics (BLS) methods, the 500,000 additional vehicle sales—an addition of more than \$10 billion to the US GDP—translate into 115,000 avoided layoffs in auto and related supplier industries during the lowest point of the recession.

Of course, the auto manufacturers can’t take all the credit for the strength of vehicle sales in the period since the attacks. Aggressive easing of interest rates by the Fed certainly lowered the cost for automakers offering zero or low interest rates. In addition, the Bush tax cut added to disposable income. But as Blinder pointed out in his op-ed piece, “Waiting for Congress to pass the much-needed economic stimulus bill is beginning to look like waiting for Godot. Fortunately for the US economy, two large private industries—automobiles and homebuilding—have stepped up to provide the stimulus that the government has thus far failed to deliver.”

From a slightly longer-term perspective, auto sales have been exceptionally strong since the mid-1990s (figure 6.2). The 1990s started on a sour

note for the US auto industry. With the economy in a recession, auto sales fell precipitously. While sales recovered as the economy emerged from recession, the sales recovery was muted. Many analysts who follow the industry argued that auto sales would remain weak for an extended period because customers were more interested in computers, boats, and home improvements. Fortunately, the pessimists were proved wrong as industry sales improved steadily through the 1990s. Auto sales exceeded the 15 million mark—which was considered the benchmark for a strong sales year—for an unprecedented five consecutive years before jumping above 17 million for three years.

The 1990s also marked the revival of the US auto industry and American-owned auto manufacturers. In the 1980s and early 1990s, it had become conventional wisdom that American auto companies would not survive the competitive challenge from Japan. Yet by the end of the decade, it was the Japanese auto companies that were struggling.

## What Happened?

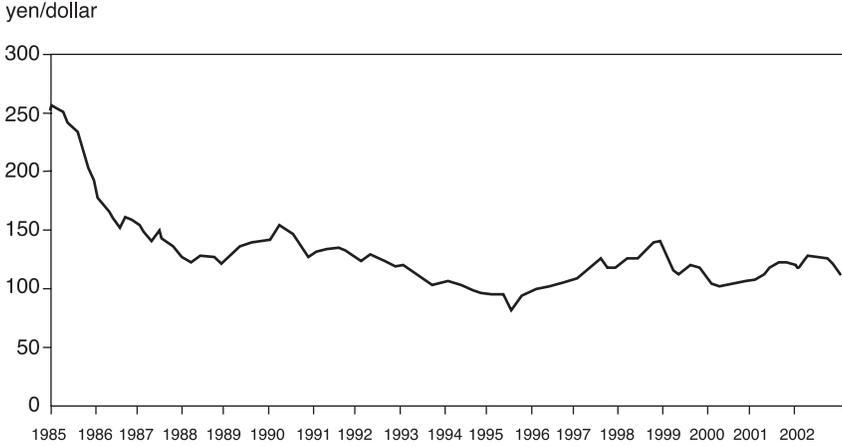
The first factor was the economy. The US economy thrived in the 1990s, while Japan's economy was stagnant. The strong US economy led to strong vehicle sales—again, more than 15 million each year since 1995. In contrast vehicle sales in Japan trended down steadily and are now at levels last seen in the early 1980s. US auto companies benefited greatly from strong domestic sales. While Japanese companies also benefited from the strength of the US market, it was not sufficient to offset their weak domestic market.

The second factor was restructuring. The threat of foreign competition forced US auto companies to restructure their US operations in the 1980s and 1990s. In contrast, Japanese companies delayed restructuring in Japan in the hope that domestic recovery would make such restructuring unnecessary.

Another factor was business strategies. In the late 1980s, American auto companies chose to invest heavily in light trucks and trucklike vehicles such as sport utility vehicles and minivans. In contrast, all the major Japanese auto companies invested heavily in luxury cars. Thus, when the market for sport utility vehicles and minivans took off in the United States, American auto companies were the primary beneficiaries. In contrast, the market for luxury cars did not develop to the extent that Japanese companies had anticipated. Moreover, an effective response by German auto companies prevented the Japanese companies from gaining share at their expense.

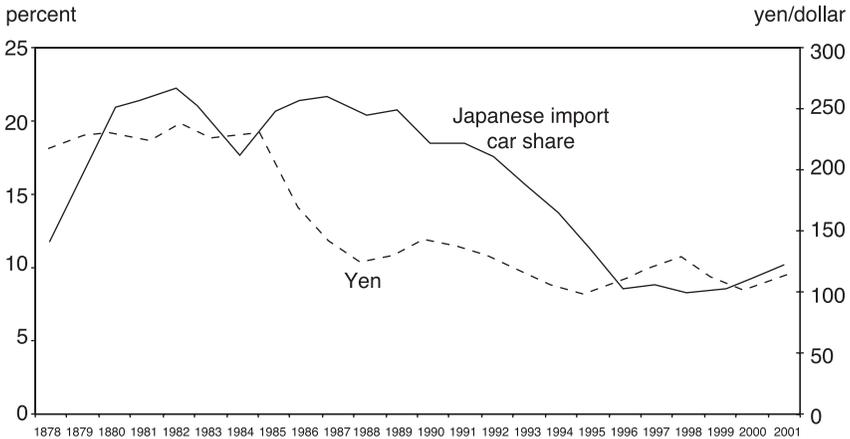
Finally, exchange rates were a factor. Like many other US manufacturers, the domestic auto companies benefited from the dollar's substantial

**Figure 6.3 Japanese yen per US dollar, 1985-2002**



Source: Federal Reserve Board.

**Figure 6.4 Japanese import car share versus the yen, 1978-2001**

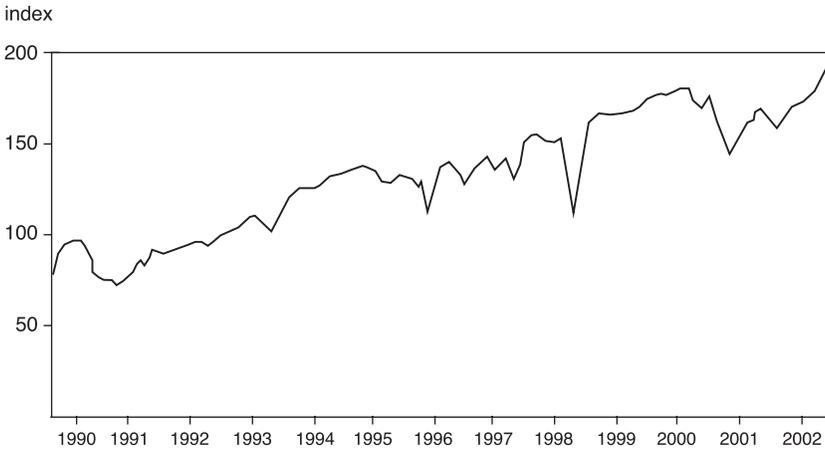


Source: Automotive Trade Policy Council.

depreciation from 1985 to 1995 (figure 6.3). The stronger yen resulted in declining imports from Japan (figure 6.4) and increased production in the United States by both domestic manufacturers and by the Japanese manufacturers in the United States (figure 6.5).

In short, as Michael Moskow, president of the Chicago Fed stated (quoted in *USA Today*, February 28, 1997), the Midwest economy in general, and the US auto industry in particular, were the surprise stories of the 1990s. Written off as part of the rust belt in the early 1980s, the auto

**Figure 6.5 Index of industrial production, motor vehicles and parts (SIC 371), 1990-2002**



Source: Federal Reserve Board.

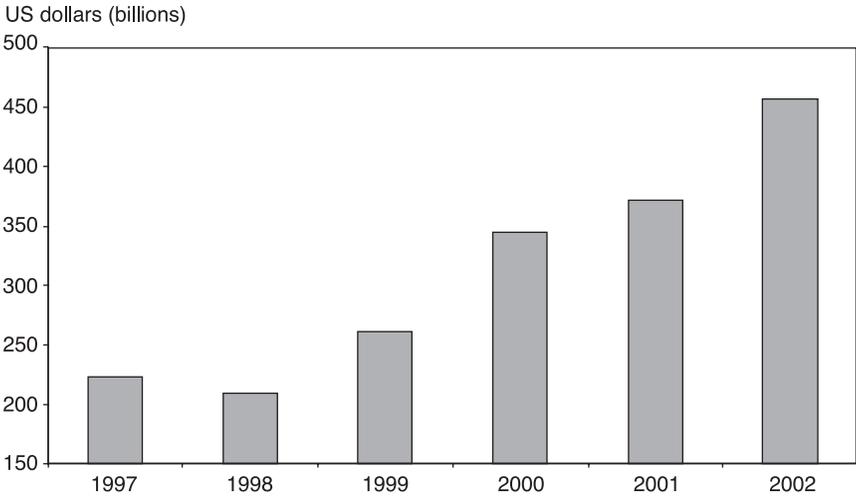
industry flourished in the 1990s. The combined annual profits for GM, Ford, and Chrysler averaged over \$13 billion per year from 1993 to 2000.

For the Japanese companies, in contrast, failure to restructure combined with a weak domestic economy and an appreciated currency left them with excess capacity and excess borrowing. By the end of the decade, Renault had taken controlling interest in Nissan, Ford had taken management control over Mazda, and DaimlerChrysler had taken over Mitsubishi. Even healthy companies such as Suzuki and Fuji Heavy Industries sought alliances with GM. Who would have thought a decade ago that Nissan, the second largest auto company in Japan, would fall under the control of a foreign firm—Renault? Or that the GM group (GM, Isuzu, Suzuki, and Fuji Heavy Industries) would become the second largest seller of cars in Japan?

The good news for American auto companies would have continued into the new millennium were it not for the fact that the government of Japan decided to embark on an export-led growth strategy again. In particular, as the yen began to appreciate in late 1998, Japan started to intervene in the currency markets heavily in 1999. During the year, Japan bought more than \$75 billion in order to weaken the yen (figure 6.6). By the start of 2000, the heavy intervention combined with frequent comments from Japanese officials threatening additional intervention succeeded in halting the yen's appreciation. However, Japan was not satisfied with simply halting the appreciation of the yen. It continued to intervene and to jawbone the currency lower. By the end of 2001, Japan had succeeded in pushing the yen down to around 134 yen to the dollar.

Many analysts continue to question the effectiveness of Japan's intervention. Indeed, there is a strong belief among economists that interven-

**Figure 6.6 Japanese foreign currency exchange reserves, August 1997-August 2002**



Note: All data are for August of the year indicated.

Source: Automotive Trade Policy Council.

tion only has a short-term impact on exchange rates. Their view is based on attempts countries have made to defend their currency. Japan proves that as long as inflation is not a concern, a country can intervene to lower the value of its currency without any limits.

One measure of Japan's intervention is change in reserves. As shown in figure 6.6, Japan's reserves rose by roughly \$200 billion, from around \$250 billion to \$450 billion, between August 1999 and August 2002. Certainly no one believes that a hard-currency country needs reserves of this magnitude. For example, US reserves are around \$50 billion. In any case, Japan has made no secret of its intervention or of its desire to drive the value of the yen lower.

What difference did this make in the auto industry? The change in the value of the yen from 116 yen to the dollar in January 2001 to 126 yen to the dollar in May 2002 added about \$3,000 in additional margin on a Nissan Maxima originally priced at \$25,989. The margin differential is obviously much greater if one considers the differential between, say, 100 to 105 yen to the dollar—what I believe to be equilibrium exchange rate and roughly the value in January 2000—and the weakest point in the current cycle, around 135 yen to the dollar at the end of 2001.

Is it any surprise, then, that 2001 marked the turning point in the relative performance of the Japanese and US auto companies? Armed with a subsidy of \$3,000 to \$3,500 per unit, the Japanese companies were soon reporting improving profits and increasing share in the United States.

Honda and Toyota, the two strongest Japanese automakers, reported all-time record profits in 2001. Nissan's turnaround made Carlos Ghosn a household name in Japan. Interestingly, both Toyota and Honda attributed the entire improvement in their profits to the depreciation of the yen.

Using the change in profits reported by Honda and Toyota in 2001, it appears that Toyota's profits improve by ¥20 billion for every one-yen fall in the yen against the dollar. For Honda, which has a higher level of production relative to sales in the United States, the improvement is around ¥12 billion. Using a longer data set, Morgan Stanley estimates that Toyota's profits change by \$125 per unit for each percentage point change in the value of the yen against the dollar ("Weaker Dollar May Change Strategic Outlook," *Equity Research*, May 31, 2002).

If it was only profits that were being increased, US automakers would be less concerned. But with auto sales in Japan stagnant, Japanese auto companies have taken advantage of the weak yen to increase market share in the United States. In the past two years, the share of the US auto market captured by imports from Japan has jumped by 1.2 percentage points. The Korean manufacturers, who also enjoy a weak currency, have gained another 1.2 percentage points, and the European manufacturers have gained about 0.8 percentage points. In total, the import share has gained 3.2 percentage points. Of course, the Japanese also have gained share through increasing local production, which also benefits from the weaker yen. But, contrary to public-relations statements from Japan, much of the gain has come from imports. Indeed, Morgan Stanley estimates a 0.75 percent correlation between Japanese import share and longer-term movements in the yen versus the US dollar.

It has been suggested that US manufacturers can offset the currency changes through hedging. That is not true, however. US companies can and do hedge their own currency exposure, but they can't hedge their competitive exposure. More important, they shouldn't have to. The auto industry is already intensively competitive. It should not be forced to compete against subsidized competitors.

Indeed, intervention on the scale that Japan has engaged in is no different from other forms of subsidies that governments offer. That is why the World Trade Organization has explicit provisions against currency manipulation. That is also why the International Monetary Fund proscribes manipulation of currency values. And that is why the Omnibus Trade Act of 1988 required the US Treasury Department to monitor currency manipulation by other countries and to take appropriate measures to prevent other countries from manipulating their currencies to gain a competitive advantage for their producers.

There is only one reason that Japan is intervening in currency markets today—to give its firms an unfair competitive advantage.

Of course, US automakers have to focus on things under their control—products, manufacturing efficiency, and supply chain management—and they are doing that. Productivity at GM, for example, has increased substantially, and quality has improved even more as the time required to bring new products to market has declined. However, it is difficult to overcome a currency disadvantage of 20 percent or more.

Nor is this a short-term problem. Japanese, Korean, and European auto manufacturers are plowing their profits back into products and production facilities, some of which are in the United States. In other words, not only are they getting a short-term advantage, they could well be gaining a longer-term advantage.

## Conclusion

The second half of the 1990s marked a revival of fortunes for the American auto industry. The strong US economy and demand for vehicles, a competitive value of the dollar, strong products, improved quality, and restructuring of manufacturing allowed the domestic manufacturers to compete successfully with foreign-owned manufacturers. GM and Ford solidified their positions as the number one and two manufacturers in the world. And, although Chrysler merged with Daimler, the combined company—DaimlerChrysler—became the number three manufacturer. In the meantime, Japanese auto companies struggled with a weak home market and an appreciated yen.

The new millennium has started with another reversal. The American companies are struggling to earn a profit while the Japanese companies are again in ascendancy. To be sure, some of the American companies' problems and the Japanese companies' recent success can be attributed to market factors. However, an even larger contributor to the relative performance has been Japan's intervention to lower the value of the yen. The weak yen has lowered the cost of vehicles imported from Japan by roughly \$3,000 on a \$25,000 vehicle. It is no surprise that Japanese companies are reporting record profits and expansion around the world while American companies are announcing significant cutbacks in capacity and employment.

