

The Road Ahead



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Table of Contents

Overview2

The Current State of the Detroit 3 and the UAW

 General Motors.....3

 Chrysler.....7

 Ford.....10

 UAW.....12

Current Status of Foreign-Based Automakers Selling in the United States

 European Automakers.....14

 BMW.....15

 Daimler and Mercedes.....15

 Volkswagen.....16

 Asian Automakers.....17

 Honda.....17

 Hyundai-Kia.....18

 Mazda.....19

 Mitsubishi.....20

 Nissan.....20

 Subaru.....22

 Toyota.....23

U.S. Light Vehicle Sales.....25

U.S. Light Vehicle Production and Capacity Utilization.....27

Employment.....29

Market Forecasts and the Road Ahead

 U.S. Light Vehicle Market Forecast for 2010 and Beyond.....30

 The Road Ahead.....32

Tables and Graphs.....35

Road Ahead 2010

Overview

In 2009, the U.S. auto industry faced the culmination of a crisis unlike any other in its history. Automotive sales have always been cyclical, and the car companies have weathered significant drops in sales and production before. However, this crisis pushed the U.S. auto companies to the brink and beyond. After years of declining sales and market share, General Motors (GM), Ford, and Chrysler (the Detroit 3) reached the crisis point in late 2008, and faced potential collapse in 2009. Such a collapse would have been extremely detrimental to the U.S. economy. The Center for Automotive Research (CAR) estimated that if all of the Detroit 3 were to have gone out of business, the total job loss in the United States would have been approximately 3 million. Given the interconnection among the three companies' supply chains and the weakened state of most U.S. auto parts companies, the loss of one of the Detroit 3 would likely cripple production at the other two and probably the operations of the foreign-owned auto companies as well.

Overall the U.S. market contracted 21 percent in 2009, with sales of only 10.4 million vehicles, the lowest level in 27 years. Light vehicle production also fell dramatically, to levels not seen in many decades. Virtually every automaker recorded significant sales declines, with the major exceptions of Hyundai/Kia and Subaru. However, the impact was much more severe on the Detroit 3 who have had a longstanding disadvantage due to legacy costs, and suffered disproportionately from the surge in gasoline prices because of their product mix.

As reported in last year's Road Ahead, GM and Chrysler received \$17.4 billion in emergency aid in 2008 to stem off immediate, unstructured bankruptcy and collapse. GM received \$13.4 billion and Chrysler received \$4 billion. In return, each company submitted a plan detailing its strategy to become viable, including such items as: limiting executive compensation, gaining wage parity with the transplants, restructuring current debt by two-thirds, etc. Citing deteriorating market conditions, both companies requested additional funds in their submissions.

The February 2009, plans submitted by GM and Chrysler were found by the President to be insufficient to establish viable companies and therefore did not satisfy the terms of the loans. Although both companies made additional attempts to restructure, they ultimately failed to reach terms with their creditors and entered bankruptcy. GM emerged from bankruptcy in 40 days as a much smaller, leaner company with a much improved balance sheet. Chrysler emerged after 41 days in an alliance with Fiat. Ford received no government aid for restructuring.

After the distribution of the original \$17.4 billion it became apparent that significantly larger loans would be required to fund the continuing operations and restructuring of GM and Chrysler. Ultimately, over \$85 billion in Troubled Asset Relief Program (TARP) funds were loaned to the auto companies, their captive finance companies, and (through the auto companies) to auto parts suppliers. President Obama created an Automotive Task Force, which includes the Secretaries of Treasury, Transportation, Labor, Commerce, and Energy as well as the leaders of the National Economic Council, the Environmental Protection Agency, the Council of Economic Advisors, the Office of Management and Budget, and the White House Office of Energy and Climate

Change, to oversee the automotive loans and the companies' restructuring efforts. The President also appointed Dr. Ed Montgomery, as the Director of Recovery for Auto Communities and Workers. He has been tasked with ensuring that the full resources of the federal government are leveraged to assist the workers, communities, and regions that rely on the auto industry.

The U.S. Government has taken ownership positions in both GM and Chrysler. Moreover, both companies renegotiated the terms of their obligations to fund health care for their union employees, resulting in the United Auto Workers (UAW) also taking major ownership stakes in the companies.

While the worst of the crisis appears to be over, there are many challenges left to face. Sales and production both realized major declines in 2009 and will take many years to recover. Employment levels have also experienced large-scale declines and will likely never return to their peak levels of years ago. GM and Chrysler's long-running decline in market share accelerated in 2009 – a trend they will have to reverse if the newly restructured companies are to succeed.

Detroit 3 and the UAW - Status Update

General Motors

Although GM experienced an extremely challenging year that included \$50 billion in federal support, bankruptcy and dramatic restructuring, it remained the top-selling automaker in the United States. However, the automaker's U.S. market share has declined from 29.1 percent in 1999 to an historic low of 19.9 percent in 2009. GM's sales declined 29.7 percent in 2009 relative to 2008, and its U.S. production declined a total of 47.8 percent. GM also experienced leadership changes, plant closures, and a decline in employment, brands, and dealerships.

Throughout the past decade, GM's restructuring efforts, including productivity improvements, manufacturing rationalizations, and significant reductions in retiree healthcare expenses and other legacy-related costs lead to significantly lower manufacturing and structural costs. Despite the efforts, GM continued to lose money. In 2008, a combination of weakening economic conditions, tightening credit, and fluctuating gas prices contributed to a severe decline in U.S. vehicle sales and a severe cash flow problem for GM. To keep operating beyond 2008, GM testified at a Congressional hearing in November 2008, regarding its financial state and need for government loans. On December 29, 2008, GM entered into a loan agreement with the U.S. Department of Treasury (Treasury) for funding of \$13.4 billion (an initial installment of \$4.0 billion was provided on December 31, 2008, followed by \$5.4 billion on January 21, 2009, and \$4.0 billion more on February 17, 2009). In mid-December 2008, the automaker announced that it planned to reduce its first quarter 2009 production volume in North America by 30 percent due to low U.S. industry sales.

On February 17, 2009, the automaker submitted a status report, as required by its loan agreement with the Treasury. In GM's "2009 – 2014 Restructuring Plan," the automaker contended that it had or would meet all the terms set forth by the Treasury. GM requested a total of \$22.5 billion (includes \$13.4 billion already received). The automaker announced plans to focus on four core

brands: Chevrolet, Cadillac, Buick and GMC, with Pontiac becoming a niche brand. GM also planned to reduce U.S. employment, nameplates and dealers, eliminate Hummer if it was not sold, phase out Saturn if it was not spun off or sold, and sell Saab (which ended up filing for bankruptcy on February 20). The automaker also planned to meet or exceed all federal fuel economy standards in the 2010-2015 model years. On March 30, 2009, the Obama administration determined that GM's February 17, 2009 restructuring plan was not viable. The Administration also asked Rick Wagoner to resign as GM's Chairman and CEO. GM received 60 days of working capital to develop a more aggressive plan, with the involvement of Treasury officials and outside advisors.

During April 2009, GM announced it was idling thirteen assembly plants in North America for various periods beginning on May 4, removing 190,000 units from its second and third quarter production schedule. The reduction was due to high dealer inventories, the need to align production with demand, and the unsuccessful resolution of Delphi emerging from Chapter 11 (Delphi did not emerge from Chapter 11 until October 2009, see below), which could have forced GM into an uncontrolled shutdown.

On April 22, 2009, GM borrowed an additional \$2.0 billion from the U.S. Treasury. The automaker announced an updated Viability Plan on April 27, which accelerated its timeline for actions and made deeper cuts relative to its February 17 Plan. Major actions in the updated Plan included: phasing-out Pontiac by 2010; reducing the number of nameplates from 48 in 2008 to 34 in 2010; accelerating the resolution of Saab, Hummer, and Saturn by the end of 2009; completing and accelerating the reduction of dealers; accelerating plant closures (from 47 in 2008 to 34 in 2010, and to 31 by 2012) and idling one additional plant; reducing U.S. hourly employment from approximately 61,000 in 2008 to 40,000 in 2010, and to 38,000 in 2011; reducing U.S. hourly labor costs from \$7.6 billion in 2008 to \$5 billion in 2010; launching a bond exchange offer (on April 27) for approximately \$27 billion of its unsecured public debt; continuing discussions with the UAW to modify the terms of the Voluntary Employee Benefit Association (VEBA); and, continuing discussions with Treasury regarding possible conversion of its debt to equity. In addition, GM lowered its market share projection to 19.5 percent in 2009, and to the 18.4 to 18.9 percent range in subsequent years, and lowered its breakeven point to 10 million vehicles (U.S. annual industry volume). GM expected its structural costs to decline from \$30.8 billion in 2008 to \$23.2 billion in 2010, a further reduction of \$1.8 billion from previous plans.

GM received an additional \$4.0 billion from the U.S. Treasury on May 20, 2009. In late May, the automaker agreed to terms with the union and its bondholders to proceed with bankruptcy protection. On May 29, GM's UAW employees approved modifications to the GM-UAW 2007 labor agreement, including: eliminating cost-of-living increases and performance bonuses, losing a paid holiday in 2010 and 2011, eliminating dental and vision coverage and some prescription drugs for hourly retirees, suspending tuition assistance for at least a year, ending pay for unused vacation, and ending the possibility of a strike until September 2015, when the next contract expires. New incentives were offered for workers to retire. It was also agreed that the VEBA trust would have a 17.5 percent stake in the new GM and warrants for another 2.5 percent stake. The UAW would also receive \$6.5 billion in preferred stock and a \$2.5 billion note, as well as a

seat on GM's board. In addition, GM agreed to produce a compact/small car in the United States at an idled assembly plant. (Press reports indicated GM originally planned to produce the car in China and export it back to the United States). On June 26, GM's Orion Township, Michigan assembly plant and its stamping facility in Pontiac, Michigan, were selected to begin producing the subcompact car in 2011, restoring approximately 1,400 jobs. On May 30 GM's bondholders approved the automaker's plan to exchange their debt for an ownership stake.

On June 1, 2009, GM filed for bankruptcy protection, and modified its plant reduction schedule, ending with 33 plants (assembly, powertrain and stamping facilities) by 2012, (i.e. two fewer plant closures than was announced in April). The automaker also planned to reduce salaried employees and reduce retiree benefits for salaried retirees and non-UAW hourly employees.

GM exited bankruptcy on July 10, 2009, and the new GM began operations. GM won permission on July 5 from a bankruptcy judge to sell substantially all of GM's assets to an entity funded by Treasury, NGMCO, Inc. Following the sales transaction, NGMCO changed its name to General Motors Company. The automaker replaced its overseas operating structure with its new GM International Operations based in Shanghai. International Operations will oversee GM's Asia, Latin America, Africa, and Middle East regions, while GM's headquarters in Detroit will oversee North American operations.

The new GM is owned by Treasury (60.8 percent), the Canadian and Ontario governments (11.7 percent), the new VEBA (17.5 percent), and the company's bondholders (10 percent). The U.S. Government agreed to invest another \$30.1 billion during and after the GM bankruptcy process. The automaker also announced plans to reduce its dealers to 3,600 by the end of 2010. However, GM's dealer reduction plans were met with strong opposition by dealers and members of Congress. In December 2009, Congress passed a bill allowing terminated GM and Chrysler dealers to appeal to arbitrators. In March 2010, GM announced its intention to restore the franchises of 661 of the 1,160 dealers who appealed.

On June 9, 2009, Edward Whitacre, Jr., former chairman and CEO of AT&T, became the chairman of the new GM. On December 1, Mr. Whitacre also became the President and CEO following the resignation of Fritz Henderson as GM's Director, President and CEO. In addition to Mr. Whitacre, six new members were elected to the new GM's board of directors, including four nominated by Treasury, one nominated by the governments of Canada and Ontario, and one nominated by the UAW Retiree Medical Benefits Trust. Five previous members remained on the new board.

GM's plans to sell its Saturn, Hummer, and Saab brands, in addition to its medium truck business, have been difficult to implement. In late September, GM decided to wind down the Saturn brand after a deal with the Penske Automotive Group was cancelled. In November 2009, Koenigsegg, a small, luxury automaker in Sweden, withdrew its offer to purchase Saab. A month later, Beijing Automotive Industry Holdings Co. Ltd. (BAIC) bought the platforms of Saab's 9-3 and 9-5 models and powertrain technology and tooling, which will be integrated into future BAIC vehicles. In February 2010, GM finalized the sale of Saab to Dutch luxury sports car manufacturer Spyker for \$74 million in cash and \$326 million in preferred shares. GM's last

medium truck was assembled at the end of July 2009, after GM was unable to find a buyer for the business after a four-year search. GM also considered selling a 55 percent stake in its European operations, Opel, to Canadian parts supplier Magna and Russian lender, Sberbank in September 2009. However, after months of negotiations, GM's board decided in early November to keep Opel and restructure. Finally, in February 2010, GM announced Sichuan Tengzhong Heavy Industrial Machinery Co., Ltd (Tengzhong), a major industrial machinery group, was unable to acquire Hummer. As a result, GM will wind down its Hummer operations.

At the end of June 2009, GM also decided to end its ownership stake in New United Motor Manufacturing Incorporated (NUMMI), a 25-year old joint venture with Toyota. The California plant ended production of vehicles for GM in August 2009 (see "Toyota" section for additional details). GM also had a number of plant closings throughout the year. The automaker closed its Massena, New York powertrain castings plant in May 2009, and closed its assembly plant in Wilmington, Delaware in July. The Wilmington plant was purchased in late October 2009, by Fisker Automotive, which plans to retool the plant to build a plug-in hybrid sedan. At the end of September, GM closed its Pontiac, Michigan pickup truck assembly plant. GM's Grand Rapids Metal Center, in Wyoming, Michigan stopped stamping production in late May 2009. Tool and die makers continued work before the plant's final closure at the end of 2009. The automaker's assembly plant in Spring Hill, Tennessee also stopped production in late November 2009, and is currently on stand-by capacity. In addition, GM closed three of its GM Service & Parts Operations warehousing and distribution centers during the year.

In early October 2009, GM's former parts division, Delphi, emerged from Chapter 11 bankruptcy after four years as a private company. The automaker acquired Delphi's global steering business and four U.S. plants, which assured continued delivery of vital parts. GM also assumed \$1.1 billion in Delphi obligations and waived approximately \$2 billion in claims against Delphi. The automaker will also invest \$1.75 billion and provide Delphi with loans. In early January 2010, GM announced plans to sell the steering business.

GM's drastic restructuring and healthier balance sheet have the automaker better positioned for the future. With an emphasis on customer satisfaction and service, GM launched a new marketing program, "May the Best Car Win," in September 2009. If a customer isn't completely satisfied with their vehicle, it can be returned within 60 days for a full refund. Although GM's government loans (\$6.7 billion to Treasury and \$1.14 billion to the Ontario and Canadian governments – the rest of the money loaned to GM has been converted into equity in the new GM) have a scheduled maturity of July 2015, in mid-December 2009, CEO Ed Whitacre said the automaker plans to repay the loans by the end of June 2010. On December 18, GM paid \$1 billion to Treasury and \$192 million to Export Development Canada.

The automaker has not committed to a timeframe of a public share offering, but the timing will depend on the conditions within GM as well as the market. For the first three months of 2009, GM lost \$6 billion. First quarter revenues worldwide were down 47 percent compared to the same period in 2008, primarily due to GM's decision to produce 903,000 fewer vehicles globally. GM did not report any full-year financial data or sales data for 2009 other than sales of 1.8 million vehicles in China by GM and its joint ventures (an increase of 66.9 percent). In mid-

November 2009, GM reported it lost \$1.15 billion since emerging from bankruptcy on July 10. The automaker's North American operations lost \$651 million, while its international operations had a \$238 million profit. The United States is GM's largest market, followed by China, Brazil, Germany, the United Kingdom, Canada, and Italy. As of October 7, 2009, GM has reduced its U.S. workforce from approximately 29,700 salaried at the end of 2008 to approximately 24,300. Hourly employment declined from 62,000 to 49,200 people in the same time period.

Chrysler

During its history, Chrysler has experienced several cycles of booms and busts. 2009 saw Chrysler's sales fall 36 percent and its market share falling from a high of 14 percent in 1988 to 8.9 percent in 2009. Chrysler was saved from bankruptcy by the USG in 1979. Chrysler paid back the loan early and went on to several years of success. By the mid-1990's Chrysler was seen as a strong and growing company (with large cash reserves) causing it to become an acquisition target for Daimler-Benz. Chrysler was owned by Daimler-Benz from 1998 to 2007, when it was purchased by Cerberus Capital Management.

Chrysler had several profitable years under DaimlerChrysler management. However, losses began to mount before the sale to Cerberus and have reportedly continued up to the present. Chrysler earned nearly \$2 billion in both 2004 and 2005, but lost approximately \$1.5 billion in 2006 and 2007. Chrysler disclosed a loss of \$8 billion in 2008.

While owned by Daimler, Chrysler employment declined from 123,000 to approximately 69,000 (a 45 percent decline). Under Cerberus management, employment was cut further to 56,600. Since 2007 when Chrysler separated from DaimlerChrysler, Chrysler reduced capacity by 1.2 million units, which represents over 30 percent of its total capacity. Chrysler reduced fixed costs by \$2.2 billion, and by the end of 2008, furloughed over 32,000 employees (including 8,000 white collar workers).

On December 19, 2008, Chrysler received \$4 billion of the \$17.4 billion in emergency loans from the \$700 billion TARP. As conditions for its loan, Chrysler submitted plans to demonstrate its viability. The President's Automotive Task Force determined that Chrysler's plan (submitted February 2009) was insufficient and that the company would have to enter Chapter 11 bankruptcy. The government provided Chrysler with additional capital to continue operations until it concluded negotiations with debt holders and reached terms for its merger with Fiat in March 2009.

On March 30, 2009, the Obama Administration approved a framework for Chrysler to achieve viability by partnering with the international car company Fiat. The alliance would also retain Chrysler's existing factory footprint and continue producing Chrysler cars in U.S. factories. The alliance would create the sixth-largest global automaker, spreading R&D and design development costs over higher volumes.

While Chrysler and Fiat reached agreement, Chrysler failed to secure acceptable terms from its debt holders. Chrysler filed for bankruptcy on April 30, 2009. By May 31, Chrysler's

reorganization was approved, just 31 days after the company filed for Chapter 11 protection and the company emerged from bankruptcy on June 10, 2009.

On June 10, the Chrysler-Fiat alliance became official. Fiat CEO Sergio Marchionne became CEO of the renamed Chrysler Group LLC. A Chrysler alliance with Fiat has several positive features. It provides Chrysler with access to competitive, fuel-efficient vehicle platforms, power trains, and components. Fiat would also provide distribution capabilities in growth markets, as well as substantial cost savings. The partnership also allows both firms to take advantage of each other's distribution networks and to optimize their current manufacturing facilities and global supplier base. Perhaps most important, Chrysler could benefit from Fiat's recent experience in successfully executing its own restructuring over the past several years.

While Fiat has taken the spotlight in the resurrection of Chrysler, Fiat is not the largest shareholder. The UAW's VEBA is the new Chrysler's majority owner, with a 55 percent share. Fiat currently has a 20 percent share, targeted to increase to 35 percent when it meets certain goals and eventually to 51 percent if it meets financial and developmental goals for the company. The U.S. and Canadian governments (national and Ontario province combined) hold minority stakes of 8 percent and 2 percent, respectively.

Chrysler has pledged to repay its loans. Chrysler has received about \$15 billion in total aid, including \$1.5 billion in aid to the automaker's finance company, Chrysler Financial. However, under its reorganization plan, Chrysler was split into two companies Old Carco LLC and Chrysler Group LLC. Old Carco LLC contains all of the "bad assets" that were not purchased by the new Chrysler Group when it emerged from bankruptcy. Included in those bad assets is the initial \$4 billion Chrysler received. Old Carco's "bad assets" also include eight manufacturing locations, many parcels of real estate, equipment leases, and contracts with 789 U.S. auto dealerships that are being eliminated.

Chrysler's Comeback Strategy

The future of Chrysler rests with Sergio Marchionne, who has impressed investors since taking over as Fiat CEO in June, 2004. Marchionne turned Fiat losses to a healthy profit beginning in FY2006 and continuing to the present. Mr. Marchionne has reduced Fiat's managerial bureaucracy and changed its tone to a focus on markets and profit.

With regard to Chrysler, Marchionne has stated, "Our goals are simple. We intend to break even this year (2010) with an operating profit of \$5 billion by 2014. We believe sales will reach 2.8 million units by that date as well. Our goal is \$65 billion to \$70 billion in revenue by 2014, driven by a 20 percent compound annual growth rate."

On November 4, 2009, Chrysler broke six months of silence when it announced its plans for the next five years. The plan builds on synergies between Chrysler and its Italian parent Fiat, especially in terms of introducing new models. Chrysler plans to launch 21 new models over the five-year period, with approximately 56 percent of its total product range to be built on Fiat platforms by 2014.

In sales, Chrysler will be looking to recover market share it has lost over the last two years. Chrysler is targeting 13 percent market share for the United States compared with its current 8.9 percent. Given the projected growth of the U.S. market, this would more than double its domestic market sales from 950,000 units to nearly 2 million units, with total sales rising from 1.3 million to 2.8 million. This includes all brands. Chrysler is basing its short-term goals on projected U.S. industry sales of 11 million units in 2010. Under this plan, improving sales outside of North America will be key for Chrysler's efforts to reduce its dependence on one region and achieve profitability. Chrysler is projecting to increase its foreign sales from the 144,000 units in 2009, to 500,000 by 2014. Foreign sales will represent 18 percent of total sales up from 11 percent currently. This is projected to require a 25 percent increase in Chrysler's dealership networks internationally. Currently, Chrysler has 1,580 dealerships outside North America, 1,100 of which are in Europe. The Chrysler brand sold 11,500 cars in Europe in 2009.

In addition to increasing its sales, Chrysler's profitability will also depend on cutting costs. Major savings will be achieved by sharing suppliers with Fiat. Chrysler plans to share two-thirds of its suppliers with Fiat by 2014. Currently, they have half of their suppliers in common. By achieving this efficiency, Chrysler projects cutting its costs by \$2.9 billion between 2010 and 2014, starting with a reduction of \$500 million next year.

Dealerships will also be consolidated, although this was a process already initiated by Chrysler under its Project Genesis program, which had the goal of uniting all brands under one roof (i.e. all dealers will carry all company brands) by 2011. The number of dealerships has already been drastically reduced as a result of its bankruptcy restructuring, which included the loss of 789 franchises. Now the aim is to make the remaining dealerships more profitable.

New Products

New vehicles for the Chrysler Fiat Group are mostly still two years away. So far, the two companies have revealed few specifics about the cars and crossovers in the works. While Chryslers' plans are quite ambitious, none of its new models have been seen by anyone outside the company. At the current round of auto shows, Chrysler is presenting models that have been around for several years, but with new colors, names or option package configurations.

The product range will start its transformation in late 2010 with new and upgraded models. Chrysler says that as a result of this partnership, it will see 75 percent of the current lineup enhanced within the next 14 months and all vehicles which will be 100 percent refreshed and reinvented by 2012. In 2010, Chrysler will introduce a new Jeep Grand Cherokee and a refreshed Chrysler 300.

The structural changes will begin in 2012 when the Chrysler and Dodge brands will get a new compact sedan based on Fiat platforms. The Dodge brand will be restructured to sell only cars, while Ram will sell trucks which were previously branded Dodge. In 2013, Fiat will continue to bring its small car technology to the U.S. group, with a new small model for Chrysler based on the Fiat 'B' platform, a small car for the Dodge brand and two SUVs for the Jeep brand based on the Fiat Panda platform. In addition, beginning in 2012, the Ram brand will sell small and large commercial vehicles based on Fiat models.

It has been reported that there may be an integration of the Chrysler and Lancia brands. Lancia, a luxury brand sold in Europe reported global sales of 121,000 cars in 2009, of which 102,000 were sold in Italy. In 2011, Chrysler intends to export four models from North America and rebadge them as Lancias.

Fiat is considering broadening its sporty car brand, Alfa Romeo, product portfolio using platforms from Chrysler Group. The plan calls for a Chrysler platform to replace the current mid-sized Alfa Romeo. The new models would be built in the United States starting in mid-2012. Alfa's new-car sales have declined steeply in the past decade as its line-up has aged and its new products were delayed. Last year, Alfa's global sales declined 1 percent to 102,000 units, according to Fiat. That's about half the 203,000 units sold in 2000. Alfa exited the United States in 1995 with a reputation for poor quality.

Ford

On January 28, 2010, Ford announced it posted a full year profit of \$2.7 billion, or 86 cents a share. This was a \$17.5 billion improvement from 2008. Pre-tax operating profits for 2009 were \$454 million; an improvement of \$7.3 billion compared to 2008. Ford posted a profit in the second, third and fourth quarter of 2009. Ford forecasts that it will again be profitable in 2010 and for the foreseeable near term as long as the automotive industry continues to improve worldwide. Ford had not recorded a full year profit since 2005.

Ford reduced automotive structural costs in 2009 by \$5.1 billion, exceeding its own goal of \$4 billion. The company gained market share in North and South America and Europe. At year's end, Ford had \$25.5 billion in cash, but \$34.3 billion in automotive debt. A significant portion of the debt (\$7.4 billion) is Ford's obligation to the UAW's VEBA. This debt puts Ford at a disadvantage to GM and Chrysler since most of their debt was eliminated when they came out of bankruptcy.

Ford's North American operations reported pre-tax operating profits of \$707 million. In South America, the company reported profits of \$369 million, Europe was \$305 million, and in the Asia-Pacific region it totaled \$19 million. Volvo, however, lost \$32 million. Ford Credit reported a pre-tax profit of \$696 million. (These totals may not equal the announced full year profit due to some one-time losses/gains.)

Revenue in 2009 amounted to \$118.3 billion, down from \$138.1 billion in 2008. However, due to the cost savings, fewer one-time write-downs, and a profit from Ford Credit, Ford was able to post a profit. Share prices for Ford increased from a low of \$1.50 on February 20, 2009, to \$10.00 as of December 31, 2009.

Ford posted a 33 percent total increase in U.S. vehicle sales in December 2009 over December, 2008; with car sales up 42 percent, crossover sales up 51 percent, sport utility up 33 percent, and pickups and vans up 18 percent. If this trend continues into 2010, Ford will again increase its U.S. market share of vehicle sales.

When current president and CEO Alan Mulally moved to Ford from Boeing Commercial in 2006, Ford was in the weakest financial position of the Detroit 3. Mulally mortgaged nearly everything the company owned, including the Ford name, to borrow money when interest rates were relatively low. The timing was excellent since one to two years later, GM and Chrysler were unable to do the same. A few months before Mulally began, Ford announced a major restructuring plan for its North American operations, naming it the "Way Forward." The purpose was to reduce Ford's North American vehicle capacity to match expected demand and reduce fixed costs. The company announced it would close 14 manufacturing facilities, including 7 assembly plants. Approximately 57,000 hourly and salaried positions have been eliminated since that time. As can be seen by the 2009 financial results, the program has served its intended purpose.

While GM and Chrysler received U.S. financial assistance in 2008-2009, Ford possessed sufficient credit lines and cash so that it did not require any form of USG direct financial assistance. However, Ford did receive a guaranteed line of credit from the USG of \$9.0 billion (not used to date).

Ford also received a \$5.9 billion loan from the USG in September to transform many of its factories into more efficient operations. The funds came from the U.S. Department of Energy's Advanced Technology Manufacturing program for vehicles. The purpose of this program is to support the development of innovative, advanced vehicle technologies which would create clean energy jobs, while reducing petroleum consumption. The loan to Ford was the first since the program was developed in 2008.

Ford gained 1.1 percent of U.S market share in 2009 compared with 2008 (its first gain in share since 1995). Auto analysts have determined most of this increase in share came primarily at the expense of the other two U.S. companies. Ford advertising has emphasized that while GM and Chrysler had to receive financial aid from the U.S. Government, Ford has been a much more stable company and has needed no assistance from the U.S. Government. Auto analysts have agreed that the advertising strategy has benefited Ford, and along with other factors, has helped Ford increase sales of vehicles in the United States and Canada.

Because of Toyota's recent safety problems, which have caused millions of recalls during late 2009 and early 2010, and Ford's widely accepted new products, Ford hopes to continue to increase its U.S. market share in 2010 by bringing more current Toyota owners into its showrooms and selling more vehicles. Based on sales through February, this appears to be happening.

In addition, Ford car and truck models were named vehicles of the year by Motor Trend magazine, and auto analysts have given very good reviews to new models that will be introduced during 2010, further increasing the sales and the residual values of Ford products. Also, a leading consumer magazine and independent surveys have given Ford very high marks in both safety and reliability.

Another encouraging sign for Ford in 2009 was that the residual values of three-year-old Fords increased by an average of \$1,300, the largest in the U.S. auto industry. This represents a narrowing of the gap between Ford and its Asian rivals, and a widening gap with its two domestic competitors—GM and Chrysler. The reason for this increase can be attributed to improved quality, new features, and newly redesigned products.

Ford made additional announcements during the year, regarding employment and employees' benefits. In December, Ford stated it would hire as many as 2,200 employees in the next two years. During the year, it offered buyouts to all of its UAW workers. As of January 31, 2010, few UAW workers had accepted the buyouts. Since buyouts had been offered previously, most of the workers who could afford to leave Ford had already departed. Ford also tried to renegotiate its UAW contract, but Ford hourly employees rejected the offer. (More on this is available in the UAW section.) Ford also is offering profit-sharing to its hourly workers. The average amount for 2009 was \$450 for each eligible employee.

In January 2010, Ford reinstated some of the benefits that were taken away previously from salaried workers. Ford again is paying for college tuition assistance, partially matching 401(k) payments, and giving salaried workers annual merit increases. However, no salaried employee will receive profit-sharing.

Unlike GM, Ford has not cut any core brands from its U.S. product line. It continues to sell the Ford, Mercury, and Lincoln brands. The Mercury line had fewer models in 2009 than 2008, but it continues to be sold in Lincoln/Mercury dealerships. All Mercury models are a variation of the Ford models, with minor differences.

During the last three years, Ford has sold its Aston Martin, Jaguar, and Land Rover operations. In addition, Ford sold most of its share of Mazda; it now only owns a little over 13 percent compared to about 33 percent a few years ago. Ford has signed a stock sale agreement with Chinese vehicle maker Geely, to transfer ownership of the Volvo brand. The deal should be finalized in the third quarter of 2010.

In the opinion of industry experts, Ford faces three major challenges for 2010 and beyond. Ford owes more debt than GM or Chrysler, it has higher hourly costs, and the U.S. and worldwide economy still is very uncertain.

UAW

During the last decade, the Detroit 3 have contended that their legacy expenses (retiree health insurance, pensions and automatic pension raises each year) have caused their U.S.-built vehicles to cost between \$1,200-\$1,700 more to build than U.S. transplant vehicles and most imported models. In addition, the Detroit 3 were not allowed to outsource many positions such as landscaping, janitorial, repacking, subassembly and many other “non-core” jobs.

The 2007 UAW/Detroit 3 contracts marked the first time since the beginning of the UAW in the mid-1930's, that the UAW gave back major benefits negotiated through the years and accepted

other changes it stated it would never allow. The major changes negotiated for the contract were:

- a two-tier wage system in which most newly hired workers would receive a lower hourly rate and lower benefits;
- the establishment of a Voluntary Employees Beneficiary Association (VEBA) to cover health care costs for retirees/spouses. The VEBA, which became effective January, 2010, was set up with an agreed amount of cash, securities, and stocks (varied for each company and has changed since the 2007 agreement) which would be owned and administered by the UAW;
- changes to the Job Bank to decrease the number of workers and length of time they were eligible for continued pay after they were laid off or their job was eliminated. (the Job Bank will soon be entirely eliminated);
- new workers would not receive health care benefits after retirement; and
- outsourcing of non-core jobs was allowed (type of jobs differed from company to company).

These contracts were unique because they did not follow the traditional process of pattern-bargaining. In the past, a target Detroit 3 company was chosen from the existing U.S. auto manufacturers, and when there was agreement with that company, the other two would be offered a similar contract.

In 2007, Ford, GM, and Chrysler's contracts differed slightly, but the major provisions were similar. The most important change was the acceptance of a two-tier wage system. In the past, the UAW had always demanded equal wages for equal work. Every UAW president stated that at no time would a worker performing the same job be paid less than another worker. In addition, workers performing some specialty jobs, such as electricians and pipe fitters, would be paid a little more per hour than assembly line workers, but all in the same job classifications would receive the same hourly rate for the same work.

On February 23, 2009, Ford and the UAW agreed to changes in the 2007 contract. The major hurdle was the UAW accepting more equity (Ford common stock) for the VEBA payment than agreed upon in 2007. According to a summary reported in the Detroit Free Press, the UAW and Ford agreed to:

- suspend cost-of-living adjustments, performance bonuses in 2009 and 2010, and eliminate one paid holiday after Easter;
- completely eliminate the jobs bank in which laid-off workers kept the same pay as when they were working and make changes to a supplemental unemployment benefit program that included creation of a job-training program;
- offer buyouts from April 1 to May 22 that would include either \$20,000 in cash or a \$25,000 voucher toward the purchase of a new Ford product, plus an additional \$40,000 for certain skilled workers and \$20,000 for other workers; and

- a tentative plan for Ford to give the UAW VEBA plan up to 50 percent stock to meet its 2007 contract obligations. The UAW agreed to this offer if it is in small payments over a long period of time and may sell the stock at any time.¹

The most controversial part of the 2009 agreement was the VEBA offer. Ford owed the UAW \$13.8 billion for the VEBA by 2010, thus Ford could give the UAW \$6.9 billion (50 percent) in stock. If the value of Ford stock declines, Ford must make up the difference by giving the UAW more Ford stock.

If the number of shares of Ford's stock portion of the VEBA is relatively high, many experts predict Ford will be pressured by the UAW to place a UAW official on the Board of Directors. This would have been true of GM and Chrysler also, but after GM and Chrysler exited bankruptcy, the union was allowed to place a member on the board of each company. This is a common practice in Germany, and during the Chrysler Loan Guarantee Program in the early 1980's, the president of the UAW sat on the board of Chrysler.

As sales of all vehicles in the United States continued to decline dramatically in 2009, both GM and Chrysler declared bankruptcy and also negotiated new contracts with the UAW. Basically, both agreed to the major provisions of the February Ford contract plus a no-strike agreement regarding wage and benefit issues until 2015; some job classifications would be combined into one classification; and there would be a freeze on new hire hourly rates for a certain period of time.

In the fall of 2009, Ford tried to renegotiate its UAW contract with the same provisions as the new GM and Chrysler contracts. The UAW leaders agreed to the changes and put the new contract changes before the rank and file. It was defeated by approximately 75 percent of the UAW workers. They stated that since Ford had posted a profit in both the second and third quarters of 2009, and would probably report a profit for the entire year, they did not believe they should give more back to Ford than they already had since the 2007 contract and the February, 2009 changes.

In mid-December 2009, Bill King was nominated by UAW officials to become the next UAW President, replacing Ron Gettelfinger who will reach age 65 in 2010. The UAW's rules state that officers of the union are required to retire at the end of the year of their 65th birthday. The entire UAW membership has to vote for approval, but the person nominated by the officials has never been turned down. Mr. King is the current UAW lead negotiator member representing Ford's UAW employees.

Foreign-Based Automakers Update

European Manufacturers

With the strong euro and weak dollar, the European manufacturers are seeking to maximize opportunities with their U.S. automotive investments. However, sourcing more in the United

¹ "UAW Urged to OK Ford Survival Plan", Detroit Free Press, February 25, 2009.

States remains a sensitive subject with German government purchasing incentives cooling down, coupled with multiple plant idlings/closings and political pressure mounting for more inward investment in Germany. Nonetheless, the German Automotive Association (VDA) expects Mercedes and BMW to grow faster than the market as new models such as the Mercedes E-class convertible and the upcoming new BMW 5-Series are introduced and car buyers consider clean diesel purchases such as Volkswagen's Jetta TDI. Diesel sales reportedly tripled to 42,000 in the United States during 2009 and VDA hopes that German manufacturers will sell more than 800,000 vehicles in 2010 (up from 763,000 in 2009).

Without a doubt, the major premium brands (in which the European manufacturers excel) have struggled in the downturn and will continue to be disproportionately hard hit until the economic recovery becomes much more established. Nonetheless, total European manufacturers' U.S. market share actually rose slightly in 2009, while European production share remained at 3.8 percent of the market, despite a drop of 35 percent in actual production levels (from 323,300 in 2008 to 209,069 in 2009). As a group, the German manufacturers outperformed the market, increasing their market share from 6.8 percent to 7.3 percent. Volkswagen performed the best, with a sales decline of only 4.7 percent for the year, causing it to gain almost half a point of market share. The Europeans are quickly becoming even more important players in the U.S. market. Ultimately, the weak dollar versus the euro has hit German car exporters hard in recent years and making more vehicles in the United States will help shield manufacturers from currency swings and reduce shipping costs.

BMW

Although BMW experienced a 10 percent drop in its annual worldwide sales from last year, it remained the global leader in the premium market segment. The United States remained the largest single market for BMW, MINI and Rolls-Royce brand cars, ahead of BMW's home market, Germany. During 2009, BMW's U.S. production fell nearly 29 percent, from 170,739 units in 2008 to 121,666. However, its overall U.S. production share increased by 0.2 percent, from 2.0 to 2.2 percent of total U.S. production. Therefore, it is no surprise that BMW's plans to double its U.S. capacity are on track, given its continued success, even in a down market. By 2012, BMW will have spent over \$1 billion in the United States by expanding office and distribution centers, as well as plant upgrades, increasing capacity to 240,000 units. During 2009, BMW celebrated 15 years at its Spartanburg, South Carolina plant, and celebrated production of its 1.5 millionth vehicle at the facility. It also began production of the X5 M and X6 M, as well as the Active Hybrid X6. Production of diesel versions of the X5 for the U.S. market began in late 2008, so BMW is clearly well-positioned to compete in these emerging technology segments, as well.

According to BMW, its total contribution to South Carolina's economy since 1992 is estimated at well over \$4 billion, making it one of several powerful engines driving the state's growth. BMW's further commitment to the U.S. market is exemplified by expanding its U.S. headquarters facility in New Jersey at the cost of \$100 million, to include engineering operations and training offices ("BMW of North America Campus"). BMW will also introduce a new MINI model, called the "Countryman", and plans to develop an ultra-low CO₂ city car line.

Daimler and Mercedes

Daimler AG (Mercedes-Benz, Smart, AMG, Maybach, Freightliner, Western Star, Mitsubishi Fuso, Setra, Orion and Thomas Built Buses) is a leading producer of premium passenger cars and the largest manufacturer of heavy- and medium-duty trucks in the world. Daimler sells its products in nearly all countries of the world and has production facilities on five continents, with North America remaining a key location in its global strategy. Daimler has extensive truck and bus manufacturing operations in the United States, but these businesses have been struggling and need a turnaround. For example, Daimler produces trucks and buses and parts in North Carolina; trucks in New York; buses in Oregon; and engines and trucks in Michigan, so it has a significant footprint across the country in commercial vehicles.

Daimler's passenger car unit, Mercedes-Benz U.S. International (MBUSI), is located in Tuscaloosa, Alabama, and currently produces the second-generation M-Class (the first rolled off the line in 1997), the R-Class Sports Tourer and the GL-Class luxury SUV. The SUVs are produced exclusively in Alabama and shipped to markets worldwide and feature diesel Blue TEC technology. Today, the plant has two assembly lines, two paint shops and a body shop. While vehicle capacity at this plant is 160,000 units, Mercedes' production was down nearly 43 percent to 87,403 units from 152,561 in 2008. Nonetheless, in a contracted overall U.S. production market in 2009, its share of overall production was only down .2 percent, from 1.8 to 1.6 percent. This production will rise in the coming years given Daimler's December 2009 announcement that it will re-locate approximately 20 percent of its upcoming C-class production from Germany to the United States (60 percent of the C-class production will remain in Germany, with 10 percent in China and 10 percent in South Africa). Since the C-class is Mercedes' best-selling model in the United States, it made strategic sense to incorporate it as part of its model line-up. Daimler states that this move will save the company approximately \$3,000 per vehicle, given lower wages in the United States. Daimler also expects this will generate another 1,000 jobs in the United States.

Volkswagen

The Volkswagen Group (VW) consists of Volkswagen, Audi, Bentley, Bugatti, Lamborghini, SEAT, Skoda, Scania, and Volkswagen Commercial Vehicles. VW has fared comparatively well during the economic crisis and intends to become the number one global automaker by 2018, overtaking Toyota. It is arguably the best-financially positioned company after the crisis, and maintains a multi-brand strategy (soon to include Porsche acquisition and purchase of 20 percent stake in Suzuki). However, it will need several more profitable years in order to make its goal materialize. Nonetheless, VW appears to be making strides in this direction. During 2009 it set a new global delivery record, despite a contracted world vehicle market. Moreover, VW had a very profitable year in its home market (encouraged by the ample incentives provided by the German government), and also in emerging markets China and Brazil, where it remains a market leader. VW's "Strategy 2018" relies on a wide product range and reputation for quality and technology to give it relative pricing power vis-à-vis its competitors.

VW has already invested \$1 billion in its Chattanooga, Tennessee assembly plant, and despite market conditions, is on track to begin production in early 2011 with initial capacity at 150,000 units, growing to 500,000 units within 4-5 years. VW plans a model designed specifically for

the North American market. During the January 2010 Detroit Auto Show, VW displayed a New Compact Coupe (NCC), based on its latest Golf, that could very well be a model produced in Chattanooga. Reportedly, thirty percent of Chattanooga production will be powered by VW's TDI clean diesel technology. VW expects to initially create at least 2,000 direct jobs.

VW announced that it will decide before the end of 2010 whether or not to include Audi production at this facility. Its decision will be based on the recovery of the U.S. market. VW clearly wants Audi to join competitors BMW and Mercedes in the world's top luxury vehicle market, but is still recovering from image perceptions from "unintended acceleration" accidents during the 1980s. As part of its "2018 Strategy," Audi hopes to sell 200,000 vehicles in the United States, or approximately 20 percent of the 1 million vehicles it benchmarks for the U.S. market by 2018. VW also plans to sell hatchback and sedan-versions of its redesigned Polo compact in the United States by 2011. The model will compete with Ford's European-designed Fiesta (which will also be built and sold in North America by this time), and Asian cars like the Toyota Yaris and Honda Fit (Jazz). Of note is that Volkswagen's sales dropped only 4.7 percent during 2009 in a dramatically contracted U.S. market. With production coming on-line next year, Volkswagen anticipates great strides in the United States.

Asian Manufacturers

Honda

Honda experienced a rough year in 2009. According to the company, its sales declined by 10.5 percent globally from already dismal 2008 sales. In its largest market, the United States, 2009 sales were down 19.5 percent from the already depressed 2008 numbers. In addition to the overall U.S. market decline, the strengthening of the yen against the dollar continued to hurt Honda in 2009. The strong yen had stung Honda badly at the end of 2008 and it continued to reduce or remove profits from the company's exports from Japan during 2009. In response, over the course of 2009 the company reduced exports from Japan by over 60 percent from its 2008 total. The U.S. market still received over 65 percent of Honda's Japanese exports during the year, but Honda idled or slowed production primarily in its home market of Japan. Thus, Honda's North American production met a record 84 percent of its U.S. sales in 2009. Likewise, despite an ongoing decline in Japanese-based production, the company had record production in China and Asia overall.

Product missteps hurt Honda in 2009. In particular, the company had high hopes for its Insight hybrid targeting 200,000 vehicle sales globally in the first year. It had tried to position the Insight as a lower cost competitor to Toyota's popular Prius. Unfortunately, the car was not well received. The vehicle was only slightly less expensive than the Toyota (\$19,800 to \$21,000 for the Prius) but was considered much less refined. "The Insight is the most disappointing Honda Consumer Reports has tested in a long time," said David Champion, director of the magazine's auto test center. It also had considerably lower mileage (40 miles per gallon of gasoline versus 50 for the Prius), one of the chief sales points for hybrid vehicles in general and a particular sales point for the Prius.² Following its U.S. introduction in March, Honda had expected to sell

² "Honda's New Hybrid Disappoints: New Hybrid-Only Insight Does Too Poorly On Consumer Reports Tests To Earn A Recommendation," by Peter Valdes-Dapena, CNNMoney.com senior writer, June 30, 2009,

90,000 during the first year in the United States alone. However, it had sold less than 21,000 through the end of December 2009.

Despite the declines Honda weathered the 2009 economic storm fairly well compared to most of its peers. Honda's U.S. production declined 26 percent which was significantly better than the average decline of 34 percent. According to Ward's Automotive, Honda passed Chrysler to claim the 4th most automotive sales in the United States with 11.1 percent of total sales in 2009. Over the past decade Honda has increased its share of U.S. sales by 4.7 percentage points, nearly doubling its proportion of the total market in U.S. passenger vehicle sales.

The U.S. "Cash for Clunkers" vehicle purchase incentives gave the company a big shot in the arm with its Civic, Accord, and Fit among the top 10 models to benefit from the program (see the sales section of this report for more information on this program). It received 13 percent of the sales under the program, almost two percentage points above its overall market share. The Japanese government introduced similar vehicle purchase incentives that gave the company an outlet for its most fuel-efficient vehicles. Because the rules were tuned to the fuel efficiency of vehicles in city driving, even the otherwise lackluster-selling Insight benefitted as the fifth best seller in the Japanese market. With 93,283 units sold, this is still well behind Toyota's Prius which led Japanese sales with 208,876 vehicles purchased.³ Honda's Fit was the second best in Japanese sales with 157,324 units sold and the Freed was seventh with 79,525 units sold.

Reports in the Japanese press show that there is some hope in Japan that the yen will decline in value during 2010 allowing Japanese-based automakers to regain some of their export competitiveness. This could allow Honda to shift some production back to Japan and it would certainly help improve the firm's profitability with its current export production. In the meantime the company has announced plans to build a second plant in China through its joint venture, Dongfeng Honda. Likewise, the company has revived plans to build a second plant in India. The company continues to pursue plans for hybrid vehicle development for advanced markets. Press reports indicate it is nearing production with a hybrid system for larger vehicles and it is considering adding a small diesel for European and developing country markets.

Hyundai – Kia

Hyundai- Kia (Kia is a wholly owned subsidiary of Hyundai) had a very good year in the United States in 2009. They did more than weather the storm. Hyundai had a sales increase of 8.3 percent compared to 2008, and Kia had an increase of 9.8 percent. In a typical year, these would be impressive gains, but in a market that was down 21 percent it was especially noteworthy. The only other automaker to experience a gain in sales volume in 2009 was Subaru. Hyundai and

http://money.cnn.com/2009/06/29/autos/cr_honda_insight/index.htm, and Consumer Reports magazine called it a "noisy car with a stiff ride and clumsy handling." Honda Insight is a Hybrid of Bad Reviews, Bad Sales: Even One Dealer Admits Insight is Disappointing," by Ken Bensinger, Chicago Tribune, Tribune Newspapers, August 16, 2009, <http://www.chicagotribune.com/classified/automotive/chi-rides-insight-0816aug16,0,7432293.story>

³ "Prius No. 1 in Japan Sales as Green Interest Grows: Toyota Prius Ranks Top-Selling Car in Japan in First for Hybrid as Green Interest Grows," By Yuri Kageyama, ABC New/Money via Associated Press, January 8, 2010, <http://abcnews.go.com/Business/wireStory?id=9508915> and "Honda Sets All-Time Calendar Year Production Record for Auto Production in Asia and China," JCN (Japan's Corporate News) Newswire, Jan 25, 2010, http://www.japancorp.net/Article.Asp?Art_ID=22453

Kia combined for 7.1 percent of the U.S. market in 2009 (Hyundai 4.2 percent with sales of 435,064 units and Kia at 2.9 percent with sales of 300,063 units), up a full two points for the year. Sales by source for Hyundai remained evenly balanced, with sales of 200,371 domestically-built vehicles and sales of 234,693 imported vehicles. However, the domestically produced share has dipped, falling from 51 percent in 2007, to 47 percent in 2008 and 46 percent in 2009.

In response to the crisis, Hyundai did cut production at its Alabama plant in 2009, with total production cut 17.3 percent. Car production was cut 31.9 percent. However, truck production (the Santa Fe) increased 9.2 percent.

At a time when many manufacturers were closing production facilities or putting new plants on hold, Kia chose to move forward. In November 2009, Kia began production at its first U.S. plant in West Point, Georgia. Mass production started in December. The billion dollar plant employs approximately 2,500 workers and will have the ability to produce 300,000 vehicles a year when operating at full capacity.

Both Hyundai and Kia reported record high profits in the fourth quarter of 2009. Hyundai's profits were reported at \$822 million – almost four times its profits in the same period of 2008. Kia reported a profit of \$524.2 million for the quarter.

Hyundai is riding a wave of new and popular products (such as the Hyundai Genesis, named 2009 Car of the Year by a jury of automotive journalists) and is forecasting bigger advances for 2010. The company has announced its intention to introduce seven new products to the U.S. market within the next two years. In February 2010, the company predicted it could hit U.S. sales of 500,000 units this year. However, this would represent an increase of 15 percent, in what is sure to be a slow growth market overall. Hyundai and Kia have both been targeting Toyota buyers during Toyota's recalls – offering \$1,000 rebates for Toyota trade-ins. Hyundai hopes that Toyota customers (who traditionally value quality) who show an interest in Hyundai during this offer-period will be pleasantly surprised by Hyundai's dramatically improved quality scores (Hyundai jumped from number 13 in 2008 to number four in 2009 in JD Power's ranking of initial quality) and low pricing.

Mazda

Mazda, Japan's fourth largest automaker after Toyota, Nissan and Honda, is working hard to rebound from the global economic downturn by focusing on the rising demand for hybrid gasoline-electric vehicles, which have recently received significant tax breaks from the Japanese Government. Mazda plans to invest its R&D on green cars and upgrading current facilities, according to Business Monitor International. With the establishment of a hybrid car program, Mazda hopes to close the gap on its larger industry competitors, Toyota and Nissan. Mazda has also pledged to improve average fuel economy 30 percent by 2015.

The auto alliance between Ford and Mazda has been in place for the last 30 years, and was especially strong in the late 1990s when the two automakers created "centers of excellence." The resulting technologies were applied to shared platforms, especially the development of the C1

compact car platform in Europe. Despite the success of the alliance, Ford cut its ownership of Mazda from 33 percent to 13 percent last year in an effort to raise much-needed cash. Some Ford vehicles such as the Escape and Fusion sedan are shifting from Mazda-derived platforms to Ford-developed platforms. In 2009, only 102,000 autos were produced by the alliance at its U.S. plant, compared with almost 200,000 in 2007, down almost 40 percent. However, Mazda maintained 1.8 percent of the production market, down only 0.2 percent from 2008.

Hoping to capitalize on the global trend towards subcompact, budget automobiles, Mazda introduced the new 2011 Mazda2 at the 2010 Canadian Auto Show. Both Mazda2 and the Ford Fiesta are built on the same platform, but with different engines, lengths, and sheet metal. Despite Mazda's "zoom-zoom" marketing, the Mazda2 has a smaller engine and is less powerful than the Ford model. The Mazda2 was originally introduced in Europe, Japan, and Australia in 2007. Since then, it has been highly acclaimed, winning 48 automotive awards, including "Car of the Year" in many markets worldwide. The Mazda2 was also selected as the "2008 World Car of the Year" (WCOTY) at the 2008 New York International Auto Show. Global sales have reached over 400,000 units in the three years since its introduction.

Mitsubishi

Currently, Mitsubishi is manufacturing both passenger cars and light trucks, albeit in reduced quantities, similar to other manufacturers feeling the strain of the economic crisis. Its single U.S. plant in Normal, Illinois has been operating under capacity for several years (Diamond-Star). In fact, 2009 production at this facility dropped nearly 70 percent to under 20,000 units (according to the plant website, annual capacity is 135,000 units). Total 2009 U.S. production share dropped by more than half: from 0.7 percent of the market in 2008 to 0.3 percent in 2009. Moreover, Mitsubishi has been experiencing sluggish sales for many years. Its total U.S. sales last year across all vehicle lines were down significantly to 53,986, a decline of 44.8 percent from 2008. Therefore, it is not surprising that the company is evaluating its global strategy and utility for this plant. However, with the strong yen and weak dollar, keeping the U.S. plant open is likely.

By partnering with a larger company, Mitsubishi hopes to keep pace with the changing times. French company, Peugeot (PSA) is courting Mitsubishi, and their alliance is getting closer, with collaboration occurring on innovative products, such as the Peugeot iOn electric car, which is based on Mitsubishi's i-MiEV electric mini car. The i-MiEV, Mitsubishi's purported ultimate eco-car, was awarded the "Environmental Special Grand Prize" during the 25th International Automobile Festival held in Paris, France in February 2010. It is scheduled to go on sale in the United States in mid-2011. The i-MiEV is planned for European launch at the end of 2010, and its charging system will be compatible for European electric outlets. A 1.3 liter gasoline version of the minicar called the "i" is also under study. This four-passenger car would compete against the Smart minicar. The Smart is imported from Europe, where Daimler AG builds it using a Mitsubishi engine. The "i" already sells in Japan and Europe with a small turbocharged 660cc gasoline engine. Mitsubishi plans to reveal an even smaller crossover, sized to compete with the Kia Soul, for U.S. dealers this spring at the Geneva auto show.

Nissan

Nissan is the sixth best-selling brand in the United States. In 2009, Nissan had a decline in U.S. sales (down 18.8 percent from 2008) as it did in 2008. Over the last several years, though, Nissan has outperformed the U.S. market and has slowly been able to improve its market share. Its share grew from 5.9 percent in 2004 to 6.6 percent in 2007 to 7.4 percent in 2009. Under the Cash for Clunkers program, 8.6 percent of new vehicles sold were Nissan. Through the first three quarters of fiscal year 2009, ending March 31, 2010, Nissan reported a global operating profit of \$2.45 billion, and an operating profit margin of 4.3 percent. This is an improvement from the same period of 2008, in which Nissan reported a \$0.9 billion operating profit and a profit margin of 1.4 percent.

Nissan has three production plants in the United States: Smyrna, Tennessee; Decherd, Tennessee; and Canton, Mississippi. The Decherd plant manufactures all the engines for the complete lineup of Nissan and Infiniti vehicles produced in the United States. In September 2009, it was reported that Nissan will begin exporting U.S.-made engines to Japan to install in vehicles that will be shipped back to the United States. Nissan has announced plans to invest \$118 million into expanding its plant in Canton. This expansion will allow Nissan to produce light-commercial vehicles during 2010, allowing Nissan to enter into the North American commercial market. Nissan's U.S. production fell 31 percent in 2009, in line with the market average.

In 2008, Nissan and Chrysler announced a partnership where Nissan would supply Chrysler with fuel-efficient small cars while Chrysler would build the next-generation Nissan Titan based on the Dodge Ram. However, after Chrysler's partnership with Fiat, Chrysler has pursued new strategies to fill holes in its lineup. As a result, the partnership between Nissan and Chrysler was terminated, and this decision has delayed development plans for the future of the Titan.

Nissan is engaging in a number of approaches and activities in order to achieve its goal of being an environmentally responsible manufacturer. Foremost, Nissan is taking a gamble on green technology by being the first manufacturer to bring a full production version of an all electric vehicle to market. As part of Nissan's zero-emission approach, it plans to release the Nissan Leaf in 2010. The Leaf is a five-passenger car. Nissan states that the car will have no emission of CO₂ or other greenhouse gases while having a driving range of more than 100 miles on one full charge. In addition, it states that the vehicle is capable of being 80 percent charged in less than half an hour. Nissan hopes to sell 150,000 Leaf vehicles in North American by 2012. In January 2010, Nissan selected AeroVironment as its partner to install home-charging stations for customers of the Leaf. It remains to be seen if this level of demand exists yet in the U.S. market for a vehicle which will be a second car for most consumers.

Nissan applied for funding from the Department of Energy to retool its plants to manufacture electric cars and batteries. The loan program was approved by Congress in September 2008 to help manufacturers upgrade facilities to comply with new fuel standards. In early 2010, the Department of Energy (DOE) came to terms on a \$1.4 billion loan agreement with Nissan North America, Inc. The company intends to use the money to upgrade its facility in Smyrna, TN in order to produce the Leaf and lithium-ion battery packs. DOE states that these projects will

create up to 1,300 American jobs while also conserving up to 65 million gallons of gasoline per year. Initially, the Leaf will be manufactured in Japan.

Nissan is also taking a very active role through partnerships with cities, states, and various countries in promoting electric vehicle technologies. In late 2008, Nissan announced that it was forming a partnership with the state of Oregon, along with Portland General Electric, to develop an electric vehicle (EV) charging network. As part of this agreement, Nissan will provide the state with zero-emission vehicles while the state will work toward implementing a charging network. In March 2009, Nissan announced a similar electric vehicle program with the Pima Association of Governments (PAG), which includes the Tucson, AZ region. Nissan and PAG will work with ECotality, a clean electric transportation company, to deploy electric vehicles and a charging infrastructure throughout the region.

In 2009-10, similar alliances to the ones described above have also been agreed to with Massachusetts; Tennessee; Washington, DC; Orlando, FL; Sonoma County in California; and Houston, TX. The state housing Nissan's North American headquarters, Tennessee, would be one of the first locations to sell the Leaf. In addition, Nissan has partnerships with foreign countries such as Israel, Denmark, Portugal, and Japan to further promote their zero emissions philosophy.

Subaru

It may be a rough time for automotive companies in general, but Subaru has been the exception in the U.S. market. It fared better than most manufacturers with only 6.8 percent decline in overall production (actually up in car production, but down significantly in light truck production).

In 2009, Subaru sold about 215,000 vehicles, and was one of two other brands (Kia and Hyundai) that managed sales increases over 2008. In 2008, only Subaru and Mini were up. According to Automotive News, part of Subaru's success can be attributed to its strategy of keeping prices low and focusing on its reputation as a value brand, outdoor-oriented and pragmatic. Since 2006, Subaru has cut prices and focused its marketing strategy on the safety and practical features of its fleet. It also gives autonomy to the dealers to weigh in on product decisions. This strategy has helped make Subaru the best-performance brand in 2009 – up 14 percent in a market down 24 percent. Subaru has jumped from the 19th largest U.S. seller in 2008 to the 11th, ahead of Volkswagen and just shy of Jeep. Its all-wheel-drive cars are priced lower than a front-wheel-drive car, which customers consider a great value. According to EPA, Subaru also has the most fuel efficient line-up of all-wheel-drive products sold in the market today. All of Subaru products are manufactured in zero-landfill production plants, and, according to Subaru, Subaru of Indiana Automotive Inc. is the only U.S. auto production plant to be designated a backyard wildlife habitat by the National Wildlife Federation.

All five of Subaru's vehicles have a five star safety rating from the National Highway and Safety Administration for front-impact, rollover, and side impact crash tests. These accolades have been a main feature in Subaru's advertising campaign. Subaru won Automotive Lease Guide's "best mainstream brand" award for the 2010 model year. In addition, the 2010 Outback was

named “Top 10 Family Car” by Kelley Blue Books Kbb.com. According to J.D. Power and Associates’ 2009 customer-retention study, Subaru’s brand loyalty was 57 percent. Only Mercedes-Benz, Honda and Toyota were higher, and Subaru was tied with Lexus.

The real test for Subaru over the next few years will be how Subaru manages its advertizing campaign as it launches new products. If it is able to keep marketing costs low while sales remain high, then it will be successful for years to come. According to Jim Hall, a consultant with 2953 Analytics, Subaru will need to focus on building consideration, in other words, getting uncommitted consumers into showrooms to consider buying a Subaru.

Toyota

Less than two years ago Toyota swept past an ailing General Motors (GM) to become the world’s biggest carmaker. Although it trailed GM in the United States, Toyota sold 1.8 million vehicles in 2009 in the U.S. market, above Ford’s sales of 1.6 million and well ahead of Chrysler’s 920,000 vehicles. Toyota sold 20 percent less than in 2008 (2.2 million vehicles). However, Toyota slightly outperformed the total market (down 21 percent), giving them a slight increase in market share – rising from 16.8 percent in 2008 to 17 percent in 2009. In response to the down market, Toyota cut its U.S. production 26 percent (which was less than the overall 34 percent decline in U.S. production). Toyota also chose not to open its new \$1.3 billion plant in Mississippi, which was intended to build the 2010 Prius. Toyota has revived its plans to open the facility, but has not announced a time frame. Toyota has become well entrenched in the United States, and continues to view the United States as the cornerstone of its sales strategy. While not completely immune to the downturn in the global economy, Toyota has managed to weather the storm better than many of its competitors, including the Detroit 3.

Recently, however, Toyota’s fortunes have changed. Toyota is now in the midst of a massive recall, and at the outset of the recall Toyota’s newly installed leader, Akio Toyoda was publicly pessimistic about Toyota rebounding quickly. Toyota’s recent increase in sales in March may have countered some of the harshest immediate concerns. Still, the company’s image and reputation for quality has been called into question. As a result of NHTSA’s mandated recall, Toyota temporarily ceased sales and production of eight models. A total of almost eight million vehicles have been recalled and the numbers are growing. In addition to the two recalls involving potentially dangerous floor mats and accelerator pedals that may stick once depressed, NHTSA has now launched into a formal investigation of braking problems on the 2010 Prius, specifically the temporary loss of braking power when driving over bumpy surfaces. The Japanese Government is also reviewing this issue and has ordered Toyota to conduct an investigation. The Prius is the top-selling hybrid vehicle in the United States, and the flag-ship for Toyota’s green image. Prius sales were down 21 percent in 2009 (from 159,000 vehicles in 2008 to 140,000 vehicles in 2009), off 23 percent from its peak in 2007 (181,000 vehicles).

The recall issue has seriously impacted Toyota’s sales in 2010. For January, the total U.S. market was up 6.2 percent from January 2009. However, Toyota’s sales were down 15.8 percent. The Camry, which has long been the top-selling passenger car in the United States, fell to the number five slot in January behind the Honda Accord, the Nissan Altima, the Toyota Corolla, and the Chevy Malibu. Other automakers are benefitting from Toyota’s losses, and

have targeted incentives directly at customers turning in Toyota's vehicles. Fortunately for Toyota, the company does not have the deep structural problems as other companies such as GM or Chrysler.

Still, Toyota is trying to rebound and is instituting massive damage control. It is scrambling to replace parts as quickly as possible and eliminate the backlog of replacement units which dealers need to install. It has also undergone an enormous public relations campaign to counter criticism that it did not act quickly enough to customer safety concerns. In the short term, the recalls are not that overwhelming for Toyota. However, in the longer term, the issue is what impact these recalls will have on Toyota's market share and pricing power. Can the company continue to charge more for a Toyota because of its quality? Industry expert, Kurt Sanger states that it is difficult to measure with any accuracy how much the auto maker's reputation for quality, reliability and safety has been damaged. Koji Endo, managing director of Advanced Research Japan in Tokyo estimates the production and sales stop, plus the defective accelerator fix may cost Toyota \$5.5 billion (as of March 2010). However, the earnings for this fiscal year are not as bad as it could be. Although the auto maker is forecasting an operating loss of \$3.8 billion this fiscal year, analysts in Tokyo are more upbeat. Sanger forecasts an operating profit of \$5 billion in the next year ending in March 2011. Others predict that Toyota will break even this year, and may earn an even higher operating profit in the next fiscal year.

From a development standpoint, the news is good. In February of this year, MotorWeek announced that the Toyota Prius won the top honor of "Best of the Year," its 2010 Driver's Choice Award for "improvements in virtually every front including, fuel efficiency, power and versatility." It also won "Best Eco-Friendly" vehicle.

At the 2010 Geneva Motor Show, Lexus introduced the Lexus CT 200h, the first and only full hybrid vehicle in the premium compact segment. Featuring second generation Lexus Hybrid Drive technology, the CT 200h reinforces Lexus' hybrid leadership in the premium market, joining the RX 450h, GS 450h and LS 600h to create a wide range of full-hybrid vehicles.

Finally, Toyota has begun production of the new 2011 Sienna minivan at Toyota Motor Manufacturing in Princeton, Indiana. This new Sienna was styled at Toyota's Caltex Design Research Center in Newport Beach, California, and was developed at the Toyota Technical Center in Ann Arbor, Michigan. Production of the new Sienna and Highlander was welcome news for the Indiana community, as the plant was underutilized during the current economic downturn. As a solution to significant overcapacity in mid 2008, Toyota consolidated production of the Tundra full-size pickup, originally built in Princeton, into its Texas facility. Toyota invested approximately \$450 million to upgrade the plant, and implemented a training program during the downturn for its team members. As a result of new ideas for improving processes and reducing wastes, the company saved an estimated \$7 million. Toyota's "shared sacrifice" approach (including elimination of executive and salaried bonuses, executive pay cuts, bonus reductions, overtime elimination and a hiring freeze) offset many of the costs of production freezes and maintenance of salaried workers.

Despite the difficult economic times that Toyota and other auto companies face domestically, Toyota is still very successful worldwide. Toyota aims to sell 8.3 million vehicles globally in

2010, representing a 6 percent year-on-year increase from 2009, when its global sales fell by 13 percent to 7.8 million units. Toyota has also announced plans to make hybrid cars the mainstay of its automotive fleet over the next few years, spearheading a broader shift in the industry towards hybridization. Demand for hybrid vehicles has been particularly high in Europe. Given other carmakers' less successful attempts in developing hybrid technology, Toyota has an edge over its competitors. In 2010, Toyota will introduce its Auris hybrid car, which is due to enter production in the UK this June. A new hybrid offering under its Lexus banner is also likely to be introduced in Europe this year to give it a competitive edge in the premium C-segment (i.e. compact car).

Emerging markets, such as China and other markets in Asia, Central and South America, promise to become a strong engine for Toyota's future growth. China, in particular, will be potentially as large a market for Toyota as the U.S. market. The key for Toyota will be to develop high quality products at affordable prices that meet regional needs. In these markets, Toyota's market share is still relatively low, so there is much room for growth.

Sales

In 2009, U.S. light vehicle sales fell to their lowest level since 1982, reaching only 10.4 million units. Sales peaked in the year 2000 at 17.3 million units, and averaged 16.4 million units from 2000 to 2008. Sales in 2009 were 21 percent below 2008's sales level, which in turn were 18 percent below 2007's levels. These extremely low sales levels caused major distress for nearly all the automakers operating in the United States and directly contributed to the near downfall of the Detroit 3.

Sales in 2009 could have been even lower. In late July, the Department of Transportation began accepting applications under the U.S. Consumer Assistance to Recycle and Save (CARS) Act of 2009 (or the "Cash for Clunkers" program), which provided cash for the trade-in of low fuel economy vehicles for models with higher fuel efficiency. Congress originally appropriated \$1 billion for the program, but noting the intense demand in the first week, immediately bumped funding to \$3 billion. Ultimately, DOT issued 677,842 vouchers for vehicle sales under CARS, with an average fuel economy improvement of 9.2 miles per gallon. This boost to sales came at a critical time in the year, when the seasonally adjusted sales rate was hovering around nine million units. For more details on the outcome of the cash for clunkers program, see the Department of Transportation's final report to Congress on CARS at: <http://www.cars.gov/files/official-information/CARS-Report-to-Congress.pdf>

Detroit 3 Performance

The market position of the Detroit 3 continued to deteriorate in 2009, with their market share falling to only 44.1 percent. While their market share has been in decline for decades, as recently as the year 2000 the three companies still commanded two thirds of the market. All three companies lost market share in 2009, with GM ending the year at 19.9 percent of the market, Ford at 15.3 percent and Chrysler at 8.9 percent. Ford's market position actually shows an improvement over 2008 when its market share was only 14.2 percent – Ford's first annual

increase since 1995. However, given the decline in the market, Ford's sales were down almost 15 percent for the year.

Collectively, Detroit 3 sales were down 26.6 percent in 2009, falling from 6.2 million vehicles to only 4.6 million vehicles in 2008. This sales level matches more closely to sales levels in the 1950's (in 1958 when the U.S. population was only 57 percent as large as it is today, U.S. car makers sold 4.7 million passenger cars). Projecting the average fall of Detroit 3 market share and the increase in Japanese manufacturer market share since 1986, the Japanese automakers would pass the Detroit 3 in 2011. Following the trend of the past five years only, the Japanese car companies would pass the Detroit 3 in 2010. However, following these simple trend lines ignores the downsizing of GM and Chrysler, the market share gains of Ford and the quality problems Toyota began to encounter in early 2010. While it is hard to predict with any certainty what any particular year's market share numbers will be, it seems certain that the Detroit 3 will not return to their former dominant position in the U.S. market in the near future.

Foreign Manufacturers

As noted above, Japanese manufacturers made modest market share gains in 2009, reaching 40.5 percent of the market. This continued a trend of increasing share that has been unbroken since 1996. However, like most auto companies, Japanese manufacturers suffered in the contracted market with sales down 19.6 percent. All of the Japanese manufacturers with the exception of Subaru (up 15.4 percent) experienced major sales declines during the year. Many analysts see Toyota's quality problems leading directly to a market share loss in 2010. Edmunds predicts Toyota will lose a point of share in 2010, with the gains going to Ford, GM and Honda. If true, this could put Ford back into the number two slot for U.S. sales - ahead of Toyota for the first time since Toyota pulled ahead of Ford in 2007.

As a group, the German manufacturers outperformed the market, increasing their market share from 6.8 percent to 7.3 percent. Volkswagen performed the best, with a sales decline of only 4.7 percent for the year, causing it to gain almost half a point of market share.

The Korean manufacturers (Hyundai and its subsidiary Kia) had the most impressive performance of any group in 2009. Their sales were up 8.9 percent giving them a two point increase in market share from 5.1 percent to 7.1 percent. These manufacturers have enjoyed a rapid rise in the U.S. market. Fifteen years ago their market share was 0.9 percent. Ten years ago, in 1999, they had climbed to 2.0 percent, and five years ago they were up to 4.1 percent.

Cars vs. Trucks

Through the 1980's, the 1990's and the first half of the 2000's light trucks increasingly dominated American consumers buying habits with ever-rising market share. By 2001 they commanded over half the market. This trend finally reversed in 2005, as passenger cars began to reclaim their popularity. In 2008 and again in 2009, passenger cars accounted for more than half of all passenger vehicle purchases, with the share in 2009 reaching 52.5 percent. The change was in large part spurred by high gas prices in 2008, and many analysts feel this shift back to passenger cars is the start of a long-term trend.

Foreign manufacturers have traditionally relied on passenger cars for the bulk of their sales, and more recently added light trucks to their line-ups. The Detroit 3 came to rely more and more heavily on truck sales for profits in the 1990's. However, even these companies have announced a new emphasis on renewing their flagging passenger car offerings. GM and Ford have had success with models like the Malibu and the Fusion. Chrysler's new partner, Fiat intends to bring its expertise in small car manufacturing to the United States to help revive the company. However, this new emphasis on the part of the Detroit 3 has yet to play out in the market place statistics. The Detroit 3 accounted for only 31 percent of passenger car sales in 2009, down from 34 percent in 2008. As recently as the year 2000 they accounted for over half that market, with a share of 52.8 percent.

Truck Market

Within the light truck market, the category that was the big winner in 2009 was cross utility vehicles. Continuing its long-term climb, the segment jumped from 37.6 percent of truck sales to 46.1 percent. Most of these customers likely came from previous SUV owners looking to find a smaller and more fuel efficient vehicle. SUVs once commanded 39.4 percent of truck sales (in 1999) but have seen their popularity wane over the years. As a major profit center for the Detroit 3, the decline of this segment contributed to the financial jeopardy that engulfed the Detroit 3 in 2009. Pickup truck sales were down slightly in 2009, from 31.1 percent of the truck market in 2008 to 28.1 percent last year. Even with market pressure for smaller and/or more fuel efficient vehicles, there are many uses for which there is no substitute for a pickup truck. Van sales peaked in 1992 at 29 percent of truck sales and have lost share every year but one since then. In 2009, van sales accounted for 11.7 percent of the truck market.

Sales Summary

As automakers push to meet new federal fuel economy standards, many analysts predict that the shift from trucks to cars, and from big trucks to small trucks (e.g. CUVs) will accelerate. JD Power has estimated that the 2010 market might be composed of as much as 60 percent to 65 percent small cars and CUVs. In 2009, these segments accounted for 40 percent of the market. By its count, almost half of all models introduced in the next three years will be small cars. While recent history would indicate that this would favor foreign manufacturers, recent passenger car advances from the Detroit 3, and the promise of Fiat product coming to the U.S. market for Chrysler will make the U.S. companies stronger contenders.

U.S. Light Vehicle Production and Capacity Utilization

While 2008 saw U.S. vehicle production reach its lowest levels, 8.5 million units, since 1982, production levels fell even further in 2009. In 2009, total production was just over 5.5 million units, a 34 percent decline from the previous year⁴. Since 2004, production has fallen over 50 percent. Between 2008-09, production for light vehicles declined 34.1 percent. Passenger car production declined 40.4 percent while light truck production declined 29 percent. Light trucks accounted for almost 60 percent of all vehicles in 2009 while cars accounted for about 40

⁴ For an historical perspective, the number of vehicles produced in the United States was similar in 1949. According to Ward's Automotive, U.S. manufacturers produced just over 5.1 million passenger cars in 1949.

percent, which are similar to the ratios in recent years. The Detroit 3 suffered even greater declines overall, with car production declining 54.9 percent between 2008-09 and light truck production declining 31 percent. Overall, the Detroit 3 produced less than three million vehicles in 2009. The depth of the Detroit 3 decline is due in large part to the total production cessation at multiple GM and Chrysler plants during their bankruptcies (see individual company section for further details).

The Detroit 3's share of North American production fell from 57.4 percent in 2008 to 53.1 percent in 2009. Ford's production level dropped from 1.47 million vehicles in 2008 to less than 1.3 million vehicles in 2009. Further, the number of vehicles produced in 2009 was over a 56 percent decline from 2004 levels. While Ford's production dropped over 12 percent between 2008-09, its share of North American production improved to 23 percent (up from 17.5 percent in 2008). In 2004, Ford had a market share over 25 percent, but its share of production had fallen every year until it achieved only 17.5 percent in 2008.

GM's U.S. production fell by almost half from 2008-09 (47.8 percent) and its share of U.S. production also fell below Ford (to only 21.2 percent, down from 26.8 percent). GM produced less than 1.2 million vehicles in the United States in 2009. This is almost a 67 percent decline from GM's level of production in 2004. GM was particularly hard hit in the automobile segment with almost a 60 percent decline in production from the previous year. This is compared to all U.S. automobile production which saw production decline 40 percent.

There are currently thirteen manufacturers producing cars and light trucks in the United States – BMW, Chrysler, Ford, General Motors, Honda, Hyundai, Kia, Mazda, Mercedes, Mitsubishi, Nissan, Subaru, and Toyota. In November 2009, Kia opened Kia Motors Manufacturing Georgia (KMMG), its first U.S. plant that will be able to produce up to 300,000 vehicles at full capacity. Volkswagen is also in the process of building a new plant in Chattanooga, Tennessee that will produce a new vehicle designed for the North American market. The Volkswagen Group of America plans to invest \$1 billion for the plant and expects to create 2,000 direct jobs in the region. Production at the Chattanooga plant is expected to begin in 2011, and may eventually include Audi models.

Toyota broke ground on a new manufacturing plant in Mississippi in 2006 that had been slated to begin producing the Prius by 2010. As a result of the sales downturn and the decline in U.S. gas prices (a key factor in demand for the Prius), in December 2008 work on the plant was delayed indefinitely and it is currently unclear when the plant will be completed and production will begin. Since 1984, GM and Toyota had jointly operated the New United Motor Manufacturing Inc. (NUMMI) plant in Fremont, California. However, in 2009, both Toyota and GM pulled out of the venture, and production at the plant is expected to cease on March 31, 2010. In 2008, GM produced 70,843 vehicles at the NUMMI plant, while Toyota produced 271,169 cars and trucks at the plant. GM produced the Pontiac Vibe at the plant, which was discontinued as part of GM's reorganization, while Toyota is shifting production of its Tacoma and Corolla from NUMMI to other North American plants.

While a number of plants closed in 2009, it is important to note that some products remain very popular, and this could lead to some plants reopening in 2010. For example, in February 2010, GM stated that it was already considering reopening some plants. GM Vice Chairman Bob Lutz stated that they are short of [production of?] the SRX, Equinox, Terrain, Enclave, Traverse, Acadia, and LaCrosse, and GM may add capacity to meet demand and maintain market share. In addition, vehicle inventory was slashed in 2009 with production levels lower than sales. Should sales levels improve, automakers will be faced with the decision of whether to increase capacity once again and face the dilemma of potentially flooding the market.

Data from the Federal Reserve Board shows that the average yearly capacity utilization for automobiles and light duty motor vehicles from 1972-2009 was 76 percent. Over the last fifteen years, utilization rates in the United State frequently exceeded 80 percent and were occasionally closer to 90 percent. The highest capacity utilization rate was in 1978 (91.1 percent). In 2009, capacity utilization reached only 39.9 percent, the lowest rate since 1972 (the earliest data publically available). Prior to 2005, capacity utilization had reached at least 80 percent every year since 1994, but it has failed to reach that level since then. Capacity utilization dropped over 17 percent in 2008 from the previous year, while it dropped again in 2009 over 31 percent from the low levels of 2008. As noted earlier, temporary GM and Chrysler plant closures during the year were major contributors to the decline in utilization.

These mathematical averages hide large differences among individual companies. It also demonstrates how the capacity rates can fluctuate dramatically from one year to the next given the market and the impact of closing plants. For example, in January 2009, GM had a capacity utilization rate of 30.8 percent, according to Ward's. By December of that year, capacity for GM was 52.5 percent, and in January 2010, GM capacity was 62.4 percent. Over the course of 2009, GM had to shutter a number of plants as it dealt with bankruptcy to decrease capacity and emerge with a more efficient process. Both Ford and Chrysler had similar capacity trends and plant closures over the last year to various degrees.

Employment

Employment has significantly declined in the automotive sector over the last decade. The continued restructuring of the Detroit 3 over the past several years has been a major contributing factor. Just between 2006 and 2008, there has been almost a twenty percent decline. U.S. motor vehicle manufacturing has declined from a peak of about 300,000 workers in 2000 to approximately 191,000 workers in October 2008. Numbers fell even further in 2009, with preliminary estimates from the Bureau of Labor Statistics (BLS) indicating an average of only 142,000 employees for the year. Including the automotive parts companies, the industry employs approximately 666,000 production workers (down from an average of 875,000 for 2008 and a high of 1.3 million in June 2000).

The employment numbers of each individual company have changed drastically in recent years. The number of Detroit 3 workers has been declining rapidly, making accurate counting difficult. While it is difficult to get accurate numbers at any specific moment, snapshots of changes in the workforce are available. The CEOs of the Detroit 3 provided employment numbers to Congress

when they testified in November 2008. Ford CEO Alan Mulally stated at that time that Ford had reduced its “workforce by 51,000 in the past three years, shrinking our hourly workforce from 83,000 to 44,000 and reducing salaried headcount by around 12,000 from a base of 33,000.” Former Chrysler CEO Robert Nardelli stated that Chrysler had furloughed 32,000 employees in 2008. According to Ward’s, 66,000 hourly employees have left GM under attrition programs since 2006.

In addition, the industry supports a wide variety of “down-stream” employment in dealerships, service/repair, financing, etc. Dealers had a high of 1.27 million employees in September 2005, but the average number of employees has been mostly declining since then. BLS estimates that the number of employees in 2009 had fallen to 1.02 million. As part of the restructuring of Chrysler and GM in 2009, the two manufacturers said they would cut more than 2,000 franchises.

Despite these reductions in force, the automotive industry continues to be one of the largest employers in the United States. At approximately four percent of GDP, the auto industry has an impact on many parts of the U.S. industrial base. The Center for Automotive Research (CAR) estimated in 2008 that if the Detroit 3 were to go out of business, the total job loss in the United States would be approximately 3 million. Given the interconnection among the three companies’ supply chains and the weakened state of most U.S. auto parts companies, the loss of one of the Detroit 3 would likely cripple production at the other two and probably the transplant auto companies as well.

The addition of new plants, such as Kia in Georgia and Volkswagen in Tennessee, will boost employment opportunities in those communities. In addition, GM is already discussing the possibility of reopening some shuttered plants to meet the demands for popular vehicles. The overall reduction in employment is not expected to be entirely replaced by new or expanded U.S. investments by international automakers, and certainly will not be replaced in the same communities. In addition, affected suppliers and dealerships will face further consolidation, resulting in even more employment declines. According to forecasts from BLS, improvements in productivity and foreign outsourcing of parts production will lead to further declines in employment in the industry in the next decade, with a decline in motor vehicle and parts manufacturing of over 16 percent⁵. BLS also predicts that wages in the industry will decline. The UAW made concessions in their 2007 contracts, and as part of the bankruptcy proceedings further concessions were made to ensure the viability of the competitiveness of the companies’ future.

Market Forecasts and the Road Ahead

U.S. Light Vehicle Market Forecast for 2010 and Beyond

Annual vehicle sales in 2009 were the lowest in almost three decades, with sales totaling 10.4 million units. However, analysts and automakers are optimistic that U.S. vehicle sales will improve in 2010 with predictions ranging from 11.2 million to 12.4 million vehicles. After two

⁵ <http://www.bls.gov/oco/cg/cgs012.htm#outlook>

straight years of sales declines, the U.S. market is expected to gradually rebound, with the outlook better for the second half of 2010 than the first half.

Economic indicators for 2010 are mixed, so the auto industry remains cautiously optimistic. In addition to pent-up demand, modest increases in consumer confidence, income, and the housing markets, along with lower debt and interest rates, are all expected to lead to increased sales. In 2009, disposable personal income (DPI) was up 1.5 percent reaching almost \$11 trillion. Per capita DPI increased to \$35,659 in 2009, up 0.6 percent in current dollars, and up 0.4 percent in constant dollars.⁶ Federal Reserve Board data shows that total consumer non-revolving debt, which includes automotive loans, dropped slightly to \$1.59 billion dollars in 2009, down 0.7 percent from 2008's level of \$1.6 billion dollars.⁷ Interest rates on consumer new car loans at auto finance companies fell from 5.52 percent in 2008 to 3.82 percent in 2009. Personal outlays for all non-mortgage interest payments decreased for the second year in a row, from \$237.7 billion in 2008 to \$214.3 billion in 2009. Housing starts, an important indicator for profitable full-size pickup trucks, are forecasted to improve in 2010. For January 2010, housing starts improved 2.8 percent.⁸

Analysts are also encouraged by the pent-up demand for vehicles, citing last year's high vehicle scrappage rate (more vehicles were scrapped than sold), the increased average age of U.S. vehicles in operation (approximately 10 years), a low U.S. sales rate of 42 autos for each 1,000 adults, and the rising number of new fuel-efficient models being offered. In addition, annual personal consumption expenditures for new vehicles fell to \$184.5 billion in 2008 and \$162.6 billion in 2009, far below the more than \$200 billion annual expenditures from 1999-2007.⁹

While there are some positive indicators, if consumers remain uncertain about the economy's recovery and unemployment remains high throughout the year, consumer confidence will deflate and vehicle sales will suffer. The average national unemployment rate grew to 9.3 percent in 2009, the highest rate since 1983.¹⁰ As of February 2010, consumer's confidence of both current-day conditions as well as their outlook for the next six declined sharply.

Participants at the December 2009, Federal Reserve Bank of Chicago's Economic Outlook Symposium projected solid U.S. economic growth in 2010, with increased personal consumption

⁶ Current Bureau of Economic Analysis data, available from <http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=Y>. Scroll to Section 2 and select Table 2.1 for "Personal Income."

⁷ Federal Reserve Board's monthly consumer credit report, available from <http://www.federalreserve.gov/releases/g19/Current/>

⁸ U.S. Census Bureau's New Residential Construction Press Releases available from <http://www.census.gov/const/www/newresconsthist.html>

⁹ Current Bureau of Economic Analysis data, available from <http://www.bea.gov/national/nipaweb/SelectTable.asp?Selected=Y>. Scroll to Section 7 and select Table 7.2.5B for "Motor Vehicle Output."

¹⁰ Bureau of Labor & Statistics' unemployment statistics, available from <http://www.bls.gov/bls/unemployment.htm>

expenditures, increased inflation, and an unemployment rate that will peak early in 2010 and fall slightly throughout the year. Light vehicle sales were predicted to rise to 11.4 million units. Real GDP in 2010 was forecast to increase by 2.5 percent. Both short-term and long-term interest rates were expected to increase by 75 and 59 basis points, respectively. In addition, oil prices were expected to increase, averaging \$83 per barrel by the end of the year.¹¹

Most analysts expect the industry's recovery to be gradual over the next few years. However, they do not anticipate the return of an annual sales rate of 17 million vehicles any time soon, if ever. For 2012, J.P. Morgan predicts sales of 14 million units, while the Center for Automotive Research predicts sales of 14.9 million units. TrueCar predicts sales will not reach 14.5 million units before 2013. In order to be profitable at lower sales levels, automakers, particularly the Detroit 3, have restructured and drastically reduced their cost structure. J.D. Power estimates industry's breakeven point has decreased from 13 million in 2009 to 11 million in 2010. Ford, which reported a profit in 2009, expects to have a pre-tax operating profit for 2010, and be solidly profitable in 2011. GM expects to be profitable in 2010. The automaker estimates it can break even by having a 19 percent market share of U.S. industry sales of at least 10 million. In its five-year plan announced in November 2009, Chrysler projected a break-even operating result for 2010, a break-even net result for 2011, and grows to have \$5 billion of operating profit in 2014.

The Road Ahead

After U.S. light vehicle sales and production in 2009 fell to their lowest level since 1982, most analysts agree that the U.S. auto market cannot get any worse. However, most analysts also agree that any recovery will be gradual. Excluding the Korean automakers, whose U.S. sales increased 8.9 percent in 2009 versus 2008, most automakers had another very rough year. The Detroit 3's collective sales for the year were down 26.6 percent, Japanese manufacturers' sales were down 19.6 percent, and the German automakers' sales decreased 14.3 percent.

After drastically reduced sales and a cash flow crisis, GM and Chrysler both ended up receiving federal loans and filing for bankruptcy protection last year. Each emerged from bankruptcy in approximately a month's time having the U.S. and Canadian governments and the UAW's retiree health care trust fund among their new owners. In addition, Fiat currently owns 20 percent of Chrysler, with the aim of eventually owning 51 percent. For 2010, government officials and analysts will be monitoring the companies' progress in returning to profitability, their repayment of government loans, and the timing of GM's public share offering (anticipated at the end of the year). Analysts will also be watching the dynamic of Fiat's alliance with Chrysler, the influence of GM's and Chrysler's new leadership and its impact on company culture, and any changes in the relationships between the automakers and their suppliers, dealers, customers, and employees. Meanwhile, Ford, who avoided bankruptcy and federal funding, is doing relatively well, and recorded its first full year profit since 2005.

¹¹ Federal Reserve Bank of Chicago, *Chicago Fed Letter*, February 2010, available from http://www.chicagofed.org/digital_assets/publications/chicago_fed_letter/2010/cflfebruary2010_271.pdf

The Detroit 3's drastic restructuring steps over the past decade, particularly in the last year, have lowered their structural and legacy costs, and aligned their production capacity and dealer network to better match decreased sales. These actions, along with positive reviews on many products, have them in a better competitive position and hopeful for profitable futures. The big unknown for the short-term outlook, however, is the pace of the industry's recovery. Consumers' confidence in both the economy and in the Detroit 3 is still shaky. The Detroit 3's U.S. market share fell to 44.1 percent in 2009. Japanese automakers, with a collective share of 40.5 percent, could overtake the Detroit 3 as the top U.S. market share holders in the near future. However, recent events have shown the Japanese automakers are not invincible. They have experienced some recent setbacks, including lower sales, lower profits due to the strengthening of the yen, product mis-steps by Honda, and Toyota's massive recall.

The competition in the U.S. market is only expected to heighten as European and Korean automakers continue to make strides in the U.S. market, with possible new entrants from China and India on the horizon. The German manufacturers had a 7.3 percent U.S. market share in 2009, and are increasing their U.S. investments to become bigger players in the U.S. market. Their U.S. production is expected to increase due to the strong euro and Volkswagen's new plant, which is expected to begin production in 2011. The Korea automakers have also increased their U.S. market share and will increase U.S. production. Their U.S. position is expected to improve with Kia beginning production in Georgia and Hyundai's dramatically improved quality scores and new products over the next couple of years. While the U.S. and other global automotive markets declined last year, China experienced growth of almost 53 percent with passenger vehicle sales of 10.33 million units due to economic growth, tax cuts, and other government stimulus measures. China may not sustain that level of growth, but the country has already become a major market with increasingly competitive automakers, both domestic and international. Over the past five years, many domestic Chinese automakers have expressed their desire to enter the U.S. market; however, it is unclear how soon they will be able to comply with U.S. environmental and safety requirements, meet U.S. consumers' quality expectations, and develop a distribution network. Under pressure to save energy and reduce emissions, Chinese-based automakers, such as BYD, are poised to be at the forefront in introducing advanced technology vehicles.

U.S. consumers' preferences seem to be gravitating towards cars versus light trucks, with the shift expected to accelerate in 2010. The Detroit 3 accounted for only 31 percent of passenger car sales in 2009, so improving in this segment and offering marketable fuel efficient vehicles will be vital to their turnaround. All automakers are under pressure to offer more fuel-efficient models to comply with stricter fuel economy standards; however, there is some concern about advanced technology vehicles' increased cost and the need for electric-vehicle infrastructure. In addition to the global automakers' new vehicles, there will be new offerings from smaller automakers, such as Fisker Automotive in Delaware and Tesla Motors of California. Given the extremely high development costs and retooling needed for advanced technology vehicles, automakers have looked to the Department of Energy's loan program for assistance. There will also most likely continue to be a number of cooperative projects between automakers and other technology companies, as well as between the automakers themselves.

Decreased U.S. production and the Detroit 3's troubles have also affected U.S. auto suppliers, as evidenced by the increased number of supplier bankruptcies and the need for the Treasury's Supplier Support Program (which is expected to end in April 2010). Suppliers warn this year could be worse, and continue to seek greater access to credit to stabilize their businesses and also assist with diversification. U.S. suppliers' financial distress also hampers their ability to innovate and offer new technology at a crucial developmental time for the industry.

Automotive-related employment has significantly declined over the past decade and is expected to continue to decline. U.S. motor vehicle manufacturing has declined from a peak of about 300,000 workers in 2000 to a preliminary estimate of 142,000 employees in 2009. There are some areas that will see increased employment as the industry gradually improves, including Kia's new plant in Georgia, Volkswagen's upcoming plant in Tennessee, and the potential reopening of some GM plants. However, productivity improvements and parts outsourcing are expected to lead to an overall decline in motor vehicle and parts employment of over 16 percent in the next decade. Dealership-related employment is also expected to continue to decline due to the elimination of some of GM's brands as well as the reduction of GM's and Chrysler's dealer franchises.

Overall, the auto industry is expected to continue to experience some struggles during most of 2010. The recovery from the drastic downturn in U.S. auto sales over the past couple of years will most likely be gradual due to continued high unemployment and the shaky U.S. economy. This slower, gradual upturn will continue to impact all automakers, not just the Detroit 3. In the midst of this recovery, automakers remain under pressure to make major investments in developing fuel efficient vehicles with various alternative powertrains. The U.S. industry, which already has cut employment and lowered capacity to better align with reduced sales, is expected to continue to consolidate with the hopes of increased profitability.

The global automotive industry will continue to present challenges, with competition from emerging markets such as India and China potentially impacting both U.S. automakers and suppliers. More information on trade, global markets and other key issues will follow in a second part of this report later this year.

– INDUSTRY TABLES –

Table 1

Consumers' Expenditures (PCE) (Billions of Current Dollars)							
	2003	2004	2005	2006	2007	2008	2009
Cars, New	91.3	91.9	97.4	100.0	95.9	85.4	71.6
Light Trucks, New	160.3	160.5	151.4	133.1	137.3	99.1	90.9
Total, New	251.6	252.4	248.9	233.0	233.3	184.5	162.5
Net, Used Autos	106.6	107.1	112.7	113.5	114.5	105.4	99.4
Total	358.2	359.5	361.6	346.5	347.8	289.9	261.9
Source: U.S. Bureau of Economic Analysis							

Table 2

U.S. Motor Vehicle Production (Millions)							
	2003	2004	2005	2006	2007	2008	2009
Cars	4.5	4.2	4.3	4.4	3.9	3.8	2.2
Light Trucks	7.3	7.3	7.2	6.4	6.5	4.7	3.3
Total LV	11.8	11.6	11.5	10.8	10.5	8.5	5.6
Med/Heavy Trucks	0.3	0.4	0.4	0.5	0.3	0.2	0.1
Total All	12.1	12.0	11.9	11.3	10.7	8.7	5.7
Source: Ward's Automotive Reports							

Table 3

U.S. Motor Vehicle Sales (Millions)							
	2003	2004	2005	2006	2007	2008	2009
Cars	7.6	7.5	7.7	7.8	7.6	6.8	5.5
Light Trucks	9.0	9.3	9.2	8.7	8.5	6.4	4.9
Total LV	16.6	16.8	16.9	16.5	16.1	13.2	10.4
Med/Heavy Trucks	0.3	0.4	0.5	0.5	0.4	0.3	0.2
Total All	16.9	17.3	17.4	17.0	16.5	13.5	10.6
Source: Ward's Automotive Reports							

Table 4

Total Passenger Vehicle Market					
	1986	2006	2007	2008	2009
TOTAL SALES	16,121,645	16,475,109	16,067,482	13,176,597	10,392,559
AMERICAN BRANDS					
Total Sales	11,813,719	8,815,017	8,181,158	6,236,502	4,578,134
Share of Market	73.3%	53.5%	50.9%	47.3%	44.1%
JAPANESE BRANDS					
Total Sales	3,386,912	5,768,779	5,961,900	5,236,305	4,208,299
Share of Market	21.0%	35.0%	37.1%	39.7%	40.5%
GERMAN BRANDS					
Total Sales	503,550	920,879	947,785	889,639	762,623
Share of Market	3.1%	5.6%	5.9%	6.8%	7.3%
KOREAN BRANDS					
Total Sales	168,882	749,821	772,482	675,139	735,127
Share of Market	1.0%	4.6%	4.8%	5.1%	7.1%
Source: Derived from Ward's Automotive Reports by U.S. Department of Commerce/Automotive Industries Team					

Table 5

Light Truck Sales					
	1986	2006	2007	2008	2009
TOTAL SALES	4,642,687	8,694,351	8,449,070	6,363,228	4,936,313
Share of Total Pass. Vehicle Market	28.8%	52.7%	52.6%	48.3%	47.5%
AMERICAN BRANDS					
Total Sales	3,657,896	5,709,268	5,392,751	3,918,652	2,885,970
Share of Market	78.8%	65.7%	63.8%	61.6%	58.5%
JAPANESE BRANDS					
Total Sales	972,503	2,453,639	2,461,930	1,989,781	1,601,508
Share of Market	20.9%	28.2%	29.1%	31.3%	32.4%
GERMAN BRANDS					
Total Sales	12,288	157,990	179,771	163,571	165,967
Share of Market	0.3%	1.8%	2.1%	2.6%	3.4%
KOREAN BRANDS					
Total Sales	0	273,559	315,847	229,377	228,500
Share of Market	0.0%	3.1%	3.7%	3.6%	4.6%
Source: Derived from Ward's Automotive Reports by U.S. Department of Commerce/Automotive Industries Team					

Table 6

Passenger Car Sales					
	1986	2006	2007	2008	2009
TOTAL SALES	11,478,958	7,780,758	7,618,412	6,813,369	5,456,246
Share of Total Pass. Vehicle Market	71.2%	47.2%	47.4%	51.7%	52.5%
AMERICAN BRANDS					
Total Sales	8,155,823	3,105,749	2,788,407	2,317,850	1,692,164
Share of Market	71.1%	39.9%	36.6%	34.0%	31.0%
JAPANESE BRANDS					
Total Sales	2,414,409	3,315,140	3,499,970	3,246,524	2,606,791
Share of Market	21.0%	42.6%	45.9%	47.6%	47.8%
GERMAN BRANDS					
Total Sales	491,262	762,889	768,014	726,068	596,656
Share of Market	4.3%	9.8%	10.1%	10.7%	10.9%
KOREAN BRANDS					
Total Sales	168,882	476,262	456,635	445,762	506,627
Share of Market	1.5%	6.1%	6.0%	6.5%	9.3%
Source: Derived from Ward's Automotive Reports by U.S. Department of Commerce/Automotive Industries Team					

Table 7

U.S. Automotive Industry Average Annual Employment (1,000s)			
(NAICS Based)	2007	2008	2009
Automobiles (336111)	127.8	117.2	89.6
Light Trucks and utility vehicles (336112)	58	46.9	29.8
Total Light Vehicles	185.5	162	119.4
Heavy Duty Trucks (33612)	34.2	27.4	23.0
Total vehicles	219.7	189.4	142.4
Motor Vehicle Bodies and Trailers (3362)	166.4	140.2	105.2
Motor Vehicle Parts (3363)	607.9	543.7	418.7
Motor Vehicle Parts (3363) and Motor Vehicle Bodies and Trailers (3362)	774.3	683.9	523.9
<i>TOTAL</i>	994	873.3	666.3
Source: U.S. Department of Labor/Bureau of Labor Statistics			

Table 8

Total Payroll & Fringe Benefits (Billions of Dollars)					
	2003	2004	2005	2006	2007
Car Plants	7.3	7.5	7.6	7.4	5.5
Light Truck Plants	11.0	11.6	10.9	9.9	8.8
Total LV Plants	18.3	19.1	18.4	17.3	16.0
Heavy Truck Plants	1.6	1.9	2.1	2.2	1.8
Total All Plants	19.9	21.0	20.6	19.5	17.8
Source: U.S. Census Bureau 2007 Economic Census and Earlier Annual Surveys of Manufactures					