

Our Friends in Detroit
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Henry Ford wanted to end special dividends for Ford stockholders and put the money into new plant investment. This investment would enable him to build more cars, employ more workers, and cut both costs and car prices. His biggest minority stockholders, John and Horace Dodge, owned 10% of the company. They disagreed with Ford, and took him to court. In 1919 the Michigan Supreme Court sided with the Dodges, ruling that a corporation exists mainly for the benefit of stockholders. This case established "stockholder primacy." Some constitutional experts dispute its significance, but *Dodge v. Ford Motor Company* remains the leading case on the purpose of corporations.

In the 1920s, General Motors President Alfred P. Sloan is thought to have established a unit charged with killing electric mass transit and replacing it with gas-burning vehicles. He is thought to have enlisted the help of oil companies, glass and rubber manufacturers, financiers, politicians and others. They pursued their scheme by means of several holding companies whose members cooperated in the destruction of the trolley systems through purchase, degradation of service, and the destruction of equipment. Between 1936 and 1950 some of these holding companies bought over 100 electric surface-traction systems in 45 cities, from New York City to Los Angeles, and replaced them with General Motors buses.

In 1947 nine corporations and seven individuals were indicted in the Federal District Court of Southern California under the Sherman Antitrust Act. The corporations were Firestone, Standard Oil of California, Phillips Petroleum, General Motors, Federal Engineering, Mack, and three subsidiary companies. In 1949 they were found guilty of conspiring to monopolize the bus business. The court fined the corporations \$5,000 each, the directors \$1 each. The verdict was appealed, and upheld in 1951.

Ford introduced its second-generation subcompact car, the Pinto, in 1971. As in many other American cars at that time, its gas tank was located directly behind the rear axle, not above. This location left a relatively small crush space, 9 inches, between the tank and the axle, where the differential sat studded with bolts that a prosecuting attorney would later call "can openers." A location above the axle, where the tank would be less likely to contact the axle, would have left this hatchback car with significantly less baggage space. In addition, its filler cap could detach from the tank in a rear-end crash, increasing the likelihood of a fire. Poorly reinforced doors could easily jam in a crash and make it difficult to escape. The rear bumper was essentially cosmetic. These design features would lead critics to charge that the Pinto was vulnerable to lethal fire and explosion in the event of a rear-end collision. Such collisions led to several big lawsuits, criminal charges, a costly recall, and severe damage to Ford's reputation. The recall involved a safety kit, worth about \$9, that covered the bolts on the differential with a protective plastic material. Other changes made the filler cap less likely to detach in a collision.

The most famous incident was decided in a California case in 1981, *Grimshaw v. Ford Motor Co.* In 1972 a woman invited her neighbor, a 13-year-old boy named Richard Grimshaw, for a ride in her new Pinto. As they drove along a freeway a carburetor problem stalled the car, bringing it to a halt in the middle lane. The following car appears to have slowed, but struck the Pinto in the rear at perhaps 30 miles per hour. The Pinto caught fire, and the driver died. Passenger Grimshaw survived, but was badly burned and endured dozens of operations as a result of his injuries. A national publication broke a Pulitzer Prize-winning story which suggested that Ford management had omitted inexpensive safeguards in the design of the Pinto because they would have cost more than the legal defense against claims of negligence. The trial judge declined to admit the evidence supporting that claim into the court proceedings, but the story was widely circulated. The final decision

awarded Grimshaw compensatory damages of \$2.5 million, and punitive damages of \$3.5 million.

Ten years later attorney Gary Schwartz revisited the decision in a law review article in which he contended that the evidence against Ford was not so compelling as popularly believed. He based this claim primarily on comparisons with other subcompact contemporaries of the Pinto, both foreign and domestic. It is not clear whether Schwartz' conclusion is to be taken as an exoneration of Pinto or a condemnation of its contemporaries. Schwartz might have clarified the matter by determining whether the simple fix effectuated by the factory recall improved the Pinto's safety record, and whether later subcompact designs were safer than Pinto and its contemporaries. Another question that might have been raised was why the carburetor, a highly refined and reliable device that should not have failed as it did, nevertheless failed in the Grimshaw Pinto.

In 1970 John Volpe, President Nixon's Secretary of Transportation, ordered the auto industry to install airbags in cars as lifesaving devices. In response, Henry Ford II and his top executive, Lee Iacocca, paid a visit to the White House. Iacocca told Nixon that airbags were just another untested gadget being pushed on the auto industry by the likes of safety zealot Ralph Nader. They would just raise prices, cause inflation and cripple Detroit in its competition with the Japanese makers. Nixon's regulators were going to "break us." Could he just tell them to cool it? Car buyers don't really want safety devices; even if they did, these bags wouldn't work anyway. Nixon obliged. He told his aide, John Ehrlichman, to take care of the problem, and Ehrlichman did just that.

In 1990, when all evasions were exhausted and thousands had died needlessly, airbags finally made it into the marketplace. Their efficacy was immediately apparent. Lee Iacocca, now CEO of Chrysler, appeared on TV commercials. He was there to brag about Chrysler's lead in bringing these lifesaving airbags to American motorists.

The modern all-electric car first appeared in 1996. A two-seat compact, the General Motors EV1 was a triumph of automotive engineering. The first generation, powered by lead-acid batteries, could go 55-75 miles on a single charge of its Delco batteries, 75-100 on Panasonics. Its running was amazingly quiet, thanks to its electric power and its aerodynamics: Its coefficient of drag, 0.19, remains the lowest ever achieved in an automobile. Its cutting edge refinements included an aluminum frame, dent-resistant side panels, antilock regenerative brakes, keyless entry and ignition, one-way thermal glass, traction control, a heat pump for heating and air conditioning, magnesium alloy wheels and seat frames for weight reduction, programmable cabin heat settings, self-sealing tires with low rolling resistance, automatic warning of low tire pressure, and heads-up displays just above the instrument panel. The second generation could go 75-150 miles on NiMH (nickel metal hydride) batteries, which could recharge in 8 hours.

In keeping with its role as a test of engineering and marketability, the car was available only on a three year/30,000 mile lease. The monthly cost could vary from \$299 to \$574, depending on state rebates. It was available in only two states, California and Arizona. Production ran from 1996 to 1999, during which time 1,117 units became accessible to the public.

Although the car earned a loyal and enthusiastic following, GM ended the program because it had doubts about the car's profitability. Moreover, it recalled every one of the cars, ostensibly because it could not tolerate the costs of maintaining the fleet for the state-mandated minimum of 15 years. Although it assured the lessees that the company would not send the cars to the crusher, it did exactly that. I have seen no company explanation, but under the circumstances destruction might indeed have been the best way to prevent reverse engineering. A few specimens exist as museum exhibits; I have seen one at the University of Cincinnati.

General Motors went on to use the EV1 as a test bed for other kinds of engine. A diesel/electric hybrid achieved a range of 550 miles at 80 miles per gallon. A gas

turbine/electric hybrid could go 390 miles at 60-100 miles per gallon. A compressed natural gas internal combustion engine had a range of 350-400 miles at a gasoline equivalent of 60 miles per gallon. There was even a fuel cell/electric version that went 300 miles at a gasoline equivalent of 80 miles per gallon.

There is no doubt that the cancellation of the program in 2003 was both a source of great dismay among the car's fans, and great joy among oil executives. Texaco rushed in to buy the patent rights to the NiMH Panasonic battery used in the EV1. Those rights now belong to Chevron, which refuses to allow that battery's use in electric vehicles.

General Motors executives now regret the decision to cancel the program. They understand now what a coup they could have achieved, given subsequent developments in the area of petroleum-based fuel. Their present great hope is the Chevy Volt, a plug-in hybrid gasoline/electric scheduled to reach the market in 2010. Had they made a different decision, the Volt might have reached the market ten years earlier.

Ironically, it was the false start by General Motors that so frightened the Japanese auto makers that they began a crash program to develop the gasoline/electric hybrid car. The leading example is the Toyota Prius. That, of course, is the kind of car that has put Japan ahead of the U.S. in worldwide technology and marketing.

Had GM decided to stick with the EV1, GM dealers everywhere would now be selling the hottest car around, the world's best electric. Instead, GM finds itself in a desperate struggle for survival, hoping it can hang on until 2010, when the savior Chevy Volt shows up--a car much inferior to the EV1. No one doubts that the Volt, as a plug-in hybrid, will use less gas and oil than a conventional car, and less than even a Prius. However, the long awaited Volt will use more gas and oil than its forbear, the pure electric EV1, which used none at all. The Volt will also require considerably more maintenance than the EV1, and more spare parts.

Truly, all GM employees have ample reason to regret their executives' decision to kill the EV1.

For decades Congress and individual states have often proposed higher requirements concerning fuel efficiency and exhaust emissions so as to reduce our consumption of fossil fuels and improve the global atmosphere. Detroit car makers have stymied virtually all of those proposals by means of aggressive lobbying. They have also used special incentives for the public to buy products particularly harmful to the environment. An example is the "Hummer Tax Loophole." This provision, originally intended for farmers to recover the cost of work vehicles, has morphed into a \$25,000 tax break for the purchase of a Hummer SUV.

In 2008 the three leaders of Ford, General Motors and Chrysler appeared before Congress. They had flown down in their corporate jets because of the financial meltdown occasioned by the irresponsible behavior of their fellow moguls on Wall Street. Times were hard, through no fault of theirs, they said, and they hoped Congress would bail them out. The first installment was to be a \$25 billion grant from the taxpayers. Otherwise, they expected to conduct their business as usual. Two weeks later they were back in Washington to ask for still more money. However, they seemed to have learned something in the interim: This time, they left the jets in their hangars and made the trip in hybrid/electric cars manufactured by their own factories.