High Noon in the Automotive Industry
Helmut Becker

High Noon in the Automotive Industry

With 86 Figures
and 29 Tables

Springer
Preface

This book was born from curiosity.

To begin with, it was the curiosity of an economist who studied in the 60's in an environment which has subsequently developed from national into global economics. Who has to recognize that politicians, scholars and large segments of society oblivious to supranational authorities and economic globalization forces continue to labour under the notion that they are still fully autonomous and sovereign when shaping national economic policy. And pretend as though their own national state were still the "master in its own house" that despite unbridled market economics could continue to dictate to the economy and companies how to live and in which "rooms".

All that has become fiction. The laws of globalization diminish the manoeuvring space for shaping national economic policy. Even if many folks today don’t want to hear it: The issue is no longer achieving what is socio-politically desirable for the own society but rather the optimal adaptation of society and social benefits to the politically practicable.

By the collapse of communism and the bipolar political world at the latest, the general conditions under which the established industrialized nations could act economically had changed fundamentally. Whereas up to then only the free market-based national economies with just 1/5 of world’s population were allowed to take part in the annual competition for the highest GDP growth rates, the title of the "world export champ" or the greatest standard of living increase etc., this pool was abruptly enlarged at the beginning of the 90's to about 4/5 of mankind.

Since then the rules of the game for global competition have been redefined. All of a sudden, economies with huge raw material and labour resources as well as high "unsaturated" market potentials announced their claims to take part in the competition. The process of globalization began. And it developed with breathtaking speed! Barely 15 years have passed since the iron and bamboo curtains fell, and discourse about economic policy in western industrialized countries is already ruled by growing concern over the consequences of this globalization for prosperity and jobs,
and in Western Europe, particularly Germany, capitalism bashing in turn is becoming ever louder.

The economist faces a series of questions: What happens when a national economy is replaced by the global economy? What happens to a highly developed national economy that suddenly has to deal with competitors in a global marketplace who boast almost equal productivity and quality levels but highly unequal wage levels?

That is one source of curiosity. The other is a by-product of the author’s close relationship to the automotive industry and its analytical and strategic problems which have occupied the major part of his professional life. Because as it happens this industry represents one of the key sectors, especially in high industrialized countries as Germany, particularly affected by the rapid change in the fundamental structure of the global economy. On the one hand, there is the global re-evaluation of production locations due to significant differences in factor costs, sometimes as close as in their own backyards. On the other hand, there are unmistakable growth limits in their primary markets. The result has been a free-for-all battle over market share!

The automotive industry thus has to bear the double burden of market and production site competition. So the key questions are: What happens in and to an oligopolistically structured industry when the foundation is abolished on which it’s post-war growth, high profits and social prestige had rested? How will the oligopolists involved react? Which solutions does competition theory offer for the relentlessly intensifying battle over market share between those involved? As the industrial nation with the highest structural dependence on cars, what employment and social benefit issues does Western Europe have to come to terms with? Does Germany’s automotive industry as that on top of the cost-iceberg still has a chance in the long run? Can the German automotive industry survive the global adjustment process?

This book is nevertheless not written from German but from global view. It should bring some clarity to the expected global trends and structural changes in the automotive industry and in the national economies most affected by it. However, it must be conceded that, considering the global economic dynamics and complexity of the material, gaps in these findings will be unavoidable, not because they were overlooked, but because they simply are not yet clear in spring 2005. And the author does not have the powers of Nostradamus!
This refers especially to the future role of China and the Chinese automotive industry. The fact is that within a mere decade China, both as sales market and production location has turned into to the third biggest automobile country in the world (passenger cars + trucks) after the U.S. and Japan. This was of no consequence for the "old" automotive world and thus also for this book, insofar as Chinese automobile manufacturers hadn’t been present as exporters in the global market and, beyond its borders, Chinese brands were more condescended to than regarded as competitive. This has changed, too! Recently plans have become public in which national Chinese automobile manufacturers (Chery, Geely, Brilliance, SAIC) in the future want to enter in the competition not just as exporters on the world market but even with their own assembly plants in Europe beginning in 2007. And there's more: Between the printing of the German and English editions of this book, the first "land winds" – off-road vehicles made entirely in China – have swept across Europe's coast, and at breathtaking prices.

For now, all the necessary information is lacking for any reliable estimate of the concrete market effects of China entering the world market. Only one thing can be said for sure: The opening bell has sounded on a new round of predatory global competition! Its initial effects will not be visible and thus accessible to an economic trend analysis until 2010 at the earliest.

This book wishes to banish the illusion that all western manufacturers and suppliers can successfully handle the unavoidable adaptation to the pressures of predatory competition. No matter how "smart", "quiet" or otherwise the "revolution" of the added value chain in automobiles may be, economic efficiency gains from global competition are not for free. A single business cannot alter the predetermined global trend. It can only adapt better than its competitors – or give up.

The same is true without exception for national economies. This book attempts to get their political and social "management personnel" to realize that no highly developed, liberal and free market-oriented economy in the triade-countries can offer pain-free solutions or "panaceas" for the necessary adaptation to such an accumulation of shock-like changes in the international economic environment. In this respect Germany is not standing alone, but is standing in the first row! Therefore the “German case” and the solutions that will be finding here will be of special interest for all other automotive western countries. However, the burden of adaptation can be kept as low as possible by returning to the familiar old virtues of rolling up sleeves and common sense and flexibly and bravely preparing for the
inevitable, perhaps even drawing advantages from it. For the global economy doesn’t just mean risks for the old industrialized countries but also opportunities.

It must be admitted that the results of the forecast through 2015 and the conclusions drawn from it are not pleasant ad hoc, either for the automotive industry, economic policy or the individual social groups affected. But it is well known that "Self-awareness is the first step toward improvement." The future for the old economies is not to be won by timidly adhering to the past or in the sleeper car (German President Horst Köhler) but only with a boldness for global competition and readiness for change. Although Germany has a lot of homemade problems it can nevertheless be taken as an example for the global community. If the German economy hadn’t once already summoned up this pioneering spirit after the war, there wouldn’t have been any "economic miracle". In other words: fighting famine with diets is no strategy. If this book is able to contribute to a renewed faith in this home-grown strength in all highly developed countries under global competition pressure, the effort will surely have been worthwhile.

Books of this kind have many fathers. I am very obliged to Adolf Ahnefeld and Franz-Josef Wolf for numerous suggestions and above all for the encouragement to finally take a critical and unvarnished look at the future of the global automotive industry from a theoretical perspective of global competition. Likewise many thanks to Werner A. Müller as well as Ruth Milewski of Springer Verlag who made the publication of this book in the present form possible through their kind suggestions on its form and contents.

Special thanks are due to my assistant Juri Dutka for his indefatigable research work, analyses, conception and calculation of the IWK Survival Index (ISI), creation of graphics etc. Also great thanks to Niels Straub for his expert contributions on the components supply industry and the almost daily updates with new reports about labour agreements, location shifts, suppliers takeovers etc.

Finally, I would like to thank my wife for her critical scrutiny of substantial passages of text and for kindly letting me spend so many weekends with my manuscript.

Helmut Becker
Munich, May 2005
Preface ................................................................................................................................. V

Introduction .......................................................................................................................... 1

1 The current situation: markets in upheaval, turbulence in the sector oligopoly ................................................................. 9
  1.1 Overview ...................................................................................................................... 9
  1.2 Structural growth weakness in the triad ................................................................. 12
  1.3 Competition from Asia intensifies .......................................................................... 15
  1.4 Growing overcapacities, decreasing capacity utilization ....................................... 20
  1.5 Atomization of model ranges .................................................................................. 26
  1.6 Change in the buying patterns of "automobile consumers" .................................... 29
  1.7 Intensified overall price and cost competition ..................................................... 32
    1.7.1 The situation of the branch as a whole ............................................................. 32
    1.7.2 Profit pressure in core business, but not for all producers ............................. 34
  1.8 Passing the loss on to the components suppliers .................................................. 37
  1.9 Conclusion: branch with increasing profit pressure ............................................ 39

2 The Western European automotive industry: cost stress and profit pressure ................................................................. 41
  2.1 External pressure factors ....................................................................................... 41
    2.1.1 Cost gap in international comparison ............................................................. 41
    2.1.2 Intensification of global location competition .............................................. 56
    2.1.3 Asian OEMs in catching up competition on quality / performance / styling .............. 66
2.1.4 "First we take Manhattan, then we take Berlin!" - Asian brands on the advance .......................................................... 69

2.2 Home-made load factors ............................................................. 73
  2.2.1 Boundless model palettes ....................................................... 73
  2.2.2 Exploding development costs, decreasing amounts of coverage ................................................................................. 77
  2.2.3 Lacking model flexibility and decreasing capacity utilization .................................................................................. 81
  2.2.4 Crowding out competition/ overcapacities/ margin pressure ...................................................................................... 83
  2.2.5 Operative losses in the core segments of the "productive" added value chain/ management mistakes ............................. 84

3 Global mega trends until 2015: intensified selection process ..... 87
  3.1 OECD-volume markets: in saturation ........................................ 87
  3.2 Growth champions of the future: BRIC states ......................... 93
  3.3 New orientation of global production locations ....................... 98
  3.4 Brand orientation of buyers’ preferences, Asian competition advances ................................................................. 104
  3.5 Asian competitors on the advance ........................................... 112
  3.6 Concentration at all levels: upheaval in the added value chain 118
  3.7 Forming of strategic alliances at OEMs .................................... 125
  3.8 Changed energy supply conditions ......................................... 127
  3.9 Conclusion: large structural change in the global automotive industry ........................................................................... 131

4 Further concentration of automobile manufacturers by 2015. 135
  4.1 Predatory competition shows its effect ....................................... 135
  4.2 Evaluation of the 11 largest OEMs according to "survival-criteria" .................................................................................. 139
    4.2.1 Analysis method ........................................................................ 139
    4.2.2 Establishment of the "IWK’s survival-index" .......................... 141
4.2.3 Sources of information .......................................................... 141
4.2.4 Valuation model ........................................................................ 142
4.3 "IWK Survival-Index": valuations in the various categories .... 143
  4.3.1 Current Economic Situation (CES) ........................................... 143
  4.3.2 Sustainability ........................................................................... 149
  4.3.3 Strategy .................................................................................. 155
4.4 Total results of the ranking ........................................................ 156
4.5 Conclusion: who has the best chances in the predatory competition? ......................................................... 158

5 Consequences for the Components Supply Industry ............. 163
  5.1 Typology of the added value chain .............................................. 163
  5.2 Concentration in the producers' oligopoly brings risks for suppliers ................................................................. 166
    5.2.1 Upward pressure on costs from OEMs becomes still more rigid ................................................................. 166
    5.2.2 Intensified competition due to progressive concentration .... 168
    5.2.3 Excessive demands on middle-class organization structures ................................................................. 170
    5.2.4 Excessive demands on financial power where capitalization is insufficient ............................................. 171
    5.2.5 Conclusion: decreasing profits, increasing risks, further consolidation ..................................................... 173
  5.3 Strategic success factors ............................................................ 175
    5.3.1 Innovation strategy ................................................................. 176
    5.3.2 Cost reduction strategy: increase in productivity or transfer to low-cost countries ........................................ 180
    5.3.3 Expansion strategy: more activities within the added value chain ............................................................. 187
    5.3.4 Growth strategy: economies of scale and cost synergies .... 188
    5.3.5 Niche strategy: specialization .................................................. 189
    5.3.6 Cooperation strategy: creation of clusters ............................... 192
5.3.7 Location strategy: go to where the OEMs are.................196
5.3.8 Financing strategy: securing increasing capital demand.....197
5.3.9 Conclusion: profitable growth is possible!......................200

6 The future map of global vehicle location – some reflections ..205
6.1 Stocktaking ........................................................................205
   6.1.1 Industrial states in the maelstrom of globalization.........205
   6.1.2 Increasing location attractiveness of the NIC's ...............209
6.2 Perspective of automotive industry in West Europe: the
   German case.......................................................................211
   6.2.1 The European dimension.............................................212
   6.2.2 The German case: location heavyweight of the automotive
       industry.........................................................................217
6.3 Determining factors of economic competitiveness ..............220
6.4 Job Engine Automotive industry: Peak Level passed..........224
   6.4.1 In the short-term: gradual melting-process .....................224
   6.4.2 In the long-term: reduction to essentials .......................229
6.5 Summary .............................................................................236

Appendix...................................................................................239
List of figures..............................................................................245
List of tables ...............................................................................249
List of abbreviations ....................................................................251
Literature.....................................................................................253
Author.......................................................................................261
Globalization, market saturation, falling prices, market atomization through endless model offensives by all manufacturers in every imaginable market segment, innovations of sometimes questionable customer benefit, and the increasing technical and organizational complexity of the product automobile characterize the demands of the automotive industry at the beginning of this 21\textsuperscript{st} century.

The battle for markets and clients in the sector has reached an unprecedented ferocity. The consequences are far-reaching structural and regional reorganization along the whole added value chain. For manufacturers, and particularly automobile suppliers, this means clear strategic business plans are necessary to protect their future sustainability. The focus is increasingly on "stay or leave" decisions with regard to present markets and traditional production locations. The latter in particular is hitting Germany.

Exhaustive treatments are legion by scientists and management consultants about

- the coming reorganization of the added value chain in the industry, including projections down to the last cent about future sales-based work division between manufacturer and supplier,

- success factors for manufacturers and suppliers in the future added value chain,

- as well as exact proportional forecasts of technological trends in the product and production process.

Their knowledge normally is based on the customer surveys of consultancies relevant to specific links in the added value chain (manufacturers + suppliers), or it is comes from technology trend updates by scientific and technical research groups.
All these studies are valuable and offer those original equipment manufacturers (OEMs) and suppliers important strategic advice on how to act in order to protect their profitability and competitiveness. All the while they fail to note that in oligopolistic markets like today’s automobile market the simultaneous implementation of the measures they suggest is of little use to those involved when the result is in an even more tense competitive situation with ever lower yields. Because not only the consultants but also the measures have their costs.

The discount battles that have been raging in recent years between U.S. manufacturers in the American automobile market are a good example for this: The endogenous growth dynamic of the U.S. automobile market as a whole has been unaffected by the discount campaigns of the various manufacturers, meaning its development has been and will remain predetermined exogenously by the macroeconomic / overall general economic conditions. Instead every U.S. manufacturer reported individual heavy losses on the micro level, making the American consumers glad because their "consumer surplus" rose with the fall in prices. Thus it follows: In narrow oligopolistic markets, if equally strong suppliers are running at the same speed in the same direction, nobody will get ahead! That’s just the way economic theory is.

Individual measures by individual manufacturers/makers don’t change the market. If a market is showing long-term (structural), non-temporary (cyclical) overcapacities, capacities have to be reduced, meaning makers will have to leave the field – all these business management prescriptions won’t help! It may well be correct, say, that the part supply industry’s share of global automobile added value in the next 10 years will increase by 12 % or more than US$ 300 billion, corresponding to the current GDP of Switzerland, at the cost of the OEMs. But this totally neglects the fact that, because of increasingly intense global competition for macroeconomic reasons, the number of OEMs and suppliers will nonetheless shrink considerably. The forecasted added value increase clearly won’t reach everyone. Therefore the strategic imperative for both manufacturers and suppliers must be to take a stand such that one can cross "the finish line" with the others. And if, like Toyota, the goal is to win, then one has to be particularly good.

Thus, one thing becomes obvious: The question of why are rarely asked in traditional, purely microeconomic consultants’ recommendations. What reasons, what general macroeconomic conditions are driving the expected market changes now and in the future? What will happen if the subjective estimations provided by those parties are wrong? Or if exogenous struc-
tural breaks cause technological trends to develop differently and the
global economic conditions specific to automobiles take an entirely differ-
cent course than what has been charted in the trend extrapolations by the
makers surveyed?

The question about the deeper reasons for the exogenous changes in the
competitive constellations of the world market, and above all their conse-
quences for OEM and suppliers, mostly not only isn’t answered but gener-
ally isn’t asked at all. Otherwise statements like "The logical consequence
of these circumstances (meaning: market saturation and decreasing sales
opportunities in the triad; authors note) is the shifting of competition into
other regions".¹ Quite the opposite! The old volume markets are under fire!

This is where this book begins. The core intention of this book is not to
spread strategies for OEM and suppliers to successfully adapt to changing
added value chains. Rather the main issue is which fundamental forces are
effecting these changes in the supply (=costs) and demand (= market
growth) conditions in the global automotive industry. First of all one has to
ask why something is happening, before one can say which consequences it
will have for the entire industry and the traditional production sites. The
reader can then derive his own strategic recommendations. There are
plenty of hints about those.

The present study is trying to perform this. The operating procedure of
the IWK hereby is "classical": First of all the diagnosis is made, thus
building up the prognosis and last but not least are given strategical rec-
ommendations in a general manner for the supplier industry.

In chapter 1, the reasons for the drastic intensification of global competi-
tition in all automobile markets at the beginnings of the 21st century will be
analyzed. How have the conditions in global sales markets changed? Which
consequences does that imply for the sector as a whole? What are the
symptoms of this worldwide radical change in the industry in the first
decade of this century? How are manufacturers themselves responsible for
the spreading fall in yields? How affected are suppliers and which ones are
particularly affected? What has to be done to "survive"?

This study takes a particularly close look at the German automotive in-
dustry in respect of its leading role in Western Europe. In chapter 2, inter-

c

1 Kurek, R. (2004), p. 131
exist at all. Instead he has to deal with six automobiles companies\(^2\) with a number of self-managed brands (e.g. AUDI, Bentley, Mini Cooper, Smart, Rolls-Royce, Skoda etc.) and what has become a confusing multitude of model and production series.\(^3\)

How heterogeneous those companies were in 2004 can be seen in their different net returns on sales, which vary between +17% at Porsche to – 4% at GM daughter Opel\(^4\). Thus, from the start, any statement about the German automotive industry does not proceed from a genuine average. Nevertheless, the present IWK study does not rely on absolute data but on trends which in oligopolistic markets are equally valid for all manufacturers, independent of their individual sales and competitive situations. However, it must be admitted that the OEMs with larger yield cushions have more room for reaction and thus more options for dealing with negative trends in a more long-term and forceful way than manufacturers like Opel who are deeply in the red. When "the attic" is already "burning", the question is moot of whether it is better to wait for rain or immediately start putting out the fire with water.

No less interesting is the question of future developments, particularly one issue: Is there any hope that the predatory global competitive situation will relax in the future? Will the market in the future help to solve the earnings problems, or will manufacturers and suppliers have to manage them on their own? Chapter 3 points out the megatrends of global market development as well as the "new division of labour in the global automotive industry" – regionally and structurally – for the next ten years.

The global predatory competition in the automotive industry begins at the top of the added value chain, the manufacturers, and is passed on to all the up- and downstream levels ("chain competition"). Even if a progressive concentration among OEMs, and in the same way among suppliers, has been visible ever since the very beginnings of the automotive industry at the beginning of the 20\(^{th}\) century, the form and ferocity of today's cutthroat competition are new. Remember: in Germany in the 1920s there were over 300 automobile manufacturers. Meanwhile the number of independent OEMs has dwindled to a narrow oligopoly in which even premium producers complain eloquently about the heightened competition. That may be understandable when seen from the narrower point of view of

\(^2\) BMW, DaimlerChrysler, Ford, Opel, Porsche, Volkswagen.

\(^3\) According to current press releases VW alone wants to put 20 new models on the market in 2005.

\(^4\) IWK calculations based on press information. Actual result likely to be lower.
management, but from the broader viewpoint of the economist it is seen as proof of market saturation and functioning competition. This is a benefit to the consumer, who of course on the other hand, as an employee in the automobile industry, feels the full negative effects of these otherwise positive aspects.

The question of how this global oligopoly of the remaining 12 motor manufacturers will continue to develop in times of foreseeable heightened competition is of course exciting: which of them will maintain their position, which will run the risk of disappearing from the market as independent OEMs? This question will be discussed in chapter 4. To assess the further development of the global automotive industry, the study examines the 11 largest remaining automobile conglomerates in order to give them a sustainability rating. The IWK-Survival-Index (ISI) is drawn up using a detailed rating system which has been developed by us. It measures the sustainability of each individual manufacturer and gives them a weighting value by drawing on a number of codes and valuation criteria. It may take the wind out of the sails of any critics if we mention here that the IWK is not a professional rating agency and has at its disposal neither the material nor the personnel resources to examine each OEM meticulously and at high cost. We have restricted ourselves to analysing the available rating results, adding our own knowledge and assessment, and to evaluating everything according to a specially designed pattern, summarizing it all in the IWK-Survival-Index (ISI).

From the perspective which the automobile manufacturers as a whole have on the future one can infer the consequences for the supply industry. What will happen to the suppliers when the OEM's oligopoly tightens up? How should they react to the concentration which is to be expected in their clientele, if they want to survive? These are the questions chapter 5 attempts to answer. Here too, as with the OEMs themselves, a universally applicable recommendation cannot be made. This, although many relevant analyses by the branch's experts would seem to suggest it were possible. Here too, as with the OEMs, there is no one typical or average supplier, quite apart from the differences given by their respective positions in the added value chain. Publishings on this topic are already very extensive. Therefore this account limits itself to the challenges and risks facing the supply industry as a whole in Germany, and subsequently evaluates the deciding strategic success factors for survival in the automobile world of the future. However, here too it is clear from the beginning that not all suppliers will make it to the other side and the number of independent suppliers will shrink considerably. Here it is necessary to build up market
power in order to be in a position to meet OEMs as equals and without bribery.

Last, but not least, chapter 6 deals with the future global map of location for the automotive industry. With respect to the high geographic density of automotive activities there and the low cost level in the very near neighbourhood of Eastern Europe countries there will be given a special view on Germany's future role as a location for the automotive industry. Does Germany have any chance as a production location in the automotive industry? In this globalized world, in which it has seemingly over night become possible to operate automobile plants in (almost) every part of the world, but at considerably lower cost? If one followed pure economic theory about perfect factor markets, the answer would be simple but painful: as far as the figures go, in the global location competition for the production and assembly of primary and end products, whether labour-intensive or simple, the high-cost location Germany would not be able to keep pace with the low-wage countries of Eastern Europe and Asia. And these reflections are also transferable to other automotive countries in Western Europe.

Indeed, just such a displacement of production and employment has long been going on. The question is:

- How far and how deeply will this location arbitration cut into industrial and employment structures?

- Whether German automobile producers have got through the worst blood-letting of value addition and employment through the agreements already made with the workforce on the safeguarding of the future and of employment? Or are there already first signs that global location competition is penetrating into mass production of up-market and complex products, and indeed even into the development of such products – the core competence of the German automotive industry?

- What arguments point in favour of Germany continuing to be an automobile location, albeit as a "plucked goose", in the long term?

However indispensable entrepreneurial decisions based on the harsh cost and rentability constraints of business management may be for the processes of alignment and restructuring in the German automotive industry, the courage and determination required of all parties should not be underestimated, regardless of how much acceptance this necessity finds within society. The challenge presented by globalization must be accepted on the offence, and not on the defence. Leadership, decisiveness and creativity are required of managers. Employees are required to act in a manner which shows they understand that it is in their own interest. It is not wish-
ful thinking and illusions, - nor yet lobbyists and functionaries – which make for secure jobs, but competitive products, and if need be, working harder and longer.

In times of universal and general uncertainty about the effects of globalization it is down to the politicians to make sure that economic activity doesn't suffer from home-grown hindrances, but is promoted. Therefore the responsibility for employment, education, financial, and economic policy in particular must lie with the politicians. They must create the necessary framework and get rid of hindrances. One doesn't need to look far!

The requisite analyses and proposals for policy makers in “Old Europe”, especially in Germany, are legion and will not be dealt with any further in this book. The author can add nothing new to them. He can at most encourage policy makers to overcome the egotism of groups and functionaries and to act courageously – at the risk of treading on the toes of the sovereign.
1 The current situation: markets in upheaval, turbulence in the sector oligopoly

1.1 Overview

In the global automotive industry the symptoms of a growing, structural profit crisis are increasing. The German automotive industry, up to now a pillar of the German economy, is no exception. This was made more than clear by the spectacular cuts in labour and wage agreements all across the industry in 2004. Even premium makers like Audi or BMW at the beginning of 2005 had to admit to tighter earnings, despite good sales figures in 2004. From which one can conclude that the creeping deterioration of earnings by now has reached the upper market segments.

For several years, in some cases more than a decade, the big global volume markets, whether the U.S., Europe or Japan, have been showing no or only little growth, or are even shrinking, as has been the case now in Germany for four years running since the beginning of 2000. For an industry like automobiles which has been among the motors for growth and income since the end of World War II this absence of growth has been a completely new phenomenon!

This alone would be sufficient in this strongly growing industry with a major social reputation to provoke at first agitation and consternation and then a hectic competitive sanctionism for customers.

But things are getting even worse for the global automotive industry because at the same time, in a breathtaking expansion of model and engine portfolios, each manufacturer is trying to defend its own market segment "with tooth and nail" or to enlarge it at their competitors’ expense. The immediate consequence of this is that even one-time niche makers have been turning into "full line makers". The result of these individual portfolio expansions are global production capacities which far exceed worldwide demand and thus are leading to growing overcapacities.
Therefore, not only are investments for new production capacity rising progressively for all manufacturers but so especially are costs for development and "market conquering". Simultaneously intensifying price and discount competition is shrinking unit profits. The consequence is brutal predatory competition which is forcing down the profit margins of all automobile producers step by step along the chain – as to be expected in an oligopolistic market with such aggressive pricing. Niche and premium suppliers are also affected, for example Porsche, BMW and DaimlerChrysler. No supplier can evade this cascading competition, sooner or later it will reach every manufacturer.

The consequences are simple: where there is competition the consumer is happy and the producer grieves. Where there is crowding-out it hurts the marginal producers first of all – at least as long as they are still in the game and able to feel the pain. The attempt to defend their market position, for example by means of aggressive discount and pricing policies, and to regain their earning power leads to the corresponding reactions of more efficient suppliers, whose earnings thus also come under pressure. It is a vicious circle from which no manufacturer can escape.

Automobile manufacturers all answer this oligopolistic, unusually heightened competition in text-book manner: cost reduction programs and savings concepts dominate the activities of the automobile conglomerates. These range from intensified pressure on components suppliers and special programs aimed at lowering manpower costs in Germany to closure or the shifting of production into low-cost foreign countries. Thus the most important topic at the moment in the automotive industry worldwide is cost reduction.

Cost reduction programs at the top of the agenda for German automobile manufacturers at present. This applies either publicly (as with the recapitalization of Opel, and the wage negotiations at DaimlerChrysler and Volkswagen) or closed, and therefore not perceivable, to the public. Examples of this are BMW and Porsche, who don't want to miss out on the cost advantages which their competitors have negotiated with difficulty and with very negative press coverage.

So much must be mentioned in advance at this stage: an efficient cost structure is merely a necessary, but not a sufficient condition for securing earning power. The decisive factor for success in the market is still the attractiveness of the product and not how efficiently it has been produced. Thus Porsche has for years, as a small niche supplier, been earning the highest yields in the entire global automotive industry, even though the company produces almost exclusively in Germany, a high-cost location.
In the past few years it has especially been volume producers in the lower and middle market sectors such as VW and Opel, but also Daimler-Chrysler, who have got into earnings crises, albeit in part for completely differing reasons. Competitive pressure is coming from two sides in the midrange segment which makes up almost three quarters of the German market. Since the end of the 90's the premium producers have been poaching on compact car territory. The Mercedes A-class, the Smart and, as the newest example the BMW 1 series are proofs that this offensive does not stop at the borders between market segments. Big brands can also make sales in the middle and lower segments.

At the same time the Koreans and Japanese have been threatening the traditional market segments from below, making life doubly hard for German producers. The Korean manufacturers Daewoo and Hyundai show double-digit growth rates in the European market, where they are successfully expanding their position after starting at low level. The same goes for Toyota and Mazda, who are gaining market share year for year. The Asian brands offer extremely reliable, solid models with a good price performance ratio. Starting from this base they are now slowly but surely beginning to advance into the premium sector (for example, the Toyota Lexus).

It's the same picture in the USA. Here Japanese, Korean and German makers are successively crowding out the remaining two American makers, GM and Ford. Significantly, both firms have been continuously operating in the red; profits are generated solely by financial services, which is really a core business of financial establishments (banks) and not of manufacturing companies.

To summarize, it can be said that in early 2005 the worldwide automotive industry is in a state of oligopolistic destructive competition. As the market as a whole is no longer growing, every producer is trying to generate growth at the cost of the other competitors. It is obvious that these aren't ready to give in without putting up a fight. The result in the end is that none can be the lucky winner; to a greater or lesser degree they are all losers with stagnant market volumes and shrinking profit margins.

The branch is caught in a dilemma caused by slack consumption, advancing Asian competition, growing overcapacity and costs due to growing model diversity, tougher price competition, and passing losses on to components suppliers.
1.2 Structural growth weakness in the triad

The automotive industry in the triad (The USA, Western Europe and Japan), which represents more than two thirds of the world's automobile sales volume, finds itself at the beginning of the 21st century in a situation of distinctly slack demand. This cannot be explained merely by normal cyclical economic weakness after a preceding economic high. In Japan the number of new registrations after almost 15 years of continuous market weakness is still below the figures for 1990 (5.1 million passenger vehicles) and shows only a limited recovery. In the USA sales of passenger vehicles (including light duty) are receding for the fourth consecutive year. The number of new registrations in Western Europe has also been below the values of the late 90's for five years now.

**Fig. 1.** Development of new PC registrations in the triad

![Development of new PC registrations in the triad](image)

Source: VDA, IWK presentation

In the same way, Germany, Europe's largest volume market, shows a persistent sales volume weakness. Since 1999 new registrations of passenger cars in Germany have sunk by 15% and are now stagnating for the third year in a row at a level below 3.3 million. German car makers are especially affected by this long period of sales weakness in their home
market because of their market share of around 70%, and with the exception of a few (Porsche, BMW) are presently suffering from considerable yield problems. This has already lead to serious structural adjustment such as the revision of wage settlements, withdrawal of shift allowances, comprehensive programs to reduce fixed costs, and in some cases massive reductions in the workforce. Even DaimlerChrysler's premium brand Mercedes brought them their worst fall in profits for a long time in 2004 (-47%).

Recognition is growing worldwide that growth in the form which had been considered usual until recently is now a thing of the past for automobile manufacturers. Because of the saturation of traditional markets, global competition for market share has become distinctly more intense and competitive pressure has increased drastically for all involved.

**Fig. 2. Development of new PC registrations in Germany**

![](image)

source: VDA, IWK presentation

In this form, this is a new for the automotive industry. The market for motor vehicles used to be determined far less by demand than it is today. In the period from the end of World War II until the end of the 70's the German automobile market had all the features of a classical seller's mar-
1 The current situation: markets in upheaval, turbulence in the sector oligopoly

Customer taste and quality needs varied only slightly, due to the high level of unsatisfied basic demand. Waiting times for the delivery of vehicles sometimes amounted to as much as 4 years (Daimler Benz).

In view of the undamped growth in the demand for German cars and the relatively low level of competition from import vehicles still prevalent at that time, there was no strategic necessity for German automobile manufacturers to adapt to the special needs of smaller demand groups. Export was an additional reliable driving force of growth, as German OEMs were positioning themselves excellently with innovative products and good brand identity / image, which they have been able to expand continuously until now.

Fig. 3. German car exports

source: VDA, IWK presentation

This success in the important export markets of the USA and Europe enabled German manufacturers to initially face effectively the weak demand in the domestic market, the growing competition from a French market which had regained its strength, but above all, the massive competition from the Japanese and Korean automobile industries since the beginning of the year 2000. In particular, those German manufacturers were successful, who were exporting to countries outside Europe. Those OEMs, however, Ford, Opel, and Volkswagen, for example, who focussed on
Europe, found themselves increasingly under pressure, even though it was the French and Italian brands that were the biggest losers in the face of the competition from Asia. Even though German manufacturers had to accept losses in the domestic market due to the increased competition, they were still able to increase their market share in Europe slightly to 46% in 2004 despite harsher market conditions.

1.3 Competition from Asia intensifies

In 1960 the share of foreign automobile brands in new registrations in Germany stood at 9.7%, but then rose continuously to 32 – 34% by the beginning of the 90's and reached about 36% for the first time by 2004. It was mainly the Asian manufacturers – first the Japanese, but meanwhile the Koreans, too, who were able to achieve a significant increase in their market presence in the whole of Western Europe, and to take market share from the established domestic manufacturers.

European countries with their own automobile industries (Germany, France, Italy, Great Britain, and Spain) reacted in the early 1980's to the Japanese manufacturers' successful market entry by initially erecting import barriers for Japanese cars. In the context of the European domestic market, these national regulations were replaced by a transitional regulation ("Elements of Consensus"), which restricted Japanese vehicle imports to a 15% share of the market right up to the year 2000.

However, this quota was never exploited. On the contrary: against all expectations exports of Japanese cars to the EU did not rise when this restriction ended. Instead, the European market was conquered from Japanese manufacturing plants in Europe, which had been set up in recent decades simply because they weren't forbidden. Local production showed strong growth, whilst the number of imported Japanese vehicles decreased distinctly, analogous to the development in the US market.

While Japanese manufacturers have been able to record continuous growth in the USA from American / Canadian production and have gained a market share of almost 30% there in the meantime, they have had to struggle with difficult market conditions in Europe. In contrast to the US market, which is dominated by the "Big Three" (GM, Ford, Chrysler), with its "value for money" mentality, The European market is essentially more heterogeneous, with far more competitors – and above all with more demanding customer expectation the sales volume of Japanese cars in West-
The current situation: markets in upheaval, turbulence in the sector oligopoly

ern Europe fell significantly during the 1990's and amounted in 2001, for example, to about 1.5 million units, which was still below the level for 1990. However, the situation changed drastically in the following years. Lead by Toyota, new registrations of Toyota vehicles in Europe recorded a considerable rise, despite a generally weak market. With annual growth rates as high as 10% (2003) they achieved a record value of 1.9 million cars in 2004.

This market success of the last three years is all the more remarkable because of the decline in the market as a whole during this time, and because of a distinct drop in sales which European mass producers had to some extent to accept. Only the Korean producers were able, with over 20%, to achieve more growth than the Japanese in the last two years, albeit at a very much lower level of fewer than half a million cars sold.

Fig. 4. PC-new registrations in West Europe

![Graph showing PC-new registrations in West Europe from 1990 to 2004 for various car manufacturers including VW, PSA, Japanese, Ford, Renault, GM, Fiat, Daimler-Chrysler, BMW, and Koreans. The graph indicates the market share development for each manufacturer over the years.](source: ACEA, IWK presentation)

The advance of Asian producers into the European market is more clearly recognizable in the development of market share. In the 1990's the share of Japanese cars in new registrations remained relatively constant between 11% and 12%, thus lower than would have been possible according to the trade restriction agreement with the European Automobile Ma-
nufacturers Association (ACEA). Since 2001 this share has been rising continuously to over 13% by the end of 2004 (Fig. 5).

In comparison to the USA, where Japanese brands' market share is twice as high as in Europe, the value on the European market still looks relatively small and obviously allows scope for increase. It is a well-known fact that Toyota wants to continue in its aggressive treatment of the European market, increasingly at the top end of the luxury class. "We will continue our strategy of developing, designing and constructing cars for Europeans in Europe". (Akihiko Saito, Toyota's Executive Vice President and R&D Manager). For this reason Toyota wants to invest around 75 million Euros in the R&D center at Zaventem (Belgium) by 2009.

Fig. 5. Development of market shares in West Europe

source: ACEA, IWK presentation

The Korean manufacturers, in Europe only since the beginning of the 90's, were able to move ahead no less sweepingly. Further market penetration is to be expected due to better quality and considerable progress in the Europeanization of their style. Their market share stands at over 4% at present. Tendency: increasing (Fig. 5).

5 Automobil-Produktion (2004-04-07)