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Appendices PART I – Fact Sheets

Preliminary note:

All references and data in the appendices with origins that are not specified are derived from the Andersen surveys, which were conducted relative to this study.

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Appendix 1: Sales Market

Market overview Europe

	1999	2000	2004
Population Western Europe (m.)	385.5	389	393
Total Fleet WE (m.)	175	178	189
Company car parc	19	19.7	21.9
Private car parc	155	158	167
Number of cars produced (m.)		17.1	+/-16.4
Passenger cars	14,7	14.8	+/-14.4
Commercial vehicles	2.1	2.3	<2
Number of new cars sold (m.)	16.8	16.6	16.2
Passenger cars	14.6	14.3	>14
Commercial vehicles	1.95	2.1	<2
Number of used cars sold (m.)	31.7	32.9	36.14
Car segments (Basis: age)			
0-3 years	22.6%		
4-7 years	25.1%		
8-10 years	21.2%		
+ 11 years	31.0		
Total	**100%**		

Source: Data Report, VDA, 2001; The impact of VMs in the European Aftermarket, Dataminor 2000; Distribution du vehicule d'occasion, Dafsa, 1999; Ovum forecasts the Internet and E-commerce, Ovum, 1999; Andersen Calculations

Cost structure of an average car in the EU

	1992	1998
Production costs	**72%**	**69%**
Components	28%	30%
Salaries	22%	19%
General costs	10%	9%
Warranty	3%	3%
Margin VM	9%	8%
Distribution costs	**28%**	**32%**
Promotion	4%	7%
Marketing VM	4%	6%
Dealer margin	8%	6%
Discount to customer	8%	8%
Bonus and premium	4%	5%

Source: Distribution Automobile, Echos, 1999

VM stands for 'vehicle manufacturers'

Price differences between EU countries in 1999

	Fischer index relative to EU9	**Fischer index adjusted for tax and exch. Rates**	**Average gross margin dealer**	**Average customer discount**
France	92.2	100.1	14.6%	8.2%
Germany	104.9	104.3	16.7%	9.2%
Italy	98.3	97.6	15.7%	10.4%
Spain	93.8	95.4	13.9%	9.3%
UK	116.9	108.2	12.7%	7.6%
Belgium	99	98.9	14.9%	9.3%
Denmark	79.6	103.1	8.7%	N.A.
Average	97.8	101.1	13.9%	8.0%

Source: Study on Price Differentials, KU Leuven, 2000; ACEA tax briefing, 1999

Key Messages

- 'Levelling' off of the sales of new cars versus strong further growth of used cars.
- More than half of the cars on the road are 8 years or older.
- There has been a shift in the cost structure of the car market over the period '92-'98.
    - Motor vehicle production costs still constitute the majority of the cost.
    - Proportion of distribution costs has become more significant.
    - Shift is mainly due to the increased marketing and promotion costs.
- Prices are still different among EC member countries, mainly due to tax legislation. To consider the impact of taxation, manufacturers tend to adjust car prices for each country. However, this is not the only reason for price differentials. (Cf. Part III.3 Variables)

Other elements

- The growth rate of passenger cars production as well as that of used car sales is slowing down (from more than 8% in 1998 to approximately 0,5% in 2000), but are still positive whereas the growth rate for the sales of new cars became negative in '99-'00 (approximately -2%).
- In Western Europe, there are on average 2,3 people for every car. Europe is still behind the US (1,5 people per car), but it is generally accepted that the North American levels will never be reached due to a different cultural and geographical environment[222].
- The fleet increases by approximately 2% annually.
- The average age of a car has risen from 6,9 years in 1982 to 7,3 years in 1997[223].
- Employment in the automobile manufacturing industry represents 8,2% of the total employment in manufacturing in the EU.[224]
- The six leading car manufacturers account for 74% of the cars sold in the EU[225].
- Implementation of lean production and lean distribution is still increasing.

[222] Source: The Car Aftermarket in Europe: 2nd Edition, FT Automotive, 1999.
[223] Source: Idem.
[224] Source: ACEA website.
[225] Source: Report on the Evaluation of Regulation n°1475/95, EC, 2000.

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Appendix 2: Current Sales Players (Dealers)

Dealer Evolution Data (Western Europe)

		1997	1998	1999	2000	99-00	97-00
Contracts	Main dealers	59,461	57,878	56,042	54,435	-2.90%	-8.5%
	Sub dealers	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Total	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Outlets	Main dealers	66,395	65,806	65,151	65,535	0.60%	-1.30%
	Sub dealers	57,083	55,805	54,917	54,138	-1.40%	-5.20%
	Total (excl. service-only outlets)	108,012	107,839	105,606	106,162	0.50%	-1.70%
Other data	Main dealer satellites	6,934	7,928	9,109	11,100	21.90%	60.10%
	Average outlets main per dealer	1.12	1.14	1.16	1.20		
	Cars sold per main dealer contract	255	283	307	>310	98-99 8.5%	96-99 29.5%

Sources: European Car Distribution Handbook, HWB, 2000; Andersen calculations

Dealership density (2000)

Market	Dealer size (by number of vehicles sold. % of total)				Coverage (Approx. number of outlets per 1000 km²)	Average number of cars sold per outlet
	Small <150 veh.	Medium 100 - 500 veh.	Big >500 - 1.000 veh.	Large >1000 veh.		
Austra	78	18	3	1	45	102
Belgium (+Lux.)	71	23	5	1	160	116
Denmark	66	31	2	1	40	110
Finland	77	19	3	1	5	122
France	58	26	13	6	40	116
Germany	67	28	5	1	80	147
Greece	81	16	4	1	15	165
Ireland	57	37	6	1	10	258
Italy	34	33	20	14	50	207
Netherlands	65	29	5	1	100	184
Portugal	55	31	11	3	20	176
Spain	41	38	17	5	20	187
Sweden	79	19	3	1	10	116
UK	40	43	15	5	30	374
Average EU	**61%**	**29%**	**8%**	**3%**	**+/-32**	**170**

Source: Andersen research; ACEA Position Paper, ACEA, 1999; Car Distribution Handbook, HWB, 2000

Dealer exclusivity

Degree to which dealers represent only one brand		
Country	1999	2000
Austra	70%	69%
Belgium (+Lux.)	92%	87%
Denmark	67%	67%
Finland	45%	36%
France	85%	78%
Germany	91%	88%
Greece	86%	82%
Ireland	72%	71%
Italy	88%	86%
Netherlands	93%	92%
Portugal	79%	82%
Spain	89%	88%
Sweden	58%	46%
UK	88%	86%
Average EU	**79%**	**76%**

Source: Car Distribution Handbook, HWB, 2000; Andersen

Key messages

- Decrease in number of dealers and concentration of dealers:
  - Main dealer contracts decrease (6 times) much faster than the number of outlets.
  - Number of sub-dealers decreases faster than the number of main dealers, which underlines the vehicle manufacturers strategy of fewer distributorships per area.
  - Concentration results in an increasing number of cars sold per outlet. (Meanwhile, vehicle manufacturers also increase the sales targets per outlet for dealers.)
- Trend towards more 'Hub and Spoke organisations' of main dealers (with the aim of a better cost structuring).
- Four out of five main dealers in Western Europe consistently conduct business with one vehicle manufacturer.
  - However, in less populated countries (e.g. the Scandinavian countries) dealers tend to sell different brands in order to be profitable.

- Today, 90% of dealerships in the EU remain small- or medium-sized (i.e. less than 500 cars sold per year).
- Whereas gross margins are decreasing but still represent more than 10% in most cases, net margins of dealers represent only between 1,5% and –3%[226].

Other elements

- 'Satellites' allow main dealers to have a more extended presence, and can help to decrease costs, since they are less capital intensive than a normal dealership. By using 'specialisation' of each of those Hub and Spoke organisations, the large dealer can spread costs across the various outlets and share certain resources like equipment and infrastructure.
- There is an increase in the number of dealer groups (even from different brands) with shareholders coming from other industries and with another focus (rationalisation…)[227].

[226] Andersen research.
[227] E.g. Sumitomo Holding is purchasing dealers in Europe for re-engineering of back-office activity.

Appendix 3: New Entrants into the Sales Market

Willingness of (UK) consumers to purchase vehicle Via Non-Traditional Channels

Source	% Very willing	% Quite willing	Total %	
Used car superstore	4	27	31	**Main players**
Insurance company	2	18	20	
Supermarket	1	16	17	
Bank	1	13	14	
Catalogue	1	6	7	
Internet	1	5	6	
Shop/Dealer via virtual reality	1	5	6	

Source: Report on Block Exemption, ACEA, 1999

Key messages

- In general, there are not any drastic changes due to new types of players entering the car distribution arena. Traditional channels are satisfying consumers. However, new entrants are interested in undertaking a multi-channel approach:
  - Increasing interest in the professionally organised used car channels.
  - Banks, supermarkets, insurance companies and other new entrants can expect to be more favoured by consumers than virtual channels.
- New entrants have limited interest in conducting “transactions” over the Internet.

3.1 Internet Players

Internet landscape in Western Europe

	2000	2001	2004
Population (in 000)	388.962	390.035	392.940
Internet connections (in 000)	28.424	37.673	183.211
Internet users (in 000)	64.438	86.036	176.368
"At home" users	47.661	63.255	125.495
"At work" users	23.903	28.523	42.796
"At school" users	9.649	11.433	18.668
Mobile users	72	1.532	97.091
Internet penetration	17%	24%	45%
Internet commerce (mio Euro)	53.505	86.420	364.548
B-to-C	3.219	6.283	39.120
B-to-B (web-based)	18.933	31.690	147.927
B-to-B (other)	31.354	48.447	177.501

Source: Ovum Forecasts the Internet and E-commerce, OVUM, 1999

Motivations for online automotive shopping

Main motivations for online automotive shopping	% of users	Infor-mation	Trans-action
Gaining knowledge before contacting a dealer	61,5	X	
Saving money/price comparisons	59,3	X	
Access to independent information	57,4	X	
Access to comprehensive information on products and services	53,9	X	
Purchasing without pressure from sales people	53,8		X
24h availability of information	53,6	X	
Access to products and services independent of where you are	51,9	X	
Etc.	…		

Sources: Cars Online; Cap Gemini, 1999

Example: Belgian Surfers

Reasons of using Internet	Rate
Only private	14,7%
Mainly private	21,6%
As much private as professional	42,4%
Mainly professional	19,1%
Only professional	2,2%
Sites visited in last 2 weeks	**Rate**
News	65,5%
Entertainment	55,6%
Travelling	46,6%
Finance	36,7%
Jobinfo	30,2%
Cars	27,1%

Source: InSites, April 2000

Key messages

- The Internet is used by consumers as a resource for information about vehicles (and their sales):
  - In the motor vehicle context, consumers mainly use the Internet to gather information, and not to conduct transactions.
  - More than 1 in 4 users has visited vehicle-related sites in the last 2 weeks[228].
  - Many consumers are eager to receive objective information, especially when there are not many inconveniences collecting it.
- Increasing use of the Internet in sales and after-sales:
  - Increasing use of 'Business to Business' (B2B) facilities for transactions (e.g. use of web-EDI) in the next few years, especially in the context of after-sales.

Other elements

- The Internet market penetration rate in North America is about 38%, whereas in Europe it is only 17%.
- The Internet plays a role in the vehicle purchasing process in more than 50% of the cases in the USA[229].
- Persons that have been online for more than 3 years spend 68% more time online per month than persons who came online during the past year. Their propensity to buy online is, according to sectors, between twice and three times higher[230].
- Automobile Internet players come and go very quickly, and many of the new entrants cease to exist a few months after beginning operations. The successful Internet players will be the ones that have a structured and well thought out international approach for 'Business to business' (B2B)[231].

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[228] Example for Belgium; Many other WE countries have higher market penetration rates than Belgium.
[229] Andersen research, 1999.
[230] McKinsey/DAD Research, 2000.
[231] Andersen research: based on a sample of Belgian Internet players studied and secondary research, 2000-2001.

3.2 Other Players

Other new actors/entrants

Actors in EU	Number of major actors in EU (1999)
Large distributors	>500 main players
# outlets EU	>130,000
Insurance companies	+/- 4800
# outlets EU	+/-250,000
Banks	> 8000
# outlets EU	+/-190,000

Sources: Andersen research; European Central Bank, 2000; OECD, 2000

Key messages

- Other new entrants have a significant number of outlets and are expanding throughout Europe. In general, these branches are largely dispersed and can be used to leverage on by serving as consumer contact points for other services and/or new products.
- Other advantages for potential new entrants are:
    - For the large distributors: frequency of customer contact and customer perception that they are independent and provide a low price channel;
    - For the banks and insurers: customer knowledge due to the provision of other “automobile products” (e.g. loans, insurance, etc.).

Other elements

- Research has shown that more and more of these new players have been investigating the potential of becoming a ‘distribution’ channel for vehicles with the following characteristics:
    - Mass-distributors show the least success up until now;
    - In some cases, banks are already offering some ‘packages’ (e.g. specific type of car, with loan and insurance included in the deal).
- The business case for mass-distributors is appealing if the following factors are present:
    - The business model is close to their own(i.e. high turnover with limited sales and service support);
    - The price difference is high enough to attract customers and to support the business risk;
    - Vehicle manufacturers agree to provide them the vehicles they need (knowing that the current margin of vehicle manufacturers is 8%; this means that the manufacturer could earn less (up to 6%) than is the case today by using the traditional network).
- The business case for banks and insurance companies is good if the following factors are present:
    - It limits their responsibilities and tasks within the business model;
    - It increases the sales of their “automobile related products” (i.e. vehicle is only a means to that end).
- Currently, the financing of new vehicle sales is derived from the following resources[232]:
    - Customers’ savings provide the primary source of financing (primary resource in almost 75% of the customers);
    - Loans (41% of the buyers);
    - Hire purchasing (leasing);
    - Personal contract purchase (customer ‘borrows’ the car and pays the remaining amount at the end of the period).

[232] Based on data for the French market in ‘La Distribution du Véhicule d’Occasion en France’, Dafsa, 1999 and on data from ‘The Future of Automotive Distribution’, FT Automotive, 1998.

- In France[233], the majority of loans are made by banks (56% of customers) :
    - Other channels are the vehicle manufacturer's finance firm (18,2% of customers), specialised financing firms (11,4%) and dealers (7, 3%);
    - The average loan for a new vehicle purchase is 9.400 Euro.
- The following characteristics in the French vehicle insurance market have been noted[234]:
    - Insurers in France generally have a low churn rate;
    - 86,4% of the clients who have a new vehicle, take 'all risk' insurance;
    - Insurance is almost never proposed nor sold at the point of sales.

Observations

- Various large manufacturers have offered vehicles to potential new players in order to test vehicle distribution. The tests have shown some degree of success. For instance, a French supermarket sold more than 300 Daewoo-brand cars in a few days, more than the whole dealer network sold in a whole quarter.
- French banks and insurance companies (BNP Paribas, Societé Generale, etc.) are offering packages that include a standardised vehicle, insurance and financing for a set price.
- The vehicle manufacturers also offer insurance and financing products. These services can be provided in-house (e.g. VW Bank, Ford Credit, etc.) or in partnership with an external party.

233 Based on data for the French market in 'La Distribution du Véhicule d'Occasion en France', Dafsa, 1999 and on data from 'The Future of Automotive Distribution', FT Automotive, 1998.
234 Source: La Distribution du Véhicule d'Occasion en France', Dafsa, 1999.

Appendix 4: Fleet Market

Fleet Sales Market Share

	2000	2005	Number of main EU actors (current)	Car Parc Europe (2000)
Total # cars sold (EU)	16.6 million	>16.0 million		>180 million
Fleet sales total	+/-6.8 million	+/-8 million		+/-20 million
- Short term	+/-0.8 million	+/-1.0 million	6 firms	+/-0.8 million
- Long term	+/-2.9 million	+/-4.0 million	<8 firms*	+/-9.6 million
- Other fleet	+/-3.1 million	+/-3.0 million	Increasing	+/-9.4 million
EU Market share average	+/-40%	>50%		+/-10%
CAGR fleet market	97-'00 growth: 2.8%	00-'05 growth: +/-5.7%		

Sources: Andersen research; Impact of vehicle manufacturers in the European After-market, Datamonitor, 2000; European Car Leasing, Datamonitor, 2000; UK Car Rental, Datamonitor,
* Average margins in the long term fleet market (i.e. leasing companies) can have average net profits up to 25% (It be noted that margins like this in the lease sector are mostly representing the net profit on the interest revenues and margins).

Evolution of fleet services

% of fleet contracts with:	2000	2003	2005
Maintenance contract	32.1	38.2	43.2
Breakdown contract	13.4	17.7	20.8
Fuel management	13.6	16.5	20.5

Source: Impact of VM's in the European Aftermarket, Datamonitor, 2000

Key messages

- The fleet market represents an large proportion of the annual sales in the European market:
  - 10% of the fleet;
  - 40% of the annual vehicle purchases in Europe.
- General fleet sales are expected to continue to increasingly grow over the next 5 years:
  - The European average sales of new cars to fleet users is expected to overtake the number of cars sold to private users;
  - There will be integration of the lease firm's services on a European level;
  - Less than eight major companies dominate this market.
- "Other fleets" will grow considerably.
  - This includes companies such as dealers and importers who are selling more and more vehicles to fleet owners;
  - In addition, other fleet service providers (fleet management, etc.) will grow.
- The increase in the fleet market is also reflected in the growth of the "fleet services" (after-sales services), which are expected to increase over next five years (to 2005), due to the following:
  - A 35% increase in maintenance contracts in the total fleet market;
  - A 53% increase in breakdown contracts and fuel management modules, in the fleet market.

Other elements

- The current market share of fleet-related sales differs greatly between different countries, ranging from 30% of total sales in Italy to 63% in the UK[235].
- Fleet companies offer more and more services to their clients, including online fleet status, fuel card management, etc…
- Operational vs. financial leasing:
  - Operational leasing will grow from approximately 21-22% to 28% of the car fleet in the coming 3 years;
  - Financial lease will stay at the current share of about 27% of the fleet.
- Average net profit of the lease companies is attractive, and can be up to 20 or even 25%, which is significant when compared to traditional car distribution channels.
- The current approach is evolving from a situation where fleet margins are negotiated with local dealers and national distributors/importers to a situation where fleet purchases are negotiated directly with the vehicle manufacturer on a European level.
- Besides the 'Big 6' or 'B 8' fleet companies, the market also includes many small players, especially in the short-term rental area (e.g. in tourist centres).
- For the most part, the large players have a well-developed European network.
- Short-term fleet organisations especially have a very well developed and dispersed network with many outlets (e.g. Avis has 2.700 outlets, SIXT has more than 1.000 outlets in Europe). It is realistic to imagine the use of this infrastructure for vehicle distribution.
- Vehicle manufacturers develop 'competing' products to be able to counterbalance the competition with fleet companies and their bargaining power (e.g. VW "We Care" or "We Cover" offers).
- Importance of the fleet after-sales market:
  - Fleet after-sales market value of 5 largest fleet markets (F, D, E, I, UK) is about 3,7 billion Euro, but will increase to more than 5 billion Euro in the next few years.

[235] "The link between sales and after-sales", AutoPolis, 2000.

Appendix 5: Car Segmentation

Car segmentation data (2000)

(Passenger) Car segments	Number of cars sold world-wide	Number of cars sold world-wide in %	Number of cars sold in Europe in %	Average number of competitors in EU countries	Average retail price per vehicle (in Euro)	Average Margin	Description	Examples
A	2.801.000	6%	7,0%	20	7.000	Low	Mini	VW Lupo, Smart, Seat Arosa, Ford Ka
B	7.110.000	15%	16,0%	19	10.000	Low	Small cars	VW Polo, Peugeot 206, Ford Fiesta
M1	13.065.000	27%	27,0%	27	13.000	Medium	Lower middle class	VW Golf, Peugeot 307, Fiat Stilo, Ford Focus
M2	9.792.000	20%	20,0%	31	20.000	Medium	Middle class	VW Passat, Peugeot 406, Ford Mondeo
M3	3.669.000	8%	7,0%	18	33.000	High	High-end middle class	Audi A6, Peugeot 607, BMW 5 series
H				9	45.000	High	Luxury class	Audi A8, Mercedes S-Class, BMW 7 series
Others	11.937.000	25%	23,0%	>35	25.000	High	All-terrain Convertibles Vans & utilities, ...	Ford Explorer, Mitsubishi Pajero, Land Rover Defender, Mercedes CLK, BMW Z3, Mercedes Vito minibus, etc.
Total	48.374.000	100,0%	100,0%					
Average 'weighted', all inclusive retail price all segments:					**+/- 18.000 Euro**			

Sources: Distribution Automobile, Eurostaf, 1999; Andersen calculations

Key messages

- More than half of the world markets (approximately 62%) are comprised of small and medium sized cars (segments B, M1 and M2).
    - These are also the classes where the most competition exists in the EU.
- Specific categories (part of "others" in the table) have gained market-share over the years.
    - Many of the players on the European market (i.e. more than 35 brands out of 55 brands present) compete in this area.
- To address 90% of customer needs, a manufacturer must offer at least 30 different models.

Other elements

- In Europe, there are approximately 50 brands of cars available (39 of them represent 99% of market), of which there are 250 models and between 2000 and 4000 versions.[236]
- Many brands in Europe have models competing in the "Mini vehicles" class today, in contrast to the lower average number of cars sold in that class on a world-wide basis.
    - This can be partly explained by the fact that Europe has a stronger presence of those kinds of cars than the world-wide average.
- Today's focus is on developing specialist types of cars that include cars such as: 'small MPV's', smaller all-terrain vehicles and family/recreation cars such as the Renault Kangoo, because the profit contribution is higher than in the mass-models segments (B, M1, M2) where price competition is much more common.
- The technology content per car has increased sharply in the last couple of years:
    - It went from 360 Euro in 1985 to 2420 Euro in 2000.
    - This represents between 15 and 20% of a vehicle's production cost.
    - By 2003-'05, it is expected that due to further technological innovations, this will increase up to 30%[237] of total vehicle costs.
- Increase in the amount of standard equipment in a vehicle[238], for example:
    - Airbag sales increased from almost zero to 40 million units during the 1990s.
    - Sales of climate controls increased and is expected to further increase to the level of 75% of the new car production (today 50% of Cars sold with climate controls.).

[236] Source: ACEA Positioning Paper, 1999.
[237] Source: Eurostat, 1999.
[238] Source: Facts and Figures, FIEV, 1999.

Observations

- Over the last decade, there has been a large increase in the number of models per brand:
  - Mercedes-Benz's main model range went from about 5 model lines (1990) to more than 12 model lines today.
  - Fiat's product catalogue contains more than 120 models and versions.
- Basic small cars such as the Peugeot 206 or Volkswagen Polo have more standard equipment compared to their predecessors.
  - For example: power windows, central locking, power steering, ABS, airbags.

Appendix 6: After-Sales Market

After-Sales market

	2000	2004 (a)	Change '00-'04	Gross Margin	Net Margin
Car Parc (# Cars)	178 m.	189 m.	6.2%		
Car Parc (Value)					
Sales Market (# Cars)	16.6 m.	16.2 m.	-2.5%		
Sales Market (Euro) (b)	298 billion	292 billion	-2%	+/-10%	1-3%
Sales used cars (# Cars)	32.9 m.	36.1 m.	+9.7%		
Sales used cars (Euro) (c)	207 billion	236 billion	+14%	+/-9%	+/-2 to 5%
Sales to the after-market (d):	+/-124 billion	+/-142 billion	+14.5%	>20%	>10%
Crash repair & car body work	44 billion	52 billion	+19.5%	>40% (on work)	11-14%
Replacement parts	46 billion	51 billion	+10%	>30%	17-18%
Services	27 billion	31 billion	+14.8%	40 to 50%	9-10%
Tires	7 billion	8 billion	+14.9%	N.A.	N.A.

Source: Andersen research; Andersen calculations; Impact of Vehicle Manufacturers in the European Aftermarket, Datamonitor, 2000; Car Aftermarket in Europe - 2nd Ed., FT Automotive, 1999; Distribution du Véhicule d'Occasion, Dafsa, 1999
(a) Without taking into account price indices.
(b) Extrapolated on average new car price in Europe.
(c) Extrapolated on average used car price in France.
(d) Values include parts and labour.

Distribution cost of replacement parts

Type of cost	% of total cost	Total
Production cost	15%	100%
Margin production (gross)	16-18%	
Storage & handling costs	5-17%	
Margin distributor (gross)	30-35%	
Margin repairer (gross)	20-30%	
Of which "net" margin repairer		+/-18%

Source: Distribution de Pièces Détachées, Eurostaf, 2000

Key messages

- After-sales market is crucial, because:
  - Large fleet: more than 170 million cars need service and repair in Europe.
  - After-sales business represents a much higher profit potential than the distribution of cars.

In the next few years, a relatively strong increase of new business can be foreseen in the sales market.

  - Higher after-sales margins are being used to compensate for mediocre vehicle distribution results[239].
  - After-sales represents an important point of customer contact- and offers a relationship building opportunity.

- Distribution of spare parts to the end-client represents a high proportion (i.e. about 65%) of the price of a spare part.

[239] Andersen research, 2001.

Other elements

- The contribution of after-sales activities to the operational revenues of vehicle manufacturers is 20 to 25%[240] (and they contribute about 50% of the pre-tax margins).
- For the players involved, the after-sales market will remain to be an area of high growth over the next couple of years, with some areas having a growth potential of 15 to 20%.
- The truck industry is a typical example where the contribution of after-sales activities is crucial for survival of the manufacturer and his dealer network:
  - Because margins on truck sales are often negative (e.g. –3% negative profit);
  - Contribution of parts sales can as much as 45%.
- The ageing of the fleet will compensate for the loss in revenues due to increased component durability (and thus less replacements & service check-ups)[241].
- Steady growth of the after-sales market, with an increase of 3.3% (turnover)
- Independent repairers prefer technical spare parts of "matching quality" because of more attractive margins[242]:
  - 10% on the original parts;
  - 30% on parts of 'matching quality'
- For body repair jobs, the original parts are used in almost 70% of the cases[243].
- For the vehicle manufacturers, in certain cases, sales of body panels contribute up to 10% to the annual turnover and up to 30% of the profits[244].
- The distribution of parts suppliers is increasingly concentrated.
  - For example, in France, the number of automobile supplier companies has decreased from 305 firms in 1996 to 280 in 1999.

[240] Source : "The car aftermarket in Europe" – 2nd Edition, FT Automotive, 1999.
[241] Source: The Vehicle Manufacturers in the European Aftermarket, Datamonitor, 2000.
[242] Andersen Analysis – Quantitative Questionnaire.
[243] Andersen Analysis – Quantitative Questionnaire.
[244] Source: "The car aftermarket in Europe" – 2nd Edition, FT Automotive, 1999.

Appendix 7: After-Sales Customers

Warranty period of most important car manufacturers in Europe

Year	France	Germany	Italy	Spain	UK
Audi	1	1	1	1	3
BMW	3	3	3	3	3
Citroën	1	1	1	1	1
Fiat	1	1	1	1	1
Ford	1	1	1	1	1
Toyota	3	3	3	3	3

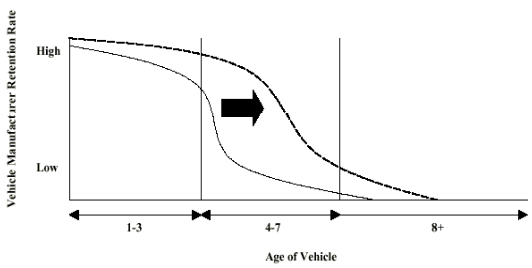
Source: Datamonitor: The impact of VM in the European aftermarket 2000 - Andersen research

Costs of diagnostic equipment

000 Euro	Parallel and Serial diagnostic	Databases	Training	Cables	Total
Standard level	15	2.2	7.5	7.5	30.2
Expert level	225	22.5	30	7.5	285

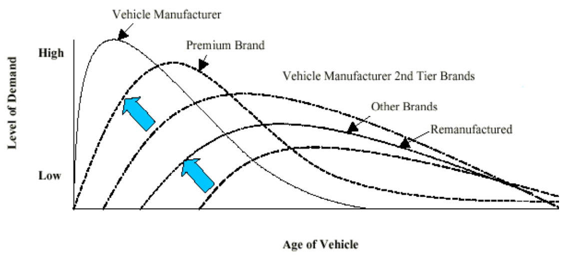
Source: Distribution de Pièces Détachées, Eurostaf, 2000

Retention rate of official dealers in the After-Market



Source: Datamonitor: Impact of Vehicle Manufacturers in the European Aftermarket 2000

Spare parts used during the lifecycle of a vehicle



Source: Datamonitor: Impact of Vehicle Manufacturers in the European Aftermarket 2000

Key messages

- Official dealers encounter a multiple negative effect when it comes to their traditional after-sales activities:
  - Lower frequency of workshop visits by their main customer groups (i.e. those owning recent cars of between 0 and 3 years), due to longer lasting vehicle manufacturer warranties and due to increasing vehicle reliability;
  - Significant and increasing amount of investments in technical equipment which is increasingly complex and difficult to operate. Moreover, equipment becomes outdated more frequently due to the rapid pace of technological advance.
- Dealers need to pursue expanding business beyond what has been their traditional after-sales focus and their current vehicle distribution activities:
  - Need to focus on the 'more than 4 years old' after-sales servicing, where earnings potential exists (i.e. move from the lower curve to the higher curve in the lower left figure (see above)): This market represents more than 75% of the service market value;
  - Need to develop other income- and profit-contributing services.
- Newer vehicles get original spare parts; Older ones get other kinds of parts:
  - Once a car gets older (and especially when warranty periods are over and/or a car is older than 3 years), the use of other types of parts will be considered;
  - At present, the consumer can choose from a rich variety of alternatives on the market; even remanufactured or reconditioned parts are possibilities.

Other elements

- The number of DIY (do-it-yourself) consumers is decreasing because cars are becoming more complex. There is a higher living standard and the population is ageing[245].
- The number of parts sales-only distributors is decreasing because of the above. However, shops that supply accessories only (and that thus not depend on replacement parts for their survival) are not very affected by this.

Observations

- Service intervals :
  - Used to be 5.000 kilometres or even 2.500 kilometres 10 years ago.
  - Currently: intervals have increased tremendously. For example, some BMW models have 30.000km service intervals, Citroën has intervals that are 20.000km (petrol cars) and their diesel engines have 15.000 km intervals.
- Fiat “Targa Service”:
  - Service structure proposed to official dealers.
  - “Package” that includes ‘quick repair service’ and ‘vehicle technical check’
- Citroën “ChronoServices” and Peugeot “Rapide” are similar programs.

[245] Distribution de Pièces Détachées et d’Accessoires Automobiles, Eurostaf, 2000.

Appendix 8: After-Sales Players

After-market distribution retail actors and channels

	2000		2004		Billion Euro Growth 2000-2004
	Outlets	Billion Euro	Outlets	Billion Euro	
Official dealers & sub-dealers	<120,000	64.1	<120,000	73.5	+14.5%
Independent repairers	118,000	42.0	N.A.	44.5	+6%
New channels. Of which:	+/- 100,000	16.0	>100,000	24.2	+50%
1) Fast Fit chains:	14,828	8.7	15,275	10.7	+22.4%
- Car manufacturers	4,100	N.A.	4,800	N.A.	N.A.
- Independent	4,900	N.A.	4,500	N.A.	N.A.
- Tire manufacturers	5,800	N.A.	6,000	N.A.	N.A.
2) Others*	+/-85,000	+/-7.5	>85,000	+/-13.5	+80%

Sources: Andersen calculations; Quantitative questionnaires; Impact of VMs in the European Aftermarket, Datamonitor, 2000
(*) "Others" include: Autocenters, Supermarkets/Large distributors, Parts stores, etc.

EU market for automotive replacement parts

	Market share
Production level: Component manufacturer Car manufacturer	 77% 23%
Wholesale level: Independent Car manufacturer	 43-45% 55-57%
Repair level: Independent garages Authorised car dealers	 37% 63%

Sources: Andersen calculations; ECAR, 1999

Key messages

- Traditional players currently have a strong hold on the after-sales market for original replacement parts, because:
  - Only official dealers have the right to distribute the original parts;
  - Design rights protect the vehicle manufacturers' status as spare parts source;
  - Warranty issues play a role in the use of non-original spare parts.
- On the other hand, vehicle manufacturers try to establish a stronger foothold in the service market by taking part in fast fit activities.
- "New channels" have increased much more (+50%) than traditional players :
  - Official dealers: only +14,5%.
  - Independent repairers: only +6%.
- The perceived added value "developed" by auto-centres (compared with the fast fit chains) shows a high potential increase over the next few years. This trend comes from:
  - The large spare parts offer (includes all product families that make up a car, except for body panels);
  - The fact that these players are capable of carrying out any types of technical work, from very easy standard work to highly complex technical work.
- Independent repair parties have a decreasing hold on the repair market.

Other elements

- There has been steady growth of fast fit chains. Over a period of two years ('98-'00), the number of fast fit outlets has increased by nearly 8% in the largest European markets.
- The top-10 fast fit chains hold 58,2% of the market share in the fast fit market[246].
- Success factors fast fit chains include[247]:
    - Specialised skills deliver effective work;
    - Good location (often in centres);
    - Rigorous stock management (limited stock-scope because of their focus);
    - Strong publicity and promotion.
- DIY (Do it Yourself) centres face difficulties due to an increasing complexity of cars and the fact that fewer people are repairing their own vehicles.

Observations

- "Eldorauto" (France – Auto-centre):
    - Defines itself as 'The vehicle maintenance hypermarket'.
    - Value proposition: From parts sales (all parts that go in a car) to service delivery (all kinds).

[246] Source: Impact of Vehicle Manufacturers in the European Aftermarket, Datamonitor, 2000.
[247] Source: Distribution de Pièces Détachées, Eurostaf, 2000.

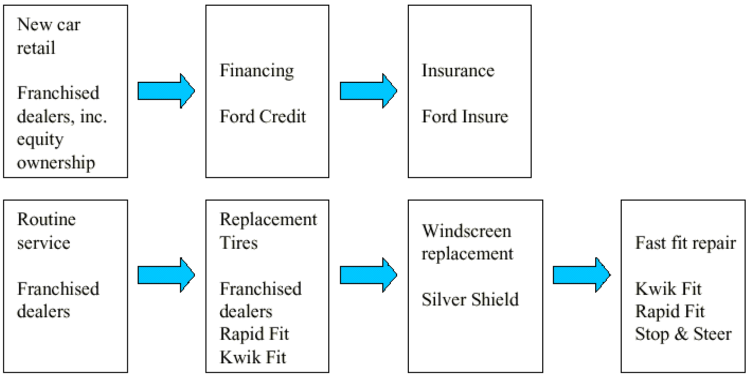
8.1 Vehicle Manufacturers

Key messages

- Vehicle manufacturers increasingly conduct activities in house in order to compensate for decreasing traditional after-sales needs (i.e. those via the official dealerships).
- Increasing strength in the after-sales servicing versus independent repairers, due to the need for expertise in vehicle repairs, (which is normally only found at official brand dealers).
- The evolution of spare parts turnover (Vehicle Manufacturers versus Independent after-sales channels) has and still is changing to the disadvantage of the parts supplier:
    - Turnover was split 50/50 between both players in 1998.
    - A year later, in 1999, it had already changed to a 56% versus 44% situation in favour of the vehicle manufacturer.

Observations

Example: Ford Motor Company



Source: Datamonitor, 2000

- Car manufacturers are tending to become more than ‘just’ car assemblers.
- OEM’s reinforce their market position not only in the after-sales market (maintenance), but also in the other elements of the value chain (financing and insurance).
- The above overview (Ford example) shows how their presence is increased in the after-sales market. The strategy to do so can take various forms:
    - Reinforcement of their distribution network (configuration, marketing): e.g. BMW, VW.
    - Acquisition of, or joint ventures with, existing repair networks, to offer after-sales services to multiple brands: e.g. Ford with Silver Shield, Kwik-Fit, Speedy, etc.
    - Develop multi-brand parts offer: e.g. Motrio (Renault), Secoia (PSA), etc.
- Ford is currently the largest player in the fast fit sector with 14,4% market share, and more than 2000 outlets. Two tyre manufacturers follow Ford: Continental and GoodYear-Dunlop[248].

[248] Source: Impact of Vehicle Manufacturers in the European Aftermarket, Datamonitor, 2000.

8.2 Parts Suppliers

Supplier turnover to Vehicle Manufacturers and profits made on parts

	Suppliers' original assembly sales	Suppliers' After-market sales
Contribution to turnover of supplier	50%	13%
Average net margins of parts suppliers	2 to 5%	Often >5%
Annual price decrease required by VM (on existing contracts)	-3 to -4% on last year's prices	Increasing pressure on prices, as VM's also market more and more after-market parts for various brands
Annual price decrease required by VM (on new contracts)	-8 to -10% on last year's prices	
Bottom line:	Ever decreasing profit	More and more difficult to make a profit

Source: Andersen research; FIEV, 2001; Distribution de Pièces Détachées et d'Accessoires Automobiles, Eurostaf, 2000

Key messages

- The margins of the suppliers to the assembly line of the vehicle manufacturer are under strong pressure because the vehicle manufacturer wants suppliers to deliver their parts at an ever-lower price.
  - The new contracts shows that the situation is worsening, with required price decreases of up to almost 10% on a year-by-year basis.
- In addition to this, the margins of the suppliers in the after-sales market are weak due to:
  - Increasing competition in the parts after-sales market since the vehicle manufacturers are also marketing more and more parts by themselves (sometimes using other brand names or even offering multi-brand parts).

Other elements

- Parts suppliers, increasingly becoming the development partners of the vehicle manufacturer, have to carry the R&D burden that goes with the establishment of the supplier contract:
  - Further increases the need to earn profits from the after-sales activities.
  - This underlines the importance of the suppliers being able to supply directly to channels such as auto centres, fast fitters and independent repairers, instead of being obliged to go through the vehicle manufacturers' channel necessarily.

Observations

- Increasing marketing activities by parts suppliers to develop their distribution network via auto-centres (e.g. VALEO in France via "Réparateur 2000").

Appendix 9: Taxation

Price differences between EU countries in 1999

	Fischer index relative to EU9	VAT and other taxes	Fischer index adjusted for tax and exch. Rates
France	92.2	20.6%	100.1
Germany	104.9	16.0%	104.3
Italy	98.3	20.0%	97.6
Spain	93.8	28.0%	95.4
UK	116.9	17.5%	108.2
Belgium	99	23.0%	98.9
Denmark	79.6	218.0%	103.1
Average	97.8	N.A.	101.1

Source: Study on Price Differentials, KU Leuven, 2000; ACEA tax briefing, 1999

Key messages

- Pricing of cars is also considered in the context of taxation.
  - The lower the taxes, the higher the base price will be;
  - Vehicle manufacturer does this to have similar pricing in various EU countries.
- When considering systematic price differentials, price differences between countries are mainly due to differences in VAT and other tax levels between countries as well as exchange rates. However, the study on price differentials conducted for the Commission[249] reveals international price dispersion for individual car models can only be explained to a partial extent by these factors.
- Especially the “other taxes” such as “registration taxes” have the most important effect.
- When adjusted for those taxes and exchange rates there are no major differences between the analysed countries (except for the UK).

Other elements

- Differences for the UK partially exist because of the additional cost for right-hand-drive and because of the high value of the British Pound over the last couple of years.

[249] Car Price Differentials in the European Union : an Economic Analysis by the KU Leuven and CEPR.