

Case Studies on
Global Automobile Industry

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OVERVIEW

The global automotive industry is one of the largest industries in the world and one of the prime drivers of international economic development and social improvement too. It manufactures around 65 million cars and trucks a year, and employs millions of people around the world. The industry accounts for about 10% of GDP in developed countries.

A century ago, the industry more or less invented modern industrial capitalism. The history of the automobile industry goes back to the 1900s, when the industry began to develop in France. But it was only in the US that automobiles came of age, when Henry Ford innovated the moving assembly line that marked the birth of mass production in the 1920s. Though GM and Ford had revolutionised the auto industry through modern car manufacturing in the mid-1920s, Toyota refined the process in the 1960s with its lean-manufacturing (Just In Time) techniques.

For the past 20 years, carmakers round the world have been trying to emulate the success of Japanese carmakers in lean manufacturing. Especially, Toyota has been seen as the benchmark for ensuring quality and efficiency. Most car factories have now been revamped more or less along Japanese lines, lessening the gap between Japanese and Western producers.

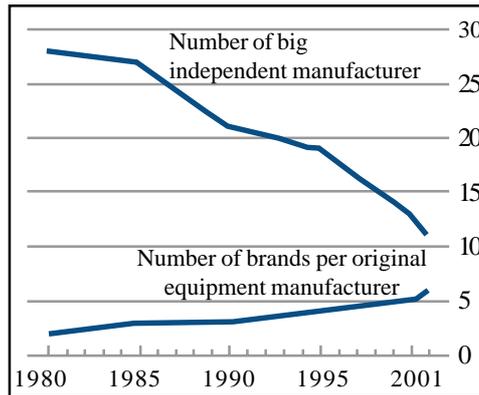
In spite of being over 100 years old and having pioneered the forms and weathered the storms of 20th century capitalism, the industry is still struggling. Graeme Maxton and John Wormald wrote in their book, *Time for a Model Change*, “It is becoming a sunset industry, a has-been in financial terms – a flagrant contrast with its continuing social role, its share of employment and its political influence.” Average profit margins have declined from around 20% in the 1920s to around 10% in the 1960s and, to less than 5% now. Even a few carmakers are in losses.

The Big Three: General Motors, Ford and Chrysler have lost a combined \$11.3 billion in 2006 and together their US market share has fallen from 72.7% two decades ago to 55.1% in 2006.¹ Many analysts expect a further decline for the Detroit carmakers. These three automakers, once domestic behemoths, are now downsizing themselves. All the three are in various stages of reorganisation. According to auto industry analysts, GM will be reduced to the size of Ford by 2008 in terms of capacity, and Ford will shrink to Chrysler’s size. GM and Ford are halving their workforce and Chrysler is planning to cut costs by \$1,000 per unit.

According to analysts, because of the continuous changes in the industry, consolidation has been taking place almost since its inception. In the late 1920s, there were 270 car companies, mostly in the US. But, after the Big Three started acquiring the small manufacturers, the number of big independent manufacturers came down drastically (Exhibit I).

¹ Priddle Alisa, “The Shrinking of the Big Three”, http://wardsauto.com/commentary/shrinking_big_three/, December 6th 2006

Exhibit I
The fall in the Number of Car Manufacturers



Source: "A Survey of the Car Industry", *The Economist*, September 4th-10th 2004

Today, the fully matured industry, consists of only seven big carmakers and three smaller ones. In terms of volume, six groups – GM, Toyota, Ford, Renault/Nissan, Volkswagen and DaimlerChrysler – and their affiliates account for about 70% of global sales.

Several powerful forces profoundly changed the industry:

- The fragmentation of the market, led to lower production runs
- The costly system of building cars for stock
- Innovative modular construction, in which most of the car is put together by parts suppliers
- Technological change (a switch to electric cars with electronic and electrical – rather than mechanical – controls)
- High pension and healthcare costs.

As a result, markets in the US, Europe and Japan, where over 80% of the world's cars and trucks are sold, have been witnessing a decline.

After the 9/11 attacks, car sales in the US have drastically come down. Besides, as carmakers from Europe, Japan and South Korea entered into the US, there was an increased competition for the traditional manufacturers. Moreover, as the US' carmakers constantly improve their productivity to catch up with these new rivals, their greater efficiency itself increases capacity by about 3% a year. The resulting oversupply has sparked a price war that is

keeping up the volume of sales, at an average cost of around \$3,000 per car. This has raised the stakes in price discounting. Hence, GM launched a wave of discounts and credit incentives in a bid to retain its market share. Ford and Chrysler too followed GM's campaign.

Similarly, Europe's car industry was also struggling. Its premium marques, Mercedes and BMW, were yet to emerge as strong global brands. Volkswagen was bogged down after it acquired a Spanish firm, Seat, and also by its high production costs in Germany. Ford and GM used to mint money in Europe when local companies such as Renault, Peugeot, Fiat and Volkswagen were not doing very well and imports from Japan were restricted. But, since 1984, Nissan, Toyota and Honda have been opening their own European factories and the competition has become tougher. Now, Toyota alone has 5% of the European market. During the past decade, Ford and GM have lost billions in Europe.

The rest of the world shows a mixed picture. In Asia, the 1997 financial crisis dealt a huge blow to the South Korean car industry. Today, only Hyundai survives as an independent carmaker. In South America, economic collapse in Brazil and Argentina halted the rapid expansion of the car industries there – leaving foreign investors such as Fiat to cut their losses. In China, the industry started booming significantly, with automobile sales growing by leaps and bounds for a decade; in some years by as much as 50%. As the automobile sales surged towards 5 million in 2005, China surpassed Germany and became the third largest automobile manufacturer in the world. In fact, all the big Western carmakers have joint ventures with local ones like Dongfeng and Shanghai Automotive Industry Corp (SAIC). Their net profit margins in China average more than 9%, compared to barely 2% in America.

So, a huge wave of new investments is now going into China. Major carmakers are set to invest about \$13 billion over the next five years. This has caused an oversupply of cars. Apart from the foreign carmakers, China also has over 100 home-grown car companies. As a result, over the past three years, prices have already fallen by about 25%, and experts expect the decline to continue at the rate of around 10% a year as competition heats up.

The main thrust of competition at the moment is in product development. Each company is trying to compete in every segment of the market with a glut of niche models designed to attract customers. This is causing the market to fragment. But, with every manufacturer trying to outdo the others with a proliferation of models and having to slash prices to shift its stocks of finished cars, a more radical approach may be needed.

Changes in manufacturing methods could also arise from new technology being incorporated in cars, particularly as less polluting alternatives to petrol and diesel engines come along. Over the next 20 years, the market share of petrol and diesel hybrids and fuel-cell electric vehicles will probably rise by about 10%. As the industry's products begin to change, so will the way in which they are manufactured. In time, there will be lesser need for huge, capital-intensive factories; so the barriers to entry will come down. Start-up companies could take away business from established traditional manufacturers.

In the industry, newcomers could become parts suppliers moving into assembly, or outside companies can shift towards new technology. And even before that happens within a decade or two, competition of a more conventional kind is bound to come from Chinese manufacturers selling low-priced cars in Asia and the US. The old car firms must reinvent themselves to seek profit, not just market share. Otherwise newer, nimbler competitors will take advantage of technological changes to do the job for them.

These trends in the industry will lead to a series of important implications and questions for new start-up companies and managerial executives. This case study volume discusses the evolution of the global automobile industry since its inception. It discusses in detail how industry forces affected major manufacturers and the trends in the industry. It also details how each player revived their strategies to survive in the industry or to retain its market share.

This book contains case studies of different companies that were chosen to illustrate a range of important issues in competitive situations in the automobile industry. The case studies provide the necessary data for sophisticated strategic analyses and act as a laboratory for the managerial executives to apply the framework of competitive strategy to real world situations. Thus, the cases form a critical bridge between a complex conceptual framework and the practice of strategy formulation. The cases in this book allow a systematic investigation of these general analytical techniques:

- **Structural Analysis** is the study of the five competitive forces influencing the industry competition and their underlying determinants
- **Generic strategies** and their relationship with the industry structure, their risks and their organisational implications, forms a basic building block in the selection and analysis of strategic alternatives
- **Competitor analysis** is an in-depth framework for assessing competitors' positions and their likely behaviour
- **Industry evolution** studies the underlying determinants of changes in industry structure over time and their strategic implications.

Companies examined in these cases allow the reader to systematically analyse the important types of strategic decisions. Based on the analysis, various decisions are taken up. Each type of decision raises its own economic and administrative issues. The strategic decisions highlighted in the case studies in the book are:

- **Major capacity expansions:** the decision to commit resources as a substantial addition to firm capacity, whose success depends on future industry conditions and what competitors choose to do
- **Vertical integration:** the extension of the firm's scope of operations through either forward or backward integration

- **Entry:** the decision to enter a new industry through acquisition or internal development
- **Divestment:** the often painful decision to withdraw from the industry
- **Mergers:** agreements among firms in the same industry including supply agreements, joint ventures and cross-licensing.

The cases in the book cannot be organised along any one dimension, but according to the companies' origins or locations – Europe, the US and Asia.