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Automobile Industry

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around the Indianapolis Motor Speedway and its owner, Tony George. During the 1980s, CART and the United States Automobile Club (USAC) had been the two sanctioning bodies that governed racing at Indianapolis, and these two groups had an uneasy relationship. In 1994, George announced that the Indianapolis 500 would leave the CART series and become the centerpiece for George’s own IRL series. Whether the decision was motivated by ego, a concern over the increased presence of foreign drivers, or a perception that Indy was dropping in status as a race is unclear. The upshot of all of this, however, was that in 1996 a group of unknown drivers raced at Indianapolis, while CART organized its own race, the U.S. 500, held in Michigan on the same day. The split greatly affected this level of racing, as it led to decreased television revenues and waning fan interest. In the end, the Indianapolis 500 prevailed, and after shifting the race date of the U.S. 500 to July, in 1999 CART canceled the race altogether.

**End of Tobacco Company Sponsorship** Since the early 1970s, tobacco companies had played a critical role in automobile racing through sponsorship of teams and events. No longer able to advertise in print or on television, the tobacco industry could advertise on the side of cars, however, and it did so freely. This investment came to an end in 1998, however, when after litigation involving the companies and the states’ attorneys general an agreement was reached that eliminated cigarette companies from automobile racing. After twenty-eight years, NASCAR’s Winston Cup ended, but racing continued, now known as the NEXTEL series.

**Impact** Despite America’s wavering love affair with the automobile, auto racing remains one of the nation’s most popular sports, on the level with football, baseball, and basketball. A huge and vibrant business, its fan base draws from virtually every class segment in society.

**Further Reading**

*See also* Automobile industry; Gordon, Jeff; Sports; Television.

### Automobile Industry

**Definition** Industry involved in the manufacture and sale of motor vehicles

*During the 1990’s, the American automobile industry was transformed in terms of products, leadership strategies, organization, and technology. Increasingly, the American industry has evolved into part of a global web of manufacturers, parts suppliers, and consumers.*

In 1999, annual sales of cars and light trucks in the United States reached a high of 16.9 million units, eclipsing by nearly one million the previous high reached in 1986. Despite ending on this high point, the 1990’s proved to be extremely competitive and turbulent time for automakers. As the decade unfolded, and following a trend that began in 1980, more and more light trucks as opposed to passenger cars were manufactured. In addition to trucks and sport utility vehicles (SUVs), new “market segment busting” vehicles appeared, called “crossovers.” The crossover mixed together features such as style, sturdiness, reliability, and luxury. These new vehicles were in part the consequence of a new generation of leaders in the industry, typically “motor heads” rather than the “bean counters” that had preceded them. As a result of making innovative vehicles that were of better quality, sales quantities and profits moved commensurately higher. For example, after staggering losses at the beginning of the 1990’s, between 1994 and 1998 General Motors (GM) and Ford had a global net income of $52 billion on reve-
nues of $1.3 trillion. Given the flush times, the end of the twentieth century witnessed a flurry of merger activity involving U.S. auto companies and overseas manufacturers. The American auto industry was no longer centered as a cluster of enterprises based for the most part in Detroit, but rather it was now profoundly global in scale and scope.

Automobile and Light Truck Industry The rapid rise of light trucks in the American marketplace post-1980 marked a new era. In 1981, light trucks represented just 19 percent of the American market, but some twenty-two years later they totaled more than 54 percent of what was once thought of as “car makes.” Indeed, the market share of trucks increased each and every year after 1981 to the twenty-first century, and this trend resulted in tremendous windfalls for American manufacturers. Trucks were often sold at profits of $10,000 or more per unit, while small cars typically garnered miniscule profit numbers—at times only $1,000 was made on the sales of such vehicles.

It was recognized, however, that the expanding truck market had its limits. In what was then perceived to be a slow-growth market increasing by no more than 1 percent per year, new products were called for. To find new market niches, a fresh type of vehicle, the crossover, appeared during 1997 and 1998. The Honda CR-V, the Mercedes-Benz M-class, the Subaru Forester, and Toyota’s RAV4 were built on car platforms and cloaked to appeal as civilized and luxury SUVs. Another unique offering that was introduced at the end of the century was the DaimlerChrysler PT Cruiser. All manufacturers at the end of the decade were working on breaking through market segments by offering vehicles that uniquely mixed the practical with affordability, performance, and style.

Just as product lines were revolutionized to include SUVs and crossover vehicles, so too was the high end of the market. Commensurate with the overall prosperity of the decade, luxury product sales increased markedly, with such products as the Lexus, Infinity, and Acura, along with BMW 5 and 7 series vehicles. These high-end cars were accountable for the decrease in the lucrative luxury sales on the part of American manufacturers from 65 percent in 1996 to 52 percent in 1999. No longer was the Cadillac the iconic symbol of status and wealth in America; rather, it was the Lexus, built by Toyota to unprecedented standards of quality and comfort, or the BMW, with its advanced technology and panache.

New Leaders and Organizational Strategies At the beginning of the 1990’s, the American automobile industry was in a decided decline. The industry lost $8 billion in 1991, and the Honda Accord was the best-selling car for the third year in a row. Despite the bleak outlook, the industry experienced a remarkable comeback, the result of new leadership. At General Motors, Chairman Robert Stempel, who had taken over from Roger Smith and had employed the same strategies of plant closings and diversification, gave way to John F. “Jack” Smith. Smith focused his energies on reapplying the managerial and organizational strategies of former GM chairman Alfred P. Sloan that led to rationalization of divisional efforts, a reduction in competition among the units, the use of common platforms across the firm, and the introduction of new technologies. At Ford, Alex Trotman followed strategies similar to that of founder Henry Ford. Trotman pushed for the introduction of the Contour-Mondeo world car, centrally manufactured in discrete locations but marketed worldwide. Even at Chrysler, executive transitions took place, as Lee Iacocca was forced out, eventually replaced by Robert Eaton and Robert Lutz.

Eaton and Lutz totally revitalized the company, the result of new organizational and manufacturing practices that included the formation of platform teams and fresh products. While basking in the glow of success between 1996 and 1998, Eaton did not want to play it safe. He had been concerned for some time with Chrysler’s future, and in particular the lack of Chrysler’s presence in foreign markets, especially Asia and South America.

Thus, beginning in February of 1998, with an ever-increasing involvement by lawyers, bankers, and second-level executives, negotiations proceeded to a point that ultimately led to the signing of a merger agreement with Daimler-Benz AG in early May. Numerous obstacles had to be overcome, from the most formidable, like different organizational structures, to patterns of acceptable cultural behavior, language, and the more trivial, like headquarter time zone differences. Would the company be called ChryslerDaimler or DaimlerChrysler? In the end, the Germans got their way in terms of the new firm’s name, and indeed that decision foreshadowed the
The Nineties in America

The Transplants  In May of 1980, the Japanese government signed the Askev/Yasukawa Agreement to encourage Japanese automakers to invest in the United States and to purchase American-made parts. Until that time, Japanese cars sold in America were imported and made entirely of Japanese parts. In the twenty-five years that followed, Japanese automakers invested $28 billion in the United States, and in the process some twelve assembly plants and thirteen parts plants were established. These facilities included Honda plants in Ohio, Georgia, and Alabama; Subaru operations in Indiana; Mazda in Michigan; Mitsubishi manufacturing in Illinois; Nissan in Tennessee and Mississippi; and Toyota in Kentucky, Indiana, West Virginia, Alabama, and Texas.

The Germans were also active in establishing new plants in the United States. In Green, South Carolina, near Spartanburg, BMW established a plant in the early 1990’s that made Z4 roadsters and X5 SUVs. Former textile workers now worked the assembly line at BMW, and the presence of the company in the local community was felt in terms of connections with Clemson University to establish an automobile research center and in the employment of numerous North and South Carolina college graduates in management positions.

The Germans were also active in Alabama, where in 1997 Mercedes established a plant to manufacture M-class and R-class vehicles. Employing just-in-time techniques so that just two hours’ worth of inventory is stocked, Mercedes’ presence in Alabama resulted in a capital investment of nearly $680 million and the creation of ten thousand jobs.

In sum, the automobile industry evolved during the 1990’s in such a manner that it was no longer possible to make a simple identification as to whether a car was American or foreign. The establishment of foreign-owned manufacturing plants in the United States was not only a recognition of the enormous market and buying power of the American people but also a clever strategy aimed at reducing nativist criticisms aimed at foreign firms who were accused of undermining American long-term prosperity and manufacturing-sector employment.

New Technologies  As a result of a new emphasis on quality, forced upon American manufacturers by the Japanese, warrantees became longer. In terms of configuration, front-wheel drive displaced the rear-wheel drive as the most used arrangement in the typical car. First employed before World War II by Ernest Loban Cord in luxury vehicles and then after the war in mass-produced cars due to the design efforts of Alec Issigonis, front-wheel drive architecture proved to be more efficient in terms of fuel consumption, and also in terms of bad-weather handling.

Safety issues, driven by federal government standards and consumer demand, also emerged as an important theme by the late 1970’s. The development of the air bag, introduced first in models during the mid-1970’s but employed almost universally by the 1990’s, was both an effective deterrent to fatal crashes and yet also highly controversial. The design is conceptually simple—accelerometers trigger the ignition of a gas generator propellant to very rapidly inflate a nylon fabric bag, which reduces the deceleration experienced by the passenger as he or she comes to stop in the crash situation. After two decades of controversy over the dangers of air bag deployment, in 1989 American manufacturers began installing air bags on many product lines. However, during the 1990’s questions over deployment and unintended injuries and death remained. In 1990, the first report of a driver being killed by an air bag took place, as a sixty-four-year-old woman suffered fatal chest injuries. Then, in 1993, the first of twenty-three deaths over three years was reported in terms of a passenger-side air bag deployment. Despite the deaths, it can be concluded that fifteen thousand lives have been saved by air bags in the last twenty years.

Better braking systems, including the use of disc brakes on all four wheels and ABS systems to equalize the braking system and prevent lockup, enhancing both stability and shortening braking distances, became prevalent in the industry again by the late 1990’s. Antilock braking was a European development that came to America first through imported German vehicles, namely the 1978 S-class Mercedes and the 7 series BMW. Bosch had patented elements of the system as early as 1936, and a number of innovations followed during the 1980’s and 1990’s.

Above all, the car became computerized. A central computer monitored ignition and combustion functions, thereby decreasing emissions to unprecedented low levels. The computer, coupled in a closed loop with electronic fuel injection and an oxygen sensor, enabled engines to burn fuel extremely...
efficiently, and with various sensors feeding information back to the computer, optimal efficiency became the rule for even the least-expensive vehicles by the early 1990’s.

**Impact** For nearly a century, the American automobile industry has been the economic engine that has driven the nation’s economy. The automobile industry is connected to the steel, petroleum, petrochemical, textile, computer, glass, and rubber industries. At the end of the 1990’s, this sector was directly responsible for more than 3 percent of the American workforce, with a payroll of approximately $10 billion. Furthermore, more than eight million workers indirectly owe their jobs to this industry.

**Further Reading**


See also Auto racing; Business and the economy in the United States; Electric car; General Motors strike of 1998; Sport utility vehicles (SUVs).