

# Reflection on the Experiences of US and European Automobile Industry to Hubei's Future Development<sup>1</sup>

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**Abstract:** Surpassing the US in car sales in 2009. China has, since the world financial crisis, been showing big potential while US automobiles industry under complete depression. Green car, which has long been popular in European countries such as Belgium, has therefore become a key for the revival of the world car industry. As one of the three major automobile bases in China, how can Hubei benefit from the current challenge and development opportunity in the pro-crisis era?

**Key words:** Saving and new energy vehicles; US automobile; decay; European "green" plastics; Hubei; development

## 1. ONCE PROSPERITY OF THE US AUTOMOBILE INDUSTRY AND ITS GRADUAL DECAY

### 1.1 The rapid development and its prosperity of US auto industry

US used to be the No. 1 automobile market in the world, while its auto industry has also experienced a long prosperity for years. As is known to all, Henry-Ford has set up, in 1903, the world's first large-scale automobile production factory, and has also, for the first time, applied the auto production assembly line in 1914, all of which had greatly improved the world's auto production efficiency. US used to be the world No. 1 car market and many famous world car brands have originated from US, such as GM, Ford and Chrysler, etc.

US auto development can be traced back to the early 19<sup>th</sup> century, due to the railway construction, large influx of immigrants and the rapid development of ship-building and shipping industry, US has been experiencing a prosperous auto industry period. Relying on the favorable conditions of iron ore and steel

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plant nearby, Detroit in Michigan has gradually turned into a very important automobile base in the US and worldwide.

Detroit, also known as "the automobile capital", was once the world's largest automobile manufacturing center. As the headquarters of GM, Ford and Chrysler, Detroit has almost become the synonym of the American cars as early as 100 years ago. Moreover, its auto industry has become a main artery of the U.S. economy.

## **1.2 Gradual decay of the US auto industry**

Making a general survey of the world auto history, the US has been for a fairly long period the largest car market, its vehicle production in 2007 reached 11.596 million and the sales volume was 16.452 million, accounting for 15.9% of the world's total automobile production and 22.9% of the world sales respectively. The US auto companies have also created the stunning Ford production assembly line and the General Motors matrix operation system. The US auto industry is its important traditional pillar industry accounting for 4% to 5% in the state economy.

Yet, during the past few decades, especially in the 21<sup>st</sup> century, the US auto industry was in a gradual decline which were represented by the following examples. In 1998, the German Daimler-Benz and U.S. Chrysler have been merged. Having been the world's second auto company up to 70 years, Ford Motor was surpassed by the Japan's Toyota in the year of 2007. To make matters worse, the US sub-prime crisis broke out, and the US auto industry was no doubt taxed further into a pit. US auto has encountered big depression, especially under the global financial crisis.

As the world's largest car producer and automobile markets, the US has in 2008 fallen to its lowest level in the past 27 years in its auto sales, the three Detroit auto big makers have all trapped in deep crisis. Though the US Big Three auto makers have made many efforts, but all did not effectively to restore the tide. To March 2009, the US auto industry was still shrouded gloom, all the major car manufacturers' sales were decreased at least by 36% compared to the same period of the previous year, many auto enterprises fell into the abyss of bankruptcy and reconstruction. General Motors and Ford were both in heavy losses, Ford's financial loss in 2008 was 12 billion US dollars higher than that in 2007. Has long been at a loss, Chrysler was getting worse and worse after the termination of cooperation with Daimler in May 2007.

The 84-year-old Chrysler have also applied for bankruptcy protection and reorganized with Fiat, while the century-old General Motors has struggled for several months applying for bankruptcy protection and closed 11 factories on June 1, 2009.

Taking GM as an example, with the influx of 59 billion US dollars offered by the US government, it owns 60% equity of GM and the GM auto has been nationalized. As a consequence, 80% of the high-position executives are appointed by the government who are inexperienced in operating car company.

All these lead to the frequent replacement of CEO in GM. The succeeding CEO Henderson was forced to resign under the pressure from the board and replaced by Ed • Whittaker, the former chairman of AT&T. Ed was appointed by the US government as well and he would represent on behalf of tax payer rather than the interests of stakeholders. It can be foreseen that it is hard for the board to make more efficient and beneficial decisions towards sensitive issues such as redundancy and partial salary. Meanwhile, the financial and operating situation may be deteriorated continually under the intervention by the government and it is most probable to go into bankruptcy again. All these have marked that the world automobile industry under significant revolution and the US auto industry does not shine any longer.

## **2. REFLECTIONS ON THE US AUTOMOBILE'S FAILURE**

Taking an overview of the development process of the US auto industry, the sub-prime crisis is not the sole reason responsible for its decay.

## **2.1 Lost its advantage due to the everlasting high costs**

The cause of the US auto industry's decay has formed long time ago. As far as most critiques are concerned, the origin of the US auto decay is UAW. Born in the 1930s, UAW is the US auto industry workers union to secure workers' full payment of medical expenses, legal advice, children care, pension, vacation, education subsidies and unemployment insurance payments. UAW has hindered the US auto industry in increasing the production costs.

According to certain statistics, the average salary of UAW workers is 62 US dollars per hour while that of Chinese workers is merely 1.5 US dollars. What is much more astonishing is the welfare of UAW workers. Ford and GM's spending on retirement pensions is as high as several billion dollars, and the annual income of auto workers equals to that of university professors. Micheline Maynard, the reporter of "The New York Times" stated in 'Decline of Detroit,' that these (high wages and welfare) 'virtually made the cost per vehicle increases to 1,200 dollars.' Detroit-produced cars has thus become as 'low quality with high price' synonymous. Additionally, UAW owns a nearly 900 million US dollars strike fund. If the employees of the federation went on strike, UAW will pay each of them 200 US dollars per week to compensate for the economic losses caused by strike. It means that UAW can afford an over two-month strike. For instance, the simply fifty-four days' GM's UAW workers strike caused a huge loss of USD 2.2 billion in 1998.

## **2.2 US's over reliance of the car financing**

US car companies depend greatly on financial products. As critics pointed out that the innovation capacity of US Big Three auto manufacturers in launching financial service products exceeds far more than the innovation ability in the practical economy. Besides the service institutions for new cars and second hand cars, they established giant service institutions. With the Big Three's market shares decrease, the profits of the main business comes from financial services rather than the auto productions and sales. 92% Americans purchase cars by credits loan and leasing. Consumers' ahead of time consumption and excessive consumption lead to the rapid expansion of US auto purchasing.

In July 2005, GM sold worth 55 billion dollars auto loans to Bank of America, and they were therefore inclined to short-term speculative securities and financial derivatives operation, which made the accumulated 190 billion US dollars credits loan of 2005 a burden for GM. GM suffered a huge loss of 38.7 billion US dollars that year.

## **3. REFLECTION OF THE SUCCESS ON THE BELGIAN HIGH-TECH RECYCLABLE CAR PLASTIC INDUSTRY**

Belgium is among the world's top car export country, this is closely related with its high-tech green car plastic industry, which has also provided around 15 · 000 job opportunities for the Belgian. The recyclable green plastic has not only greatly reduced its weight, but also made the Belgian car cheaper and safer, improved its car quality and made Belgian car maintenance more convenient. In some sense, its recyclable plastic has brought a real technical revolution in Belgium.

Belgian is a small country with little natural resources, with 95% of its domestic companies are small ones engaging mainly in import & export, Service industry has been quite essential in Belgian national economy. With narrow domestic market, middle & small Belgian businesses have to export based on high-tech & advanced equipment, they have a say in international market by their flagship products. Belgian high-tech middle & small car enterprises are open both in its structure & operation. They have been engaging for generations in the productions of machine fittings such as car spares.

Belgian trading model—Support middle & small high-tech car enterprises; Government—NGO—financial institutions unite into one to establish efficient & direct connect; Promote foreign trade through technological innovation—can provide China with certain experiences not only in our further enlarging Sino-EU trade, but also in China's current economy transformation.

## **4. CONCLUSION**

### **4.1 Experiences of the US auto industry's failure**

Over-consumption or excessive-consumption has become a behavior feature in US's autos. Americans are a country living 'on-the-wheel', owning more than 26% cars in the world with only less than 5% world's population. According to a record by US Department of Transportation, China's vehicle ownership per thousand persons in 2003 is merely equivalent to that of US in the late 1930s.

Reasons for the US auto high ownership are, first, US high levels of income and the fierce auto market competition. Different from many other countries' higher fuel tax policies (to limit energy consumption and promote environment protection), US fuel tax is relatively lower and steadier. Second, the US auto finance market is rather developed and the strategy of "zero down payment, zero interest rate" has been applied from the late 1980s. After the 9.11 in 2002, GM established "Zero-interest rate" loan to stimulate the US economy and the other Big Two carried out similar marketing measures in order to change the sharp decline in car sales. The effect of 'Zero down payment, zero interest rate' is obvious in the short run, but on the other hand it made the auto business risky and a large number of consumers lacking of practical purchasing power buy cars purely by loan, which made the follow-up production being limited. Third, US highly developed second car market accelerates the current high frequency of cars replacement and causes some consumers to over consumption. The US second car market is the world's most developed and largest market, and its car replacement is cheap and convenient. According to relevant statistics, over the past 10 years, the average new car sales of US per year is 16 million, and second hand car sales reached over 40 million, almost 2 to 3 times larger than that of the sales of new cars. The second hand car market's prosperity represents that the high frequency of replacement and the increase of cars per capita growth.

### **4.2 Reference on the Europe "green" automobile----experiences of the Belgium Hi-tech auto plastic industry**

The world's current main solution under the economic crisis is to produce small and inexpensive cars as to stimulate consumption. India has released a mini car mainly made up with plastic and merely costs 18,000 Yuan (about USD2630) which is welcomed by the consumers. Sequentially, US released Peel 50 battery-operated mini car and Toyota planned to research and designed USD 5,000 ultra-low cost cars.

In fact, the recyclable hi-tech green plastic has become the main components of cars in Belgium and many other European countries, which will absolutely cause an auto revolution worldwide. Plastic is the fourth largest export industries in Belgium. its plastic products exports accounts for 7.1% of the BLEU total exports. According to the data by Belgium State Statistics Bureau, plastics production import and export industry has provided Belgium with approximately 15,000 employments, a total of 21,300 employees. Plastic processing industry is the most creative industry of Belgium.

Belgium plastic automobile industry attaches great importance to environmental protection and recycling. "Green" plastic make cars inexpensive and improve the vehicle quality too. Meanwhile, it is much more convenient for auto repairing and makes cars more secure. Plastic has replaced the traditional materials in auto industry which has brought a technical revolution.

In one word, clean energy vehicles, as the trends of sustainable and healthy development, has become the focus of global automotive industry competition. Those who first realize the industrialization of new auto energy's industrial applications will surely grasp better development opportunities.