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**A Report into Competition for New Entrants in the UK Motor Car Industry**

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<u>Abbreviation</u>	<u>Description / Web address</u>
AA	The Automobile Association
ACC	Adaptive Cruise Control (Volvo Cars)
ACEA	Association des Constructeurs Européens d'Automobiles (a body representing car manufacturers in the EC)
AG	Audi Group
BBC	British Broadcasting Corporation
BIMS	British International Motor Show
BIMTA	British Independent Motor Traders Association
BMW	Bayerische Motoren Werke AG (Bavarian Motor Works)
BEUC	Bureau Européen des Unions des Consommateurs, (a body representing consumer organisations in the EC)
BSIS	Blind Spot Information Systems (Volvo Cars)
CA	Consumers' Association
CAGR	Compound Annual Growth Rate
CV	Commercial Vehicles
DETR	Department of the Environment, Transport and the Regions
DGFT	Director General of Fair Trading
DTI	Department of Trade & Industry
DTI-AU	Department of Trade & Industry Automotive Unit
EC	European Community
EEA	European Economic Area
EEurope	Eastern Europe
EU	European Union
Fleet	Defined by the DVLA, the SMMT and many suppliers as 25 or more cars registered as being used by a single company
FMCC	Ford Motor Credit Company
GCC	Gulf Cooperation Council
IDIS	Intelligent Driver Information System (Volvo Cars)
JAMA	Japan Association of Automobile Manufacturers
LCV	Light Commercial Vehicles
LDWS	Citroën's Lane Departure Warning System (detects any car changing lane >80 km/hr)
NAmerica	North America
NCAP	(European New Car Assessment Program) <a href="http://www.euroncap.com">www.euroncap.com</a>
NCAP-AOR	NCAP Adult Occupant Rating
NCAP-CPR	NCAP Child Protection Rating
M-B	Mercedes-Benz
MPV	Multi-Purpose Vehicle
OEM	Original Equipment Manufacturer
OICA	Organisation Internationale des Constructeurs d'Automobiles (The International Organization of Motor Vehicle Manufacturers)
PC	PSA Peugeot Citroën
PLC	Product Life Cycle
Platform	Commonality of design or manufacture in automobile production
PSS	Preventative Safety Systems (Volvo Cars)
RAC	Provides range of motoring and vehicle services to consumers and businesses
RAC Foundation	Independent body established to take on role of protecting interest of motorist
R&D	Research & Development
RMI	Retail Motor Industry Federation Limited
RRP	Recommended Retail Prices
SMMT	Society of Motor Manufacturers and Traders
SMTA	Scottish Motor Trade Association
SSTI	Secretary of State for Trade & Industry
SUV	Sports Utility Vehicle
SWOT	Strengths, Weaknesses, Opportunities & Threats
US	United States (of America)
VER	Voluntary Export Restraints (Regime of quantitative restrictions on the import of Japanese cars into UK, certain other countries & EC)
VW	Volkswagen Group
WEurope	Western Europe
WRG	Water Repellent Glass (Volvo Cars)

Table of Acronyms

**1.0 ABSTRACT**

This report was assembled using research from published material and websites of manufacturers within the motorcar industry. The motor industry is one of the most fiercely competitive industries in the UK, with over fifty manufacturers vying for position in a very sizeable market. Despite ever increasing environmental initiatives, the popularity of the motorcar as a mode of transport and status symbol shows no sign of abating. This report considers the market segments, the key players and their strengths, weaknesses, opportunities and threats as well as the marketing mix and methods of how product differentiation is achieved. An analysis of the Product Life Cycle and market influencing factors are considered using Porter’s Five Forces. Finally, the report culminates in some advice for new entrants to the motorcar industry.

**2.0 INTRODUCTION**

The motor industry is one of the most intensely competitive industries in the United Kingdom with over fifty manufacturers (What Car! July 2006, Appendix A1) vying for a slice of a market of almost 2.5 million new vehicles per annum (Table 2.1.2, SMMT, 2006). There were 30.9 million cars on UK roads in 2005, growing steadily from 18.5 million cars in 1983. Nearly 8 million cars are less than 3 years old (SMMT, 2006).

<b>Year</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>
<b>Total</b>	2,458,769	2,563,631	2,579,050	2,567,269	2,439,717

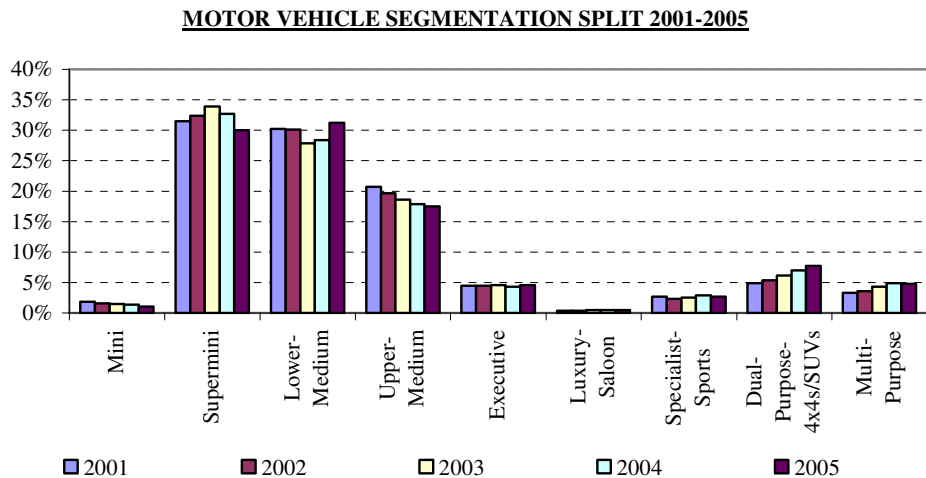
*Table 2.1.2 Total New Registrations in UK 2001-2005*

This report is concerned with assessing the new car market in the UK with the view to giving advice to potential new entrants.

### 3.0 THE CURRENT UK MARKET PLACE

#### 3.1 MARKET SEGMENTS

The SMMT (2006) breaks down new UK car registrations into nine segments, including: Mini, Supermini, Lower Medium, Upper Medium, Executive, Luxury Saloon, Specialist Sports, Dual Purpose 4x4s / SUVs and MPVs<sup>1</sup> (Figure 3.1.1).



*Figure 3.1.1 The segment market share for 2001-2005*

No individual manufacturer has a product in every segment (Appendix A5), although Mercedes-Benz appears to come closest covering all segments except the Mini and Supermini, whereas some, such as Land Rover, Maybach and Rolls Royce concentrate on only one segment.

Most suppliers market a number of different model ranges, which have been growing as suppliers have sought to increase sales by appealing to a wider population and by developing new products. Influencing factors have been the use of common platforms for a number of ranges (Brown, 2005) and the decision of some suppliers to extend their ranges into new segments: for example, BMW has started for the first time to enter the SUV market with their distinctive X3 and X5 brands and VW is entering the convertible coupé and luxury car markets with the EOS and Phaeton respectively.

In the mid-1980s the ‘Hot Hatch’ was the car of the day, with the Golf GTi in particular creating a segment of it’s own before other manufacturers such as Peugeot tried catch-up with it’s own version of a GTi. The last few years have seen a prevalence of 4x4s, MPVs and now SUVs, much to the annoyance of many, especially those affected by 4x4s in the town/city.

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<sup>1</sup> Various Car Magazines use much the same categories, with minor variations; for example, Lower and Upper Medium are usually combined as ‘Family Car’.

In Figure 3.1.4, (most data being collated from What Car!, 2006) the highest range of basic models appears to be offered by Ford (257) followed closely by Renault (254) and Mercedes-Benz (248), while Morgan, for example, appears to offer just one. These figures exclude variations in colour, options in metallic paint and don't account for the multitude of trim levels or options within a particular model. Some manufacturers such as Vauxhall offer numerous options at a cost, whereas others (e.g. Subaru) offer certain levels of trim as standard with very few optional extras. For the volume manufacturers, the model ranges are usually modular, being constructed by mixing and matching a limited range of bodies and engine types; For example, Ford only has variations on eight different basic models (Table 3.1.3).

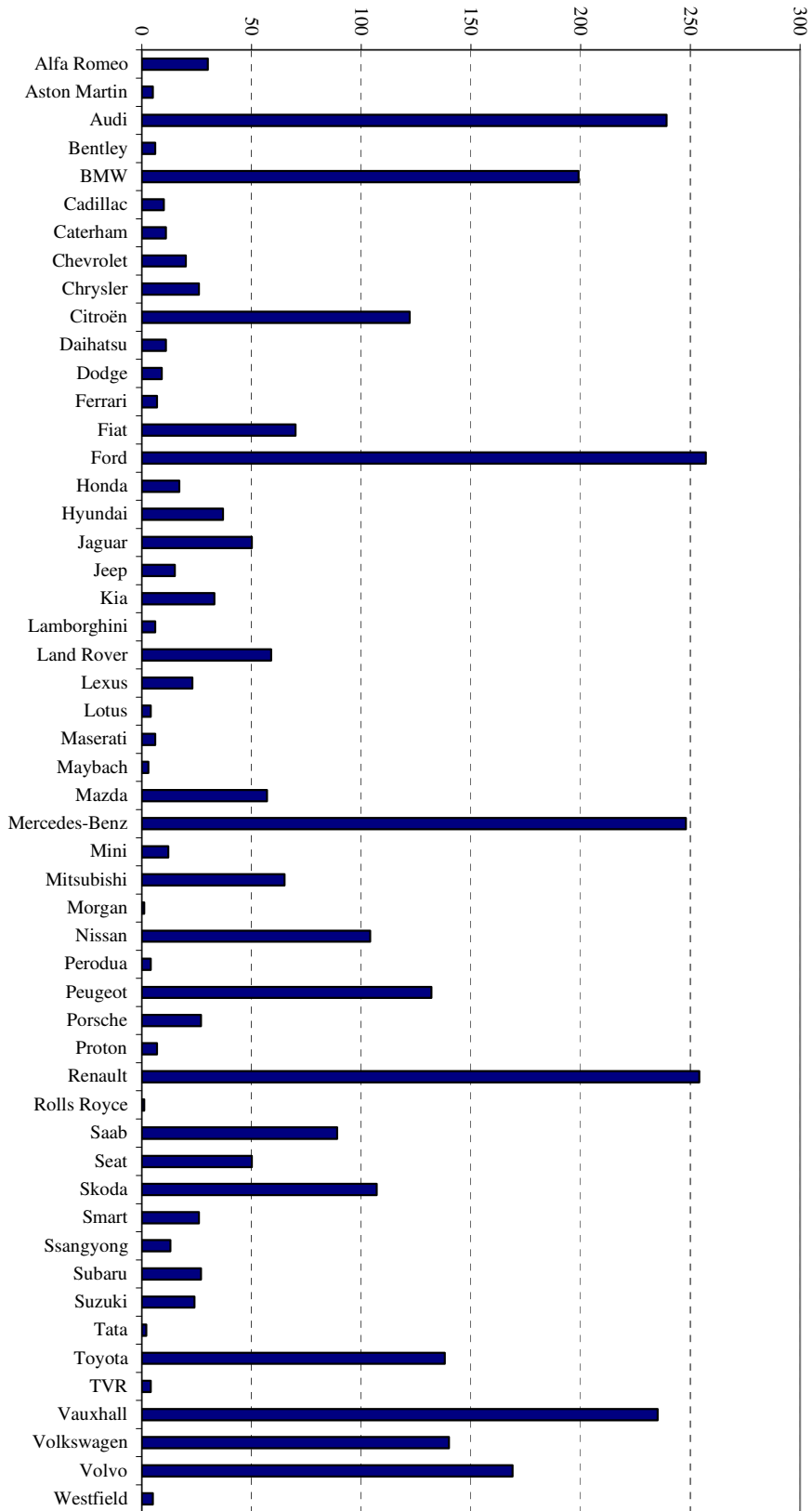
<b>Model:</b>	<b>Fiesta</b>	<b>Focus</b>	<b>Fusion</b>	<b>Galaxy</b>	<b>Ka</b>	<b>Mondeo</b>	<b>Ranger</b>	<b>S-Max</b>
<b>Type:</b>	Hatchback	C-Max (MPV) Estate Saloon	Hatchback	MPV	Hatchback StreetKa (Open)	Estate Hatchback	4x4	MPV
<b>Engine Size / Type:<sup>2</sup></b>	1.25 16v	1.4 16v	1.4	1.8 TDCi	1.3i	1.8 SCi	2.5 TDCi	1.8 TDCi
	1.4 16v	1.6 16v	1.4 TDCi	2.0	1.6i	1.8i 16v		2.0
	1.4 TDCi	1.6i 16v	1.6	2.0 TDCi	1.6 8v	2.0 TDCi		2.0 TDCi
	1.6 16v	1.6 TDCi	1.6 TDCi		1.6i 8v	2.0i 16v		2.5
	1.6 TDCi	1.8 16v				2.2 TDCi		
	2.0 16v	1.8 TDCi				2.5i		
		1.8i 16v				2.5i V6		
		2.0 16v				3.0 V6		
		2.0 TDCi						
		2.0i 16v						
		2.5						

*Table 3.1.3 Ford Car Models and Range of Engine Sizes & Types*

<sup>2</sup> For illustration only. Different power output from the same basic engine is ignored.



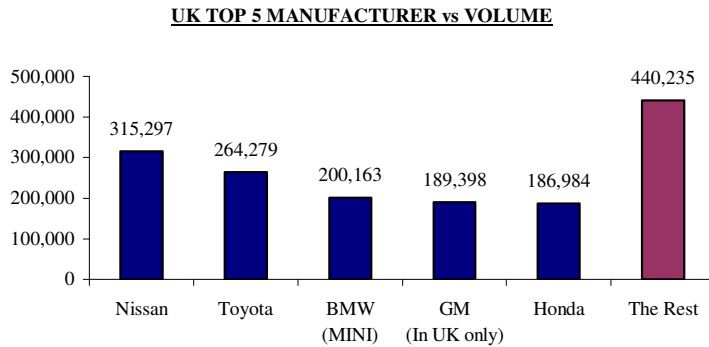
**CAR BRAND UK MODELS - JULY 2006**



*Figure 3.1.4 Car Brand UK Models – July 2006*

### 3.2 KEY PLAYERS

An assessment of the key UK Players can be based on any number of different criteria, but in 2005 the top five new car producers (72% of UK market) *by volume* are given in Figure 3.2.1 (SMMT, 2006).



*Figure 3.2.1 UK Top 5 Manufacturer vs. Volume*

If this were to be extended further to gain a more in-depth understanding, the prominent car suppliers in may be split into those with manufacturing facilities in the UK and those who import (Table 3.2.2):

<u>Manufacturers in UK</u>	<u>Importers</u>
Ford ( <i>Ford Motor Company Limited</i> ) <sup>3</sup>	BMW ( <i>BMW (GB) Limited</i> ) <sup>4</sup>
Honda ( <i>Honda Motor Europe Limited</i> )	Citroën ( <i>Citroën UK Limited</i> ) <sup>7</sup>
Nissan ( <i>Nissan Motor (GB) Limited</i> ) <sup>5</sup>	DaimlerChrysler ( <i>DaimlerChrysler UK Limited</i> ) <sup>6</sup>
Peugeot ( <i>Peugeot Motor Company PLC</i> ) <sup>7</sup>	Fiat ( <i>Fiat Auto (UK) Limited</i> ), also covers Alfa Romero <sup>8</sup>
Rover (Collapsed in 2005; no longer manufacturers cars)	Renault ( <i>Renault UK Limited</i> ) <sup>5</sup>
Toyota ( <i>Toyota (GB) PLC</i> ) (includes Lexus)	Volkswagen ( <i>Volkswagen Group United Kingdom Limited</i> ) <sup>9</sup>
Vauxhall ( <i>Vauxhall Motors Limited</i> ) <sup>10</sup>	Volvo ( <i>Volvo Car UK Limited</i> )

*Table 3.2.2 UK Car Manufacturers & Importers*

In addition to relationships within supplier groups listed above, there are a number of alliances, smaller strategic holdings and cross-shareholdings between supplier groups with a view to cooperation over say, product development (See footnote & Appendix A4 for more details).

The SWOT analyses following are necessarily restricted to the major UK suppliers, although in many instances a holding company SWOT analysis might embrace the more niche or prestige models not explicitly covered elsewhere.

<sup>3</sup> Incl. Ford, Aston Martin, Jaguar, Land Rover, Mazda, Volvo

<sup>4</sup> Incl. BMW, Mini, Rolls-Royce

<sup>5</sup> Alliance between Renault & Nissan

<sup>6</sup> Incl. Chrysler, Mercedes-Benz, Smart

<sup>7</sup> Part of PSA Peugeot-Citroën

<sup>8</sup> For brevity, Fiat is not included in the SWOT analysis

<sup>9</sup> Incl. Audi, Bentley, Seat, Skoda, Volkswagen

<sup>10</sup> Part of General Motors Corporation (incl. Chevrolet, Saab, Vauxhall)

### 3.3 KEY PLAYERS MANUFACTURING IN UK – STRENGTHS & WEAKNESSES

Manufacture in UK	Strengths	Weaknesses
Ford (AROQ Dec'05 & March '06)	Third largest OEM in the world Enjoys strongest portfolio of brands worldwide Long & venerable history and heritage Vast dealership network worldwide, 700 in UK Strong engineering, R & D base Extensive product range	Losing overall market share since 1999 in US Losing European market share since 1991 Ford Europe slow in identifying & exploiting key emerging markets, incl. fuel efficient vehicles Unable to offer new models to the market regularly; possible slow product development
General Motor Corporation (AROQ May'06)	World's largest motor manufacturer (sales & volume) Global market share 14.2% > 9million vehicles Multi-brand portfolio, strong brand recognition Gaining market share throughout many regions	Losing market share in US Slow in identifying market trends for fuel-efficient vehicles (too US focused?) Too reliant on SUVs Slow in recognizing market for hybrid vehicles
Honda (AROQ Dec'05)	Third largest auto-manufacturer in Japan High proportion of R&D Investment Leadership & expertise in manufacturing and technology development	Adversely affected by strengthening of Yen, especially against US\$
Nissan (AROQ Dec'05)	Global market share 5.74% Significant market share gains in overseas markets	Extensive reliance on Toyota for hybrid-electric technology Reliance on Renault for diesel engine technology Quality & product recall problems US in 2004
Notes: 1. Power (2006) 2. Isodore (Jan 2006)	Zero debt, operating margin of 10% (2004/05) Manufacturing synergies - alliance with Renault Automotive engine manufacturer world leader Fewest design problems (2005/06) <sup>1</sup> Most productive car plant in Europe <sup>2</sup>	
PSA Peugeot-Citroën (AROQ May'06)	Second largest automobile manufacturer in Europe, European market share 14.3% Remains competitive due to agreements with several OEMs (incl. BMW, Mitsubishi & Ford) Major cost benefits realized due to sharing of parts across range of models Increasing production volume, new models, improved looks and innovation - shared R&D	Heavily reliant on Western Europe for sales (82%) European Market share possibly in decline Adverse publicity for closure of Ryton Plant Could affect consumer confidence
Toyota (AROQ May'06)	Largest auto-manufacture in Japan Third largest in world (vehicle production & sales volume consistently increasing over recent years Strong financial and operational performance High proportion of R&D Investment Very quick in spotting market trends	Reputation issues associated with Lexus recall (faulty seat belt part)

*Table 3.3 Key Players Manufacturing in the UK Strengths & Weaknesses (2005)*

### 3.4 KEY PLAYERS IMPORTING TO THE UK – STRENGTHS & WEAKNESSES

Importers	Strengths	Weaknesses
BMW (AROQ Feb'06)	Brand name. Renowned luxury car manufacturer (Mini & Rolls-Royce brands) Global presence High proportion of R&D investment Extensive employee training program Fewest defects & malfunctions Much improved NCAP AOR	Economies of scale limited e.g. Other brands (M-B, Lexus, Audi) have parent companies with more resources Possible overdependence on Europe (@ 45% of sales)
(Citroën) (AROQ Mar'06)  Also see PSA Peugeot-Citroën above	Leading automobile manufacturer in France & Spain Strong presence in Motor Sports & Car Racing Benefits from relationship with Renault High proportion of R&D investment Strong safety culture (NCAP ratings, LDWS)	Heavily reliant on WEurope for sales (>80%) Sales in Central & EEurope declining with increasing competition in the Region
DaimlerChrysler (AROQ April '05)	Third largest automobile maker in world (market share @ 14.5%) Various M-B cars global leaders in their segments	Over 50% of revenues obtained from US Sales of all models except C-Class in decline Mercedes-Benz' poor reliability
Renault (AROQ May'06)  Also see Nissan above Notes: 3 - Which (2005)	One of leading vehicle manufacturers in Europe Global presence with operations in 118 countries Sales increasing at 4.4% CAGR past 4 years Strong financial & operating performance High proportion of R&D investment NCAP Ratings throughout latest model range (2006)	Heavy reliance on sales in Europe (nearly 79% of total group sales volume from 2001 to 2005) Heavy decline in European market share 11.3% in 2002 to 10.4% in 2005) Share in domestic (French) market declined from 28.2% in 2003 to 26.8% during 2005 Weakened competitive position Poor reliability <sup>3</sup>
Volkswagen AG (AROQ May'06)	One of the leading passenger car & LCV manufacturers in the world Global car market share 9.1% (2005) Present in low-cost production regions (India & China) Flexible product sharing production lines Able to respond quickly to changing market demand Well placed for technology transfer & expertise sharing	Group derives nearly 72% of sales from EU Potential exposure in event of regional economic downturn Potential reputation issues associated with illegal dealings of Helmut Schuster in 2005 <sup>11</sup>
Volvo (AROQ May'06)	Recognized for advanced technologies - Preventative, Protective, Post Crash Safety Systems Very strong presence in domestic market (Sweden)	Sales of Bi-Fuel cars (and thus bi-fuel products) decreasing over recent years No manufacturing facilities in US despite 28% sales volume (detrimentally affected by strong Euro and weakening US\$)

*Table 3.4 Key Players Importing to UK Strengths & Weaknesses (2005)*

<sup>11</sup> The Andhra Pradesh government's payment of Rs.11.67 crores to a Delhi-based company in a deal meant to manufacture the Volkswagen car in Visakhapatnam leads to a controversy. Helmut Schuster was VWs representative in India.

### 3.5 KEY PLAYERS MANUFACTURING IN UK – OPPORTUNITIES & THREATS

Manufacture in UK	Opportunities	Threats
Ford (AROQ Dec'05 & March '06)	Increase presence in Asia Pacific Regions Partnership between Ford & Chinese Companies Expansion of production, new products & distribution channels in China Partnership with Fiat in Europe (Spain, Poland)	Expansion of product range by Audi, M-B, BMW Increased competition in Europe Decline of US\$ against major currencies Relaxation of import duties in Asia Pacific Regions Increasing healthcare costs
General Motor Corporation (AROQ May'06)	Development of Hybrid systems with BMW & DaimlerChrysler Cost reductions Number of new models	Falling market share in SUVs & 4x4s Increasing structural & healthcare costs Job cuts leading to worker unrest Japanese gains in global arena, particularly Toyota
Honda (AROQ Dec'05)	Motorcycle competitiveness to improve	Increasing raw material & fuel prices Economic downturn in developed markets Reduced prices to compete
Nissan (AROQ Dec'05)	Joint venture in China Increased production in China, some leverage in GCC	Additional burdens on manufacturing due to rapid Company growth Increasing raw material & fuel prices Unfavourable exchange rates
PSA Peugeot-Citroën (AROQ May'06)	Joint venture with Toyota leading to increased production Chinese expansion Increased capacity in Brazil, Argentina & China	Increasing raw material & fuel prices
Toyota (AROQ May'06)	High performance hybrid vehicles (NAmerica) Strategic partnerships in China	Production at maximum (& high) volume Increasing raw material & fuel prices Unfavourable exchange rates Government regulations (incl. taxes), import regulations

*Table 3.5 Key Players Manufacturing in the UK Opportunities & Threats (2005)*

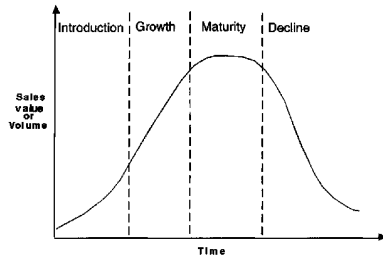
### 3.6 KEY PLAYERS IMPORTING TO THE UK – OPPORTUNITIES & THREATS

Importers	Opportunities	Threats
BMW (AROQ Feb'06)	Global expansion especially Asia, EEurope Production network expansion	Increasing raw material prices Increasing fuel prices
(Citroën) (AROQ Mar'06)	Hybrid Motor Car (C4 Hybride) Expansion of production facilities, EEurope Increased sales of C1 and C6	Severe competition in European market NAmerican & Asian car production increases in Europe Renault-Nissan alliance
Also see PSA Peugeot-Citroën above		
DaimlerChrysler (AROQ April '05)	New retail outlets in Europe Could capitalize on growing truck & CV markets – WEurope & NAmerica Cost efficiency improvements	Interest rate increases Weaker domestic demand
Renault (AROQ May'06) Also see Nissan above Notes: 3 - Which (Aug 2005)	Capitalise in alliance with Nissan New emerging markets in Columbia, Morocco, and Russia; China, Brazil, India & Iran all on the radar screen Agreements in India	Global & domestic competition, especially Toyota & VW in Europe Imported brands in French market
Volkswagen AG (AROQ May'06)	New production facility in China Recent divestment of non-core business	Increasing raw material prices Increasing fuel prices Unfavourable exchange rates
Volvo (AROQ May'06)	Increase in Asian sales, China in particular	Increasing raw material prices Increasing fuel prices Unfavourable exchange rates Relaxation of import duties

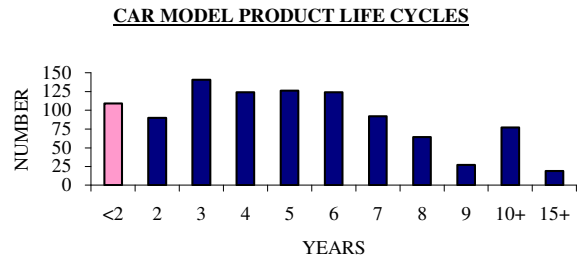
*Table 3.6 Key Players Importing to UK Opportunities & Threats (2005)*

### 3.7 PRODUCT LIFE CYCLE

The PLC (Figure 3.7.1) has four stages (Jobber, 2004) and the time a new car model is on the market can vary considerably. The PLC distribution is given in Figure 3.7.2 for a survey of 963 different car models. Existing car models with a major facelift are considered new products. All models with PLC < 2 year are current (July 2006) models, with five ceasing production in 2006. Data recorded from 1972 (Parkers, 2006)<sup>12</sup>.

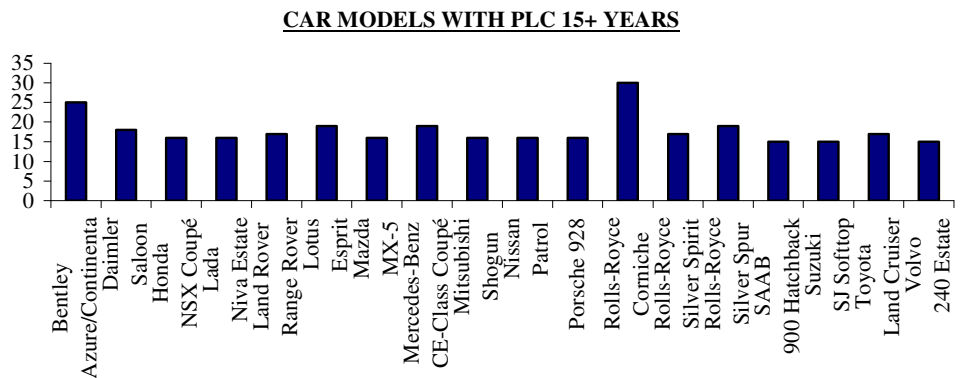


*Figure 3.7.1 PLC*



*Figure 3.7.2 Historical PLC Distribution – Cars*

The car models (Figure 3.7.3) may have had such a long had such a long PLC for any number of reasons; for example, due to well placed promotion and advertising campaigns, but it seems that in the majority of cases they were produced for a niche market, experiencing relatively little competition, but also they were solidly built, reliable, considered of robust quality, and importantly are likely to have remained profitable. Interestingly, the Bentley, Range Rover, NSX Coupé, and MX-5 remain strong even now, and several remain strong in the second-hand market.



*Figure 3.7.3 Car Models with Product Life Cycle 15+ Years*

<sup>12</sup> It's possible that some models (e.g. Rolls-Royce Corniche) have been around for much longer

## **4.0 ELEMENTS OF THE MARKETING MIX**

### **4.1 PROMOTION**

Promotion involves disseminating information about a product, product line, brand, or company (Appendix A4). Kotler et al (2006) suggests that advertising offers a reason to buy, whereas sales promotion offers incentive. Product promotion in the car industry uses a variety of media including:

#### **NEWSPAPER AND MAGAZINE ADVERTISING**

German manufacturers such as Audi, BMW, VW as well as Alfa Romeo, Lexus, Renault and Saab seem to make use of half or full page spreads in broadsheet Sunday Newspapers and supplement magazines such as the Daily and Sunday Telegraph, whereas cheaper cars rely more on dealerships advertising in tabloid newspapers. This type of advertising can reach a specific targeted audience as much is known about certain newspaper readers.

Perhaps the most influential are the plethora of Car Magazines such as 'What Car?' Top Gear and Car Magazine; these include reviews and summaries of vehicle details and specifications<sup>13</sup>.

#### **TV ADVERTISING**

TV commercials are considered to be the most effective mass-market advertising format and are used by many of the high volume car suppliers. Advertisements for different cars are often distinctive, such as the Renault Mégane and the 'Shaking Your Ass' theme and Honda's fascinating advertisements not necessarily featuring a car! Other prominent manufacturers making use of UK TV fairly recently include Citroën (skating robot), Vauxhall (prowling black car), and Audi and BMW with final imposing head-on shots of one of their offerings, as well as the intriguing 'Mini' Adventure stories.

#### **MOTOR SHOWS**

In the UK, all major car manufacturers show their wares at the biannual BIMS (2006) where all the new cars, world car premieres, and concept cars can be viewed. OICA accredited International Motor Shows typically last 10 to 12 days (OICA, 2006) made up of a couple of Press days and a Dealer preview day before general public access for a week. Motor Shows allow manufacturers to showcase their latest offerings to the automotive press and general public. These events create buzz for hot new products that often carries over into dealerships months down the line.

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<sup>13</sup> Fleet cars are covered in more specialist magazines such as Fleet News (EMAP Automotive Ltd) and Fleet World Magazine (Stag Publications Ltd).

## **WEBSITES & ONLINE ADVERTISING**

All manufacturers referred to herein have eye-catching websites with high visual impact where potential customers can view the product and also read the car specifications and in some view videos of the vehicles in motion. Visitors will often have the opportunity to create their own model choice, engine size and type, colour, and trim on top of the standard product. The web pages are eye catching, dazzling, and easy to navigate. There is plenty of competition, so getting people's attention can be difficult.

Another form of advertising on the Internet is the use of pop-up windows, flash or banners, particularly prominent on websites giving car reviews. Growth in online advertising is so strong that it has now overtaken both outdoor and radio advertising in percentage of market share. (Eckford, 2005)

## **PERSONAL SELLING (CAR SALES, DEALERSHIPS)**

This area of promotion is where a high percentage of motorcars are actually sold. This method of selling is important as it builds up customer relationships. It is interactive, adaptable and useful for addressing customer needs. This type of promotion takes in the original sale; but it can also include long-term technical service and support and gives customer reassurance that they will be looked after. Distribution channels in the car industry are usually either directly with the manufacturer in the case of smaller niche manufacturers, or through authorised dealership networks (Figure 4.2), with Ford having the most dealerships in the UK with 700<sup>14</sup>, making it relatively easy for the company to introduce a new product to market compared with companies with fewer dealerships.

## **POSTERS AND BILLBOARDS**

Billboards or posters show large advertisements aimed at passing pedestrians and drivers, being designed to catch a person's attention creating a memorable impression very quickly leaving the reader thinking about the advertisement after they have gone past it. There are usually only a few large print words and a humorous or arresting image in brilliant colour. Car manufacturers often use these showing a vehicle with a short catchphrase or motto. Trudeau (1997) observes that the mind remembers pictures more than words, which may go some way to understanding why the words on billboards are minimal.

## **PRICING**

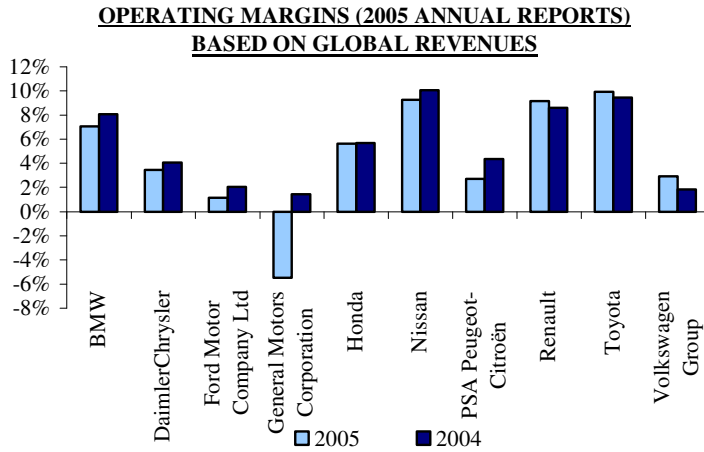
The UK car market is extremely competitive, and is notorious for low profitability (DTI-AU, 2004). In general, suppliers appear to set their RRP's at about the same level as their competitors for equivalent cars, and seek to compete through other means such as marketing, product quality, specifications and special offers (SSTI, 2000). Special offers might include discounts, insurance deals, trim upgrades,

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<sup>14</sup> The number for Smart is perhaps misleading in that many M-B dealerships also deal in the Smart brand of car.



deposit contribution, or ‘free’ items such as Satellite Navigation devices. (Parkers, 2006). Some manufacturers also offer on-line sales, leading to significant savings. Figure 4.1 is based on global sales, but shows the low operating margins attained by some manufacturers.<sup>15</sup>



*Figure 4.1 Car Manufacturer Operating Margins (2004/2005)*

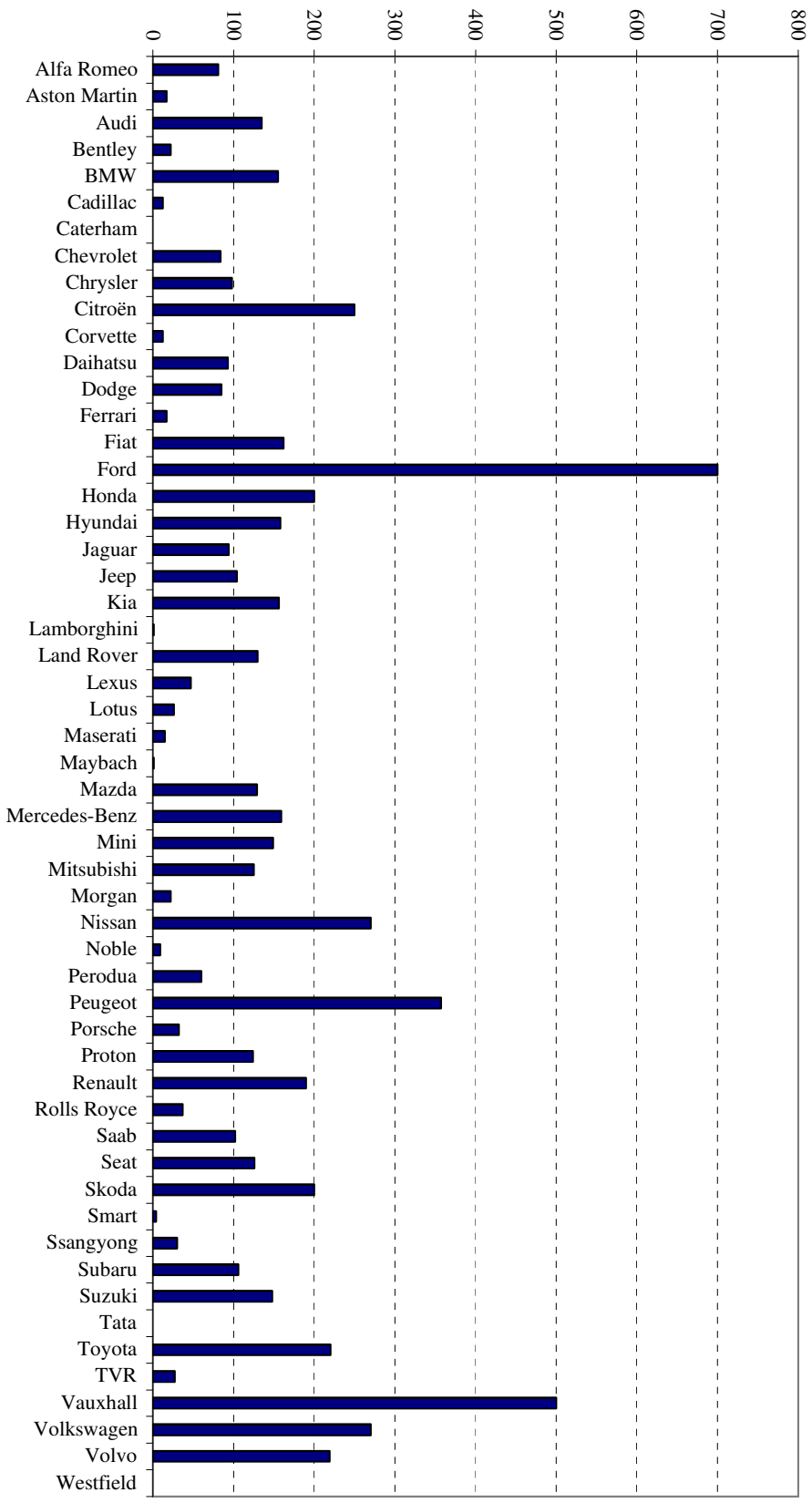
## PRODUCT PLACEMENT

Product placement can be a subtle form of advertising if done well. There are three forms<sup>16</sup>, but the one that springs to mind most is where TV (or film) producer might have been paid compensation for a car to appear, for example when BMW introduced the Z3 to James Bond in ‘Goldeneye’, (also 750i in ‘Tomorrow Never Dies’ and the Z8 in ‘The World is Not Enough’), when previously Aston Martin was the car of choice.

<sup>15</sup> Figures based on global performance, not just UK. Data calculated from various manufacturers’ 2005 Annual Reports.

<sup>16</sup> It simply happens, or where a deal is struck either where a supplier might provide a car or fleet of cars for a TV show or film to use or where a TV or film is paid compensation for a product to appear.

**CAR DEALERSHIPS IN UK (SEPT 2006)**



*Figure 4.2 Car Dealership Networks in UK (Top Gear Magazine, Oct 2006)*

## 5.0 PRODUCT DIFFERENTIATION

Greater product differentiation and less time to market are key drivers for success in a very competitive car market. Car manufacturers differentiate their products in a number of ways (Table 5.1). Product differentiation can help protect against competition, but there must be a constant flow of new design ideas<sup>17</sup>. Horizontal differentiation appears to be visible and concerns variety such as colour (Table 5.2) and style, whereas vertical differentiation concerns qualities such as fuel economy, reliability and durability.

<u>HORIZONTAL DIFFERENTIATION</u>	<u>VERTICAL DIFFERENTIATION</u>
Boot Space	Durability (robustness)
Colour	Emissions (CO <sub>2</sub> ) Tax
Exhaust Size	Engine Selection (i.e. Cubic Capacity / Size)
Function	Fuel Economy
Isofix (baby Car Seat Fixing)	Gearbox – Automatic or Manual
No. of Seats	Fuel Type
Option packages (Seat covers, hi-fi)	Insurance Group
Trim (Seat covering, wheel design, cabin equipment)	Price
Type (Hatchback, Coupe, Saloon, 4x4, SUV, MPV etc)	Product Support & After Sales Service
	Reliability
	Safety Protection Systems
	Safety Rating (e.g. NCAP)
	Service costs & frequency
	Speed / Performance
	Suspension systems
	Time between Engine Services
	Warranty

*Table 5.1 Car Product Differentiation*

Product differentiation affects customers in different ways, but affordability is usually a key factor, including initial purchase<sup>18</sup> followed by running costs.

2004		
Top colours	Volume	Per cent of parc
Blue	7,302,931	24.1 per cent
Silver	5,681,521	18.8 per cent
Red	5,402,009	17.8 per cent
Green	3,344,745	11.1 per cent
Black	2,671,945	8.8 per cent

Source: SMMT

*Table 5.2 Colours of cars on UK roads 2004 - Top five*

<sup>17</sup> Kotler (1984) suggests that: “As competition intensifies, design offers a potent way to differentiate a company’s product and services”.

<sup>18</sup> There are a number of schemes available for purchase, including cash payment, bank loans, hire purchase, personal contract purchase, dealer finance and credit card (!), all of which come into the mix when considering price.

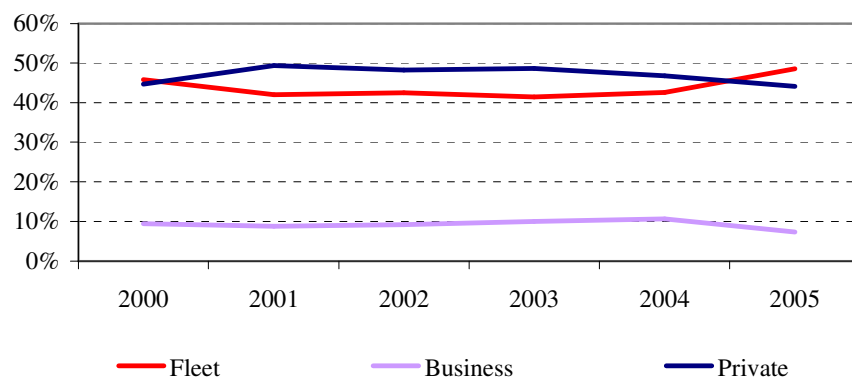
## 6.0 MOTOR CAR INDUSTRY COMPETITIVE ANALYSIS

The private, business and fleet car markets had @ 44%, 7% and 49% of the new car market share respectively (Figure 6.1.1, SMMT, 2006). In the case of fleet cars, from a lease or purchasing point of view, emissions, fuel economy, insurance rating and maintenance service arrangements might matter most, whereas buyers buy their cars on the grounds of price, fuel consumption, size, comfort, style and safety (Mackintosh, Sept 2006).

Over fifty different UK supplier price ranges are shown in Figure 6.1.2. A large number of manufacturers appear to be aiming for the low cost end of the market, with 60% keeping the price range of their brand below £25,000, while the high end appears to be dominated by Maybach, Rolls-Royce and Bentley. Land Rover appears to have cornered the market in rugged 4x4 vehicles since other manufacturers in similar price ranges don't appear to have similarly priced vehicles with the same reputation on the market, although reliability has been problematic (Parkers, 2006).

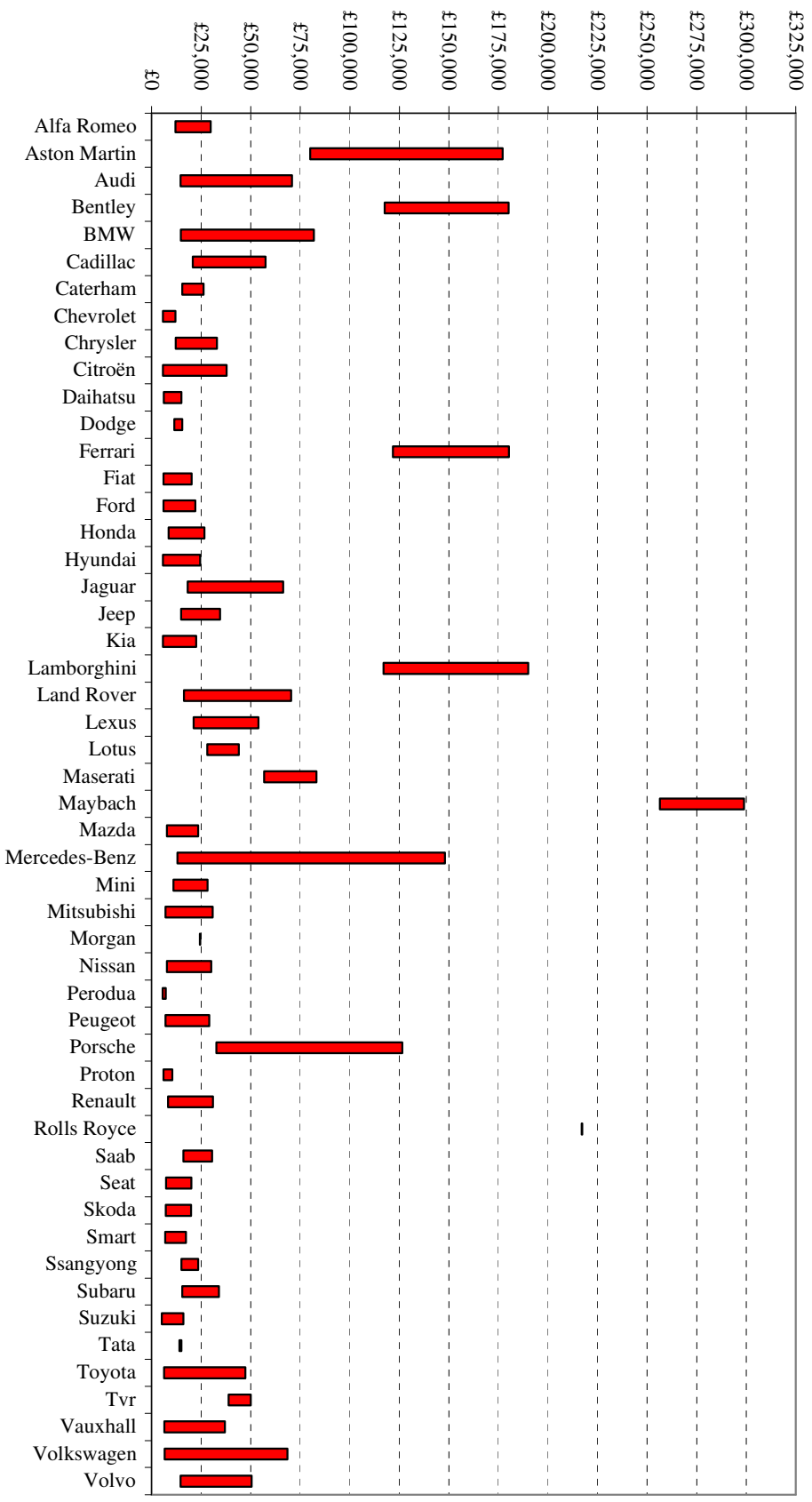
Competition for SUVs is fierce, in particular with Audi (Q7), BMW (X3, X5), Lexus (RX), VW (Touareg) and Volvo (XC70, XC90) all jockeying for position. Porsche with its more expensive SUV the Cayenne appears to be in a market on its own, possibly relying on the brand name, loyalty and prestige. Mercedes-Benz covers the widest price range, and arguably this might partially explain why Mercedes-Benz is no longer the distinguished marque of quality it used to be, and why it slumped in Customer Satisfaction Surveys (Green, 2005).

### NEW CAR REGISTRATIONS (2001-2005)



*Figure 6.1.1 New Car Registrations*

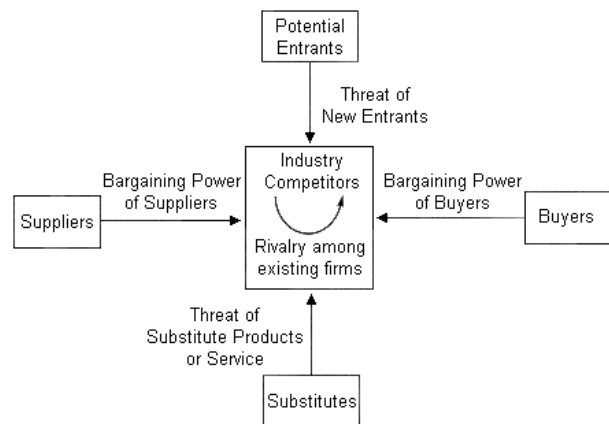
**CAR MANUFACTURER NEW PRODUCT PRICE RANGE**



*Figure 6.1.2 Car Manufacturer New Product Price Range 2006*

## 6.1 PORTER'S FIVE FORCES

The Porter Model (1980) provides a structural analysis of the industry that any given company competes in. It analyses the attractiveness of the industry in terms of competition as determined by the five forces (Figures 6.1.3 & 6.1.4). The next few sections consider each of the five forces in turn. Note that Porter suggests that competitor analysis and industry forecasting can be modelled, but that an enormous amount of research and data would be required for a successful conclusion. He also gives conditions making suppliers and buyers more powerful, but for brevity these conditions shall not be repeated here.



*Figure 6.1.3 Porters Five Forces*

## 6.2 BARGAINING POWER OF SUPPLIERS

Suppliers can exert bargaining power over participants in the car industry by threatening to raise prices or reduce the quality of purchased goods or services; Power is influenced by a number of factors, including the importance of volume to supplier; if the car industry is only a small fraction of the supplier turnover it will have little power to exert economic pressure on them. Over the last few years, car manufacturers have substantially reduced numbers, and have put responsibility for innovation, development and liability on their primary suppliers (DTI-AU, 2004); this can lead to benefits for the manufacturers but could also lead to over-reliance. Traditionally obtaining information on suppliers is difficult because it is invariably commercially sensitive.

## 6.3 BARGAINING POWER OF BUYERS

Car buyers and consumer groups compete with the industry by forcing down prices, bargaining for higher quality or more services and by playing competitors against each other, all at the expense of industry profitability. Where cars are in demand, dealers are reluctant to agree to a discount.

**BARGAINING POWER OF SUPPLIERS**

- Concentration of suppliers
- Importance of Auto Industry to supplier
- Switching company costs
- Raw material inputs, fuel prices
- Availability of substitute inputs
- Threat of forward integration
- Motor Trader Bodies (BIMTA, BVRLA)
- Government Institutions, Legislation
- Regulating bodies (DETR, DTI)
- Motor Trader Assoc. SMTA, SMMT, JAMA
- Motor vehicle suppliers<sup>19</sup>
- Costs relative to total industry purchases
- Voluntary Export Restraints (VERs)

**POTENTIAL NEW ENTRANTS**

- Cash rich companies
- Conglomerates (e.g. Tata, Hyundai, Mitsubishi)
- Companies with extensive R&D
- Companies from China, India
- Smaller players wanting to be bigger
- Government Legislation

**INDUSTRY COMPETITORS / RIVALRY AMONGST EXISTING FIRMS**

- Parent & subsidiary groups, e.g.
- BMW (BMW, Mini, Rolls-Royce)
- Daimler Car Group (incl. Chrysler, Mercedes-Benz, Smart)
- Ford (incl. Ford, Aston Martin, Jaguar, Land Rover, Mazda, Volvo)
- General Motors (incl. Chevrolet, SAAB, Vauxhall)
- Honda
- Nissan
- PSA Peugeot-Citroën (Citroën, Peugeot)
- Renault
- Toyota
- Volkswagen (incl. Audi, Bentley, Seat, Skoda, Volkswagen)
- Acquisition policy (e.g. DaimlerChrysler, strategy of taking equity in other COs)

**BARGAINING POWER OF BUYERS**

- Leasing companies
- Fleet car market
- Private buyers
- Government Institutions (DTI, DETR, DGFT)
- Consumers' Association
- The AA, RAC
- Car magazines & TV programs
- Grey imports (New cars imported from outside EEA)
- RAC Foundation
- Finance availability

**THREAT OF SUBSTITUTES**

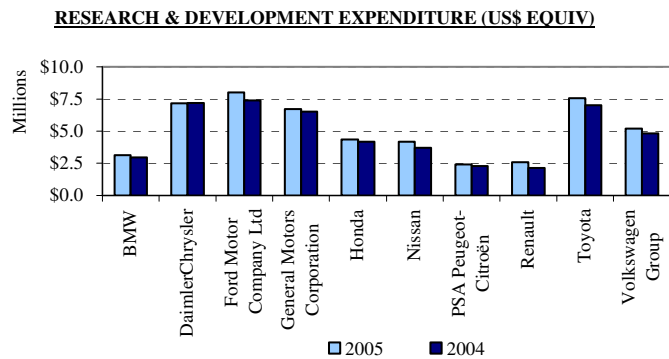
- Public transport (Cost & availability)
- Bicycles & motorcycles
- Private bus & rail companies
- Advances in motor car & engine technologies
- Used car market
- Other manufacturers
- Communications technology improvements
- Impact of congestion charges (present & future, London, etc)
- Local government policies (parking charges, etc)
- Electronic road pricing (future to come?)

*Figure 6.1.4 Porters Five Forces in Action – UK Motor Car Market*

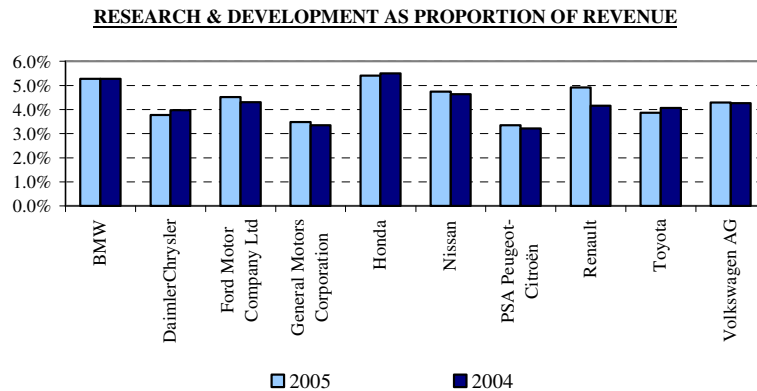
<sup>19</sup> Control & entry of Franchised Dealerships

## 6.4 THREAT OF NEW ENTRANTS

The new car market is very competitive and doesn't always generate 'good' profits compared to other industries, but nevertheless, new entrants are entering the market all the time, if not by existing car manufacturers, then by multi-conglomerates such as Tata who have the financial security to do so. Porter (1980) suggests that there are six barriers to entry<sup>20</sup>, and in this instance, arguably the most crucial might be the amount of R&D investment, the ability to produce a sufficiently differentiated motor vehicle, and the ability to access distribution channels (car dealerships). R&D expenditure is shown in Figure 6.3. (US\$ equivalent – ignores currency inaccuracies<sup>21</sup>). Figure 6.4 shows R&D as a proportion of Revenue.



*Figure 6.3 Research & Development Expenditure (US\$ Equiv)<sup>22</sup>*



*Figure 6.4 Research & Development as proportion of Revenues<sup>18</sup>*

<sup>20</sup> 1) Economies of scale; 2) Product differentiation; 3) Switching costs; 4) Access to distribution channels; 5) Cost disadvantages Independent of scale; 6) Government Policy

<sup>21</sup> European Manufacturers' results are quoted in Euros, while Japanese are quoted in Yen. All have been converted to US\$ for comparison purposes and should be regarded as indicative only. (For this exercise 1 Euro = 1.2687 US\$, 1 US\$ = ¥107.38)

<sup>22</sup> Figures are obtained from manufacturers' Annual Reports (2005), Section 8.1. (Nissan Full Year Mar 2005 to March 2006)



R&D Expenditure by Ford and Toyota in 2005 appears to outstrip others. It is perhaps surprising then that both companies seem to be so diverse when introducing new models. Ford seems slow at introducing new models to the market, whereas Toyota is quick to spot trends and is a market leader in Hybrid systems.

BMW and Honda spend most on R&D as a proportion of revenues and both companies have taken advantage of this with BMW having fewest defects and malfunctions, even though its R&D expenditure is one of the smallest, while Honda is a leader in powertrain and combustion engine technologies.

## **6.5 THREAT OF SUBSTITUTES**

All car manufacturers are competing against each other as well as against potential substitutes for their products such as second-hand cars; rail and bus travel, motorcycles and bicycles, with improving communications networks potentially reducing the need for business representatives to travel to meetings. Other manufacturers might produce a similar product for a similar price, whereby other factors such as brand loyalty, quality will play a part in the buyer deciding which product.

## **6.6 COMPETITIVE RIVALRY IN INDUSTRY**

There is constant jockeying for position in the car industry, with new models being continually introduced by different manufacturers. There is a high level of differentiation in the new car market. Many new cars are on offer, but J.D.Power survey (2006) finds that carmakers vary widely in design and production quality. BMW, Chrysler, Hyundai, Lexus, Porsche and Toyota are the brands with the fewest defects and malfunctions. Brands with the fewest design problems include GMC, Hyundai, Jaguar, Lexus, Nissan, & Porsche. For most suppliers, the prices and specifications of their competitors' models emerged as the most prominent factors in setting their RRP (SSTI, 2000), but price cuts are quickly matched by rivals, and this is demonstrated by the low profitability of the industry. Advertising battles are frequent, especially on the TV and Internet.

## **7.0 CONCLUSION & RECOMMENDATIONS**

The UK car market is one of the most fiercely competitive in the world. There are several big players with DaimlerChrysler, Ford Motor Company, General Motors Corporation and Toyota all having revenues of around \$180m to US\$190m per annum which gives them momentum in an ever-changing car market. Sometimes it's difficult for these large companies to respond quickly to changing markets, although Toyota seems to be more adept at doing so well despite production lines working at high efficiency and capacity. The smaller Japanese players such as Honda and Nissan have demonstrated their willingness and ability to lead the way in certain technologies (especially engines) and concepts, and are also either market leaders or very quick in spotting gaps or market trends. BMW is lauded as a quality carmaker and has shown that it can compete with fewest defects or malfunctions, despite having

a relatively small R&D budget. VW is able to respond quickly to changing market demand with its flexible product lines, and is well placed for technology transfer and sharing of expertise.

As a minimum, any potential market entrant should take the following steps into account:

- Examine market segments (characteristic worthy of marketing focus) in detail
- Develop realistic and attainable marketing strategy, including goals and objectives
- Identify and anticipate competitors who serve the segment/s
- Allocate sufficient resources to the task
- Ensure that there is management focus
- Prepare a basis for defining new target market (focus for company's offering)
- Prepare a basis for choice of target market (positioning)

It is anticipated that this will include the following:

- Research potential competitors thoroughly
- Understand competitors' SWOT
- Try to understand the influences of Porter's Five Forces Model<sup>23</sup>
- Try to predict or understand how competitors might respond, and whether they are able to
- Try to pick an area where potential competitors are least ready, enthusiastic or uncomfortable about competition and where they may be most vulnerable
- Try to find a strategy involving a competitor moving into an area which is uncomfortable for them given current circumstances – past legacies and current strategies could affect whether and how a competitor might react
- The amount and proportion of R&D funding invested by competitors *may* be indicative of their ability to respond with new products, but this notion is far from clear cut, as indicated by the difference between Ford and Toyota
- Minimise time between product development and its release to the market, but ensure that product quality isn't overly compromised in doing so
- Ensure that the vehicle being introduced is sufficiently differentiated

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<sup>23</sup> Porter's Five Forces model can be difficult to implement, particularly when considering power of suppliers, because of the commercial sensitivity of the information required.

## 8.0 REFERENCES

**Note:** For other useful references including car manufacturer's websites, refer Appendix A11.

- AROQ Ltd Limited [www.AROQ Ltd.com](http://www.AROQ Ltd.com) ([www.just-auto.com](http://www.just-auto.com)) Global automotive research source
- AROQ Ltd (Feb'06) "*Chapter 6: SWOT analysis. (BMW AG 2006 company profile edition 1)*"
- AROQ Ltd (Mar'06) "*Ch 6: SWOT analysis. (Citroen 2006 Company profile edition 1)*"
- AROQ Ltd (April '05) "*Ch 6: SWOT analysis. (Daimler Chrysler: 2005 company profile edition 1)*"
- AROQ Ltd (June'06) "*Ch 6: SWOT analysis. (Fiat SpA 2006 Company profile edition 2)*"
- AROQ Ltd (Dec'05) "*Ch 6: SWOT analysis. (Ford Motor Company: 2005 company profile ed 3)*"
- AROQ Ltd (Mar '06) "*Ch 6: SWOT analysis. (Ford 2006: company profile edition 1)*"
- AROQ Ltd (May'06) "*Ch 6: SWOT analysis. (GMC 2006 Company profile edition 1)*"
- AROQ Ltd (Dec'05) "*Ch 6: SWOT analysis. (Honda Motor Co Ltd.: 2005 Company profile edition 3)*"
- AROQ Ltd (Dec'05) "*Ch 6: SWOT analysis. (Nissan Motor Co Ltd: 2005 company profile edition 3)*"
- AROQ Ltd (May'06) "*Ch 6: SWOT analysis. (PSA Peugeot Citroen 2006 Company profile edition 1)*"
- AROQ Ltd (May'06) "*Ch 6: SWOT analysis. (Renault SA 2006 company profile edition 1)*"
- AROQ Ltd (May'06) "*Ch 6: SWOT analysis. (Toyota Motor Corporation 2006 Company profile ed 1)*"
- AROQ Ltd (May'06) "*Ch 6: SWOT analysis. (Volkswagen AG 2006 company profile edition 1)*"
- AROQ Ltd (May'06) "*Ch 6: SWOT analysis. (Volvo Car Corporation 2006 Company profile ed 1)*"
- Bellis, M. (June 2006) <http://inventors.about.com/library/inventors/blcar.htm>
- BMW Annual Report (2005):  
[http://www.bmwgroup.com/bmwgroup\\_prod/e/0\\_0\\_www\\_bmwgroup\\_com/investor\\_relations/finanzberichte/geschaeftsberichte/2005/\\_pdf/gb2005\\_gesamt.pdf](http://www.bmwgroup.com/bmwgroup_prod/e/0_0_www_bmwgroup_com/investor_relations/finanzberichte/geschaeftsberichte/2005/_pdf/gb2005_gesamt.pdf)
- British International Motor Show (2006) ([www.britishmotorshow.com](http://www.britishmotorshow.com))
- Brown, S. (July 2005) "*An analysis of the top global automotive manufacturing platforms*" [www.just-auto.com](http://www.just-auto.com)
- Car Magazine [www.carmagazine.co.uk](http://www.carmagazine.co.uk) (EMAP Automotive Ltd)
- Citroën UK [www.citroen.co.uk](http://www.citroen.co.uk)
- DaimlerChrysler (2006) Annual Report (2005):  
[http://reports.equitystory.com/daimler/gb2005/pdf/en/DC\\_GB05\\_E\\_complete.pdf](http://reports.equitystory.com/daimler/gb2005/pdf/en/DC_GB05_E_complete.pdf)
- DTI-AU (2004) "*2004 Submission to the House of Commons Trade and Industry Committee - The UK Automotive Motor Trade sector*" DTI
- Eckford, A. (Nov 2005) "*Automotive companies click with internet ads.*" Auto Trader Issue 13 Nov 05.
- Ford Motor Company Annual Report (2005):  
[http://www.ford.com/NR/rdonlyres/emwjt42turmgvsborq7bqproy43vwnf4cztbl5614oos4sf545rswt6jd\\_h3gap4juvgevyld4g43xxky6y5znoot/2005\\_AR\\_full.pdf](http://www.ford.com/NR/rdonlyres/emwjt42turmgvsborq7bqproy43vwnf4cztbl5614oos4sf545rswt6jd_h3gap4juvgevyld4g43xxky6y5znoot/2005_AR_full.pdf)
- General Motors Corporation Annual Report (2005):  
[http://www.gm.com/company/investor\\_information/docs/fin\\_data/gm05ar/download/gm05ar.pdf](http://www.gm.com/company/investor_information/docs/fin_data/gm05ar/download/gm05ar.pdf)

Green, Gavin (11 Oct 05). “Where does Mercedes go from here?” The Independent Newspaper

Honda Annual Report (2005): <http://world.honda.com/investors/annualreport/2005/pdf/ar2005.pdf>

J.D.Power Associates (2006) “Initial Quality Study<sup>SM</sup>” [www.jdpower.com](http://www.jdpower.com)

Jobber, D. (2004) “Principles and Practices of Marketing” 4<sup>th</sup> Edition McGraw-Hill International

Isodore, C. (Jan 2006) “GM, Ford woes could bite Chrysler next”. [www.CNNMoney.com](http://www.CNNMoney.com)

Kotler, P. (1984) “Design: A powerful but neglected strategy tool”. Journal of Business Strategy (Autumn Edition)

Kotler, P. & Keller, K (2006) “Marketing Management 12e” Pearson Prentice Hall

Mackintosh, J. (Sept 06). “Car buyers switch to hybrids as fuel costs rise.” FT Newspaper 15 Sept 06.

Nissan Motor Company Annual Report (2005):  
[http://www.nissan-global.com/EN/DOCUMENT/PDF/AR/2005/AR05\\_e\\_all.pdf](http://www.nissan-global.com/EN/DOCUMENT/PDF/AR/2005/AR05_e_all.pdf)

OICA (2006) [http://www.oica.net/htdocs/shows/Shows\\_2005-2006.htm](http://www.oica.net/htdocs/shows/Shows_2005-2006.htm)

Parkers (Oct 2006) “Car Price Guide” EMAP Automotive & [www.parkers.co.uk](http://www.parkers.co.uk)

Porter M.E. (1980) “Competitive Strategy: Techniques for Analysing Industries and Competitors”, New York Free Press.

PSA Peugeot-Citroen Annual Report (2005):  
[http://www.psa-peugeot-citroen.com/document/publication/annual\\_report\\_20051151075591.pdf](http://www.psa-peugeot-citroen.com/document/publication/annual_report_20051151075591.pdf)

Renault Annual Report (2005):  
[http://www.renault.com/renault\\_com/en/images/Renault%20Annual%20Report%202005%20%20EN%20290306%20V3\\_tcm1120-353236.pdf](http://www.renault.com/renault_com/en/images/Renault%20Annual%20Report%202005%20%20EN%20290306%20V3_tcm1120-353236.pdf)

SMMT (June 2006) [www.SMMT.co.uk](http://www.SMMT.co.uk)

SSTI (Mar 2000). “A Report on the supply of new motor cars with the UK” Competition Commission

Top Gear Magazine (Oct 2006) [www.topgear.com](http://www.topgear.com) BBC Magazines

Toyota Annual Report (2005): [http://www.toyota.co.jp/en/ir/library/annual/pdf/2005/ar05\\_e.pdf](http://www.toyota.co.jp/en/ir/library/annual/pdf/2005/ar05_e.pdf)

Trudeau, K. (1997). ”Mega Memory: How to Release Your Superpower Memory in 30 Minutes or Less a Day” William Morrow (Paperback)

Volkswagen AG Annual Report (2005):  
[http://gb.volkswagen.de/fileadmin/g\\_bericht/pdf/en/Gbericht\\_2005\\_en.pdf](http://gb.volkswagen.de/fileadmin/g_bericht/pdf/en/Gbericht_2005_en.pdf)

What Car? (July 2006) [www.whatcar.co.uk](http://www.whatcar.co.uk) Haymarket Motoring

Which? (04 Aug 2005) “Ford promoted, Mercedes drops into relegation zone” Corporate Press Release

## A1 THE HISTORY OF THE MOTOR CAR

A history of the Motor Car may be obtained at the following link. Although interesting, this article runs into over 16 A4 pages, it has been omitted for brevity.

Ref: <http://inventors.about.com/library/inventors/blcar.htm> Bellis, M. (June 2006)

## A2 LIST OF CAR BRANDS SELLING IN THE UK MARKET

Alfa Romeo	Aston Martin	Audi				
Bentley	BMW					
Cadillac	Caterham	Chevrolet	Chrysler	Citroën	Corvette	
Daihatsu	Dodge					
Ferrari	Fiat	Ford				
Honda	Hyundai					
Jaguar	Jeep					
Kia						
Lamborghini	Land Rover	Lexus	Lotus			
Maserati	Maybach	Mazda	Mercedes-Benz	Mini	Mitsubishi	Morgan
Nissan	Noble					
Perodua	Peugeot	Porsche	Proton			
Renault	Rolls-Royce					
Saab	Seat	Skoda	Smart	Ssangyong	Subaru	Suzuki
Tata	Toyota	TVR				
Vauxhall	Volkswagen	Volvo				
Westfield						

*Table A2 List of Car Brands selling in the UK*

Source: 'What Car' Magazine August 2006

**A3 TOP 5 BEST SELLERS BY SEGMENT (SMMT, 2006)**

<b>Mini</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Suzuki	Alto	7,584	27.9%	£5,999	£5,999
Chevrolet	Matiz	4,772	17.5%	£6,095	£7,695
Vauxhall	Agila	3,808	14.0%	£6,445	£8,945
Suzuki	Wagon R+	3,218	11.8%	£7,999	£7,999
Smart	City Coupe	1,448	5.3%	£6,775	£14,615
<b>Supermini</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Vauxhall	Corsa	89,463	12.2%	£6,995	£12,155
Ford	Fiesta	83,803	11.4%	£8,395	£13,595
Peugot	206	67,450	9.2%	£8,195	£15,420
Renault	Clio	56,538	7.7%	£8,895	£15,050
MINI	MINI	44,770	6.1%	£10,995	£19,095
<b>Lower Medium</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Ford	Focus	145,010	19.0%	£11,245	£19,495
Vauxhall	Astra	108,461	14.2%	£10,995	£19,120
Renault	Megane	87,093	11.4%	£11,450	£20,000
Volkswagen	Golf	67,749	8.9%	£11,995	£24,740
Peugeot	307	44,276	5.8%	£11,300	£17,700
<b>Upper Medium</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Ford	Mondeo	57,589	13.5%	£15,800	£24,300
BMW	3 Series	44,844	10.5%	£19,995	£32,450
Vauxhall	Vectra	44,626	10.4%	£14,750	£24,945
Volkswagen	Passat	35,594	8.3%	£15,325	£25,815
Audi	A4	35,005	8.2%	£19,200	£49,980
<b>Executive</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Mercedes	C Class	29,071	26.2%	£21,550	£48,790
BMW	5 Series	18,140	16.3%	£25,925	£63,495
Mercedes	E Class	14,620	13.2%	£27,025	£64,455
Audi	A6	11,016	9.9%	£25,275	£55,030
Volvo Cars	70 Series	9,902	8.9%	£22,985	£38,435
<b>Luxury</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
BMW	7 Series	2,017	17.3%	£48,725	£83,730
Bentley	Continental	1,923	16.5%	£117,500	£118,750
Jaguar	XJ	1,814	15.5%	£41,995	£74,995
Mercedes	S Class	1,635	14.0%	£54,975	£69,770
Audi	A8	1,558	13.3%	£48,680	£77,360
<b>Sports</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Mercedes	SLK	6,310	9.8%	£28,525	£51,010
Audi	TT	5,616	8.7%	£15,325	£25,815
Vauxhall	Tigra	5,563	8.6%	£13,995	£15,695
Mazda	MX-5	5,182	8.0%	£15,600	£18,900
Mazda	RX-8	4,971	7.7%	£20,500	£22,300
<b>Dual Purpose</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Land Rover	Freelander	17,723	9.5%	£15,995	£26,595
Honda	CR-V	16,700	8.9%	£17,700	£23,100
Toyota	RAV4	14,234	7.6%	£18,750	£26,995
Land Rover	Discovery	13,212	7.1%	£26,995	£48,495
Nissan	X-Trail	11,642	6.2%	£16,500	£23,000
<b>MPV</b>	<b>Model</b>	<b>Number</b>	<b>Mkt Share</b>	<b>Price Range (June 2006)</b>	
Vauxhall	Zafira	40,923	35.2%	£12,995	£21,995
Volkswagen	Touran	12,706	14.7%	£14,725	£20,355
Ford	Galaxy	9,298	8.0%	£19,495	£23,995
Kia	Sedona	5,865	5.0%	£15,750	£20,195
Chrysler	Voyager	5,199	4.5%	£25,795	£33,225

## A4 LIST OF AUTOMOBILE MANUFACTURERS

### A4.1 AUTOMOTIVE COMPANY GROUPS

Ref: [http://experts.about.com/e/l/li/List\\_of\\_automobile\\_manufacturers.htm](http://experts.about.com/e/l/li/List_of_automobile_manufacturers.htm)

The following automobile manufacturers produce or have produced automobiles, based on 2005 data, and has been revised from the original list to include only those Parent Manufacturers with a noted presence in the UK car market. Note that these are automobile makers rather than individual types. Some of these have never been independent companies but are sub-brands established by a parent company. Many of the brands mentioned below no longer exist as separate companies. Some are totally extinct, with some being owned by larger companies.

<u>PARENT MANUFACTURER</u>	<u>SUBSIDIARY LEVEL I</u>	<u>SUBSIDIARY LEVEL II</u>
BMW	Mini Riley (no longer sold) Rolls-Royce Triumph (no longer sold)	
Bristol Cars		
DaimlerChrysler	Chrysler Group  Mercedes Car Group  Commercial Vehicle Brands	Chrysler Eagle (Discontinued in 1998) Dodge Jeep Plymouth (Discontinued in 2001) Global Electric Microcars (GEM) Maybach Mercedes-Benz Smart Freightliner Mercedes-Benz Mitsubishi Fuso Mitsubishi Motors Corporation (interest) Setra Sterling Trucks Western Star
Fiat	Alfa Romeo Ferrari Lancia Maserati	
Ford	Aston Martin  Continental (no longer separate make, see Lincoln) Jaguar Land Rover Continental Lincoln Mahindra Mazda (controlling interest) Mercury Volvo	Lagonda (no longer sold) Tickford (now the performance arm of Aston Martin)  Daimler Range Rover
General Motors	AM General (not sold to private individuals; similar vehicles are sold to ordinary consumers as HUMMERS) Buick Cadillac Chevrolet Fiat (interest divested February 2005) Daewoo (sold as Chevrolet, Holden or Suzuki outside South Korea)	Geo ZAZ

	GMC	FSO
	Hindustan	
	Holden (Australia)	
	Hummer	
	Isuzu (interest)	
	Oakland	
	Oldsmobile (Discontinued in 2004)	
	Opel (Europe excluding UK, also India and Africa)	
	Pontiac	
	Saturn	
	Saab	
	Subaru (interest until 2005)	
	Suzuki (interest)	Maruti
	Vauxhall (UK)	
	Wuling (China)	
Honda	Acura (USA)	
Hyundai Group	Hyundai	
	Kia	Asia Motors, Ltd
MG Rover <sup>24</sup>	MG	
	Rover	
Morgan		
Nissan (44% shareholding by Renault and involved in joint venture companies [1])	Infiniti	
Noble		
Perodua (Shareholders including Daihatsu)		
Porsche		
Proton	Lotus	
PSA Peugeot Citroën	Citroën	
	Peugeot	
Renault (15% shareholding by Nissan and involved in joint venture companies [2])	Alpine (no longer sold)	
	Dacia	
	Renault Samsung	
Shanghai Automotive	Chery (奇瑞)	
	Ssangyong	
Tata Motors		
Toyota	Daihatsu	
	Lexus	
	Scion	
	Subaru (interest)	
TVR		
Volkswagen Group	Audi (Audi Group)	
	Bentley (VW Group)	
	Bugatti (VW Group)	
	Lamborghini (Audi Group)	
	SEAT (Audi Group)	
	Skoda (VW Group)	
	Volkswagen (VW Group)	

*Table A4 Automotive Company Groups*

<sup>24</sup> No longer manufacturers cars (April 2005)



**A5 SEGMENTATION SUMMARY NEW CARS @ JUNE 2006**

**Source:** What Car! “New Car Guide”. Haymarket Magazines (Cars in *italics* excepted)

<u>MANUFACTURER / SEGMENT</u>	<u>MINI / SUPERMINI</u>	<u>SMALL FAMILY CAR</u>	<u>FAMILY CAR</u>	<u>COMPACT EXECUTIVE</u>	<u>EXECUTIVE</u>	<u>LUXURY</u>	<u>DUAL PURPOSE (4x4) / SUVs</u>	<u>MPV</u>	<u>ROADSTERS / CABRIOLET / SPORTS<sup>25</sup></u>
Alfa Romeo		1		1					
Aston Martin									4
Audi		1		1	1	1	1		2
Bentley						2			3
BMW	1	1		1	1	1	2		4
<i>Bristol Cars</i>						1			1
Cadillac				1	1				
Caterham									
Chevrolet	2	1						1	
Chrysler					1			2	2
Citroën	3	1	1					2	1
Corvette									1
Daihatsu	2						1		1
Dodge		1							
Ferrari									4
Fiat	3	1	1				1	3	
Ford	3	1	1					2	1
Honda	1	2	1				2		1
Hyundai	2	1	2				3	2	
Jaguar				1	1	1			1
Jeep							3		
Kia	2	1	1				2	2	
Lamborghini									2
Land Rover							5		
Lexus				1	1	1	1		1
Lotus									1

<sup>25</sup> Numbers should be considered indicative only; include Roadsters, Cabriolets and 2-seater sports. Ordinarily this column would be segmented further.

Cont'd/....

<u>MANUFACTURER / SEGMENT</u>	<u>MINI / SUPERMINI</u>	<u>SMALL FAMILY CAR</u>	<u>FAMILY CAR</u>	<u>COMPACT EXECUTIVE</u>	<u>EXECUTIVE</u>	<u>LUXURY</u>	<u>DUAL PURPOSE (4x4) / SUVs</u>	<u>MPV</u>	<u>ROADSTERS / CABRIOLET / SPORTS<sup>25</sup></u>
Maserati						1			
Maybach						1			
Mazda	1	1	1					1	1
Mercedes-Benz		2	1	1	2	2	2	2	3
Mini	1								1
Mitsubishi	2	1					4	1	1
<i>Morgan</i>								1	1
Nissan	2	1					5	1	2
<i>Noble</i>									1
Perodua	2								
Peugeot	3	1	1		1			3	2
Porsche							1		3
Proton	1	1	1						
Renault	2	1	1					3	1
Rolls Royce						1			
SAAB				1	1				1
Seat	2	2	1					1	
Skoda	1	1	1						
Smart	2								2
Ssangyong							2	1	
Subaru		1	1				1		
Suzuki	4	1					3		
Tata							1		
Toyota	2	1	2				3	2	1
TVR									3
Vauxhall	3	1	1		1			1	2
Volkswagen	2	4	1			1	1	3	2
Volvo		1		1	1		2		1

*Table A5 Segment Coverage – New Cars @ June 2006*

## **A6 PROMOTION**

There are four principle reasons for car manufacturer product promotion:

- To raise product awareness to potential customers
- To remind customers about it's products
- To persuade customers to switch from rival manufacturers
- To improve and maintain the image of the company

Various authors including Kotler & Keller (2006) give advantages and limitations of major media types.

## A7 KEY PLAYERS MANUFACTURING IN UK – STRENGTHS & WEAKNESSES

Manufacture in UK	Strengths	Weaknesses
<p>Ford (AROQ Dec'05 &amp; March '06) Notes: 1. J.D.Power (2006) 2. Isodore (Jan 2006)</p>	<p>Third largest OEM in the world Enjoys strongest portfolio of brands worldwide Long &amp; venerable history and heritage Vast dealership network worldwide, 700 in UK Strong engineering, R &amp; D base FMCC (subsidiary) is largest vehicle financing company in the world (&gt;10 million customers) as of end 2005 Fewest design problems (Jaguar) <sup>1</sup> Extensive product range</p>	<p>Losing overall market share since 1999 in US Ford Europe market share reduced by 3.2% in 12 years since 1991 Ford Europe slow in identifying &amp; exploiting key emerging markets, incl. fuel efficient vehicles Unable to offer new models to the market regularly; possible slow product development Does bankruptcy lie ahead? <sup>2</sup> Land Rover – poor reliability record</p>
<p>General Motor Corporation (AROQ May'06)</p>	<p>World's largest motor manufacturer (by sales &amp; volume), since 1931 Global market share 14.2% (2005) &gt; 9million vehicles Multi-brand portfolio, strong brand recognition Gaining market share throughout many regions (except US) e.g. 15.5% CAGR increase from 2000-2005 in Latin America</p>	<p>Losing market share in US, declining 3.3% CAGR between 2002 &amp; 2005 Slow in identifying market trends for fuel-efficient vehicles (too US focused?) Too reliant on SUVs Slow in recognizing market for hybrid vehicles</p>
<p>Honda (AROQ Dec'05)</p>	<p>Third largest auto-manufacturer in Japan Largest motorcycle manufacturer in world, responsible for several high-profile models, boosting revenues substantially Consistently invests 5.5% of total sales in R&amp;D Leadership &amp; expertise in manufacturing Internal combustion engine technologies uses range of products developed by Honda Independent in development of alternative powertrain technology</p>	<p>Adversely affected by strengthening of Yen, especially against US\$ Reputation damaged by recall of light trucks in April 2004</p>
<p>Nissan (AROQ Dec'05) Notes: 1. Power (2006) 2. Isodore (Jan 2006)</p>	<p>Second largest auto-manufacturer in Japan Global market share 5.74% @ end 2005 Strong sales growth since 2000 Significant market share gains in overseas markets Zero debt, operating margin of 10% (2004/05) Manufacturing synergies - alliance with Renault Renault-Nissan worldwide market share 9.8% Renault-Nissan alliance = top 4 in world Automotive engine manufacturer world leader Fewest design problems (2005/06) <sup>1</sup> Most productive car plant in Europe <sup>2</sup></p>	<p>Extensive reliance on Toyota for hybrid-electric technology Reliance on Renault for diesel engine technology Quality &amp; product recall problems dented US sales in 2004 Reputation issues resulting in need to revisit interior design of later car model at considerable additional expense</p>
<p>PSA Peugeot-Citroën (AROQ May'06)</p>	<p>Second largest automobile manufacturer in Europe, European market share 14.3% (2005) Remains competitive due to agreements with several OEMs (incl. BMW, Mitsubishi &amp; Ford) Major cost benefits realized due to sharing of parts across range of models Increasing production volume, new models, improved looks and innovation - shared R&amp;D</p>	<p>Heavily reliant on Western Europe for sales (82%) European Market share possibly in decline Adverse publicity for closure of Ryton Plant. Could affect consumer confidence.</p>
<p>Toyota (AROQ May'06)</p>	<p>Largest auto-manufacture in Japan Third largest in world (vehicle production &amp; sales volume consistently increasing over recent years Net sales increased by 9.4% CAGR period 2000/01 to 2004/05 Significant operating income improvements (increase of 3.9% over same period) Strong financial and operational performance R&amp;D Investment @ 4.1% of net sales Market leader in Hybrid systems (Prius) Very quick in spotting market trends</p>	<p>Reputation issues associated with Lexus recall (faulty seat belt part)</p>

*Table A7 Key Players Manufacturing in the UK Strengths & Weaknesses*

**A8 KEY PLAYERS IMPORTING TO THE UK – STRENGTHS & WEAKNESSES**

<b>Importers</b>	<b>Strengths</b>	<b>Weaknesses</b>
BMW (AROQ Feb'06)	Brand name. Renowned luxury car manufacturer (Mini & Rolls-Royce brands) Global presence R&D = 5% of sales revenue, one of highest in industry Extensive employee training program Fewest defects & malfunctions Much improved NCAP AOR	Economies of scale limited e.g. Other brands (M-B, Lexus, Audi) have parent companies with more resources Possible overdependence on Europe (@ 45% of sales)
(Citroën) (AROQ Mar'06)  Also see PSA Peugeot-Citroën above	Leading automobile manufacturer in France & Spain Strong presence in Motor Sports & car Racing Benefits from relationship with Renault Strong R&D (annual expenditure 2m Euros) Strong safety culture (NCAP ratings, LDWS) Ownership of car labelling for emissions levels	Heavily reliant on Western Europe for sales (>80%) Sales in Central & Eastern Europe declining with increasing competition in the Region
DaimlerChrysler (AROQ April '05)	Third largest automobile maker in world (market share @ 14.5%) Various M-B cars global leaders in their segments	Over 50% of revenues obtained from US market Sales of all models except C-Class are in decline Mercedes-Benz' poor reliability
Fiat Group (AROQ June'06)	Current leader of Italian market (30.7% share) Leading presence in Turkey, Poland & Brazil Ferrari one of world's leading sports car Successfully reduced debt recently; improved capital structure	Intense competition and weak economic environment have conspired to the group experiencing large losses recently. Italian market share declined from 60% (1980s) to 30% more recently
Renault (AROQ May'06)  Also see Nissan above  Notes: 3 - Which (Aug 2005)	One of leading vehicle manufacturers in Europe Global presence with operations in 118 countries Sales increased from 2002 to 2005 at 4.4% CAGR (36,336 to 41,338 million Euro) Strong financial & operating performance R&D expenditure increased from 3.1% (2002) to 4.9% (2005), leading to technical advantage over competitors NCAP Ratings throughout latest model range (2006)	Heavy reliance on sales in Europe (nearly 79% of total group sales volume from 2001 to 2005) Heavy decline in European market share 11.3% in 2002 to 10.4% in 2005) Share in domestic (French) market declined from 28.2% in 2003 to 26.8% during 2005 Weakened competitive position Poor reliability <sup>3</sup>
Volkswagen AG (AROQ May'06)	One of the leading passenger car & light truck manufacturers in the world Global car market share 9.1% (2005) South America & Western Europe 18.9% share in each Market share 30.8% in domestic German market Present in low-cost production regions (India & China) Record sales 5.2 million vehicles in 2005 Flexible product sharing production lines Able to respond quickly to changing market demand Well placed for technology transfer & expertise sharing	Group derives nearly 72% of sales from European Union. Potential exposure in event of regional economic downturn Potential reputation issues associated with illegal dealings of Helmut Schuster (2005)
Volvo (AROQ May'06)	Recognized for advanced technologies - Preventative, Protective, Post Crash Safety Systems Good reliability certain models Very strong presence in domestic market (Sweden)	Sales of Bi-Fuel cars (and thus bi-fuel products) has been decreasing over recent years No manufacturing facilities in US despite 28% sales volume (detrimentally affected by strong Euro and weakening US\$)

*Table A8 Key Players Importing to UK Strengths & Weaknesses*

**A9 KEY PLAYERS MANUFACTURING IN UK – OPPORTUNITIES & THREATS**

<b>Manufacture in UK</b>	<b>Opportunities</b>	<b>Threats</b>
Ford (AROQ Dec '05 & March '06) Notes: 1. J.D.Power (2006) 2. Isodore (Jan 2006)	Increase presence in Asia Pacific Regions Partnership between Ford & Chinese Co. Expansion of production (4x), new products & distribution channels in China Partnership with Fiat in Europe (Spain, Poland)	Expansion of product range by Audi, M-B, BMW Increased competition in Europe Increase in Japanese production facilities in Europe Decline of US\$ against major currencies Relaxation of import duties in Asia Pacific Regions Increasing healthcare costs
General Motor Corporation (AROQ May '06)	Development of Hybrid systems with BMW & DaimlerChrysler Cost reductions Number of new models	Falling market share in SUVs & 4x4s Increasing structural & healthcare costs Job cuts leading to worker unrest Japanese gains in global arena, particularly Toyota
Honda (AROQ Dec '05)	Motorcycle competitiveness to improve	Increasing raw material prices Economic downturn in developed markets Reduced prices to compete
Nissan (AROQ Dec '05) Notes: 1. Power (2006) 2. Isodore (Jan 2006)	Joint venture in China Increased production in China, some leverage in GCC	Additional burdens on manufacturing due to rapid Company growth Danger of missing opportunities Increasing raw material prices Increasing fuel prices Unfavourable exchange rates
PSA Peugeot-Citroën (AROQ May '06)	Joint venture with Toyota leading to increased production Chinese production expansion Increased capacity in Brazil, Argentina & China	Increasing raw material prices Increasing fuel prices
Toyota (AROQ May '06)	High performance hybrid vehicles (North America) Strategic partnerships in China	Fiercer competition Production at maximum (& high) volume Danger of missing opportunities Increasing raw material prices Increasing fuel prices Unfavourable exchange rates Government regulations (incl. taxes), import regulations

*Table A9 Key Players Manufacturing in the UK Opportunities & Threats*

**A10 KEY PLAYERS IMPORTING TO THE UK – OPPORTUNITIES & THREATS**

<b>Importers</b>	<b>Opportunities</b>	<b>Threats</b>
BMW (AROQ Feb'06)	Global expansion especially Asia, Eastern Europe Production network expansion	Increasing raw material prices Increasing fuel prices
(Citroën) (AROQ Mar'06)  Also see PSA Peugeot-Citroën above	Hybrid Motor Car (C4 Hybride) Expansion of production facilities, Eastern Europe Increased sales of C1 and C6	Severe competition in European market North American & Asian car production increases in Europe Renault-Nissan alliance
DaimlerChrysler (AROQ April '05)	New retail outlets in Europe Could capitalize on growing truck & CV markets – Western Europe & North America Cost efficiency improvements	Interest rate increases Weaker domestic demand
Fiat Group (AROQ June'06)	Joint ventures & partnerships in low-cost countries (Tata) Development investment in Brazil	Labour unrest in transport sector Increasing fuel prices (particularly diesel) Increasing raw material prices
Renault (AROQ May'06)  Also see Nissan above	Capitalise in alliance with Nissan New emerging markets in Columbia, Morocco, and Russia; China, Brazil, India & Iran all on the radar screen Agreements in India	Global & domestic competition, especially Toyota & VW in Europe Imported brands in French market
Notes: 3 - Which (Aug 2005)		
Volkswagen AG (AROQ May'06)	New production facility in China Recent divestment of non-core business	Increasing raw material prices Increasing fuel prices Unfavourable exchange rates
Volvo (AROQ May'06)	Increase in Asian sales, China in particular	Increasing raw material prices Increasing fuel prices Unfavourable exchange rates Relaxation of import duties

*Table A10 Key Players Importing to UK Opportunities & Threats*

## A11 OTHER USEFUL REFERENCES (WEBSITES)

All of the following website addresses have been visited as part of research for this report.

**Note:** Addresses primarily referenced are UK based websites, not necessarily parent company website.

AA [www.theaa.com](http://www.theaa.com)

Alfa Romeo UK [www.alfaromeo.co.uk](http://www.alfaromeo.co.uk)

Aston Martin UK [www.astonmartin.com](http://www.astonmartin.com)

Audi UK [www.audi.co.uk](http://www.audi.co.uk)

Audi, 2005 Annual Report, [www.Audi.com](http://www.Audi.com)

Bentley Motors UK [www.bentleymotors.co.uk](http://www.bentleymotors.co.uk)

BMW UK [www.bmw.co.uk](http://www.bmw.co.uk)

Bristol Cars [www.bristolcars.co.uk/BristolFighter.htm](http://www.bristolcars.co.uk/BristolFighter.htm)

Cadillac [www.cadillac.com](http://www.cadillac.com)

Carpages (Aug 2006) [http://www.carpages.co.uk/land\\_rover/land-rover-sales-06-01-06.asp](http://www.carpages.co.uk/land_rover/land-rover-sales-06-01-06.asp)

Carpages (Aug 2006) <http://www.carpages.co.uk/mazda/mazda-sports-cars-28-01-06.asp>

Caterham Cars UK [www.caterham.co.uk](http://www.caterham.co.uk)

Chevrolet UK [www.chevrolet.co.uk](http://www.chevrolet.co.uk)

Daewoo (actually GM Daewoo) [www.gmdaewoo.co.kr](http://www.gmdaewoo.co.kr)

Daihatsu UK [www.daihatsu.co.uk](http://www.daihatsu.co.uk)

DaimlerChrysler [www.daimlerchrysler.com](http://www.daimlerchrysler.com)

Dodge UK [www.dodge.co.uk](http://www.dodge.co.uk)

DTI-AU - Automotive Unit of the Department of Trade and Industry [www.autoindustry.co.uk](http://www.autoindustry.co.uk)

DTI-AU (Post 2004) “*Car Manufacturing in Britain*” DTI [www.autoindustry.co.uk/ukprofile/Cars](http://www.autoindustry.co.uk/ukprofile/Cars)

Ferrari Great Britain Ltd [www.ferrari.co.uk](http://www.ferrari.co.uk)

Fiat UK [www.fiat.co.uk](http://www.fiat.co.uk)

Ford UK [www.ford.co.uk](http://www.ford.co.uk)

General Motors Corporation ([www.gm.com](http://www.gm.com))

General Motors Corporation Europe ([www.gmeurope.com](http://www.gmeurope.com))

Honda UK [www.honda.co.uk](http://www.honda.co.uk)

Hyundai UK [www.hyundai-car.co.uk](http://www.hyundai-car.co.uk)

Jaguar UK [www.jaguar.co.uk](http://www.jaguar.co.uk) ([www.jaguar.com](http://www.jaguar.com) worldwide website)

Jeep UK [www.chryslerjeep.co.uk](http://www.chryslerjeep.co.uk)

Kia UK [www.kia.co.uk](http://www.kia.co.uk)

Lamborghini UK [www.lamborghini.co.uk](http://www.lamborghini.co.uk)

Land Rover UK [www.landrover.com](http://www.landrover.com)

Lexus Europe [www.lexus-europe.com](http://www.lexus-europe.com)

Lexus GB [www.lexus.co.uk](http://www.lexus.co.uk)



Lotus (Group Lotus plc) [www.grouplotus.com](http://www.grouplotus.com)  
Maserati UK [www.maserati.co.uk](http://www.maserati.co.uk)  
Maybach [www.maybach-manufaktur.com](http://www.maybach-manufaktur.com) (Original website) ([www.maybach.com](http://www.maybach.com) being remodelled)  
Mazda UK [www.mazda.co.uk](http://www.mazda.co.uk)  
Mercedes UK [www.mercedes-benz.co.uk](http://www.mercedes-benz.co.uk)  
Mercedes [www.mercedes-benz.com](http://www.mercedes-benz.com)  
Mitsubishi Motor Cars UK [www.mitsubishi-cars.co.uk](http://www.mitsubishi-cars.co.uk)  
Morgan (The Morgan Motor Company) [www.morgan-motor.co.uk](http://www.morgan-motor.co.uk)  
Nissan UK [www.nissan.co.uk](http://www.nissan.co.uk)  
Noble Automotive [www.noblecars.com](http://www.noblecars.com)  
Perodua UK [www.perodua-uk.com](http://www.perodua-uk.com)  
Peugeot UK [www.peugeot.co.uk](http://www.peugeot.co.uk)  
Peugeot-Citroen (Aug 2006) <http://www.psa-peugeot-citroen.com>  
Porsche [www.porsche.com/uk](http://www.porsche.com/uk)  
Proton UK [www.proton.co.uk](http://www.proton.co.uk)  
RAC [www.rac.co.uk](http://www.rac.co.uk)  
RAC Foundation [www.racfoundation.org](http://www.racfoundation.org)  
Renault UK [www.renault.co.uk](http://www.renault.co.uk)  
Renault (March 2006) [www.renault.com](http://www.renault.com) Renault Atlas  
Rolls Royce Motor Cars [www.rolls-roycemotorcars.com](http://www.rolls-roycemotorcars.com)  
SAAB [www.saab.com](http://www.saab.com)  
Ssangyong UK [www.syukcars.co.uk](http://www.syukcars.co.uk)  
Seat UK [www.seat.co.uk](http://www.seat.co.uk)  
Škoda UK [www.skoda.co.uk](http://www.skoda.co.uk)  
Smart Car (The) UK [www.thesmart.co.uk](http://www.thesmart.co.uk)  
Subaru UK [www.subaru.co.uk](http://www.subaru.co.uk)  
Suzuki GB [www.suzuki.co.uk](http://www.suzuki.co.uk)  
Tata Motors [www.tatacars.co.uk](http://www.tatacars.co.uk) (Tata Motors Limited [www.tatamotors.com](http://www.tatamotors.com))  
Toyota Japan [www.toyota.co.jp](http://www.toyota.co.jp)  
Toyota UK [www.toyota.co.uk](http://www.toyota.co.uk)  
TVR [www.tvr-eng.co.uk](http://www.tvr-eng.co.uk)  
Vauxhall UK [www.vauxhall.co.uk](http://www.vauxhall.co.uk)  
Volkswagen UK [www.volkswagen.co.uk](http://www.volkswagen.co.uk)  
Volkswagen AG [www.volkswagen-ag.de/en](http://www.volkswagen-ag.de/en)  
Volvo UK [www.volvocars.co.uk](http://www.volvocars.co.uk)  
Westfield Sportscars UK <http://www.westfield-sportscars.co.uk>