

**Developments in
car retailing and
after-sales markets
under Regulation
N° 1400/2002**

- Volume I -

**Final report to EC DG
Competition**

**By
London Economics**

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Final report
To
EC DG Competition

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Contents	<i>Page</i>
Abbreviations	xiii
Executive Summary	xv
1 Introduction and background to the study	1
1.1 Objectives of the study	1
1.2 Structure of this report	4
Part I	5
2 Distribution of motor vehicles	6
2.1 Introduction	6
2.2 Evolution of market size and structure	8
2.3 Evolution of dealer networks per Member State and per brand	36
2.4 Financial indicators	72
2.5 Competition Analysis: Evolution of competitive environment	87
2.6 Effects of observed trends on consumers	101
2.7 Summary and conclusions: overall impact of Regulation 1400/2002 on the car distribution sector	108
Part II	113
3 The repair and maintenance of motor vehicles	114
3.1 Introduction	114
3.2 The evolution of the demand for service and repair	117
3.3 Service and repair networks	122
3.4 The structure of the repair sector	130
3.5 New developments/innovation	153
3.6 Competition analysis	162
3.7 Effects on consumers	176

Contents	<i>Page</i>
3.8 Conclusion	179
Part III	185
4 The spare parts market	186
4.1 Introduction	186
4.2 The spare parts supply chain	192
4.3 Vehicle parts production	194
4.4 Distribution of spare parts	201
4.5 Retail market for spare parts	222
4.6 Innovation in distribution channels	230
4.7 Evolution of competitive environment	236
4.8 Effects of observed trends on consumers	261
4.9 Conclusion: overall impact of Regulation 1400/2002 on the spare parts sector	265
References	271
Annex: List of tables in confidential annexes (Volume II)	273
1 Annex to Part I: Market developments in European car distribution	273
2 Annex to Part II: Developments in the European market for repair and maintenance of motor vehicles	279
3 Annex to Part III: Developments in the European market for automotive spare parts	288

Figures	<i>Page</i>
Figure 1: Worldwide new registrations of passenger cars (2004).	9
Figure 2: New registration of passenger cars per Member State (1997-2004).	11
Figure 3: Estimated annual trend growth rate in new registrations 1997-2004.	13
Figure 4: Average annual percentage change in new registrations, selected brands (1997-2004).	14
Figure 5: Coefficient of variation in new registrations per brand in 9 EU Member States, 1997-2004.	15
Figure 6: Average annual rate of change in new car registrations compared with real disposable household income (1997-2004).	16
Figure 7: Income elasticity of car demand.	17
Figure 8: Size of car parc - 1997-2004.	19
Figure 9: Growth of car parc, 1997-2004.	20
Figure 10: Car parc: initial density and growth 1997-2004.	21
Figure 11: Average annual percentage change in car parc, per brand (1997-2004).	23
Figure 12: Age profile of car parc, 1998 and 2002.	25
Figure 13: Car manufacturers' average market share, 1997-2004.	26
Figure 14: C4 concentration ratios in 6 large member states (1997-2004).	28
Figure 15: Market concentration: Herfindahl-Hirshman Index, 1997 and 2004.	29
Figure 16: Volatility of car manufacturers' market shares: average standard deviation of market shares 1997-2004.	30
Figure 17: No. of manufacturers ranked in the top four in terms of sales during 1997-2004.	31
Figure 18: Closeness of competitors: average distance between the market shares of 4th and 5th largest manufacturers (1997-2004).	32
Figure 19: Closeness of competitors: average distance between top 5 manufacturers' market shares (1997-2004).	33

Figures	<i>Page</i>
Figure 20: Total sales by value: ratio of volume brands to premium/specialist brands in 1998 and 2004.	34
Figure 21: Density of dealer network: average number of dealer outlets per 1,000 inhabitants, 1997-2002 and 2003-2004.	37
Figure 22: Total authorised sales outlets (all makes) in selected Member States (1998-2004)	40
Figure 23: Dealer network status: Main dealers and sub-dealers (1997, 2004).	41
Figure 24: Trends in total sales outlets by brand. West Europe (16 markets)	42
Figure 25: Unit sales per dealer (1997, 2004).	43
Figure 26: Evolution of car sales per dealer contract, by country (€ million).	44
Figure 27: Percentage change in number of dealers vs. percentage change in total turnover (1997-2004.)	45
Figure 28: Manufacturer-owned dealer outlets as a percentage of all dealer outlets (average 1997-2004).	46
Figure 29: Manufacturer-owned outlets.	47
Figure 30: Evolution of turnover of manufacturer-owned outlets as a percentage of total dealer turnover, by brand.	48
Figure 31: Evolution of turnover of manufacturer-owned outlets as a percentage of total dealer turnover, by country.	48
Figure 32: Ownership of car dealers 1997-2004: LE survey results.	49
Figure 33: Manufacturers' share of the total dealer network compared with market concentration: 4 largest manufacturers (1997-2003).	50
Figure 34: Evolution of the share of the Top 20 dealers' turnover in total sales, by brand: index, 1997=100.	52
Figure 35: Evolution of the share of the Top 20 dealers' turnover in total sales, by country: index, 1997=100.	52
Figure 36: Evolution of turnover (€) per dealer contract by country (1997-2004).	53
Figure 37: Average turnover per dealer in € (1997-2004).	54

Figures	<i>Page</i>
Figure 38: Market share of the top 50 dealer groups.	55
Figure 39: Market share of the top 25 dealer groups.	56
Figure 40: Average profile of top 50 dealer groups by country (2003).	56
Figure 41: Changes in average profile of top 50 dealer groups by country (2001/2-2003/4).	57
Figure 42: Organisational arrangements (1997-2004): LE survey results.	57
Figure 43: Manufacturer restrictions on multibranding by dealers.	61
Figure 44: Evolution of the share of dealers selling brands of different manufacturers by country.	63
Figure 45: Proportion of multi-brand dealerships (1997-2004), by manufacturer.	64
Figure 46: Proportion of multi-brand dealerships (1997-2004).	65
Figure 47: Multi-brand dealerships (1997-2004): LE Dealer Survey results.	66
Figure 48: Multi-brand dealerships: showroom arrangements (1997-2004): LE Dealer Survey results.	67
Figure 49: Percentage of stand-alone dealers (1997-2004).	68
Figure 50: Operating margin for vehicle manufacturers (in %).	72
Figure 51: Average operating margin for vehicle manufacturers' European operations (in %).	73
Figure 52: Average % turnover change on a year earlier for vehicle manufacturers' European operations.	74
Figure 53: Average operating margin for car dealerships (in %).	75
Figure 54: Operating margins for the larger companies (turnover above average).	76
Figure 55: Operating margins for the smaller companies (turnover below average).	77
Figure 56: Sector-wide operating margin for car retailing.	77
Figure 57: Turnover of car dealerships (1997-2004): LE Dealer Survey results.	78

Figures	<i>Page</i>
Figure 58: Financial indicators (1997-2004): LE Dealer Survey results. (€'000)	79
Figure 59: Selected financial ratios (1997-2004): LE Dealer Survey results.	79
Figure 60: Average Margin Structure.	81
Figure 61: Dealer's typical profit structure.	82
Figure 62: Dealers' satisfaction by business area.	83
Figure 63: Trends of Required Investments over time (1997-2004), by brand.	84
Figure 64: Average fixed and variable margins per brand, 1997-2002 and 2003-2004.	85
Figure 65: Perceived benefit of obligatory brand-specific investments	91
Figure 66: Car price differentials across EU Member States (1997-2004).	93
Figure 67: Effect of new rules on location clauses: perspectives of dealers.	94
Figure 68: Reasons for not opening new outlets in response to new rules on location clauses: perspectives of dealers.	94
Figure 69: Perception of threat of new entry in response to new rules on location clauses: perspectives of dealers.	94
Figure 70: The market for leased cars: fleet size in Europe* (2000-2004).	95
Figure 71: The market for leased cars: breakdown by contract type, UK (1997-2004).	97
Figure 72: Leasing market: share of new registrations, Germany (2002-2004).	98
Figure 73: The market for leased cars: percentage of total car parc, UK (1997-2004).	99
Figure 74: Leasing market in the United Kingdom: units (1997-2004).	100
Figure 75: Average annual rate of change of car prices compared with overall price level (1997-2004).	101
Figure 76: Change in real car prices, EU25 (1997-2003).	102

Figures	<i>Page</i>
Figure 77: Purchases of motor vehicles: percentage share of total consumer expenditure (1997-2004).	103
Figure 78: Average annual percentage change in consumer expenditure on motor vehicles (1997-2004).	103
Figure 79: Change in real consumer expenditure on motor vehicles (1997-2003).	104
Figure 80: Evolution of consumer preferences: changes in demand by car segment (1997-2004).	105
Figure 81: New registrations by car segment (2004).	106
Figure 82: Evolution of consumer preferences: changes in demand by car body type (1997-2004).	107
Figure 83: Service & repair of motor vehicles: market size for selected countries (1997-2003), € millions.	118
Figure 84: Average yearly service and repair expenditure per vehicle - selected countries (1997-2003).	120
Figure 85: Estimated total number of service & repair businesses (1997-2003).	123
Figure 86: Number of service & repair enterprises (authorised & independent) per 1,000 cars, 1999-2000 and 2003-04.	125
Figure 87: Average operating margin for service and repair of motor vehicles.	126
Figure 88: Profit ratios for the larger car service and repair companies (turnover above average).	127
Figure 89: Profit ratios for the smaller car service and repair companies (turnover below average).	127
Figure 90: Sector-wide profit margin for car service and repair.	128
Figure 91: Evolution of “cost of goods sold” divided by turnover for selected countries.	129
Figure 92: Repairer structure in France, 2005.	131
Figure 93: Market shares of different types of repairers, by age of car - Germany (2004).	133
Figure 94: Ratio of the number of independent to authorised repairers (1999-00 versus 2003-04).	135

Figures	<i>Page</i>
Figure 95: Excess growth of authorised repairer turnover (1998-2003).	136
Figure 96: Independent repairers' views on becoming authorised.	137
Figure 97: Authorised repairers: total no. of contracts in selected Member States (1997-2004).	138
Figure 98: Authorised repairers: total no. of outlets in selected Member States (1997-2004).	139
Figure 99: Density of the authorised network: outlets per 100,000 inhabitants (1997; 2003).	141
Figure 100: Make Trends. Total authorised service and repair outlets. West Europe (16 Markets)	142
Figure 101: Manufacturer-owned repairer outlets as a percentage of total repairer outlets, 2004.	143
Figure 102: Stand-alone repairer outlets as a percentage of all service and repair outlets (2004).	144
Figure 103: Independent repairers' turnover and its components.	145
Figure 104: Total no. of independent service & repair businesses in selected Member States (1997-2003).	147
Figure 105: Change in the number of independent repairers (2002-2003).	149
Figure 106: Membership of service/repair chains (%).	150
Figure 107: Repair market structure by type of repairer, 2004.	151
Figure 108: Full-service repairer franchises in Germany, 2003-2004.	156
Figure 109: Financial information for the 50 largest repairer groups*.	159
Figure 110: Perception of competitive challenges.	166
Figure 111: Price and service quality in selected German independent repairer franchises (2003).	170
Figure 112: Price and service quality of selected authorised repairers, Germany (2001).	171
Figure 113: Spain: Average prices by type of outlet.	172

Figures	<i>Page</i>
Figure 114: Trend in real prices of service & repair of motor vehicles, EU25 (1996-2004).	177
Figure 115: Maintenance and repair price inflation compared with headline inflation, EU25 (1997-2004).	177
Figure 116: Trend in real prices for repair & maintenance of motor vehicles (1997-2004).	178
Figure 117: EU spare parts market structure.	194
Figure 118: Top 30 European parts suppliers - Ranked on 2004 European OES parts sales.	197
Figure 119: Profit margins of parts manufacturers (1997-2004).	199
Figure 120: Relative contribution of car parts to manufacturers' profits	200
Figure 121: Relative contribution of the aftermarket to OESs' profits	200
Figure 122: No. of manufacturer-owned parts distributors - 1997-2004.	202
Figure 123: Share of vehicle manufacturer-owned parts distributors in total number of distributors - 1997-2004.	203
Figure 124: Spare parts sourced from VM relative to total sourcing, 2004 (%).	204
Figure 125: Parts distributors in major markets (2004).	205
Figure 126: Changes in authorised parts distributor numbers and repairer contracts, 1997-2002 and 2002-2004.	206
Figure 127: Number of authorised spare parts distributors 1997-2004.	207
Figure 128: Number of stand-alone authorised spare parts distributors (1997-2004).	208
Figure 129: Share of stand-alone authorised spare parts distributors in total number of authorised parts distributors (1997-2004).	209
Figure 130: Indicators on the evolution of VMs' parts business turnover.	212
Figure 131: Indicators on the evolution of VMs' parts business profitability.	212

Figures	<i>Page</i>
Figure 132: Evolution of turnover for parts distributors 1997-2004, 2004=100.	213
Figure 133: Average operating margin - sale of motor vehicle parts and accessories, 1998 – 2004.	214
Figure 134: Average operating margin - sale of motor vehicle parts and accessories, 1998 – 2002 and 2003 - 2004	215
Figure 135: Profit ratios for the larger companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is above the sector average, 1998 – 2004.	216
Figure 136: Profit ratios for the larger companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is above the sector average, 1998 - 2002 and 2003 – 2004.	216
Figure 137: Profit ratios for the smaller companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is below the sector average, 1998 – 2004.	217
Figure 138: Profit ratios for the smaller companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is below the sector average, 1998 - 2002 and 2003 – 2004.	218
Figure 139: Sector-wide profit margin for companies whose main activity is the sale of motor vehicle parts and accessories, 1998 – 2004.	219
Figure 140: Sector-wide profit margin of companies whose main activity is the sale of motor vehicle parts and accessories in distribution of spare parts, 1998 – 2002 and 2003 – 2004.	219
Figure 141: Financial information for the 100 largest parts distributors.	220
Figure 142: Spare parts market size at retail value 1999-2004 (€m).	223
Figure 143: Spare parts market size - value of retail market 1999-2004 (€m).	224
Figure 144: Drivers of retail demand for spare parts - 1999-2004.	225

Figures	<i>Page</i>
Figure 145: Market share of the authorised network in the spare parts retail market (1999-2004).	227
Figure 146: Market share of the authorised network in the spare parts retail market, 1999 vs. 2004.	228
Figure 147: Split of the non-VM-authorised parts market ⁽¹⁾ for selected Member States - 2004	229
Figure 148: Changes in the market share of authorised networks compared with initial market shares (1999-2004).	229
Figure 149: Market for “must match” spare parts, EU15.	243
Figure 150: Price differences between suppliers in Germany, 2003.	244
Figure 151: Price evolution of body parts and non-body parts - France 1999-2004.	247
Figure 152: Price differentials across different retail channels for selected spare parts, UK (2005).	249
Figure 153: Manufacturer restrictions on use of non-manufacturer-branded spare parts.	251
Figure 154: Perceived importance of different customer categories.	254
Figure 155: Perceived importance of different competitor categories.	254
Figure 156: Total sales by car parts producers by market segment 1997-2004.	255
Figure 157: Branding of spare OES spare parts.	255
Figure 158: Sales of spare parts to different customer groups, percentage of total EU spare parts sales.	256
Figure 159: Volume of EU-wide sales of spare parts bearing the parts manufacturer's brand name, by customer group (2004).	257
Figure 160: Distribution of profits across different segments, 1997-2004.	258
Figure 161: Perceived benefits and impact of the BER on the spare parts market.	259
Figure 162: Evolution of real prices of parts & accessories for personal transport equipment, EU25 (1966-2004).	261

Figures	<i>Page</i>
Figure 163: Prices for parts & accessories for personal transport equipment compared with the general price level, EU25 (1997-2005).	262
Figure 164: Evolution of real prices for parts & accessories for personal transport equipment 1996-2004.	263

Abbreviations

A.C.I.	Automobile Club d'Italia (IT)
ACAP	Associação do Comércio Automóvel de Portugal - Portuguese Motor Industry Association (PT)
ACEA	Association des Constructeurs Européens d'Automobiles - European Car Manufacturers' Association
AM100	Dealer group performance review by motor magazine AM
ANFAC	Asociación Española de Fabricantes de Automóviles y Camiones - Spanish Motor Industry Association (ES)
AR	Authorised repairer
BDL	Bundesverband Deutscher Leasing-Unternehmen e. V. - German Leasing Industry Association (DE)
BER	Block Exemption Regulation (unless otherwise mentioned Regulation (EC) No 1400/2002)
BVRLA	British Vehicle Rental and Leasing Association (UK)
CBS	Centraal Bureau voor de Statistiek - Dutch Statistics Agency (NL)
CCFA	Comité des Constructeurs Français d'Automobiles - French Car Manufacturers' Association (FR)
CECRA	Conseil Européen du Commerce, et de la Réparation Automobiles (European Council for Motor Trades and Repairs)
DAT	Deutsche Automobil Treuhand - German automotive market research company
DfT	Department for Transport (UK)
DTI	Department of Trade and Industry (UK)
EU	European Union
forsa	Gesellschaft für Sozialforschung und statistische Analyse mbH - German polling institute
GUS	Główny Urząd Statystyczny - Polish Statistics Agency (PL)
GVA	Gesamtverband Autoteile-Handel - German Parts Distributors Association
HHI	Herfindahl-Hirshmann Index
HWB	HWB International Ltd. - Publisher of the GMAP Car Distribution Handbook.
ICDP	International Car Distribution Programme
ifo	Information und Forschung - Institut fuer Wirtschaftsforschung - Institute for Economic Research (DE)
IKA	Institut für Kraftfahrwesen - Institute of Automotive Engineering, Aachen University of Applied Sciences
INE	Instituto Nacional Estadística - Spanish statistics agency
INSEE	Institut National de la Statistique et des Études Économiques (FR)
IR	Independent repairer
IPR	Intellectual property right
KBA	Kraftfahrt-Bundesamt - Federal Bureau of Motor Vehicles and Drivers (DE)
KSH	Központi Statisztikai Hivatal - Hungarian Statistics Agency (HU)
LE	London Economics

mfbi	Market Facts and Business Information
NACE	Nomenclature des Activités dans la Communauté Européenne - Classification of Economic Activities in the European Community
NSA	National Statistics Agency
OCU	Organización de Consumidores y Usuarios - Spanish consumer organisation
OE	Original equipment
OFT	Office of Fair Trading (UK)
RAI	Rijwiel- en Automobiel-Industrie Vereniging - Dutch Bicycle and Automobile Industry Association
RCD	RCD Datacentrum - Dutch Automotive Industry Information provider (NL)
SCB	Statistiska Centralbyraan - Swedish Statistics Agency
SG/DAEI/ SESP	Secrétariat Général/Direction des Affaires Economiques et Internationales/Service Economie, Statistiques et Prospective
SIKA	Statens Institut för Kommunikationsanalys (SE)
SMMT	Society of Motor Manufacturers and Traders (UK)
UNRAE	Unione Nazionale Rappresentanti Autoveicoli Esteri - National Union of Foreign Automotive Industry Representatives(IT)
VM	Vehicle manufacturer
ZDK	Zentralverband Deutsches Kraftfahrzeuggewerbe - German Motor Trade Association

Abbreviations for countries/country groupings

DK	Denmark
DE	Germany
EE	Estonia
ES	Spain
FR	France
IT	Italy
CY	Cyprus
LU	Luxembourg
HU	Hungary
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
SE	Sweden
UK	United Kingdom
EU	European Union
EFTA	European Free Trade Association

Executive Summary

Introduction

- This report reviews market developments in automotive retailing and after-sales sectors following the entry into force of the Regulation No. 1400/2002 (henceforth referred to as BER 1400/2002 or simply BER), the new EC regulation covering distribution and after sales services of new motor vehicles in the EU. BER 1400/2002 replaced the previous Regulation (Regulation 1475/95).
- The report focuses on the competition implications of the new rules for a) the distribution of new cars; b) the car service and repair sector; and, c) the market for automotive spare parts.
- The study covers developments in twelve Member States, namely Denmark, Germany, Estonia, Spain, France, Italy, Hungary, the Netherlands, Poland, Portugal, Sweden, United Kingdom.
- The focus of the study is on developments over the period 1997 – 2004, with a particular emphasis on any changes during the period following the entry into force of the new BER. At issue is whether BER 1400/2002 has resulted in any already observable changes in the three sectors of interest in the twelve Member States listed above.
- The data and information gathering exercise involved surveys of five different groups of stakeholders: vehicle manufacturers; parts manufacturers; authorised dealers; independent repairers; and independent parts distributors associations.
 - The surveys of vehicles manufacturers, parts manufacturers and independent parts distributors associations were undertaken by the Commission under Article 18 of Regulation (EC) 1/2003 whereas the surveys of dealers and independent repairers were undertaken directly by London Economics.
- In addition to the survey results, the report includes a large amount of data from national statistics offices, sector associations, and other published sources and various market studies. Unfortunately, the scope of the latter strand of information is generally much narrower than that of the present study, both in terms of geographical and historical coverage.
- The report is divided into three major parts:
 - Part I: Market developments in European car distribution

- Part II: Developments in the European market for repair and maintenance of motor vehicles
- Part III: Developments in the European market for automotive spare parts.
- The present executive summary provides an overview of the key findings from each of the three parts of the report.

Part I: Market developments in European car distribution

The 2002 BER

- Regarding the sales of new cars, the new BER incorporates a broader ban on territorial restraints. This includes:
 - A new prohibition on the combination of selective and exclusive distribution (art. 4(1)(d)); and,
 - An end to the exemption of location clause as of October of 2005 (art. 5(2)(b)).
- In addition, to encourage innovative forms of distribution, the new BER:
 - Stipulates the unbundling of car sales and after-sales activities (art. 4(1)(g)) and,
 - Prohibits vehicle manufacturers to put restrictions on dealer multi-branding (i.e., the no non-compete obligations (art.5(1))).

Key trends in new car distribution over the period 1997 - 2002

- Overall new car registrations across the EU increase cumulatively by 7.6% over the period 1997-2004. This overall picture of EU-wide moderate annual growth of new car sales hides both a high degree of variation in the trend growth of new car sales across Member States and a high degree of year-to-year variation in new cars sales in individual Member States.
 - Our estimates of annual trend growth rates in the number of new car registrations over the period 1997-2002 range from -8.7% in Poland and -6.2% in Denmark to +7.7% in Estonia and +13.1% in Hungary.

- At the brand level, we also observe a great deal of diversity in new car sales performance. A number of manufacturers post declines or only very marginal growth over the period 1997-2004 while others show robust growth of more than 10%.
- Overall, across the 12 Member States, a small number of large, mostly multi-branded manufacturers (VW, GM, PSA Ford and Renault) account for the majority of sales in the 12 selected countries.
- Intense and growing inter-brand competition resulted in a sharp decrease in the number of brands with EU-wide market shares greater than 10%. While in 2000 vehicle manufacturers VW, Opel/Vauxhall and Renault had brands in this position, by 2004 this was the case only for Renault.
 - Concentration of new car sales by vehicle manufacturers decreased slightly in the 12 Member States as a whole over the period 1997-2004. This small downward trend in concentration, however, masks a great deal of diversity. The four-firm concentration ratio fell by more 10% in Italy, Hungary, Poland and Sweden while it increased by slightly more than 20% in Portugal and more marginally in Denmark, Germany, Estonia and France.
 - The intensity of the rivalry among car manufacturers over the period 1997-2004 meant that in most of the 12 Member States the gap in terms of car sales between the market share of the fourth largest manufacturer in terms of sales in given market and the fifth largest is often very small, and in all but one of the 12 countries 5 or more manufacturers held a top 4 position over the period 1997-2004.
- The number of dealers fell and so concentration of dealer networks increased.
 - The number of franchised sales outlets fell by 5.3% across the 12 countries of interest over the period 1998-2004 with practically all the decline occurring since 2000 and more particularly since 2002.
 - This decline reflects a pronounced restructuring and rationalisation of dealer networks by car manufacturers.
 - This restructuring has been most significant in the case of larger brands. Some smaller brands benefited from this structural change as they could pick up sales outlets discarded by the larger brands or by car dealers fleeing the uncertainty caused by the on-going rationalisation process.
- Average car sales per main dealer and per all outlets have increased in the period 1995-2004 for almost all the countries studied. The average increase in Western European markets was 28% per main dealer and 59% per outlet.

- The number and size of dealer groups increased and a small increase in manufacturers' direct involvement in car distribution is also observed.
- The costs faced by car dealers for complying with manufacturer standards increased and vehicle manufacturer remuneration schemes for dealers moved towards more qualitative criteria and less quantitative criteria.
- The importance of multi-brand distribution grew but other forms of innovation in car retailing show more mixed results.
- The overall profitability of both vehicle manufacturers and dealers is generally low but some new dealer groups appear attractive to investors. Average operating margins for dealerships are slightly above 1% in 2004 without a particular trend being identified over the study period. Vehicle manufacturers' reported operating margins show high volatility with negative results common for several years and across several brands.
- Differences in new car prices across the EU narrowed but full price convergence has not yet been achieved.
- This narrowing in price differences occurred in the context of a moderate, downward trend in the level of car prices compared to headline inflation.

Main trends in new car distribution and the objectives of the BER

- The changes taking place in the sector are substantial but it is too soon to conclude whether the final outcomes will meet to a satisfactory degree the objectives of the Commission.

Increase in competition

- In terms of the effect of the introduction of a broader ban on territorial restraints and, in particular, on both inter-brand and intra-brand competition, we have little evidence either way at this stage.
- Dealer groups and large dealerships have increased both in number and in average size. At issue is whether this means more or less competition among dealers.
- As noted above, the total number of car distribution outlets has decreased significantly in most markets. As a result, the territorial coverage of the distribution network has been reduced. However, this does not necessarily imply less competition.
 - The number of franchises has fallen far less than the number of outlets.

- The decrease in the number of outlets is mainly due to the elimination of sub-dealers, which did not compete with each other to any significant degree.
- One may expect that, in certain areas, the presence of a smaller number of dealers results in greater market power for the remaining ones.
- But, this is more likely to occur in areas of lower population density where the previous density of the distribution network was too high and the distribution network was unprofitable.
- In areas with higher population density, such as large urban centres, it is possible that competition actually increases among the new larger and more powerful dealer groups.
- In addition, large dealerships and dealer groups are more likely to be multi-brand operations which would imply that not only intra-brand competition but also inter-brand competition may be enhanced.
- The study also intended to examine whether intermediaries became an additional source of competition over the period 1997-2004, particularly through cross-border trade, as BER 1400/2002 opened up the market to intermediaries wishing to engage in cross-border sales of new vehicles by not exempting contractual arrangements between vehicle manufacturers and dealers restricting intermediaries from purchasing more than 10% of a dealer's total sales volume.
- Unfortunately, it is quite difficult to obtain robust data on the volumes of car sales through intermediaries. Only a few car manufacturers replied for most countries and these responses do not point to an increasing trend in transactions through intermediaries.

Innovation in new car distribution

- As noted above, the second objective of BER 1400/2002 with regards to new car sales is to encourage innovative forms of distribution.
- The trend towards larger dealerships clearly facilitates multi-branding as well as potentially other forms of innovation in automotive retailing and the BER has been clearly instrumental in ensuring that car manufacturers do not restrict the multi-branding distribution format.
- Apart from multi brand dealerships, other innovative distribution formats include Internet retailing, “car supermarkets”, and specialised retailing.
- Internet car retailing has not yet been taken up by consumers to any significant degree for effecting actual new car purchases. However, it has had an impact on car distribution. It has certainly increased the

amount and depth of information available to prospective buyers and facilitated inter-brand comparisons at a much lower cost to consumers.

BER 1400/2002 and the new car distribution arrangements

- Prior to BER 1400/2002, vehicle manufacturers could appoint their dealers using a combination of both exclusive and selective distribution systems.
- After 2002, all car manufacturers, with the exception of Suzuki, adopted a selective distribution system. This has therefore precluded the attribution of exclusive territories to dealers.
- One implication of this change in contractual arrangements between vehicle manufacturers and new car dealers is the potential for stronger competition among dealers, especially intra-brand competition. In contrast, prior to 2002, intra-brand competition was generally ruled out by the choice of selective plus exclusive distribution.

Impact of observed trends on consumers

- Car manufacturers have embarked on a massive campaign of network rationalisation in the recent years.
- This has inevitably hurt some of the smaller and less profitable dealers who, as a consequence, have lost their franchise. It is difficult to judge at this juncture what this impact this change will have on EU consumers.
- While the geographic coverage of the distribution networks is narrowing, the new larger dealerships and dealer groups are probably more efficient organisations, offering higher levels of service, and may perhaps be able to benefit from significant economies of scale.
- These efficiency gains are likely to be passed on to consumers in cases where competition between vehicle manufacturers is such as to exercise an effective constraint on dealers of competing brands. Inter-brand competition is increased, as reflected by new entries, lower market concentration and significant volatility as regards market shares.
- As already noted, innovative retail formats, such as multi-branding and sales of cars in supermarkets or over the Internet, have met with differing degrees of success.
- While multi-branding by authorised dealerships is clearly on the rise and the corresponding reduction in search costs appears to be to the benefit of consumers, the success and potential benefit of other alternative retail formats shows a more mixed picture.

- The European market for sales of new cars is a highly competitive market. Vehicle manufacturers compete actively for their market shares, and real prices show a slight downward trend. This is clearly to the benefit of consumers and appears to reflect the workings of strong competitive forces.

Part II: Developments in the European market for repair and maintenance of motor vehicles

The research of relevant data from existing databases and market research has proven to be particularly difficult in respect of aftermarkets. It has thus been impossible to retrieve robust data for some of the indicators originally envisaged for the study. As a consequence, our analysis herein relies more closely on qualitative assessments and research of expert opinions.

The new BER and car repair and service

- In the case of automotive service and repair, the new BER addresses a number of restrictions that create entry barriers to gaining the status of an authorised repairer. Namely, repairers' access to the authorised network is to be based on qualitative (as against quantitative) selection criteria (art. 3(1)); and any a priori exclusion of stand-alone repairers is prohibited (art.4(1)(h)).
- With respect to independent repairers, the new BER seeks to create a level playing field vis-à-vis the authorised repairer networks. This objective is rooted in the granting of access to technical information (art.4(2)) and to original parts (art. 4(1) (i) and (j)).

Key trends in car service and repair over the period 1997 – 2002

- Overall, the size of the European market for car service and repair appears stable.
 - Our estimates based on Eurostat data point to relatively large positive market trends in France (with 33% growth over the period 1997-2003), Poland (with 69%) and the UK (with 51%).
 - Conversely, countries such as Germany and Portugal registered overall reductions in market size of 35% and 44%, respectively.
 - In recent years, the trend of negative growth observed earlier in certain markets has become relatively more prevalent. Thus, the outlook on the market could be considered unfavourable.

- This market development is driven more by a reduction in average yearly maintenance and repair expenditure per vehicle on the road than by changes in the number of vehicles on the road.
- A number of factors contributed to the car repair and service market dynamic over the period 1997 - 2004. Some factors tend to dampen the demand for car repair and service (such as the increased reliability of vehicles; increased road safety; and the wider prevalence of traffic control measures) while others tend to stimulate the demand (such as the positive growth on the size of the European car parc; the evolving complexity of repair processes; and the growing adoption of periodical road worthiness testing schemes).
- Service and repair networks have seen a trend reduction in the number of businesses operating in the sector. This reduction has become more pronounced in recent years and has been felt most in Denmark, Italy, Hungary and Portugal.
- Financial indicators for the European service and repair sector as a whole show average profitability below 3%. This average profitability does not show any particular trend over the period 1997-2003.
 - The period 2003-2004 sees a marked reduction in reported profitability by firms in Italy and Portugal. Meanwhile, Estonia, Spain, Hungary, Sweden and the UK show operating margins above the EU-25 average.
 - The limited available data on service and repair businesses' costs do not show a noticeable increase over the study period.
- The structure of the European car service and repair sector is characterised by the presence of several different types of operators and has been impacted by a number of recent developments.

Authorised repairer outlets

- It is important to distinguish between the number of outlets and the number of contracts. Much of the post-2002 change may be put down to the disappearance of sub-dealers, which has been compensated for only partly by appointment of stand-alone authorised repairers.
- The number of authorised repairer outlets has decreased by 18% in the EU-25 over the period 1997 - 2004 and 2/3 of this change took place in the most recent three years.
- The reduction is most pronounced in Italy and Poland, where it exceeded 20% in the last three years. France, the Netherlands and Sweden saw larger decreases earlier.
- The density of authorised outlets per 100,000 inhabitants decreased considerably in the countries where it was highest such as Denmark, Germany, France, Italy, and Sweden and increased

slightly in the 3 Eastern European countries in our sample, reflecting a much smaller initial base.

- The percentage of outlets belonging to the top 13 brands is still large (accounting for 68% of the total number of repairer outlets) but has seen a steady decrease over the period 1997 - 2004.
- The number of manufacturer-owned repairer outlets has increased in recent years but continues to represent a very small percentage of the overall number of authorised repairer outlets, not exceeding 4% of that total in 10 out of 12 countries, the exceptions being Estonia and Poland.
- Stand-alone authorised repairers (i.e. offering car service and repair but not car sales) have rapidly become an important feature of the market upon the entry into force of the new BER. In Germany, Portugal, France, Spain, Sweden and Italy, more than 20% of all authorised repair outlets are stand-alone outlets, and this figure reaches 60% in Italy.

Independent repairers

- We observe a relatively small decrease in the number of independent service and repair businesses over the period 1997-2003. The decrease appears to be accelerating in 2002-2003.
- Spain, France and Italy together experienced a reduction of close to 6,000 independent repair businesses over the period 1997-2003. Germany, Denmark and the Netherlands also saw a significant reduction.
- Close to 6,000 independent repairer businesses were lost in the group of 12 countries of interest in just 2002-2003.
- The distribution of independent repairers across different sub-categories of repairers varies across countries: Fast-fits and autocentres are more widespread in France and in the UK than in Germany and Spain; in Italy they are virtually unknown.

Market shares of the different types of repairers

- Vehicle age is a major driver of consumer choice between authorised and independent repairers. New cars are disproportionately serviced by authorised repairers while older cars owners favour independents.
- While independent businesses vastly outnumber authorised repairers, the ratio of the number of independent repairers to the number of authorised repairers has fallen from 7 to 1 to 5 to 1 in the group of the 12 countries of interest.
- This reduction was the most pronounced in Spain, France, Italy, and Portugal.

- In terms of market shares, the period saw gains by authorised repairers relative to independents in practically all countries. Growth in the authorised repairers' turnover exceeded the growth of the repair and service as a whole by 5 percentage points or more in Denmark, Germany, Spain, the Netherlands, Poland and Portugal over the period 1997-2003.
- The attractiveness of the "authorised repairer" status is underscored by LE's survey finding that 17% of independent businesses surveyed sought to enter into a contractual agreement with a vehicle manufacturer.
- A number of new developments/innovation in automotive service and repair formats are observable in the sector.
 - The perceived competitive importance of offering multi-brand repair services to customers has led some VMs to establish franchises of repairers separate from their original brand franchises.
 - Independent repairer groups have also increasingly resorted to the franchise format to enter the market with large chains of repairers.

Main trends and the objectives of the BER

- The market has witnessed a drive by former stand-alone independent repairers to become part of the new large repairer groups. Concurrently, consolidation across these groups is taking place. This suggests a trend towards the emergence of a small number of large repairer groups at the expense of the traditional-format independent repairers.
- It is reasonable to expect that this trend helps the independent segment of the market in competing with the authorised repairers segment while, at the same time, it puts added pressure on the traditional independent repairers who must choose either to adapt rapidly to rapidly evolving market conditions or cease to operate as has been the case for several thousands of European repairer businesses in the recent years.
- Repairer groups are better equipped to compete with authorised repairers than the former dominant business model of the traditional independent repairer. The most important conditions for effective competition are access to technical information and specialist tools, access to competitive parts distribution systems and brand name recognition.
- While the new repairer groups appear to succeed well in the last two of these three dimensions, according to many, access to technical information and the cost of specialist diagnosis tools are still a major concern.

- Cars' technical features have become more complex and computerised over the past decade and independent repairers argue that car-makers have made it hard for them to get hold of the diagnostic tools – by pricing them too high and/or limiting their availability – thus reducing access to the information required to identify the origin of a break-down and fix it in a timely manner.
- The new BER's provisions aiming at ensuring that independent repairers have sufficient access to technical information to perform their service and repairs do not yet appear to have been wholly successful.
- Indeed, a 2004 study by IKA¹, a German independent research group, on the provision of access to technical information by vehicle manufacturers, concluded that carmakers are failing to give independent repair shops the technical information they need to compete with authorised repairers.
- The issue of access to technical information is particularly relevant for cars that are at least three years old and thus no longer covered by the manufacturers' warranty. Smaller repairers that work on multiple brands are hardest-hit since it is very expensive for them to invest in each car brand's scan tool and information systems. Instead, these repairers tend to rely on a few general tools and sites that can be used for multiple brands.
- A major problem for repairers is the price of the technical information. Due to inadequately designed information systems and/or insufficient cost models, independent operators are not able to purchase technical repair information at a price at which repair activities can be undertaken under competitive conditions.
- As a result of these difficulties and the cost for accessing the necessary information and tools, the independent sector cannot directly compete in equal footing with the authorised sector. Some independent repairers have in response become specialised repair shops, catering for just some types of repair jobs and thus needing to invest in only one sub-set of tools. Another response has been to form alliances and groups of repairers with a joint organisation for accessing and making available technical information for all members.
- Both trends are presently quite noticeable in the independent sector, illustrating the significant impact that constraints on access to technical information have had in shaping the competitive landscape in the automotive service and repair sector.

¹ IKA report "Do motor vehicle suppliers give independent operators effective access to all technical information as required under the EC competition rules applicable to the motor vehicle sector? (COMP/F-2/2003/26 S/2.371920 Final Report)"

- At the same time, parts manufacturers often have a certain part of the required knowledge and can share it with their own newly established franchised networks of repairers. Electronic repair manuals, parts catalogues and order-facilities (often as integrated systems), provided online and constantly updated, form part of the franchise package in many independent networks.
- Similarly, the garage equipment specialists are also increasingly making available to the independent sector the diagnosis tools and software required to communicate with even the most recent car models. To a certain degree, these types of activities are encouraged by the new BER and are likely to contribute to creating a more level playing field in the automotive repair and service market over the medium term.
- As a result of these recent developments, and contrary to the overall negative market trend affecting the independent repairer sector, repairer groups experienced significant growth in recent years. In part, this growth is a direct result of the influx of highly qualified personnel (and sites) from formerly authorised repairers leaving the vehicle manufacturers' networks. The crucial factor benefiting the independent groups, however, is the direct involvement of major parts distributors, parts suppliers, and even car manufacturers.
- An analysis of data on repair price differentials between the authorised and independent sectors suggest that independent repairers still have to offer prices substantially below those prevalent in the authorised networks in order to compete. Thus, the benefits which repairer groups are expected to bring to the independent repairer market segment are not yet fully realised or insufficiently widespread. Lower prices may reflect the fact that many independent repairers are still unable to offer a one-stop-shop for the full range of repair services, since, inter alia, they don't have access to the necessary technical information including that embedded in brand-specific electronic diagnosis and repair tools.
- This conclusion is further supported by the fact that, in terms of quality ratings, the independent sector fares quite well, often receiving higher ratings than authorised repairers. This implies that the implicit "price discount" mentioned in the paragraph above is in fact even higher than the difference in observed actual prices.

Impact of observed trends on consumers

- Prices for service and repair are increasing in real terms while care maintenance and repair expenditures are falling in real terms.
 - One factor that may be contributing to such price developments is the increasing complexity of repair jobs, and the correspondingly higher costs of repairs.
-

- Another possible explanation, or at least contributing factor, may be a sub-optimal level of competition in the market. Markets where competition is distorted and/or market players can exert market power, can be characterised by decreasing sales and rising price levels, as in the case of the European service and repair market.
- It is however difficult to quantify the degree of sub-optimal competition in the absence of detailed information on the evolution of repairer costs. That being said, an analysis of financial indicators of the various segments of the car repair and service sector failed to find evidence of higher profit for the larger repairers and repairer groups. Overall, the profit ratios of the different sub-sectors are broadly similar to those observed in other segments of the automotive market and are low. These facts, therefore, support the explanation that rising car maintenance and repair prices are driven by rising costs rather than the explanation based on worsening competition conditions.
- An increase in the market share of authorised repairers, observed over the last few years, also contributes to an increase in the average maintenance and repair price since these repairers are, on average, consistently more expensive than the independent repairers.

Part III: Developments in the European market for automotive spare parts

The research of relevant data from existing databases and market research has proven to be particularly difficult in respect of aftermarkets. This has resulted in the impossibility to retrieve robust data for some of the indicators originally envisaged for the study. As a consequence, our analysis herein relies more closely on qualitative assessments and research of expert opinions.

The new BER

- The new BER again addresses a number of restrictions that create entry barriers to become an authorised parts distributor. As in the case of access to the authorised repair network, access to the authorised parts distribution network is to be based henceforth on purely qualitative selection criteria (art. 3(1)). In addition a “safe haven” for joint purchasing of parts has been created (art. 2(2)(a)).
- The new BER also aims to prevent potential foreclosure of parts manufacturers. Thus, the new BER does not exempt contracts containing restrictions on the arrangements between vehicle manufacturers and authorised repairers preventing the latter from buying parts from competing parts producers (Art. 4(1)(k)).

- In addition, no contracts containing restrictions on original equipment suppliers (OESs) to sell to authorised and independent distributors and repairers are exempted (art. 4(1)(j)).

Key trends in the automotive parts sector over the period 1997 - 2004

- Market structure trends
 - The number of authorised parts distributors increased 7.3% for the 12 countries in the period 2002-2004.
 - Vehicle manufacturer owned parts distributors constitute generally less than 1% of all parts distributors, but their turnover grew at an average of 50% in the period 2002-2004, much faster than the 10% registered by other parts businesses.
- Profitability trends
 - Average operating margins in the industry fluctuate around 3% with a slight upward trend in recent years.
 - Profit margins in spare parts manufacturing are high compared to car manufacturing and distribution.
- Innovation in distribution channels
 - Stand-alone authorised parts distributors' numbers have increased, as has the interest of vehicle manufacturers in the parts distribution business.
 - Some parts manufacturers have entered the market offering soft-franchise agreements for "partner garages".
 - The Internet is increasingly used to manage the distribution of spare parts.
 - Changes in logistics and stocking requirements have been met by new arrangements between (vehicle and parts) manufacturers and specialist logistics providers.
- Impact of trends on market players
 - The market position of vehicle manufacturers in the market for spare parts remains stable.
 - Authorised repairers continue to source about 90% of all parts from the vehicle manufacturers' distribution network.
 - Some market intelligence suggest that price increases in "captive parts" were much larger than in parts that are open to competition.
 - The distribution of parts within the authorised networks remains tied to the provision of repair services, with very few exceptions.

- The access by independent garages to parts, training and technical information seems to be less open than what the BER aims for.

Main trends and the objectives of the BER

Reducing barriers to entry for independents

- At the present time, it is not entirely clear whether the barriers faced by independents in gaining authorised spare parts distributor status have fallen consistently.
- In some countries, such as Germany and the UK, there are clear indications that at least some car manufacturers have appointed or are willing to appoint independents as authorised parts distributors.
- According to the survey of independent parts distributors, most of the vehicle manufacturers have refused to provide the list of standards required to become an authorised distributor. Vehicle manufacturers are said to justify their refusal on the basis that such standards do not yet exist or that no separate (from repairer contracts) spare parts distribution contracts are offered.
- In conclusion, with respect to this particular objective, the new BER does not appear so far to have resulted in a substantial change.

Preventing foreclosure of original equipment suppliers

- The second main objective of the BER for the spare parts market is the prevention of foreclosure of parts manufacturers' selling outside the vehicle manufacturers' distribution channels.
- Although concerns about potential foreclosure are mentioned by several sources within the automotive sector, we have failed to find supporting evidence.
- Original equipment suppliers currently sell about 60% of their spare parts turnover into the independent market. This situation, according to our survey of 20 of the largest parts manufacturers in Europe, has remained more or less stable over the last 8 years, with a slight trend towards an increase in supply to vehicle manufacturers and a decrease in supply to independents. Thus, it would appear that the concern about foreclosure is somewhat overemphasised.
- As we discuss below, the situation of independent distributors trying to sell to authorised dealers and repairers appears rather more problematic. This is a market segment in which some form of foreclosure may occur.

The role of the BER in the automotive parts market

- The new BER gives authorised dealers and repairers the choice to purchase competitive spare parts from the independent parts distributors. Manufacturers can nonetheless require their franchisees to buy a minimum of 30%² of parts from the manufacturer and its authorised partners.
- Our survey of parts distributors highlighted potential anti-competitive practices and structural reasons (see below) why this greater freedom does not appear to have been taken up to any significant degree by authorised dealers and repairers

Possible anti-competitive practices

- Original equipment suppliers may fear that supplying directly authorised dealers and retailers, thus by-passing the VM channels, could be viewed as a “hostile” act by vehicle manufacturers. OE suppliers obviously depend on vehicle manufacturers for an important part of their businesses and do not want to endanger their relationship with them. This, in turn, impacts on the scope for dealers/repairers to use of alternative sourcing channels.
- The bonus systems used by vehicle manufacturers still incorporate significant incentives not to buy parts outside the vehicle manufacturer supply channel. Examples of such rewards systems include special bonuses on captive parts prices if a certain percentage of “competed” parts is bought from the vehicle manufacturer, high rebates on sales of competed parts to the independent repairers, year-end bonus for high purchases of vehicle manufacturers’ competed parts, the offer to supply technical information under the condition that the necessary parts are bought, etc.
- Aggressive price offers by vehicle manufacturers for their replacement parts can be observed. It seems that, in general in recent years, the prices of competitive replacement parts have been maintained or reduced while the prices of captive parts were raised.

² According to BER 1400/2002, article 5, 1(b), the Exemption shall not apply to any contracts containing any direct or indirect non-compete obligations. Article 1, 1(b) states: ‘non-compete obligation’ means any direct or indirect obligation causing the buyer not to manufacture, purchase, sell or resell goods or services which compete with the contract goods or services, or any direct or indirect obligation on the buyer to purchase from the supplier or from another undertaking designated by the supplier more than 30 % of the buyer’s total purchases of the contract goods, corresponding goods or services and their substitutes on the relevant market, calculated on the basis of the value of its purchases in the preceding calendar year.

Structural reasons

- Dealers show a certain resistance to changing business practices. To some extent, there may also be a certain lack of awareness of the new parts purchase opportunities.
- Another concern of independent parts distributors relates to the parts ordering systems of some manufacturers. These systems are often designed in ways that are said to preclude the ordering of parts from independent suppliers. In order to access the independent channel, the authorised dealers and repairers must install a separate ordering system which is costly and cumbersome.
- The legal restriction whereby authorised partners may be forced to purchase a minimum of 30% of all spare parts from the vehicle manufacturer and its network may have important consequences for the 70% for which sourcing partners can be freely chosen.

The sourcing of spare parts is a complex business and repairers aim to minimise the possibility of disruption. Having to source parts from different distribution systems is always a challenge and inevitably involves duplication of costs. This in itself puts the vehicle manufacturer at a clear advantage for supplying the unrestricted 70%.

- The new BER explicitly protects the freedom of original equipment suppliers to supply their components to independent parts distributors or directly to independent or authorised repairers.
- Although it is occasionally claimed that car manufacturers sometimes attempt to curtail this freedom, the results of the survey of the 20 largest original equipment and parts manufacturers in Europe does not confirm this. Sales to the independent market account for about 60% of their spare parts turnover.
- One potentially far-reaching novelty of BER 1400/2002 for the independent aftermarket is the new definition of “original spare parts”. Such parts are no longer defined with respect to the vehicle manufacturer’s distribution system, but their label instead is based on considerations regarding the quality and technical specifications of the component.
- This allows original equipment suppliers to market parts under their own brand name as “original spare parts” and makes it easier for repairers to convince motorists that non-vehicle manufacturer parts can be of equivalent quality.
- Nevertheless, the impact of the availability of this “original spare parts” definition on the automotive parts market has been limited so far by the factors listed earlier in this section.

Impact of observed trends on consumers

- Consumer attitudes will to some extent determine the final impact of the new BER in the car parts sector.
- Yet, the individual customer does not traditionally make the decisions about the type of parts to be used, except when she/he is directly buying the parts for DIY maintenance and repairs.
- The individual consumer typically only selects the service provider. Key factors influencing that choice are: security and skills; habit; and proximity. In industry studies, price is typically ranked lower.
- However, large customers, such as insurance and leasing companies, show a growing interest in getting involved in the parts business and, in particular, may have a say in what parts are used e.g. in crash repairs.
- Final consumers do not appear to have benefited from on-going changes in the form of lower parts prices.
- However, even if some parts are more expensive, the overall level of consumer expenditure on parts has not increased over the last seven years due to the fact that breakdowns and part replacements occur less frequently. Vehicle reliability has increased and this is certainly a plus for consumers.

1 Introduction and background to the study

1.1 Objectives of the study

The purpose of this project is to study the market developments in automotive retailing and after-sales sectors following the entry into force of the Regulation No. 1400/2002 (henceforth referred to as BER 1400/2002 or simply “the Regulation” or “BER”), the new EC regulation covering distribution and after sales services of new motor vehicles in the EU, which replaced the previous regulatory regime (Regulation 1475/95). In particular, the study seeks to assess whether, or the extent to which, the spirit of the new regulatory environment is being reflected in industry practices.

This new BER, which entered into force on 1 October 2002, sets out rules under which restrictive agreements caught by the prohibition laid down in Article 81(1) meet the conditions for an exemption pursuant to Article 81(3). Such rules are deemed to be observed throughout the European Union by suppliers of motor vehicles and spare parts in their contractual and day-to-day business relationships with their downstream partners or buyers.

The Regulation brings in new provisions, which aim to introduce more competition in distribution and after-sales services. The Commission is committed to monitoring its operation on a regular basis and this study concentrates on the competition implications of the new rules for the following three aspects of the new motor vehicles industry:

- distribution of new cars,
- automotive service and repair, and
- the market for automotive spare parts.

We build the analysis of the impact of the new BER on the automotive sector around a set of the most relevant legislative changes. We discuss these at the beginning of each of the three main parts of the study.

We note, however, that BER 1400/2002 establishes market thresholds below which the conditions of Article 81(3) are assumed to be generally fulfilled. This threshold is 30% of a supplier’s relevant market for the sale of spare parts or repair and maintenance services, 40% for agreements containing quantitative selective distribution systems for the sales of new motor vehicles (there is no threshold in the case of qualitative selective distribution systems), and 30% with regards to vertical agreements containing exclusive supply obligations. Thus, the new BER introduces a test based on market share thresholds designed to create a “safe haven” for firms that have less than a certain level of market power.

In addition, BER 1400/2002 contains “hardcore restrictions” (Article 4) which, if present in any agreement, exclude the entire agreement from the benefit of the block exemption. Further general and specific conditions are listed in Articles 3 and 5. These, however, only exclude from the benefit of the block exemption the sections which contain any of the listed restrictions.

In the following paragraphs we provide an overview of main elements of the new BER. It should be noted that the BER does not “ban” or “prevent” or otherwise prescribe rules for vertical contracting between car manufacturers and their authorised partners. The BER simply grants or does not grant the benefit of the block exemption to certain categories of contracts and clauses within contracts. It should similarly be noted that, in general, the fact that certain agreements are not covered by the block exemption, does not mean that they are or would be automatically prohibited under Article 81.

The purpose of the present study is not, however, limited to an assessment of the impact of the new BER. The Commission has expressed an interest in an overall assessment of the evolution of the state of competition in these 3 areas of the automotive sector.

Wherever possible, it is nonetheless of interest to relate at least some of the observed developments to the new BER. However, with regards to a comprehensive assessment of the impact of the new BER on those three market segments, one must accept that, in a number of areas, it is very early days to infer likely outcomes from all markets and market players adjusting to the new realities. This difficulty is compounded by the rapid pace of technological change affecting the three market segments.

The main body of this report is thus divided into three parts, each one dedicated to the study of each of the three markets. As per the terms of reference we focus our analysis on 12 countries of the EU 25 (Denmark, Germany, Spain, Estonia, France, Hungary, Italy, the Netherlands, Poland, Portugal, Sweden and the UK) and attempt to cover the period 1997-2004 in order to assess changes since the introduction of the new BER.

Below, we list a summary of the issues that the present study addresses, in reference to possible sector developments and possible areas of impact of the new BER.

The market for new cars distribution

In Part I we examine the evolution of the competitive environment in the car-retailing sector by taking into account relevant factors including market size, market structure, density and structure of the authorised networks, concentration of dealers, the development of innovative forms of automotive retailing and the evolution of intra and inter-brand competition.

Before the introduction of BER 1400/2002, a trend of decreasing numbers of outlets and growing concentration in car distribution was already identifiable. We examine in more detail this trend towards large dealers and dealer groups. In addition, innovative retailing formats have appeared in the

market with varying degrees of success. Finally, we also investigate the evolution of profits and prices, and the extent to which these reflect the competitive situation of the sector.

In light of these factors, we then assess whether the ongoing trends in new car distribution are likely to yield benefits for consumers and conclude on the extent to which the BER has had an impact on the evolution of competition in this market segment.

Car service and repair

In Part II of this report, with regards to car service and repair, we analyse the evolution of market size, the networks of authorised repairers and the relative competitive position of authorised and independent repairers. Of greatest importance with respect to this interaction are the problems of access to technical information by independents and the new developments in terms of repairer chains and involvement of vehicle manufacturers and parts manufacturers in repair and service.

The extent of innovation in organisational formats has been remarkable and has clearly accelerated after the introduction of the new BER. The traditional split of the service/repair market between authorised and independent repairers has always given the authorised network a very large share of the new and nearly new vehicles while the independents prevailed in the older cars segment. Both sides have perceived the potential for change prompted by the new BER and reacted to defend and if possible extend their market shares. Innovations and developments in the type of repair outlets and chains that occurred with varying degrees of success under the new market conditions are part of the resulting effects.

From the point of view of final consumers, we also review the evolution of total expenditure and prices paid for car service and repair. Consumers' attitudes are particularly relevant in this market, especially the extent to which they are aware of the range of choices available, particularly for car service and repair during the manufacturer's warranty period. These factors clearly affect the extent to which consumers are benefiting or will potentially benefit from the various trends examined.

Spare parts markets

The study of the spare parts market puts particular emphasis on the evolution of the traditional link between distribution of spare parts and the provision of repair services.

We also analyse the evolution of vehicle manufacturers' and component manufacturers' competitive positions in the authorised and independent after sales markets. A significant issue is the influence of vehicle manufacturers over their authorised repairers on the choice of spare parts and spare parts suppliers.

Important elements of this analysis are: the evolution of the distribution channels for replacement parts; the impact of the new spare parts definitions introduced by the BER; the evolution of the competitive position of authorised and independent repairers; and the behaviour of customers, particularly in terms of loyalty to the car manufacturer brand in the context of the spare parts market.

Finally, we discuss the potential for consumer benefit arising from the observed trends in the spare parts markets.

1.2 Structure of this report

The remainder of this document is structured as follows:

- Part I: Market developments in European car distribution
- Part II: Market developments in European car repair and service
- Part III: Market developments in the European market for spare parts
- Summary and conclusions
- A series of annexes containing supporting evidence and auxiliary tables related to the discussion in the main body of the text.

Part I
Market developments in European car distribution

2 Distribution of motor vehicles

2.1 Introduction

In this chapter we discuss developments in the retail market for passenger cars in a sample of 12 EU Member States over the period 1997-2004. The 12 Member States selected for the study are: Denmark, Germany, Estonia, Spain, France, Italy, Hungary, the Netherlands, Poland, Portugal, Sweden, and the United Kingdom. Between them, these countries account for 89%³ of new car registrations in the EU.

We start with a broad overview of the European car market and proceed to analyse the size and structure of each of the national markets under consideration, as well as developments over time. Specifically:

- In Section 2.1.1, we review the elements of BER 1400/2002 concerning the distribution of motor vehicles.
- In Section 2.2, we explore the determinants new car registrations and car parc (i.e. stock of cars) and analyse the state of competition between manufacturers, using measures of concentration, as well as other indicators.
- In Section 2.3, we review vehicle manufacturers' distribution networks operating in the countries under consideration, and examine the effect the BER has had on them. We also study innovation in the distribution market, especially with respect to new distribution channels, and BER-induced changes in the business model of traditional dealers.
- In Section 2.4 we review financial information on vehicle manufacturers and dealers.
- In Section 2.5, we draw conclusions about competitive environment for car distribution in the EU based on the preceding analysis.
- Section 1.1 focuses on the effects on consumers and includes data on trends in car prices and expenditure trends.
- We conclude the chapter with an assessment of the impact of Regulation 1400/2002 in Section 2.7.

³ Source UNRAE, 2004.

Surveys of car manufacturers and car dealers conducted by London Economics form the backbone of our analysis in this chapter.⁴ In addition, data from other sources have been used where necessary. Foremost among those sources are national statistics agencies and other official bodies collecting information on the car market, industry associations, trade publications, and commercial data providers.

2.1.1 Elements of BER 1400/2002 concerning the distribution of motor vehicles

The Block Exemption Regulations for the automotive sector (BER 1400/2002, formerly BER 1475/95) were adopted by the European Commission in recognition of the fact that, while certain categories of vertical agreements can improve economic efficiency in the automotive market (in particular by reducing transaction and distribution costs and optimising sales and investment), special rules are required in order to guarantee pro-competitive outcomes.

With respect to new car sales, BER 1400/2002 limits the types of agreements exempt under the regulation with a view to increasing competition between dealers of the same brand, which is closely connected to the overarching objective of single market integration, as well as competition between brands.

In terms of intra-brand competition, the BER aims to encourage trade between territories within the common market, including parallel trade. Many of the restrictions that have been used to limit cross-border trade are now considered as hardcore restrictions. The most far-reaching change has been the end to the exemption of combined exclusive and selective distribution agreements. This was deemed an essential step towards ending the segmentation of the market for new cars, which in the past contributed to the large differences new car prices observed across the EU.

Another important objective of the BER was to allow authorised car dealers greater flexibility in their commercial strategies. In this respect the BER contains three major innovations. They are:

- Breaking of the sales-service link
- Abolishing locations clauses⁵
- Promoting multi-branding⁶

⁴ The survey of manufacturers was sent in the autumn of 2005 under the investigative authority of the European Commission in accordance with Article 18 of Regulation 1/2003. The manufacturers covered were: DaimlerChrysler, Fiat, Ford, General Motors, Honda, Hyundai, Mitsubishi, Nissan, PSA, Renault, Suzuki, Toyota and Volkswagen. The LE survey of car dealers comprised 152 dealers in the 12 selected Member States.

⁵ Art. 5(2)(b).

⁶ Art. 5(1).

The breaking of the sales-service link represents a major change, as it used to be a precondition for exemption under the previous BER 1475/95. By stipulating that agreements that do not allow dealers to subcontract servicing and repair to authorised repairers are no longer exempt, the new BER enables dealerships to concentrate exclusively on the selling of new cars.⁷

Another common features of dealer contracts prior to the new BER were restrictions on the members of the authorised networks regarding the opening of new outlets. As of 1 October 2005, such “location clauses”, are now longer exempt:⁸ Article 5(2)(b) of the Regulation states that the exemption does not apply to

“any direct or indirect obligation on any distributor of passenger cars (...) within a selective distribution system, which limits its ability to establish additional sales or delivery outlets at other locations within the common market where selective distribution is applied.”

Finally, the BER does not exempt restrictions on dealerships regarding their ability to sell vehicles from different manufacturers (“multi-branding”). The relevant paragraphs in the BER are Article 5(1)(a), which states that direct or indirect non-compete obligations are not exempt, and Article 5(1)(c), which stipulates that

“any direct or indirect obligation causing the members of a distribution system not to sell motor vehicles (...) of particular competing suppliers (...).”

These changes apart, the BER attempts to preserve the beneficial aspects of the close relationship between car manufacturers and their dealers, in particular with respect to measures intended to safeguard quality and protect brand image. Manufacturers retain the right to select dealers and impose quality standards.

2.2 Evolution of market size and structure

In this section, we undertake a high-level analysis of the structure of the European automotive market. We use country- and brand-level data on new car registrations, car parc, and manufacturers’ market shares to describe and analyse the dynamics of the automotive market across the 12 Member States that are the subject of our investigation.

⁷ Art. 4(1)(g). Sub-repairers belong to the authorised repair network of the brand in question and who therefore fulfil the manufacturer’s quality standards

⁸ Art. 5(2)(b) and Art. 12(2).

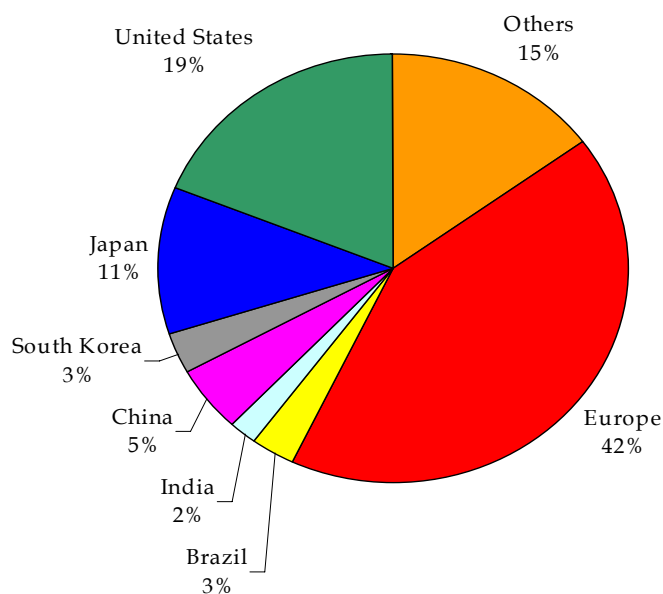
2.2.1 New registrations

New registrations are a proxy of demand for new vehicles, which we use to highlight the dynamics of the market. In this sub-section, we analyse trends in new registration figures and their volatility across the 12 countries and different brands. We also relate developments in new registrations to the evolution of household income (adjusted for inflation).

Overview

Europe continues to be the world's largest market for passenger cars. The EU + EFTA zone accounted for 42% of new registrations globally in 2004 (Figure 1). In volume terms, following a slump in the early 1990s, more than 14 million new cars were registered across the EU in every year since 1998.

Figure 1: Worldwide new registrations of passenger cars (2004).



Note: Europe = EU (except CY, MT) + EFTA.

Source: ACEA.

Volatility of new registrations at national level

The demand for new cars, as expressed by new registrations, is volatile over the period 1997-2004.

As Figure 2 shows, changes in the number of new registrations from year to year can be large. Variations in excess of 10% in either direction occur at least once in every country, with the exception of Italy and the United Kingdom.⁹

The volatility in the number of new registration also differs markedly across countries.

- The volatility of new registrations is very high in Denmark, Estonia, Hungary and Poland (these countries show a coefficient of variation¹⁰ > 20%);
- In contrast, volatility is relatively low in Germany, Italy and the UK. These countries show a coefficient of variation < 8%;
- The EU aggregate shows little volatility in comparison.

⁹ The data displayed in Figure 2 are by UNRAE (the Italian national association of the representatives of foreign car manufacturers), which produces comprehensive collection of automotive industry data based on national statistics and industry associations in Europe.

¹⁰ The coefficient of variation is the standard deviation of the sample divided by the sample mean and expressed as a percentage.

Figure 2: New registration of passenger cars per Member State (1997-2004).

	1997	1998	1999	2000	2001	2002	2003	2004	Coefficient of Variation
Denmark	152,084	162,508	143,727	112,690	96,187	111,598	96,076	120,484	20.4%
Germany	3,528,179	3,735,987	3,802,176	3,378,343	3,341,718	3,252,898	3,236,938	3,266,826	6.5%
Estonia	11,108	10,445	8,906	10,876	13,038	14,853	15,602	16,513	21.7%
Spain	1,016,383	1,192,530	1,406,246	1,381,256	1,425,573	1,331,877	1,382,109	1,517,518	11.8%
France	1,713,030	1,943,553	2,148,423	2,133,884	2,254,732	2,145,071	2,009,246	2,013,712	8.2%
Italy	2,402,358	2,374,706	2,331,917	2,425,537	2,417,171	2,288,765	2,247,443	2,263,687	3.0%
Hungary	79,773	103,541	129,292	133,234	148,125	171,215	208,426	203,726	30.9%
Netherlands	478,290	543,056	611,487	597,625	530,231	510,702	488,841	483,885	9.6%
Poland	477,937	515,256	625,837	473,110	323,126	303,957	353,635	318,111	27.5%
Portugal	213,636	248,398	272,883	257,836	255,215	226,092	189,792	197,521	13.1%
Sweden	225,263	253,430	295,249	290,529	246,581	254,589	261,206	264,246	8.7%
UK	2,170,725	2,247,403	2,197,615	2,221,647	2,458,769	2,563,631	2,579,050	2,567,269	7.7%
EU25*	13,879,799	14,858,401	15,682,546	15,217,581	15,180,210	14,780,905	14,703,703	14,937,517	3.5%

Notes: * data missing for CY, MT.

Sources: UNRAE.

Trend growth in new registrations at national level

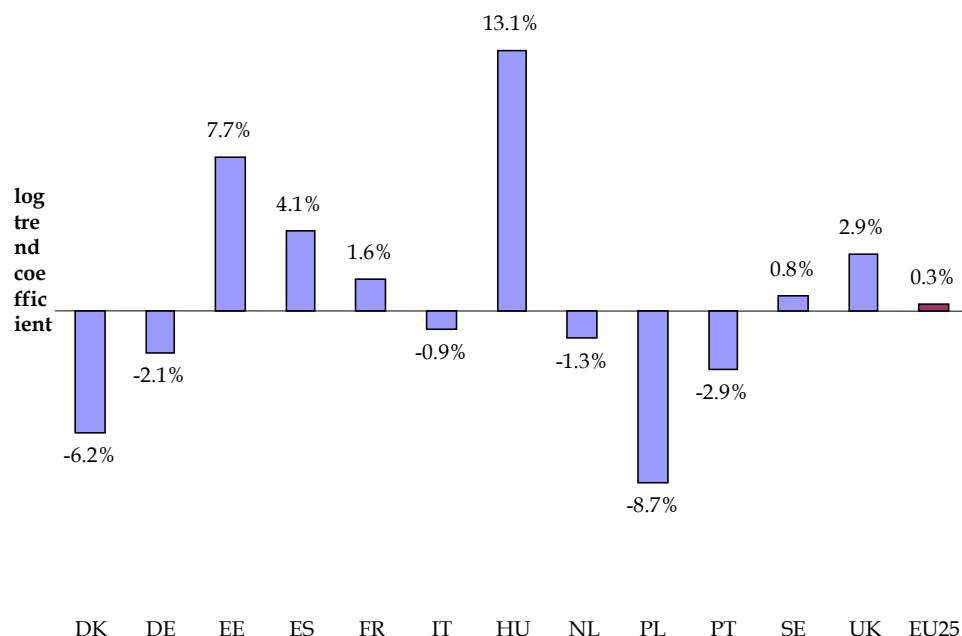
New registrations in 2004 are lower than in 1997 in five of the 12 countries, namely Denmark, Germany, Italy, Poland and Portugal.

However, with the exception of Hungary, new registrations in the 12 countries show no strong trends over the period 1997-2004.

Figure 3 shows the estimated trend coefficient of a simple regression relating the annual level of new registrations to a trend variable. The estimated coefficient measures the annual trend growth rate of new registrations over 1997-2004.

- Strong and significant upward trends exist only in Hungary and Estonia;
- Weak positive trends can be seen Spain, France, Sweden and the United Kingdom;
- In contrast, Denmark, Germany, Italy, the Netherlands and Portugal show weak negative trends. A pronounced overall declining trend can be observed in Denmark and Poland.

Figure 3: Estimated annual trend growth rate in new registrations 1997-2004.



Note: the figure shows for each country the estimated coefficient of a regression of new registrations (in log) on a trend variable.

Source: LE calculations.

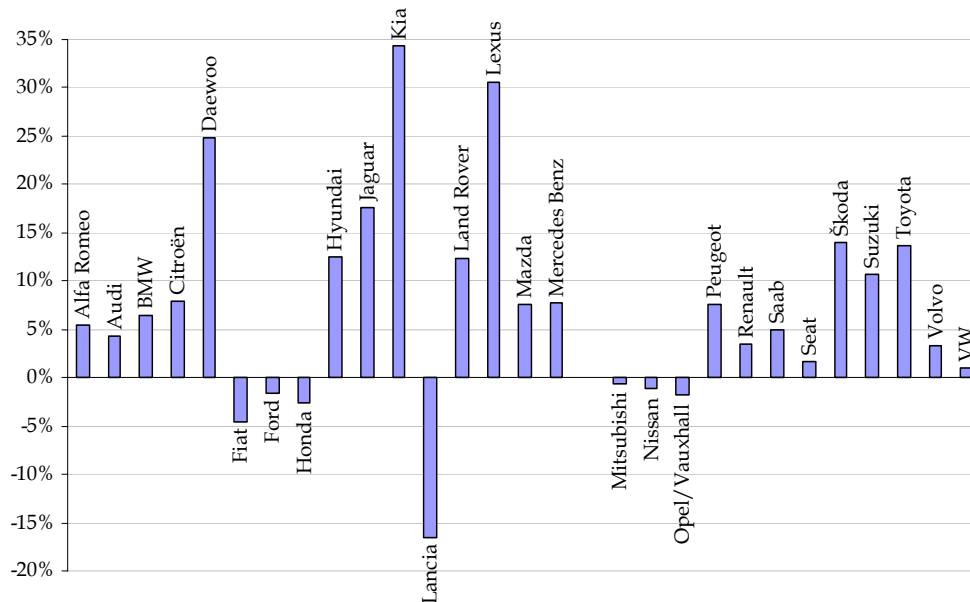
Trend growth in new registrations at the brand level in nine Member States¹¹

Clearer trends are observable in new registration numbers at brand level in the 12 Member States.

Large volume manufacturers, such as Ford, Fiat, Opel/Vauxhall and VW, lost out in comparison with more upmarket and specialist brands, particularly Lexus, Jaguar and Land Rover, but also compared with relatively new entrants into the volume market, such as Kia and Daewoo (Figure 4).

¹¹ DK, DE, FR, IT, HU, NL, PT, SE, UK. Brand-level data on new registration not available for EE, ES, PL.

Figure 4: Average annual percentage change in new registrations, selected brands (1997-2004).



Sources: De Danske Bilimportører, KBA, CCFA, UNRAE, KSH, RCD/RAI, ACAP, Bilsweden, ANFAC, DTL, SMMT.

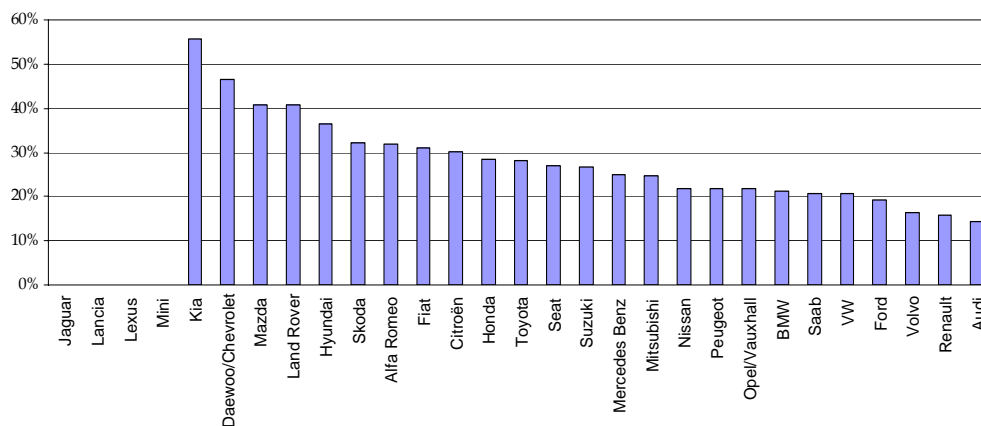
Volatility in new registrations at the brand level

The volatility of new registrations at brand level is also high, and tends to be higher for smaller or newer brands (e.g. Kia, Daewoo, Land Rover).

Registrations of large established brands, such as VW and Ford and Renault exhibited less volatility over the period 1997-2004.

The coefficients of variation of new registrations by brand across the nine European markets for which we have complete data are shown in Figure 5.

Figure 5: Coefficient of variation in new registrations per brand in 9 EU Member States, 1997-2004.



Notes: The countries are DK, DE, FR, IT, HU, NL, PT, SE, UK. No data available for the whole period for Jaguar, Lancia, Lexus and Mini.

Source: LE calculations.

Trends in new car registrations and household income

The purchase of a new car is a major investment for households. It is therefore surprising that in many countries there is no strong correlation between growth in household income and new car registrations (Figure 6).

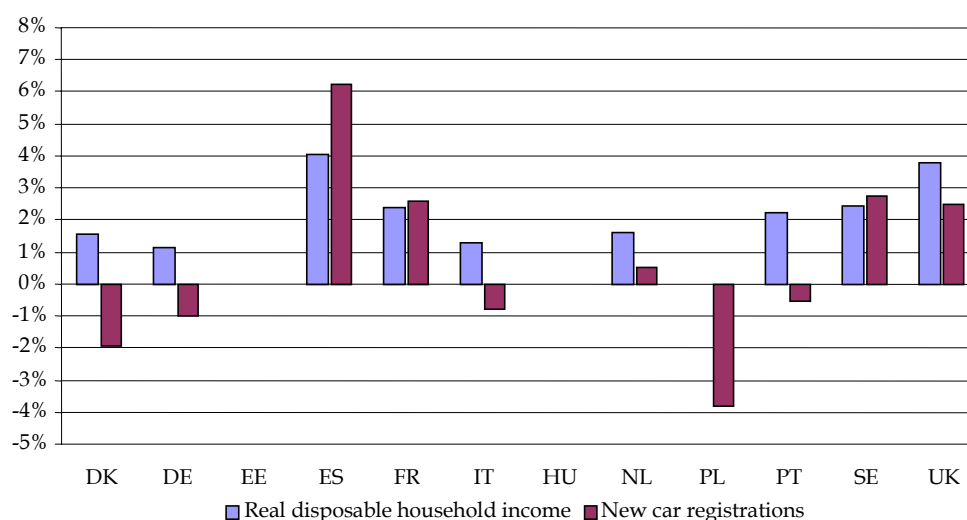
A positive correlation between growth in household income and growth in new car registrations exists in five of the countries in our sample, Spain, France, the Netherlands, Sweden, and the UK. However, Denmark, Germany, Italy and Portugal show a negative correlation.

Overall, high-growth countries, such as Spain, Sweden and the UK also record strong growth in new registrations, while countries in which household income grew slowly, such as Denmark, Germany and Italy, saw a decline in new registrations between 1997 and 2004.

Another point to note is that in Spain, France and Sweden new car registration grew faster than disposable household income. This suggests that financing options other than outright purchase contributed to the increase in new registrations in those countries. The growing importance of leasing and other financing options¹² can be expected to further weaken the link between current household income and new car registrations.

¹² See subsection "Car ownership versus long-term leasing and fleet purchases" in section 2.5.1 below.

Figure 6: Average annual rate of change in new car registrations compared with real disposable household income (1997-2004).



Note: The average of the change in new car registration was computed using the years 1997-2003 only. No data on disposable household income available for EE and HU.

Source: LE calculations based on Eurostat and UNRAE.

Numerous studies have attempted to measure the strength of the relationship between income and demand for cars. The results of a review of the literature on this topic by the University of London's Transport Studies Unit for the UK Department for Transport are shown in Figure 7. Among the many studies reviewed by the authors, they give greater credence to the results from dynamic estimation methods. While the average demand elasticity¹³ in the various types of static estimation studies ranges from 0.8 to 1.9, the dynamic estimation studies show a mean short-term elasticity of 0.3 and a long-term elasticity of 0.8. This implies that, internationally, an increase in real income of 10% leads to an increase in the number of vehicles of 3% within about a year, and of 8% in the longer term.

¹³ In this context, the demand elasticity is an estimate of the percentage change in the number of cars on the road for a 1 percentage point increase in real income (i.e. income adjusted for inflation).

Figure 7: Income elasticity of car demand.

Dependent variable: Vehicle stock	Static estimation				Dynamic estimation	
	Total	Cross section data	Panel data	Time series data	Short term	Long term
Mean elasticity	1.09	1.89	0.78	1.22	0.32	0.81
Standard deviation	0.56	-	0.40	-	0.21	0.43
Range	0.49,1.89	1.89,1.89	0.49,1.23	1.22,1.22	0.08-0.94	0.28-1.62
Number of estimates	5	1	3	1	15	15

Note: The data reported in this table are based on a review of 69 elasticity studies. The countries covered are: USA (63), UK (29) Canada (12) France (7) Germany (7) Belgium (6), OECD 12 countries (6), plus: Denmark, Italy, Netherlands, Austria, Sweden, Norway, Spain, Australia, Japan, specific US states, and various multi-country groupings (1-4 each). The time period covered by the different studies is 1929 to 1998, with an average period per study of 19 years (SD 10 years). The mid point of the data collected is 1974.

Source: University of London Centre for Transport Studies.

2.2.2 Total car parc in each of the 12 Member States

By car parc we mean the stock of all cars registered for use on the road by the relevant authorities in Member States. At every point in time, it consists of the newly registered and reregistered cars of all preceding periods minus attrition/deregistration.

The car parc and its composition plays an important role as a driver not only of new car sales, but crucially also of the demand for service and repair. Figure 8 shows the car parc for each Member State in our sample for the period 1997-2004, while the cumulative growth over this period is shown in Figure 9.

In this sub-section, we describe the size of the car parc in the 12 Member states, and analyse its dynamics and effects on the growth in new registrations.

In all countries, the car parc is larger in 2004 than in 1997. The car parc grows steadily in seven out of the 12 countries (Denmark, Germany, the Netherlands, Poland, Portugal, Sweden, UK). A further two, France and Italy, show a slight drop in the last year of the period. In contrast, in Estonia and Hungary the car parc figures show relatively large drops in individual years.

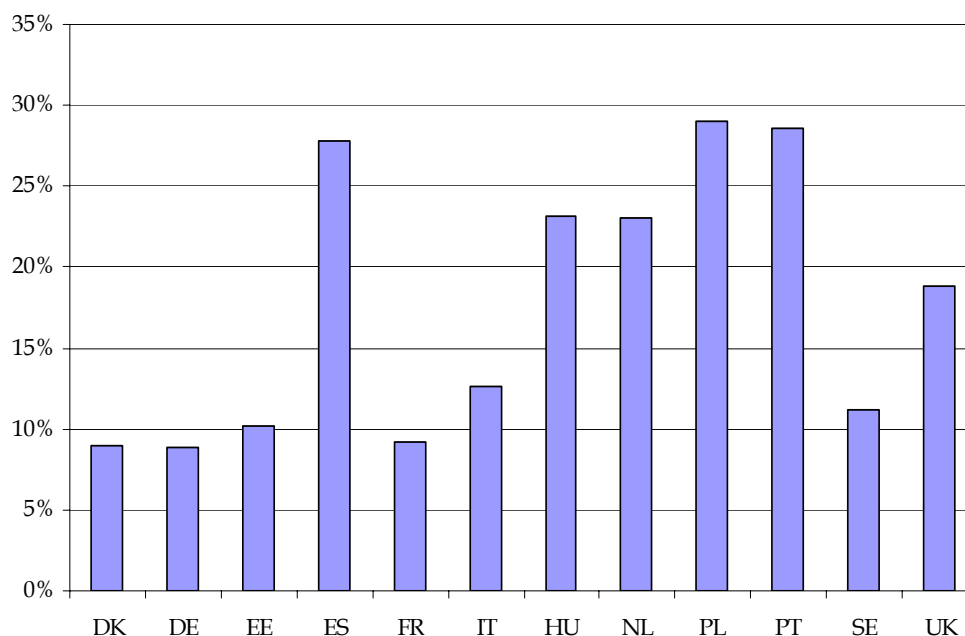
The largest increase in the car parc is observed in Poland at 29%, followed by Portugal (28.6%), Spain (27.7%) and Hungary and the Netherlands (both 23.1%). The growth of the Polish car parc, despite the decrease in new registrations in Poland observed in Figure 2 above, suggests a sluggish

replacement of old vehicles. In fact, between 2003 and 2003 alone, the number of cars in Poland younger than five years dropped by 16.9%, while the number of older cars increased by 7.3%. The smallest increase in the car parc at 8.8% occurs in Germany (Figure 9).

Figure 8: Size of car parc - 1997-2004.

	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	1,738,854	1,783,098	1,817,147	1,843,254	1,854,060	1,872,631	1,888,290	1,894,649
Germany	41,371,992	41,673,787	42,323,672	42,423,254	43,772,260	44,383,323	44,657,303	45,022,926
Estonia	427,700	451,000	458,700	463,900	407,300	400,700	434,000	471,200
Spain	15,297,400	16,050,057	16,847,397	17,449,235	18,150,880	18,732,632	18,688,320	19,541,918
France	28,017,221	28,201,321	28,627,360	29,272,165	29,807,799	30,330,382	30,590,743	30,582,717
Italy	30,154,914	31,056,004	32,038,291	32,583,815	33,239,029	33,706,153	34,310,446	33,973,147
Hungary	2,297,115	2,218,010	2,255,526	2,364,706	2,482,827	2,629,526	2,777,219	2,828,433
Netherlands	5,810,000	5,931,000	6,120,000	6,343,195	6,539,212	6,710,602	6,854,743	7,151,000
Poland	-	-	9,282,816	9,991,260	10,503,052	-	11,243,827	11,975,191
Portugal	3,021,000	3,239,000	3,469,000	3,593,000	3,746,000	3,885,000	3,966,000	4,100,000
Sweden	3,702,778	3,792,056	3,889,902	3,999,268	4,018,533	4,044,928	4,077,973	4,116,308
UK	21,681,000	22,114,732	22,784,568	23,196,112	23,898,844	24,543,000	24,984,664	25,753,802
EU25	184,529,019	190,617,722	195,042,023	200,869,298	205,883,578	209,749,831	212,023,622	-

Sources: DK: Danmarks Statistik; DE: KBA; EE: Eesti Statistika; ES: ANFAC, INE; FR: SG/DAEI/SESP (FCA); HU: KSH; IT: UNRAE, SE: SIKA, SCB; NL: RAI Vereniging, CBS; PT: ACAP; PL: GUS; UK: DfT; EU15: ANFAC, Eurostat.

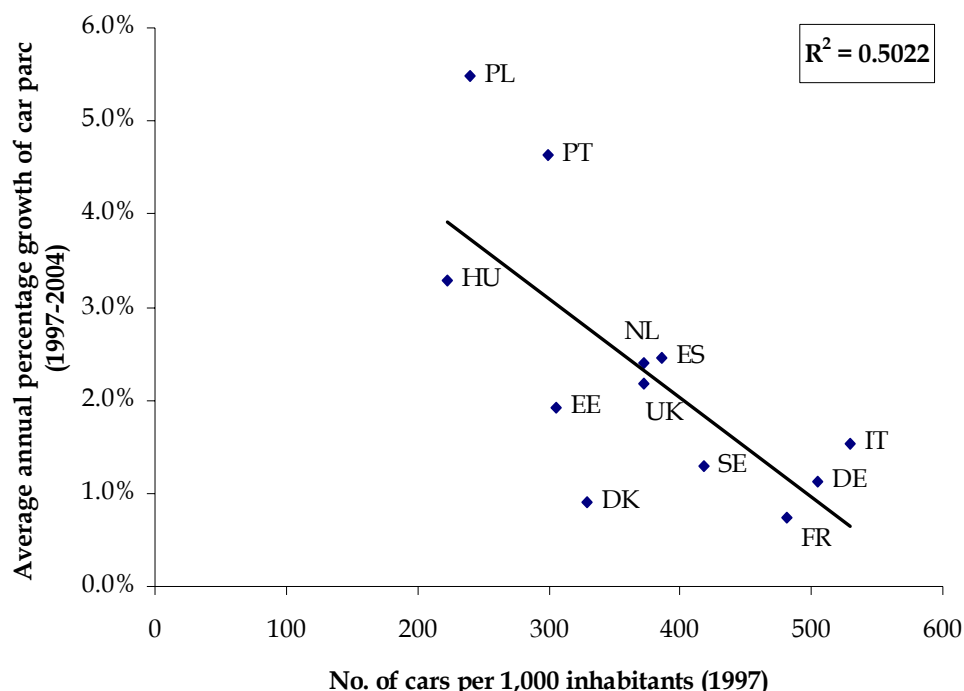
Figure 9: Growth of car parc, 1997-2004.

Sources: DK: Danmarks Statistik; DE: KBA; EE: Eesti Statistika; ES: ANFAC, INE; FR: SG/DAEI/SESP (FCA); HU: KSH; IT: UNRAE; SE: SIKa, SCB; NL: RAI Vereniging, CBS; PT: ACAP; PL: GUS; UK: DfT; EU15: ANFAC, ACEA (2003).

An important driver of the growth in the car parc over the period 1997-2004 is the initial level of car ownership in the market. This is clearly shown in Figure 10, which relates market saturation, proxied by the number of cars per 1,000 inhabitants, to the increase in the car parc in the 12 countries.

The countries with the highest level of car ownership at the start of the period in 1997 tend to show the lowest growth rates subsequently. The car parc in countries with low initial levels of car ownership, on the other hand, grows rapidly, at a rate of over 5% on average in Poland and Portugal. High growth rates could be expected to persist in countries where car ownership is still low if one assumes that the current EU-wide average car parc density of 492 cars per 1,000 inhabitants is going to be eventually achieved in all Member States.¹⁴

¹⁴ 2003 figure. See ACEA (2005).

Figure 10: Car parc: initial density and growth 1997-2004.

Notes: PL: the initial value for car parc per 1,000 inhabitants is from 1998.

Sources: LE calculations based on data from Eurostat, NSAs, and industry associations.

Further insights are provided by data on car parc by brand, covering Denmark, Germany, Italy, Hungary, the Netherlands, Sweden and the UK. The information on car parc per brand is summarised in Figure 11, while the underlying data is provided in the annex to this chapter, containing the confidential data.

Of all brands, the most rapid growth is shown by Mini. The brand's high growth rate reflects the fact that, uniquely in our sample, it was reintroduced during our sample period in 2001, thus beginning with a stock of nought. Significant growth rates were also recorded by other newcomers, such as Lexus, Kia, Daewoo/Chevrolet, Hyundai and Škoda.¹⁵ Other brands that saw large increases in the number of their cars were specialist brands like Jaguar and Land Rover.

¹⁵ Skoda, despite its long tradition as one of the world's oldest car makers is classified here as a newcomer in the sense that its mass-market presence in western European market is relatively recent, following its acquisition by Volkswagen AG in 1991.

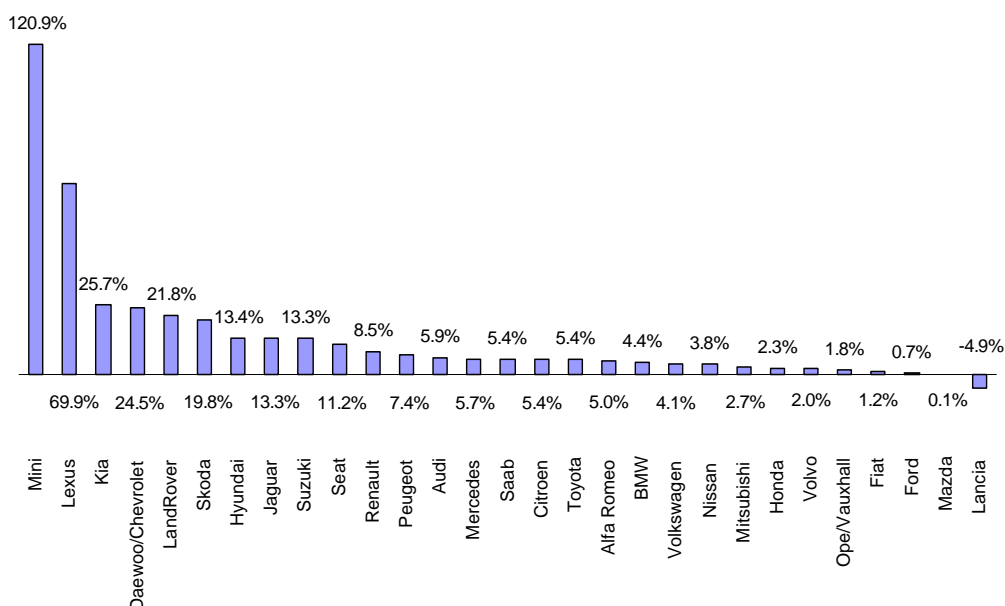
In our sample of brands, only Lancia experienced an absolute decrease in the number of its cars on the roads of the seven Member States covered by our data. In part this is due to the brand's exit from several European markets, including Denmark, Sweden and the United Kingdom.

Other manufacturers saw the number of their cars decrease in some of the markets we investigated. A striking example is Ford, whose cars are becoming rarer in a number of western European markets (Denmark, Germany, Sweden, UK). The positive overall average annual growth rate in Ford numbers (Figure 11) was achieved despite a reduction of the stock of Ford cars of over 10% in Denmark and the UK.

Developments in car parc composition reveal a dynamic market in which brands' fortunes can change drastically over time, and where new brands are able to establish themselves at the expense of incumbent competitors. The evidence for vigorous competition between car manufacturers includes the continuing market entry of new manufacturers (e.g. Landwind), as well as the recent exit of a major incumbent, Rover.¹⁶

¹⁶ However, in terms of absolute numbers, the differences between large established brands and newer competitors are still stark. For instance, over 13 million Ford cars were in use across the seven countries in 2004, compared with 738,000 Hyundai cars.

Figure 11: Average annual percentage change in car parc, per brand (1997-2004).



Note: the figures are based on data from DK, DE, IT, HU, NL, SE and UK only.

Source: *De Danske Bilimportører, KBA, A.C.I., KSH, RAI Vereniging, Bilsweden, SMMT.*

2.2.3 Age of car parc

The age of a country's car parc affects competition in the distribution and service and repair sectors in significant ways. A high proportion of older cars is likely to benefit the service and repair market, especially the independent sector of the market. As rapid technical progress in car design requires ever more specialised skills and equipment, traditional independent garages are often at a disadvantage compared with franchised competitors who enjoy the full support of the manufacturers' technical expertise.

In addition, manufacturers' warranties usually end after two or three years.¹⁷ The proportion of cars either side of the 3-year watershed thus has important implications for the independent repair market, as the vast majority of automobile customers use authorised repairers during the warranty period.

For the new car distribution sector, on the other hand, an older car parc represents higher growth potential in the market for new cars. Changes in the car parc's age profile can thus affect the two sectors differently: whereas a

¹⁷ OFT (2003).

movement towards a younger car parc benefits dealers of new cars, the independent repair sector might eventually be negatively affected, as older cars, which provide their main customer base, become rarer.

According to ACEA, the average age of passenger cars in the EU is 8 years. About 70% of cars on the road in Europe have been in use for less than 10 years.¹⁸

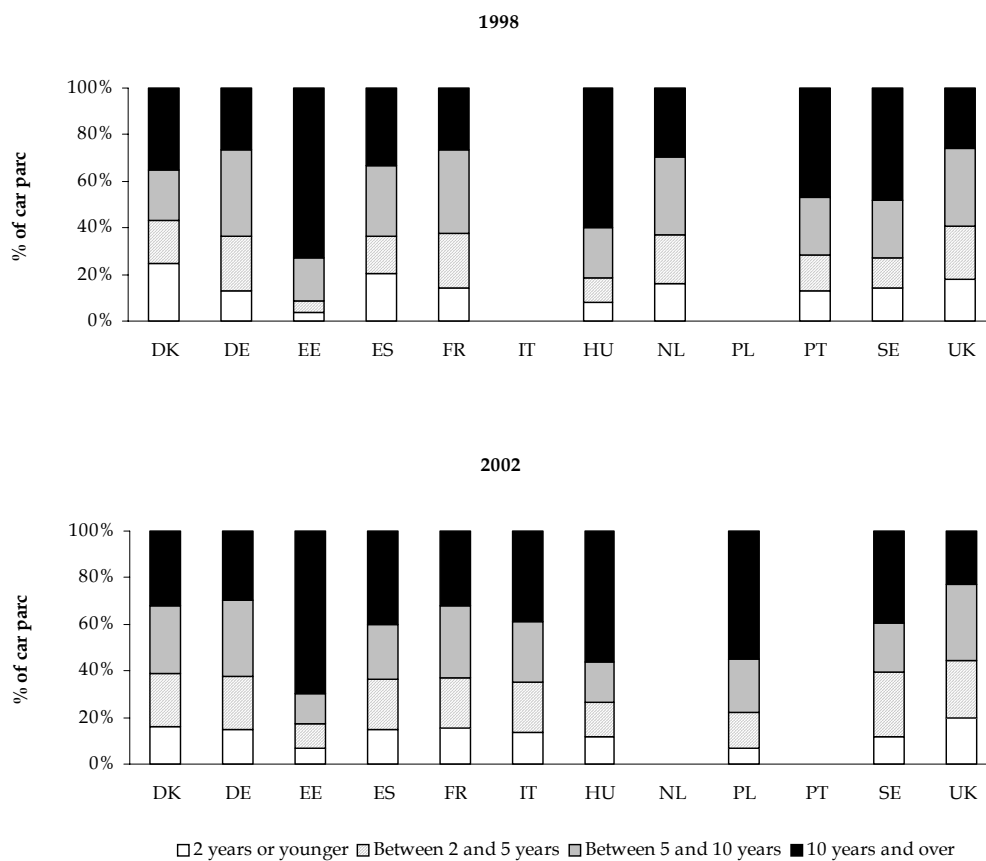
As Figure 12 shows, the proportion of cars aged ten years and more is significantly higher in the eastern EU Member States (Estonia, Hungary) than in the rest of the EU.¹⁹ The difference is narrowing, however, as new cars are registered at a higher rate in these countries than in most other EU countries (see Figure 2).

In Western Europe, on the other hand, the proportion of new cars aged two years or less is decreasing in countries such as Denmark, Spain and Sweden, as cars were being replaced less frequently in recent years.

¹⁸ ACEA (2005).

¹⁹ Due to the incomplete data in earlier and later years, only the years 1998 and 2002 are shown in Figure 12. The complete data (1997-2003) is provided in the annex containing the confidential data (Annex I Part 1).

Figure 12: Age profile of car parc, 1998 and 2002.

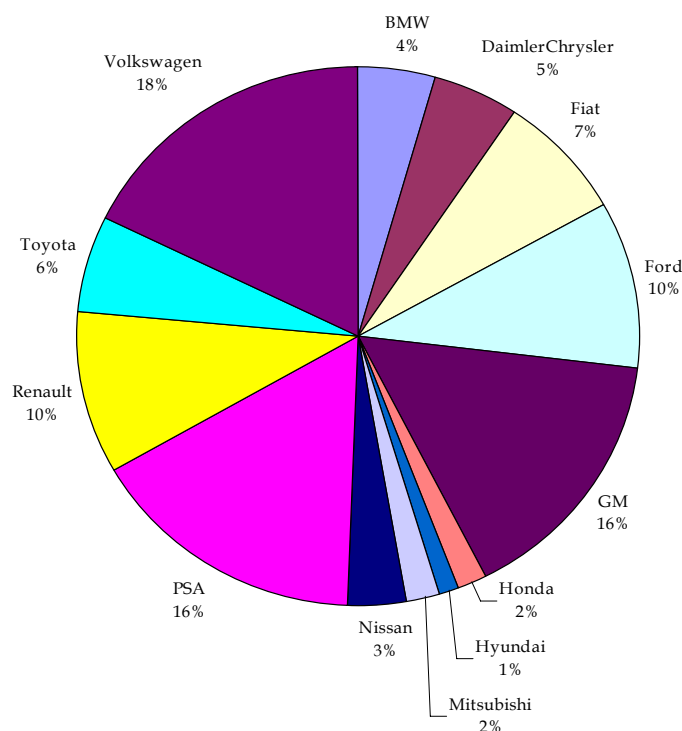


Source: Eurostat.

2.2.4 Vehicle manufacturers' market shares and market concentration

This sub-section analyses the dynamics of the automotive market in the 12 countries under investigation using indicators on manufacturers' market shares. On the basis of data on manufacturers' total sales over the period 1997-2004 we describe the distribution of market shares across the 12 countries and examine the degree of market concentration and its underlying volatility.

Figure 13: Car manufacturers' average market share, 1997-2004.



Note: market shares have been calculated using data on the value of sales across the 12 selected countries.

Source: LE Manufacturer Survey.

Underlying data can be found in table format in the annex to this chapter containing the confidential information (Volume II Section 1).

Virtually all global carmakers compete on the European market. The overall market shares of car manufacturers in the 12 Member States are displayed in Figure 13.

A relatively small number of large, mostly multi-brand manufacturers (VW, GM, PSA, Ford, Renault) account for the majority of sales in the 12 selected countries.²⁰

However, the intense inter-brand competition means that fewer and fewer individual brands have market shares over 10%. In 2000, VW, Opel/Vauxhall and Renault were in that situation; in 2004 this was only the case for Renault. This illustrates the intensity of competition and the difficulty of any one brand to retain a large market share.

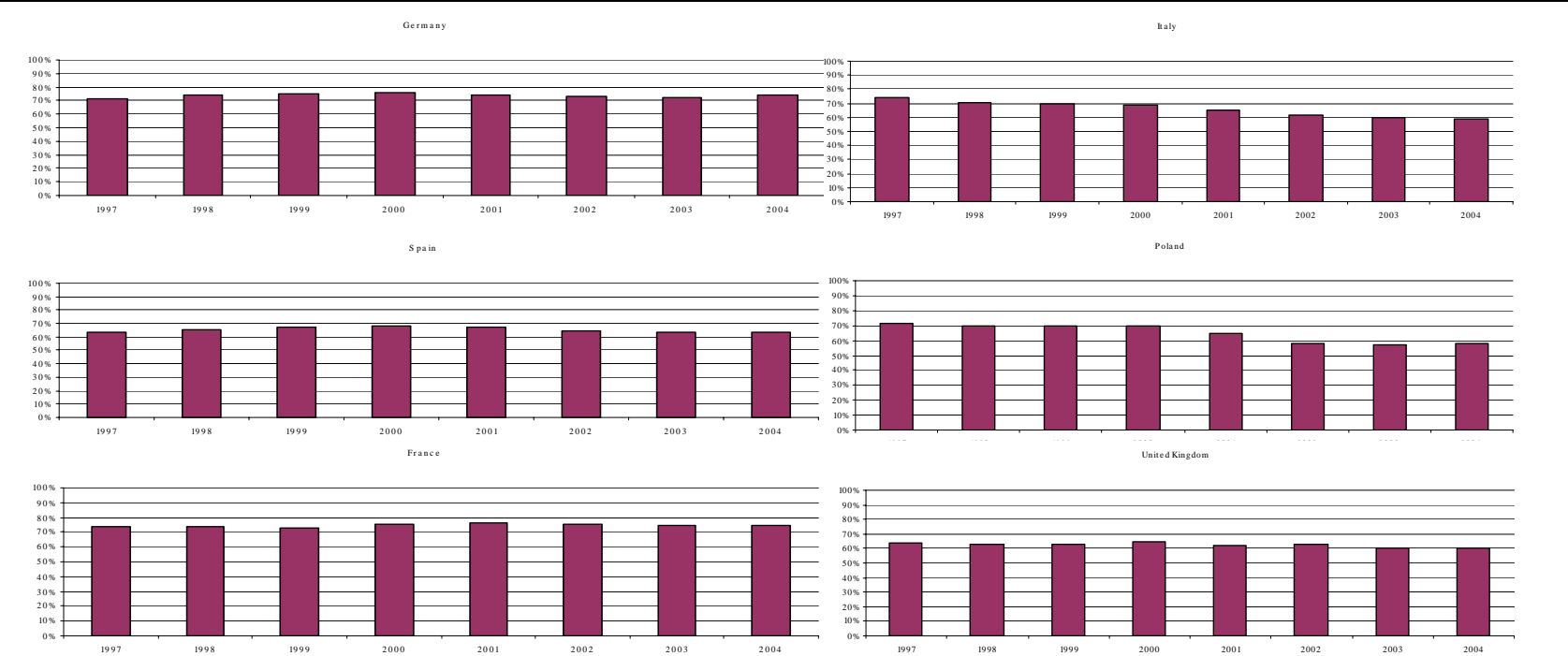
Another point to note that is obscured by high-level market share figures is that sales data show evidence of inter-brand competition not only between brands produced by different manufacturers, but also between brands within the same group. A good example is Ford, where the specialist brands Jaguar and Land Rover prosper, while the volume brand Ford, fares less well in a number of markets.

Over the period 1997-2004 concentration, as measured by the four-firm concentration ratio, increased significantly in Portugal (by 20.8%) and slightly in a further four countries (Denmark, Germany, Estonia and France). In the remaining countries, concentration decreased substantially, in the case of Italy, Hungary, Poland, and Sweden by more than 10% over the period. Across the 12 countries, the unweighted average concentration ratio fell by 2.8%.

An illustration of the trends in concentration is given in Figure 14, which shows the four-firm concentration ratios for the EU's six largest markets in our sample for each year over the period 1997-2004. Detailed information on the market shares can be found in the annex to this chapter containing the confidential data.

²⁰ Concentration in the 12 markets, as measured by the sum of the market shares of the four largest firms, is relatively high. Throughout the period 1997-2004 the C4 is greater than 60% in all countries, with the exception of Italy, Poland and Portugal, which show slightly lower ratios in individual years.

Figure 14: C4 concentration ratios in 6 large member states (1997-2004).



Note: For earlier years, some of the market shares on which the C4 is based are derived from imputed sales data. Trends in the data for the first few years are thus less reliable than towards the end of the period.
Source: LE Manufacturer Survey. The data used to compute the C4 ratios are provided in the confidential annex to this chapter (Volume II Section 1).

An alternative measure of market concentration is the Herfindahl-Hirshman Index, the sum of the squares of the market shares of all firms in the market. A market with a HHI in the region of 1,000 is generally considered moderately concentrated, whereas a HHI greater than 1,800 is seen as indicative of high concentration.

As Figure 15 shows, the HHI was between these benchmarks in six out of the 12 countries in 1997 and in nine countries in 2004. The HHI decreased between 1997 and 2004 in seven countries, as well as on average across the 12 countries.

More importantly, the number of countries in which the HHI was above the critical threshold of 1,800 has decreased from six in 1997 to three in 2004, and in two cases the HHI is only marginally higher than 1,800.

Figure 15: Market concentration: Herfindahl-Hirshman Index, 1997 and 2004.



Notes: the Herfindahl-Hirshman Index (HHI) is the sum of the squared market shares of all the firms in a market; a HHI of 1,800 (shown by the blue dotted line) is seen as indicative of high market concentration in the market.

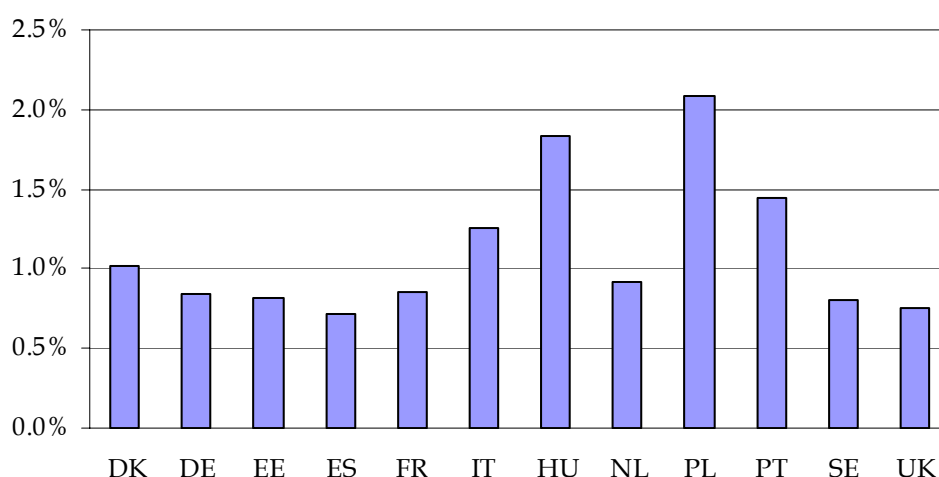
Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

The overall market shares of car manufacturers across the 12 European markets studied in this report have remained relatively stable as shown by Figure 16. The latter shows the average of the standard deviation of the manufacturers' market shares for each of the 12 countries.

- In seven countries, namely Germany, Estonia, Estonia, France, the Netherlands, Sweden, and the UK, the average of the standard deviation in market shares is smaller than 1%, suggesting that overall there is relatively little changes in market shares in these countries.
- In contrast, in Hungary and Poland, the average is almost twice as high suggesting a more unsettled market situation in those countries.

Figure 16: Volatility of car manufacturers' market shares: average standard deviation of market shares 1997-2004.

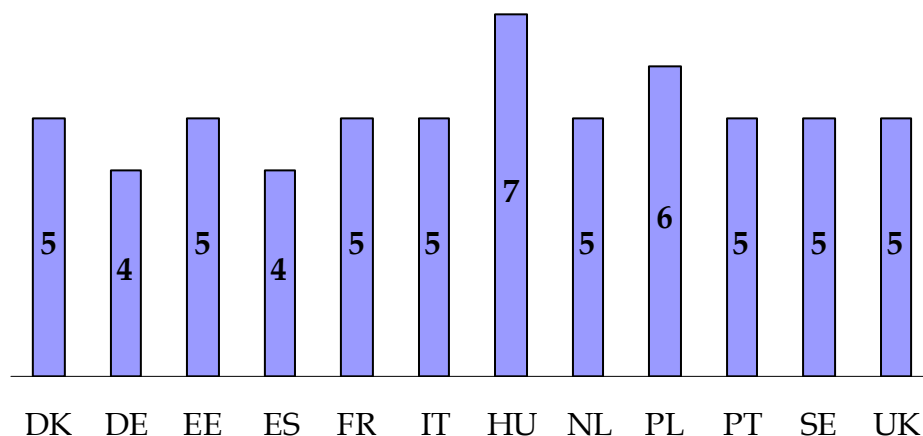


Source: LE calculations.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Further evidence of a greater dynamism in the markets in Hungary and Poland is given by a look at the composition of the top four firms in terms of market shares over time. Figure 17 shows that the top four firms remain the same in two markets (Germany, Spain). In the majority of countries one competitor managed to overtake one of its top four rivals during the period 1997-2004. More changes in position occurred only in Poland and Hungary, where six and seven firms respectively held one of the top four positions over the same period.

Figure 17: No. of manufacturers ranked in the top four in terms of sales during 1997-2004.



Source: LE calculations

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Typically, the increase in sales necessary for a new firm to enter the top four are not very large. This is illustrated in Figure 18, which shows the average distance between the market share of the manufacturer ranked fourth in terms of sales and its closest smaller competitor.

The distance between the smallest firm in the top four and its closest rival, measured as the percentage market share separating the two, is small overall. Unsurprisingly, Spain, the country where competitors' market shares are furthest apart, is also the country where no manufacturer was able to enter the top four for the first time between 1997 and 2004. (See Figure 17.)

Within the top five firms, competition is also close in most cases. Figure 19 shows the average distance between the five largest competitors in each national market. With the exception of Estonia, where, according to our survey, the largest manufacturer commands a market share of over 50%, the five largest firms' market shares are within 10% of each other. In a majority of countries the average distance between the top five firms is even below 5% (Denmark, Germany, Spain, Hungary, Netherlands, Poland, Portugal, UK).

The indicators discussed above suggest that the European car market is increasingly competitive.

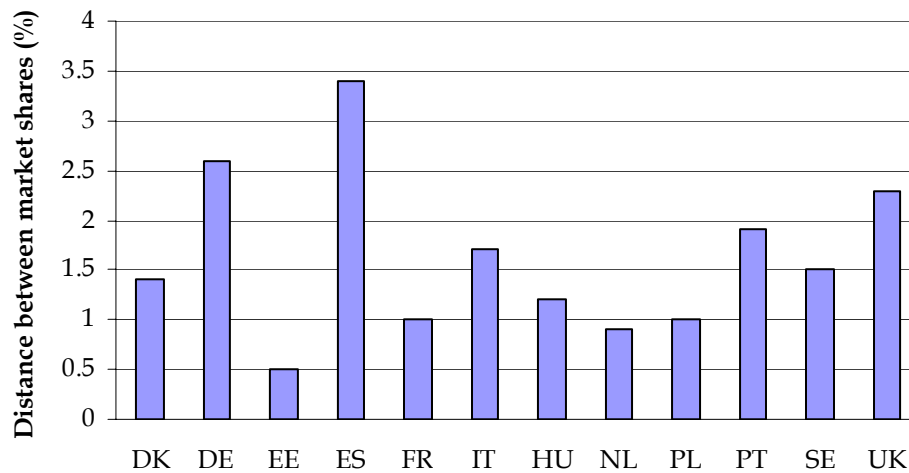
- Overall market concentration is declining (Figure 14, Figure 15).
- Ancillary evidence is given by the changing composition of the four largest firms in the market over the period 1997-2004 (Figure 17), the

closeness between competitors (Figure 18), as well as the continuing occurrence of entry and exit in the European car market.

- The declining trend in car prices in the EU, which is discussed in more detail later in this chapter (see Section 1.1, especially Figure 76), is also consistent with an increase in competition.

Thus, despite high combined market shares for the four largest firms, and moderately high concentration as measured by the HHI, our analysis suggests that car manufacturers in European markets operate in a competitive environment.

Figure 18: Closeness of competitors: average distance between the market shares of 4th and 5th largest manufacturers (1997-2004).

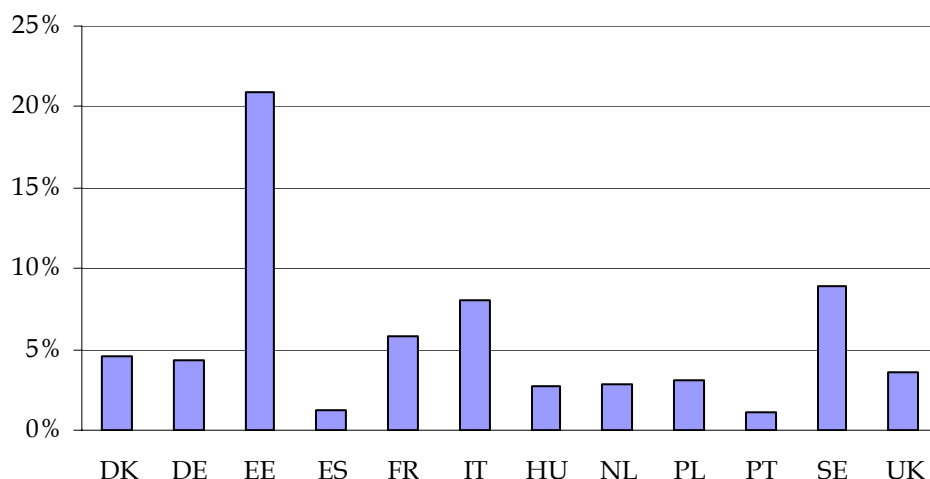


Note: distance is measured as the percentage market share separating the 4th largest firm in terms of sales from the 5th largest.

Source: LE calculations

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Figure 19: Closeness of competitors: average distance between top 5 manufacturers' market shares (1997-2004).



Note: distance is measured as the average percentage market share separating the 5 largest firms in terms of sales.

Source: LE calculations.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

2.2.5 Other changes in the marketplace

Another interesting feature of the EU market for passenger cars is the differentiation according to segments. The waning popularity of some traditional volume brands compared with specialist and premium brands that could already be seen in the new registrations data (see Figure 4 above), is confirmed by the sales data in Figure 20, which shows the number of volume-brand cars sold for every premium-brand car.²¹

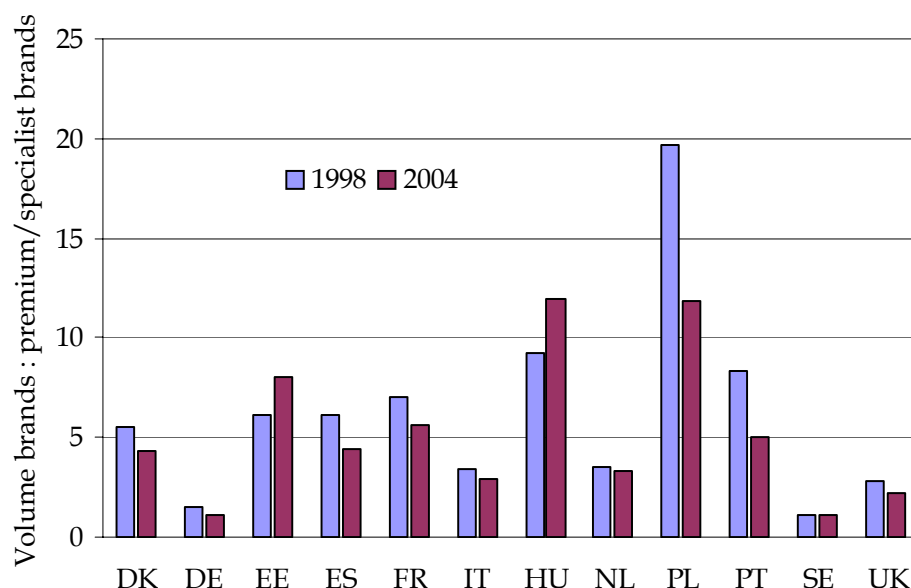
Total sales of premium and specialist brands relative to sales of volume brands increased in most countries in our sample between 1998 and 2004. The share of volume brands increased only in Hungary and Estonia (Figure 20). Volume brands continue to outsell premium and specialist brands by more than ten to one in Hungary and Poland.

In Western Europe, the ratio of sales of volume brands to premium brands has dropped to between one and five or lower in all countries except France. The very high proportion of premium/specialist-brand sales in Germany and Sweden is partly an artefact of our brand classification: brands such as Audi,

²¹ For the classification of brands refer to the note under Figure 20.

Saab and Volvo are classed as premium brands, even though they have long enjoyed high market shares in their home countries, where they are not necessarily considered as specialist or premium cars.

Figure 20: Total sales by value: ratio of volume brands to premium/specialist brands in 1998 and 2004.



Notes: Due to missing data in 1997, we use 1998 at the first year for the comparison; brands are classified as follows: volume brands: Citroën, Daewoo/Chevrolet, Fiat, Ford, Honda, Hyundai, Lancia, Mazda, Mitsubishi, Opel/Vauxhall, Peugeot, Renault, Seat, Škoda, Suzuki, Toyota, VW. Premium/specialist brands: Alfa Romeo, Audi, BMW, Jaguar, Land Rover, Lexus, Mercedes, Mini, Saab, Volvo.

Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

2.2.6 Section summary

The key facts emerging from the review of the trends affecting car manufacturers in the European market are the following:

- Aggregate demand is volatile, reflecting the cyclical nature of durable goods purchases. This volatility is observed in all countries covered by the study with the exception of Italy and the UK. Volatility differs across brands: “older” brands suffer lower volatility than newer, smaller volume brands. Germany, Italy and the UK also have lower levels of volatility in the number of new registrations.

- New registration trends vary across countries and brands. The overall trend is only very slightly positive. Growth was high in Estonia and Hungary, while significant decreases occurred in Denmark and Poland. In terms of brands, the best performing were Daewoo, Kia and Lexus.
- The link between car registrations and household income is tenuous over the period 1997-2004. In the sample covered by the study, the best predictor of the growth in the car parc is the level of the car parc per 1,000 inhabitants at the beginning of the period.
- The changes in car parc per brand highlight the competitive nature of the market. Over the period 1997-2004, newer brands grew significantly at the expense of some of the more established ones.
- The clearest illustration of this high level of competition is given by the evolution of manufacturers' market shares. Although a relatively small number of large, mostly multi-brand, manufacturers account for a majority of sales in the 12 countries, market shares at the top do not only move considerably from year to year, but have also generally decreased (albeit slightly) over the period 1997-2004, reflecting vigorous competition.

Overall, we would conclude that this as a highly competitive market, where the main players have relatively unstable market positions and new entrants have achieved considerable growth. That being said, it is noteworthy that in practically all countries only five car manufacturers have occupied the top four market share positions.

2.3 Evolution of dealer networks per Member State and per brand

This section discusses the characteristics of car manufacturers' distribution systems and the changes they have undergone between 1997 and 2004.

It focuses on:

- The size, structure, and type of dealer networks;
- The financial situation of dealerships;
- New developments in automotive retailing in the form of organisational changes (multi-branding, specialisation) and innovation through new distribution channels (car supermarkets, Internet sales).

2.3.1 Size and structure of the dealer network

The following section discusses the size and structure of manufacturers' dealer networks in the 12 selected countries. We focus first on the overall size of the authorised dealer network and the developments in terms of network organisation. After this, we analyse manufacturers' distribution strategies with the help of indicators on sales and network density. However, before doing so, we provide brief explanations of key terms relating to the car distribution networks.

Notes with respect to terminology

An "authorised dealer" is a car retailer who has a contract with one or more car manufacturers, and who is required to adhere to manufacturer franchise standards. These are also often referred to as franchised dealers.

Until 2002, there was a distinction between "main dealer" and "sub-dealer". The main dealers had contracts with car manufacturers, as above, while the sub-dealers usually held contracts with a main dealer, who supplied them with parts, vehicles and technical support. After the new BER entered into effect, the sub-dealer category changed. In particular, service sub-dealers have mostly either gained an authorised repairer contract or left the network.

The term "independent dealers" refers to dealers who are not owned by either the car manufacturer or the national distributor/importer. This notion is to be distinguished from the concept of "unauthorised distributor", which refers to a reseller that does not belong to the authorised distribution network set up by a vehicle manufacturer.

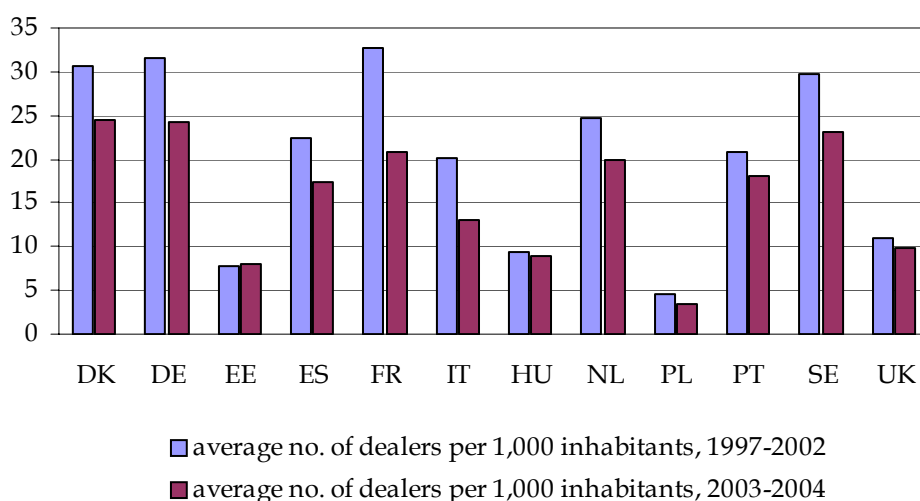
There is a distinction between "number of dealer contracts" and "number of dealer outlets" in that one dealer contract can refer to more than one outlet.

“Intermediary”, in this context, refers to a person or an undertaking which purchases a new motor vehicle on behalf of the consumer without being a member of the distribution network. These are often used for cross border transactions.²²

Overall size of dealer networks in the 12 Member States

There has been a drop in the density of dealer networks in all 12 Member States, except Estonia, where there has been a very small increase. The decline in average network density observed between the periods 1997-2002 and 2003-2004 ranges from 10% in the UK to 36% in France. (Figure 21)

Figure 21: Density of dealer network: average number of dealer outlets per 1,000 inhabitants, 1997-2002 and 2003-2004.



Source: HWB International; Eurostat.

The total number of franchised sales outlets in the 12 Member States remained roughly stable from 1997 to 2000 (Figure 22). Beginning in 2001, however, the number of franchised dealers started to fall significantly and by 2004 was about 30% lower than in 1997. There is, however, considerable variability in the extent and speed of this reduction across the 12 countries.

It is quite likely that the reduction in the number of dealers reflects a clear pattern in manufacturers' strategies. The new BER seems to have been the

²² For the definition of intermediary please see recital 14 of the BER and section 5.2 of the explanatory brochure.

trigger for moves by all major manufacturers towards more condensed distribution networks, with larger dealerships that are subject to rigorous quality requirements.

One rationale for this is the fact that larger dealerships make it easier for the dealer to fulfil the increasingly strict requirements on franchise standards imposed by the manufacturers, and cheaper for the manufacturer to check compliance with standards across its network. In addition, there could be an efficiency benefit due to the realisation of economies of scale, although this assertion is not supported by some of the evidence presented later on (namely, in Figure 54 and Figure 55 on pages 76 and 77).

Investments necessary to meet these requirements have been increasing (see Figure 63 below), which can be attributed to an effort on the part of manufacturers to strengthen their brand images in a market in which non-price arguments become an increasingly important channel of inter-brand competition. In the light of the generally low margins earned by car dealers (see Figure 53, Figure 54, Figure 55, Figure 56 and Figure 59 on page 79), high sales volumes are necessary to meet the required investments and remain commercially viable.

While overall, the rationalisation process was initiated just after 2000, it is noteworthy that in a number of countries this process is still well underway in the period 2003-2004. This is most notably the case in Austria, Greece, Portugal and Spain, where the rationalisation accelerated considerably in recent years. The UK is an exception in the overall picture: its process of network rationalisation was already well under way in the 1980s, and not an as significant reduction is observed in the period 1997-2004.

The reduction in the number of dealers in the other major markets, Germany, Spain, but especially France and Italy, was long postponed but now has been dramatic. This reduction has been mainly but not totally at the expense of sub-dealers (Figure 23).

The reduction in the number of sub-dealers over the period 1997 to 2004 has been steep, ranging from 8% in the Netherlands to almost 90% in Sweden. However, despite such reductions, the sub-dealer still has a considerable presence in Germany and France.

It should be noted that, as intra-brand competition in the marketplace is mainly the result of the competitive interaction between main dealers, rather than between main dealers and their sub-dealers, such a process of network rationalisation is unlikely to have had a significant impact on intra-brand competition.

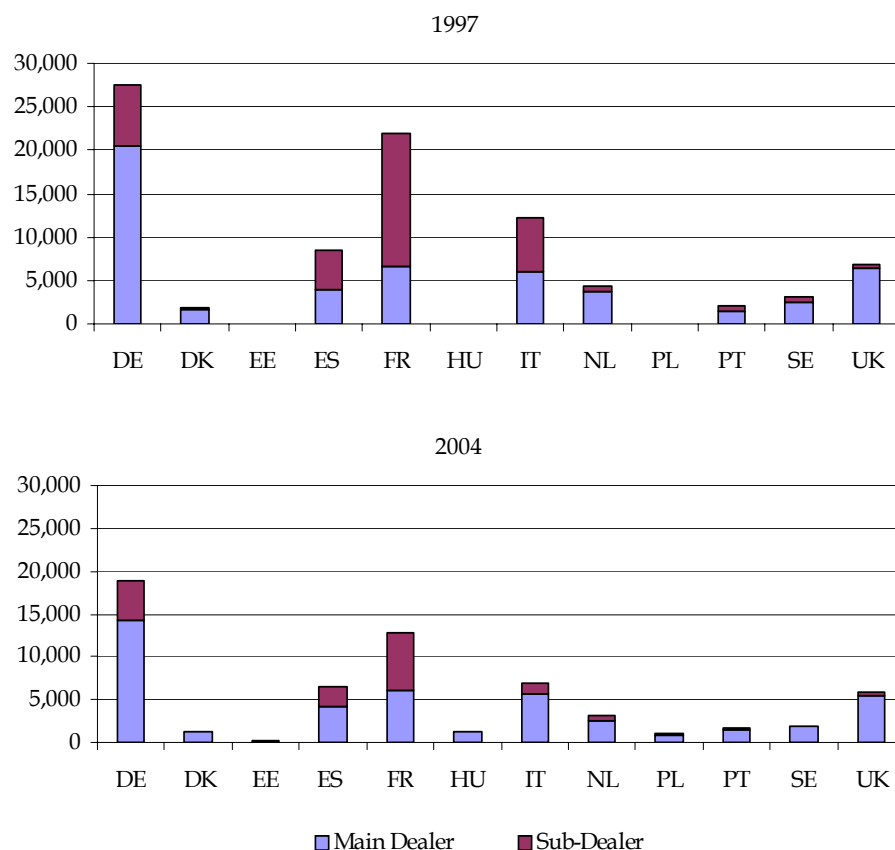
The scaling-down of dealer networks is not an issue in eastern European markets, where dealer networks have in fact been growing over the period 1997-2004. Despite this, dealer density in Eastern Europe is still low compared with the more mature western European markets. Although overall new car sales in Eastern Europe are also relatively low, low density means that sales volume per dealer is large enough to support high dealer

standards. According to Figure 25, unit sales per dealer in Estonia, Hungary and Poland are not structurally different from other Member States, which implies that the low per-dealer sales values recorded in Hungary and Poland (Figure 26) are due to a preference for less expensive cars rather than an abundance of dealerships. In the light of the new emphasis placed on quality standards in manufacturers' distribution strategies, this means that dealer densities in Eastern Europe may be expected to remain low, despite the expected future growth in car ownership.

Figure 22: Total authorised sales outlets (all makes) in selected Member States (1998-2004)

								<i>Average yearly percentage change</i>			
	1998	1999	2000	2001	2002	2003	2004	1998-2004	1998-2000	2000-2004	2003-2004
Denmark	1,698	1,697	1,678	1,554	1,516	1,396	1,239	-4.5%	-0.6%	-6.5%	-11.2%
France	21,912	19,325	21,662	17,598	15,346	12,250	12,774	-7.0%	-0.6%	-10.3%	4.3%
Germany	27,273	27,443	26,449	25,299	22,948	21,084	18,830	-5.2%	-1.5%	-7.2%	-10.7%
Italy	12,076	12,151	12,121	10,606	10,185	8,140	6,857	-7.2%	0.2%	-10.9%	-15.8%
Netherlands	4,246	4,025	3,923	3,776	3,478	3,332	3,132	-4.4%	-3.8%	-5.0%	-6.0%
Portugal	2,028	2,037	2,274	2,090	2,147	2,035	1,736	-2.4%	6.1%	-5.9%	-14.7%
Spain	8,439	9,195	9,099	9,152	9,091	8,103	6,428	-4.0%	3.9%	-7.3%	-20.7%
Sweden	2,700	2,807	2,772	2,497	2,419	2,210	1,924	-4.8%	1.3%	-7.6%	-12.9%
UK	6,795	6,569	6,426	6,185	6,094	5,833	5,777	-2.5%	-2.7%	-2.5%	-1.0%
Total	100,178	97,984	98,698	90,215	84,709	74,878	68,233	-5.3%	-0.7%	-7.7%	-8.9%

Source: HWB International Ltd.

Figure 23: Dealer network status: Main dealers and sub-dealers (1997, 2004).

Source: HWB International Ltd.

Evolution of dealer networks by brand

The restructuring of dealer networks has been most significant in the case of larger brands. The share of sales outlets in Western Europe belonging to networks of the 13 largest brands, as measured by their market shares, decreased markedly after 2001, particularly between 2002 and 2003 (Figure 24). Of the 32,033 outlets that disappeared between 1997-2004, the top 13 brands accounted for 91%, a contribution greater than their share in the number of total dealer outlets as shown in Figure 24.

Some of the biggest declines were amongst the networks of exclusive brands such as Audi and Mercedes Benz. The volume market manufacturers (e.g. Ford, GM, Opel/Vauxhall), Fiat, Peugeot, Citroen, VW, Seat, Renault, Toyota,

Nissan, Mazda, Mitsubishi, Honda, Suzuki) have generally shed outlets in considerable numbers, the traditional European and US-owned firms more than the Asian makers. In fact the major advance of the Hyundai-Kia Group is reflected by, and supported by, the significant increase in sales and service outlets especially after 2000.

The marked increase in sales and service outlets for some smaller and less established brands can be seen as a side effect of the rationalisation efforts undertaken by larger brands over recent years. The scaling-down of authorised networks in the wake of the introduction of the new BER resulted in a significant number of dealer and repairer sites suddenly becoming available, which turned out to be an opportunity for brands such as Hyundai and Kia to move into previously untapped local markets.

Moreover, the uncertainty caused in a franchised network by rationalisation means that some of the good dealers 'jump ship' to obtain the security of a new aggressive franchise. The ambitions of Hyundai-Kia armed with its new Slovakia assembly plant will be supported by a ready number of sales and service points wishing to sell and service the two brands. This development might provide a blueprint for newer and future entrants (e.g., Chinese, Indian brands) wishing to establish themselves in the European market.

Figure 24: Trends in total sales outlets by brand. West Europe (16 markets)

	1997	1998	1999	2000	2001	2002	2003	2004
Total number of outlets	106,193	105,824	104,261	104,643	96,890	91,420	80,874	74,160
Number of outlets - top 13 Brands ¹	76,670	76,404	74,420	74,302	67,786	61,835	52,452	47,670
Top 13 brands' share of total outlets	(72%)	(72%)	(71%)	(71%)	(70%)	(68%)	(65%)	(64%)
Number of outlets - other brands	29,523	29,470	29,841	30,341	29,102	29,585	28,422	26,490

Change over 1997-2004

Total -32,033

Top 13 -29,000

Top 13 91% of total change

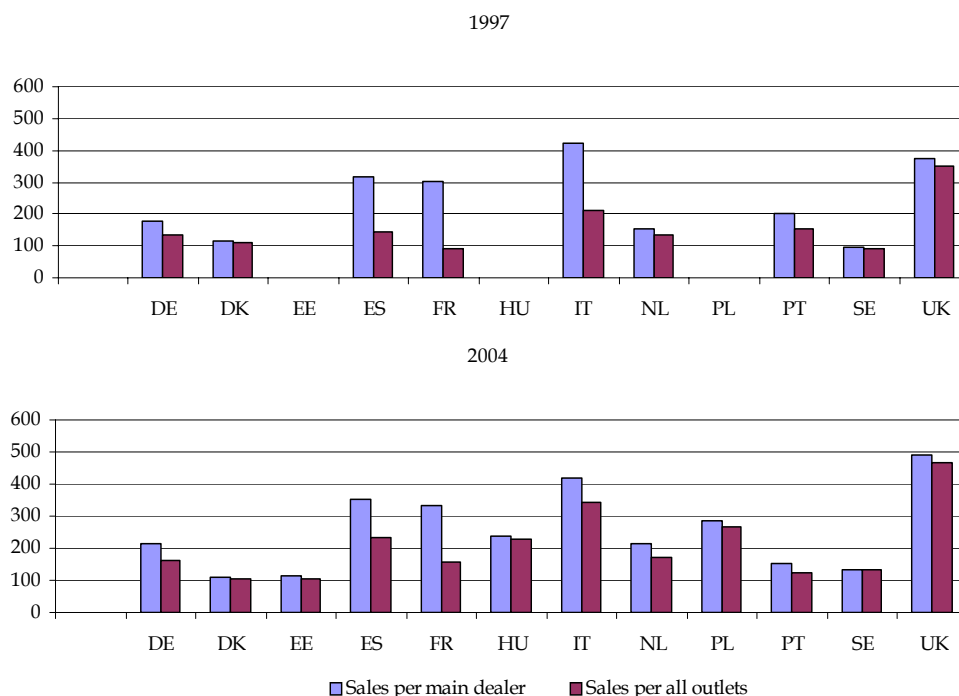
¹ Renault, Peugeot, Citroen, VW, Audi, SEAT, Opel, Ford, Nissan, BMW, Fiat, Mercedes, Toyota.

Source: HWB International Ltd.

Average size of dealers

Recent trends in sales per dealer or outlet provide a good perspective on likely future developments (Figure 25). Average sales per main dealer and per total number of outlets have increased for almost all countries in the sample in the period 1995-2004. The average increase in the Western European countries was 28% per main dealer and 59% per total number of outlets.

Figure 25: Unit sales per dealer (1997, 2004).



Source: HWB International Ltd.

The figure overleaf (Figure 26) shows the evolution of average car sales per dealer contract, as gathered from LE's survey of car manufacturers.

Average car sales per dealer contract have generally increased between 1997 and 2004. The most significant increases occurred in Denmark and Hungary. In 2004 the UK, Italy and Spain are the countries where average sales per dealer contract are highest. Denmark, Hungary, Poland and Sweden have much lower car sales averages, of about 1/3 the level for Italy, for example.

Figure 26: Evolution of car sales per dealer contract, by country (€ million).

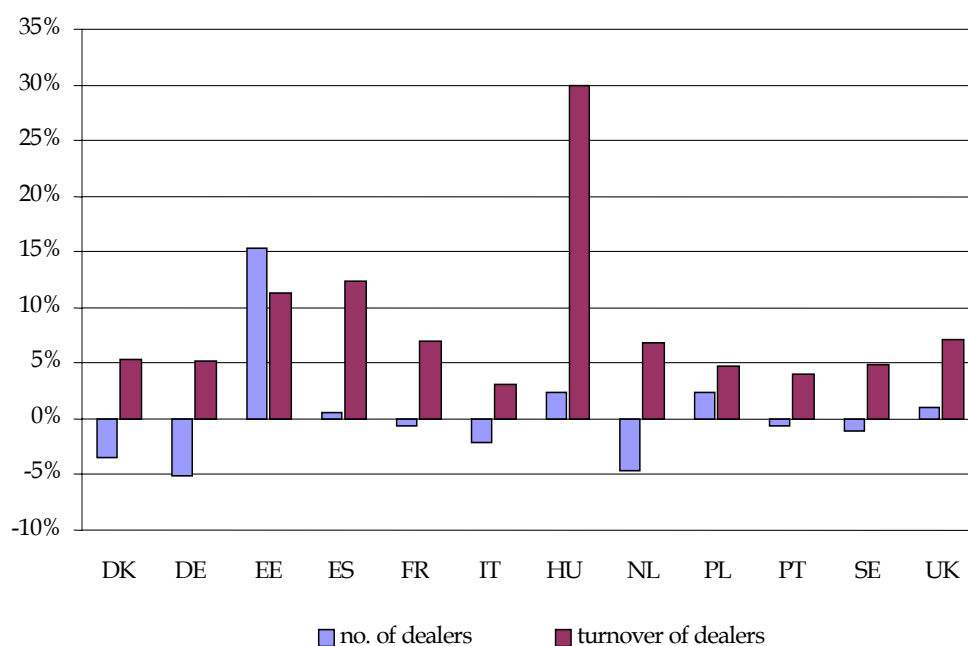
									<i>Average yearly percentage change</i>			
	1997	1998	1999	2000	2001	2002	2003	2004	1997-2004	1997-2000	2000-2004	2003-2004
Denmark	1.5	1.6	1.5	1.6	1.6	2.6	2.3	3.0	10.4%	2.2%	17.0%	30.4%
Germany	3.4	4.3	5.2	6.0	6.1	6.2	6.6	6.9	10.6%	20.8%	3.6%	4.5%
Estonia	8.3	5.9	3.8	4.0	4.6	5.3	5.6	5.9	-4.8%	-21.6%	10.2%	5.4%
Spain	3.6	4.5	5.6	5.6	5.7	6.1	7.1	8.5	13.1%	15.9%	11.0%	19.7%
France	3.7	4.4	5.0	5.1	5.5	5.7	5.4	5.7	6.4%	11.3%	2.8%	5.6%
Italy	5.5	5.5	6.1	6.5	7.0	7.6	8.8	9.0	7.3%	5.7%	8.5%	2.3%
Hungary	0.8	1.2	1.6	2.0	2.3	2.8	3.2	3.4	23.0%	35.7%	14.2%	6.3%
Netherlands	2.3	2.8	3.7	4.2	4.4	4.9	5.5	5.9	14.4%	22.2%	8.9%	7.3%
Poland	2.4	2.5	2.6	2.6	2.2	2.6	3.0	3.0	3.2%	2.7%	3.6%	0.0%
Portugal	3.1	3.7	4.3	4.5	4.3	3.9	3.9	4.3	4.8%	13.2%	-1.1%	10.3%
Sweden	2.5	3.0	3.8	3.6	2.9	3.1	3.2	3.4	4.5%	12.9%	-1.4%	6.3%
UK	8.0	8.4	9.2	8.8	10.9	12.2	12.7	13.9	8.2%	3.2%	12.1%	9.4%

Source: LE Manufacturer Survey. Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

When the average percentage change in sales per dealer contract is decomposed into the contributions made individually by the decline in dealer numbers and the increase in turnover, it turns out that the latter generally plays a much larger role (Figure 27). The only exception is Estonia, where the expansion in dealer numbers was faster than the increase in dealer turnover, certainly as a result of the extremely low initial dealer density in Estonia, where, according to our manufacturer survey, only 37 dealerships existed in 1997.

This suggests that the reduction in dealer numbers represents a deliberate strategic decision by manufacturers, who want larger and more efficient dealerships, rather than a move necessitated by market conditions, such as falling demand.

Figure 27: Percentage change in number of dealers vs. percentage change in total turnover (1997-2004.)



Note: The figures do not correspond exactly to the results in Figure 26, as this includes more observations that were omitted from the ratio.

Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Despite the apparent uniformity of the overall trend towards more concentrated and more efficient dealer networks, individual manufacturers have adopted different strategies. Audi, for example, has increased its

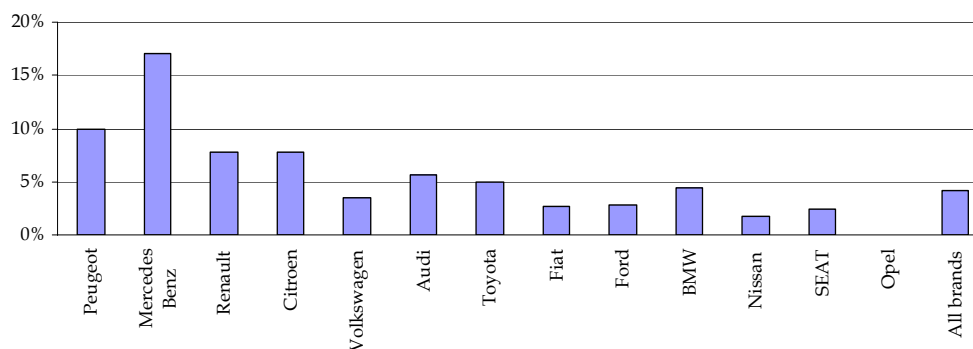
efficiency with a major increase in sales whilst Mercedes Benz has reduced the number of dealers, especially between 1997 and 2000. On the other hand, BMW, wedded to a policy of dealing with smaller dealer groups, has maintained its network at a time of increased vehicle sales.

Renault, the largest selling brand in Europe in 2003-4, maintains far more dealers per sale than its close rivals. This suggests that a further downsizing is likely. The challenge to Renault is illustrated by the fact that it has 10.3% of the West European market and 9,126 sales outlets, whilst the VW brand has just under 10% of the West European market with 4,380 sales outlets.

Manufacturer-owned outlets

Under the Block Exemption of 2002, manufacturer or national importer involvement in new car retailing has shown a noticeable increase (see **Error! Reference source not found.**). This increase does not change the market structure significantly since the number of new manufacturer-owned outlets as a fraction of total number of outlets is very small. Currently, some 96% of all main dealers are independent operations. Of the 2,384 non-independents, around half are operated by national distributors, so only around 2% of the total number of dealers are directly owned.

Figure 28: Manufacturer-owned dealer outlets as a percentage of all dealer outlets (average 1997-2004).



Source: HWB International Ltd.

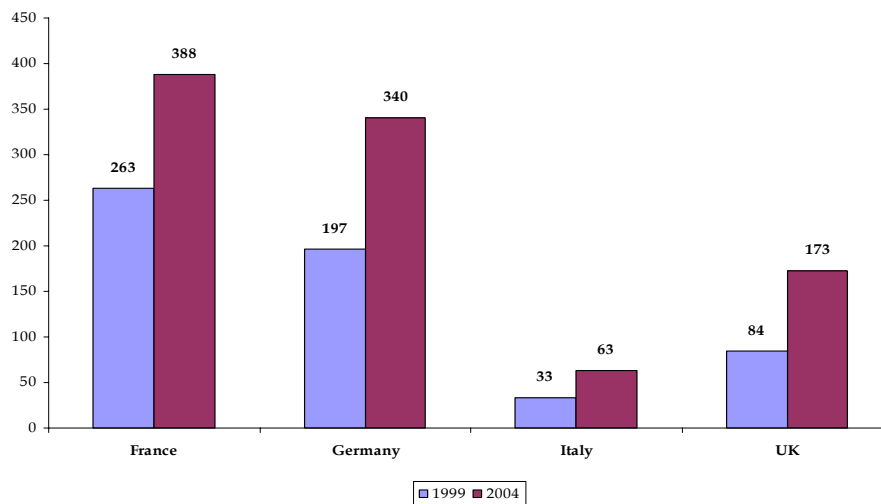
Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Two thirds of all direct outlets are owned by the top 13 brands. The proportion of total outlets represented by direct dealer outlets for those brands is shown in Figure 28). Besides directly owned dealerships VW Group companies (VW, Audi, SEAT) and Toyota have significant numbers of independent national distributors who also act as dealer groups. Only Mercedes Benz is following an aggressive strategy of integrating its retailing

with, for instance, 42% of UK sales through direct outlets in London, Birmingham and Manchester (the brand also operates its own used car outlets).

Indirectly, manufacturers do have more control over their retail network than the above suggests. It is common knowledge that many key dealer sites are owned by manufacturers or their subsidiaries, even though the dealerships are operated by independents. This ensures that such key sites do not fall into the hands of rivals by a switch of franchise.

Figure 29: Manufacturer-owned outlets.



Source: ICDP and national sources.

As the data in the figure above show, there has, nonetheless, been a noticeable increase in the last few years of the number of manufacturer-owned outlets. Their numbers have more than doubled in the UK, and registered considerable increases in both Germany and France, as well as in Italy (although starting from a much smaller base).

The two figures below report the results from LE's survey of car manufacturers. We have constructed (based on somewhat incomplete replies) an index reflecting the percentage of total reported dealer turnover that can be attributed to the turnover of manufacturer-owned dealerships.

Figure 30: Evolution of turnover of manufacturer-owned outlets as a percentage of total dealer turnover, by brand.

	1997	1998	1999	2000	2001	2002	2003	2004
Brand A	8.4%	8.7%	9.1%	10.3%	9.6%	9.0%	9.5%	10.1%
Brand B	23.3%	22.7%	22.0%	22.9%	23.6%	24.0%	23.7%	24.3%
Brand C	0.6%	0.4%	0.2%	0.2%	0.3%	0.7%	4.5%	6.1%
Brand D	33.7%	34.1%	33.0%	35.8%	34.7%	35.0%	35.1%	35.3%
Brand E	1.8%	1.8%	1.9%	2.8%	3.5%	3.0%	3.9%	3.4%

Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Figure 31: Evolution of turnover of manufacturer-owned outlets as a percentage of total dealer turnover, by country.

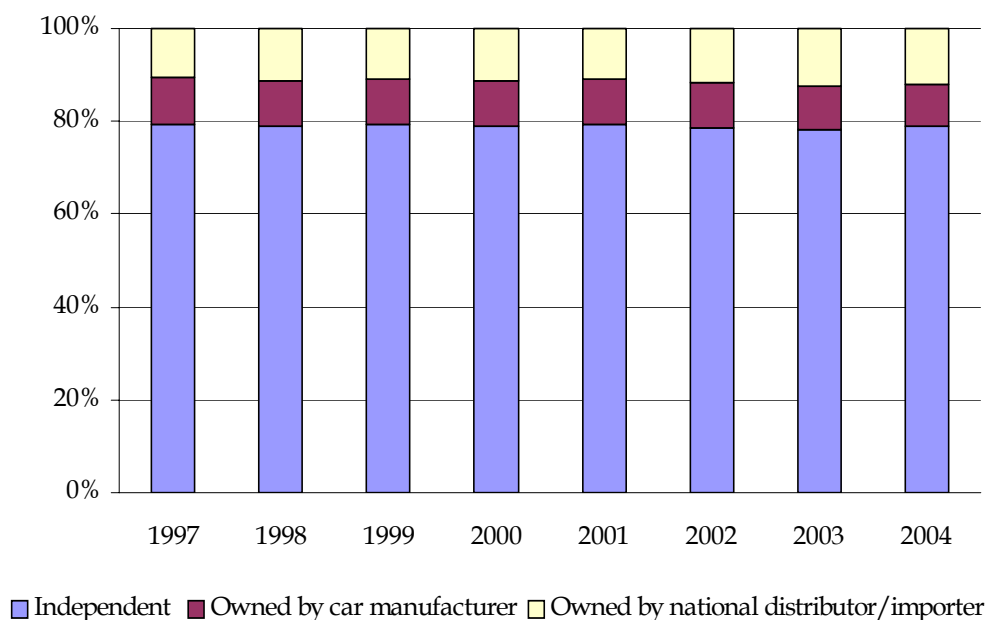
	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	1.0%	1.0%	0.9%	0.9%	1.0%	0.9%	1.3%	1.2%
Germany	14.1%	13.5%	14.4%	16.5%	15.9%	16.4%	17.5%	18.5%
Estonia	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Spain	13.5%	12.8%	12.8%	15.1%	17.5%	18.4%	15.5%	13.9%
France	17.0%	17.0%	15.3%	16.6%	17.4%	17.2%	17.3%	17.4%
Italy	0.8%	1.0%	1.2%	1.5%	1.8%	2.7%	3.7%	4.8%
Hungary	0.0%	0.0%	0.0%	1.0%	0.9%	0.9%	1.1%	1.4%
Netherlands	2.2%	3.2%	2.1%	2.2%	2.4%	2.4%	-	2.6%
Poland	2.0%	2.2%	1.3%	-	1.4%	2.2%	2.4%	2.9%
Portugal	8.0%	7.7%	6.4%	6.8%	6.3%	7.0%	8.2%	9.0%
Sweden	5.3%	5.1%	6.0%	17.7%	28.9%	26.2%	27.3%	-
UK	5.7%	4.5%	3.7%	4.0%	4.0%	4.2%	5.6%	6.5%

Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

We observe slight increases for some of these indicators. These are most noticeable in Germany, Italy, Hungary and the UK. Sweden, on the other hand, has seen a very steep increase in the turnover share of manufacturer-owned outlets, over 20% between 1997-2004.

The vast majority (app. 80%) of car dealers in the 12 countries that participated in our dealer survey are independent. According to the survey results, the ownership status of car dealers has not changed to any significant degree during the period 1997-2004 (Figure 32). The percentage of manufacturer and importer owned outlets in our dealer sample is much higher than the overall figures reported by HWB. This probably reflects a certain selection bias in our responses.

Figure 32: Ownership of car dealers 1997-2004: LE survey results.

Source: LE Dealer survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

National distributor status

The status of a car brand's national distributor, in terms of the closeness of its relationship to the manufacturer, is often different in different countries. Furthermore, the status of the national distributor in a country does not seem to change over time, indicating that there is no urge to alter the existing structures from the point of view of car manufacturers.

Direct ownership by the manufacturer is the most common arrangement in the Member States we surveyed, with the exception of Estonia. However, independent national distributors are also common, particularly in Estonia, where the majority of brands are distributed via an independent company, and also in Denmark, Hungary, the Netherlands, Poland and Portugal.

Joint ownership, which we define as a situation where the manufacturer shares ownership of the distributor with an independent company, and where the manufacturer's ownership share does not exceed 90%, is comparatively rare. It occurs only in the cases of Toyota, Lexus, Hyundai, Honda and Jaguar, and only in a limited number of countries (Estonia, Hungary, Netherlands, Portugal and the UK).

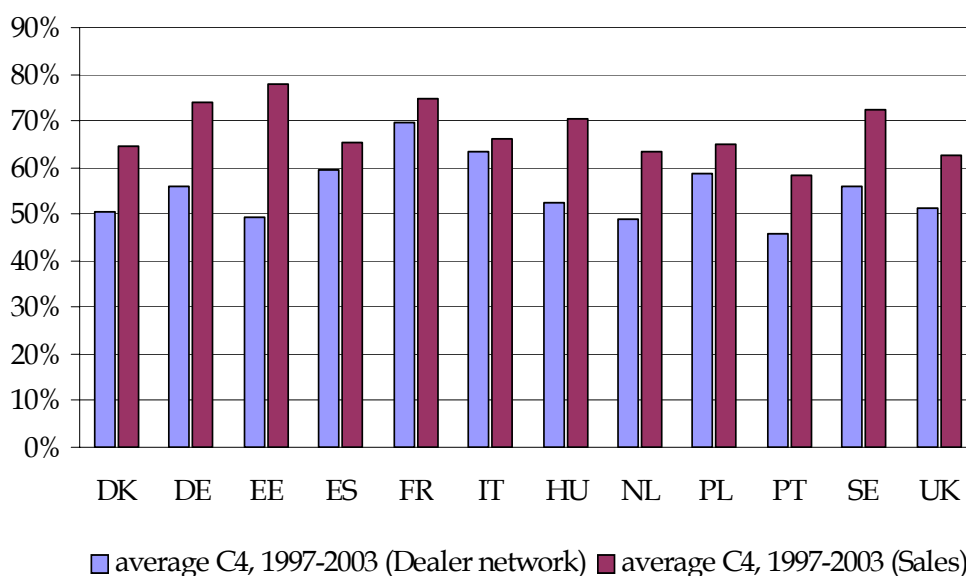
2.3.2 Market shares of VMs networks on local markets

In this sub-section we look at C4 concentration ratios representing the sum of the number of dealerships in the 4 largest networks relative to the total number of dealerships. We do this on a per country basis. These figures can be compared with C4 concentration ratios computed in relation to market shares of overall sales. The percentage of dealerships in the hands of particular manufacturers is less pronounced than overall market concentration.

Figure 33 shows that the 4 largest dealer networks represent hardly more than 60% of all dealerships in all markets except France and Italy, significantly less than their share in total sales.

This implies that dealerships belonging to networks of the brands with the highest market shares have considerably higher volume of sales per outlet than the average dealership.

Figure 33: Manufacturers' share of the total dealer network compared with market concentration: 4 largest manufacturers (1997-2003).



Source: HWB International Ltd.

2.3.3 Consolidation at distribution level

In this part of our study we look at indicators of market concentration in automotive retailing.

Market position of the top 20 dealers

The 20 largest dealers' turnover represents a significant proportion of the value of new car sales in all countries. Moreover, there has been a steep increase in the market share of the 20 largest dealers, for all brands except Renault, and in all 12 countries we investigated. To illustrate the rate of increase, we created an index that shows the percentage increase in the market share of the 20 largest dealers since 1997 by brand (Figure 34) and by country (Figure 35).

The overall increase in the largest dealers' market share has been highest in France at 76%, but for some brands the increase has been even more pronounced. Within our sample of brands, the 20 top dealers for Lancia and Škoda have more than doubled their market share over the period 1997-2004, while the 20 largest dealers for Daewoo/Chevrolet have increased their market share fivefold.

Figure 34: Evolution of the share of the Top 20 dealers' turnover in total sales, by brand: index, 1997=100.

	1998	1999	2000	2001	2002	2003	2004
Alfa Romeo	118	131	144	155	166	172	180
Audi	114	130	139	142	140	143	148
BMW	101	104	105	129	155	182	186
Chevrolet (Daewoo)	128	165	237	231	316	404	533
Citroën	105	111	120	123	125	130	140
Fiat	114	127	144	162	176	187	199
Honda	106	128	155	172	172	168	166
Hyundai	112	126	126	127	123	131	144
Lancia	109	117	146	173	203	217	238
Mercedes Benz	92	107	121	132	123	124	130
Mitsubishi	93	88	88	100	119	130	131
Opel/Vauxhall	102	107	115	127	136	143	155
Peugeot	114	124	127	131	133	141	152
Renault	90	83	80	78	81	84	86
Seat	117	129	139	155	165	169	177
Škoda	104	113	130	155	186	211	220
Toyota	90	90	97	101	108	118	129
VW	100	106	122	133	143	151	162

Note: a 3-years moving average was used to calculate the index for the years 1998-2003.

Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Figure 35: Evolution of the share of the Top 20 dealers' turnover in total sales, by country: index, 1997=100.

	1998	1999	2000	2001	2002	2003	2004
Germany	100	104	114	129	145	156	162
Spain	98	101	107	113	116	120	123
France	95	97	104	110	120	142	176
Italy	119	138	153	161	164	166	165
Netherlands	99	96	96	106	117	126	131
Poland	124	148	167	175	175	172	173
UK	83	91	97	108	104	117	142

Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

Evolution of average turnover per dealer

The figure overleaf reports the evolution of average turnover per dealer, as gathered from LE's survey of car manufacturers

Figure 36: Evolution of turnover (€) per dealer contract by country (1997-2004).

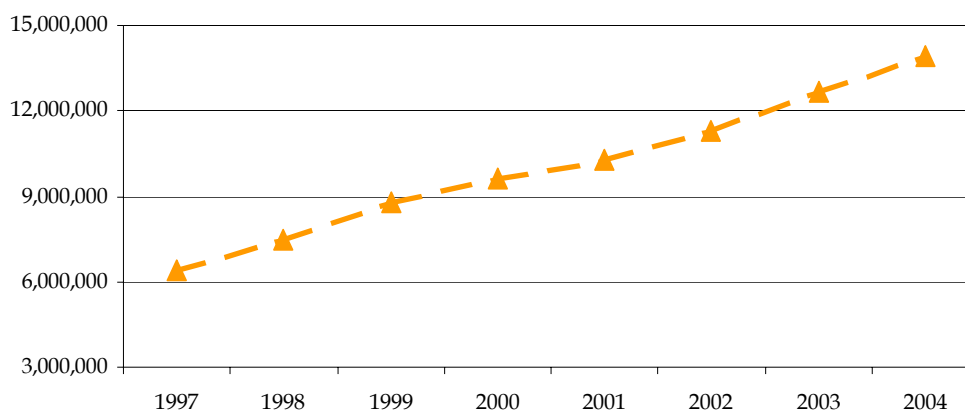
	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	13,788,707	14,311,534	14,530,300	15,815,524	15,680,102	22,619,501	20,318,099	29,965,299
Germany	8,436,758	8,512,852	11,166,824	13,616,834	13,058,334	11,637,069	12,704,068	12,540,320
Estonia	5,872,910	6,334,460	4,579,040	5,073,597	5,638,812	6,370,164	8,963,866	11,086,883
Spain	4,763,256	5,620,592	6,572,701	6,355,938	6,846,594	7,287,874	8,829,155	10,653,149
France	5,369,032	5,894,369	6,660,426	7,158,041	7,714,162	8,293,309	8,811,881	8,904,904
Italy	6,533,653	6,969,625	7,396,885	8,492,982	9,726,867	10,274,995	11,181,308	12,187,426
Hungary	1,059,679	1,338,399	1,960,313	2,325,688	2,721,372	4,282,512	6,059,148	6,606,595
Netherlands	6,336,590	6,181,343	7,945,962	8,808,794	9,663,876	10,930,173	11,988,329	11,955,947
Poland	2,313,924	2,602,109	3,661,292	3,802,952	3,719,758	3,903,749	4,153,070	4,821,954
Portugal	3,040,495	3,217,934	4,058,709	4,183,562	4,102,085	3,491,401	3,200,395	3,394,885
Sweden	3,771,915	5,225,316	5,828,487	6,109,077	6,237,289	6,137,350	7,547,420	7,396,797
UK	12,041,537	13,342,650	12,979,435	13,448,379	14,160,944	16,494,023	19,261,418	21,557,936

Source: LE Manufacturer Survey. Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

The figures of turnover per dealer shown on the previous page have seen a major hike between 1997 and 2004. Broadly speaking, considering the 12 countries analysed in this study, turnovers almost doubled in the period under consideration in many countries; singularly speaking, the most significant increases happened in Denmark, Spain, Hungary, Poland, the Netherlands and in the UK (Figure 36).

If we consider the turnover of dealers of every specific manufacturer, the situation is similar. Dealers saw a boost in their turnovers between 1997 and 2004; in particular, Renault, Honda, Hyundai and DaimlerChrysler's dealers achieved the highest increases.

Figure 37: Average turnover per dealer in € (1997-2004).



Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

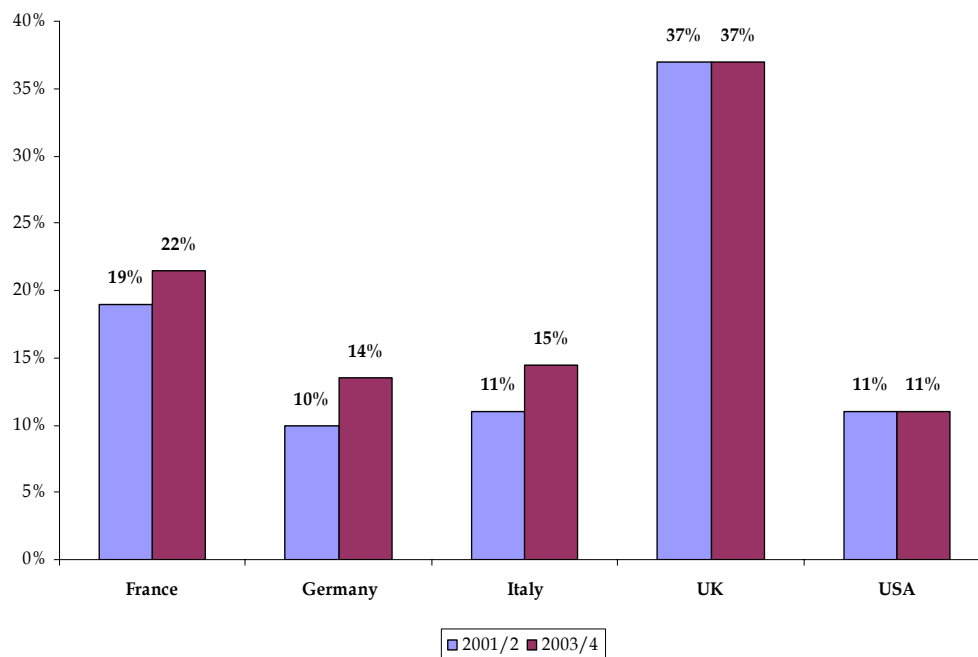
Dealer groups

Overlaying the reduction in the number of outlets already discussed, is the concentration of ownership. Current trends appear to translate the view that only larger size dealers attain the necessary levels of profitability to sustain a dealership, and to establish the quality and professionalism required to maintain sales volumes in an ever more competitive and transparent car market.

A growing proportion of dealers is owned by a dealer group. These can range from small companies operating two or three dealerships, up to large international groups. Since most groups are not publicly listed companies, it is difficult to say how many dealerships they control. Further consolidation

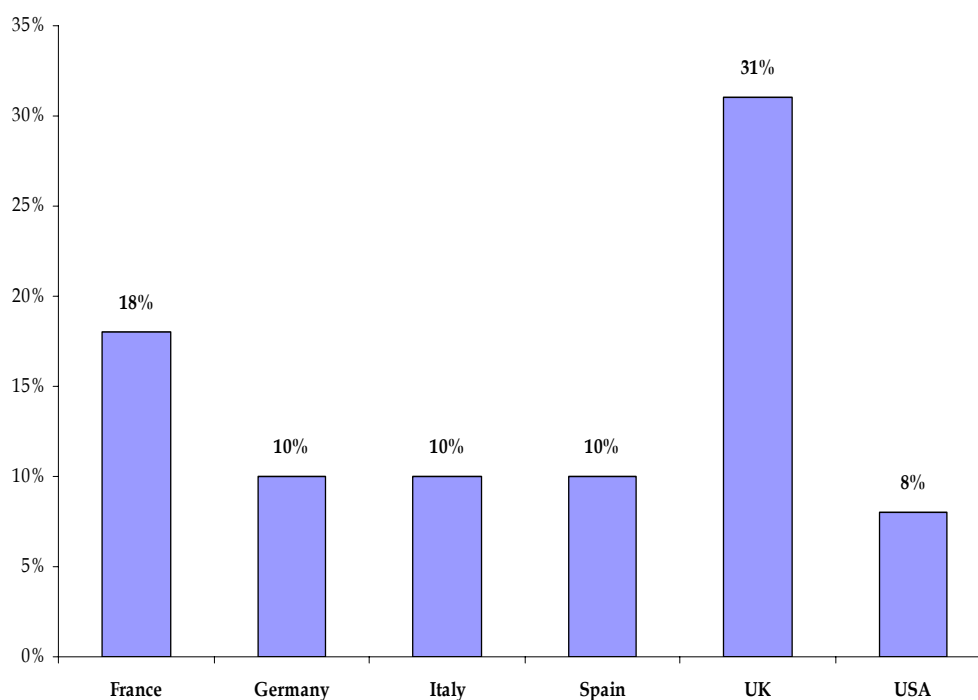
can still be expected as the Block Exemption has weakened the manufacturers' control over changes of ownership.²³

Figure 38: Market share of the top 50 dealer groups.



Source: ICDP.

²³ Art. 3(3).

Figure 39: Market share of the top 25 dealer groups.

Source: ICDP.

Figure 40: Average profile of top 50 dealer groups by country (2003).

	France	Germany	Italy	UK
Total sales (€m)	270	340	151	801
Employees	750	858	215	1501
New car sales (units)	9949	7800	6601	21606
Used car sales (units)	7184	8760	3592	17837
Used/New ratio	0.72	1.12	0.51	0.8
Number of outlets	20	21	11	33
Number of brands represented	4	5	5	9
Number of manufacturer brand-groups	2	3	3	6

Source: l'Argus, ICDP, AM100, Motor Trader.

Figure 41: Changes in average profile of top 50 dealer groups by country (2001/2-2003/4).

	France	Germany	Italy	UK
Total sales (€m)	5%	2%	9%	24%
Employees	11%	2%	0%	-2%
New car sales (units)	-1%	23%	6%	10%
Used car sales (units)	7%	18%	19%	6%
Used/New ratio	7%	-3%	8%	-7%
Number of outlets	5%	24%	0%	-6%
Number of brands represented	0%	66%	25%	-25%
Number of manufacturer brand-groups	0%	100%	50%	-14%
Change to total market volume	-11%	-3%	-7%	4%

Source: *l'Argus, ICDP, AM100, Motor Trader.*

The most concentrated market is the UK where the top 50 dealer groups have a market share of 37% and the top 25 represent 31%. In addition, the top 50 sales have seen a dramatic increase of 24% between 2001/2 and 2003/4. The UK top dealer groups have reduced the number of employees, the number of brands represented and the number of outlets.

France is the second most concentrated market. Germany, Italy, and Spain have lower market concentration.

The share of our dealer survey respondents that are part of a dealer group or chain of dealerships has increased steadily over recent years, at an annual rate of 5.3%. In 2004 just under a half of our respondents reported that they were part of such a grouping. Coinciding with this increase there has been a fall in the average number of dealers per group from 15 to 11. Only a small and shrinking minority consider themselves as sub-dealers. (Figure 42.)

Figure 42: Organisational arrangements (1997-2004): LE survey results.

	1997	1998	1999	2000	2001	2002	2003	2004
Part of chain/group of dealers (%)	33.6	34.2	36.2	38.2	41.4	42.8	45.4	48.7
Average no. of dealers in group	15	14	13	13	13	12	12	11
Sub-dealer	4.6	4.6	3.9	5.9	4.6	4.6	3.9	3.3

Note: Shares are given as % of the full sample. Blank responses are assumed to mean that the dealership is a main dealer.

Source: *LE Dealer Survey.*

2.3.4 Innovation in automotive retail

In this section we provide information on the recent evolution of automotive retail formats. In particular, we report on the prevalence of exclusive versus selective distribution systems, multi-branding by dealers, full-function versus stand-alone dealers, Internet sales, and sales of cars in supermarkets.

According to a study by McKinsey (2003), in the years to come, European high volume car manufacturers will adopt alternative forms of retailing such as supermarkets and Internet selling.²⁴ Those manufacturers in the high end of the market, interested in maintaining high premiums, will probably buy networks of dealers. The majority of European manufacturers however, will optimise their distributive network and trim the number of dealerships.

Distribution systems

The new BER changed the rules with regard to the type of distribution agreements that can benefit from exemption. Whereas the previous BER 1475/95 covered distribution agreements in which suppliers selected their authorised distributors and granted them territorial exclusivity, the new BER 1400/2002 no longer does so. Instead, from 2003 onwards, suppliers face a choice between:

- An **exclusive distribution system**,²⁵ in which distributors are allocated an exclusive sales territory in which they enjoy protection from (active) sales by other dealers into that territory, and
- A **selective distribution system**,²⁶ which permits the suppliers to choose their authorised partners, but within which active selling into other territories must be permitted. The BER distinguishes further between:
 - a) quantitative selective distribution, in which selection criteria directly limit the number of distributors,²⁷ and
 - b) qualitative selective distribution, in which selection is based on objective criteria, which have to be necessary for the purpose of the agreement (i.e. the selling of new cars) and are applied in a non-discriminatory manner.²⁸ Crucially, qualitative selection

²⁴ McKinsey & Company (2003).

²⁵ The definition of the exclusive distribution system can be found in the Commission notice of 13 October 2000: Guidelines on vertical restraints [COM(2000/C 291/01) - Official Journal C 291 of 13.10.2000].

²⁶ Art. 1(1)(f).

²⁷ Art. 1(1)(g). Examples of quantitative selection criteria are the direct limitation of dealer numbers in a defined territory (which can be smaller than the Common Market) and minimum purchase obligations.

²⁸ Art. 1(1)(h) Examples of qualitative selection criteria are the standards for the qualification of sales personnel and for the equipment/decoration of sales premises.

criteria must not directly limit the number of suppliers, i.e. all dealers that meet the criteria must be allowed to join the authorised network.

According to our survey, virtually all car manufacturers opted for quantitative selective distribution systems following the entry into force of Regulation 1400/2002. Before they had used a mostly a mixed exclusive and selective system.

After 2002, a few brands chose to run exclusive (or mixed) distribution systems, mainly in the eastern European countries that joined the EU in 2004 (Citroën, Peugeot, Volvo, Alfa Romeo, Fiat, Renault). This has been limited for the most part to a transitional period in 2003. Of our respondents, only Alfa Romeo and Fiat reported using an exclusive distribution system after 2003, and this applied only to Estonia.²⁹ Suzuki, which did not take part in our survey, also operates an exclusive system.

Multi-branding

Multi-branding means the selling of different brands by the same dealership. Whereas multi-branding with respect to brands by the same manufacturers has always been possible, the new BER introduced the right for authorised dealers to sell brands from different manufacturers from under the same roof. In this report, we use the term multi-branding in the latter sense, that is, the sale of new cars of different brands belonging to different manufacturers.

Standards required by the vehicle firms can be the main constraints on dealers considering whether to take on additional brands. This can increase showroom and workshop costs whilst the compliance costs imposed by vehicle makers makes multi-franchising daunting. In addition qualitative standards have quantitative elements, such as the number of ramps available or the total stock required.

In some countries, multi-brand dealerships have gained considerably more prominence than in other European markets. The proportion of multibrand dealers, according to our survey of car manufacturers, is 29.7% in Sweden, 35.2% in Denmark, and 38.9% in Estonia, but it is below 20% in most other countries in our sample, and as low as 9.1% in Portugal (Figure 44).³⁰

A study of Nordic dealers provides a number of reasons why dealers may have chosen not to take on a new brand.³¹ The three main reasons why taking on a new brand had been ruled out were: not considered a profitable strategy;

²⁹ The detailed results are included in the confidential Annex I Part 2.

³⁰ The high proportion of multi-brand dealerships in the Nordic countries compared with the rest of Europe is also remarked upon in the Nordic Automotive Industry Survey (Exido, 2004). However, the figures they report (12% and 13% for DK and SE respectively) are considerably lower than those indicated by our survey responses.

³¹ Exido (2004).

required too great investment; and hindering by car manufacturer or importer rules.

Booz Allen Hamilton (2005), an independent consultancy, carried out a study on multi-branding strategies in the German automotive market in 2005. Although around half of the dealers planning to switch to multi-branding are still in the early stage of the project, according to the consultancy's findings, dealers expect multi-branding to generate an increase in profitability ranging from 0.5 to 2%. Therefore, they are on average optimistic about the idea. The same study predicts that multi-branding retail will increase in the next five years to reach up to 30-40% of German dealers. As much as 80% of dealers cited higher turnovers as the first reason behind their willingness to adopt a multi-brand strategy; little more than one out of ten cited costs savings as a key determinant. Deterrents to move towards multi-branding strategies were considered the fear to jeopardise existing relationship with main manufacturer or financial and operational concerns.

When it comes to after-sales multi-branding, more than a third of German dealers showed a positive attitude towards the idea and considered it even more attractive than new vehicle sales multi-branding.

The information we received from our survey of car manufacturers allowed us to construct the following summary table of contract clauses concerning multibranding. The table also reports, when available, information about how the new BER changed these aspects of manufacturer-dealer contracts.

Figure 43: Manufacturer restrictions on multibranding by dealers.

Manufacturer	Brand	Current	Prior
BMW	BMW	No restrictions but require clear separation between the display areas	
	Mini		
PSA	Citroën	Not allowed on mfr-owned Non mfr-owned no restrictions	
	Peugeot		
General Motors	Chevrolet (Daewoo)	Not allowed on mfr-owned Non mfr-owned no restrictions but clearly defined display area	Under previous BER, full use of restrictions and brand specific requirements
	Opel/Vauxhall		
Ford	Saab	No restrictions but required to avoid brand confusion	Under previous BER, full use of restrictions and brand specific requirements
	Ford		
	Jaguar		
	Land Rover		
	Mazda		
	Volvo		
Honda	Honda	Continues with restrictions to the extent that they are allowed under new BER	Under previous BER, full use of restrictions and brand specific requirements
Hyundai	Hyundai	No restrictions	
Fiat	Alfa Romeo	No restrictions	Under previous BER, full use of restrictions and brand specific requirements
	Fiat		
	Lancia		
DaimlerChrysler	Mercedes Benz	Not allowed on mfr owned Non mfr-owned require brand-adequate zones	Under previous BER, full use of restrictions and brand specific requirements
Mitsubishi	Mitsubishi	Request clear separation between the display areas	

Figure 43: Manufacturer restrictions on multibranding by dealers.

Manufacturer	Brand	Current	Prior
Nissan	Nissan	Not allowed on mfr owned Non mfr-owned require separate areas of showroom	Under previous BER, full use of restrictions and brand specific requirements
Renault	Renault	No restrictions except those authorized by BER 1400/2002	Requirements were stricter before new BER
Suzuki	Suzuki		
Toyota	Toyota	No restrictions	Restrictions were removed due to new BER
	Lexus		
Volkswagen	Audi	Other (no explanation)	Now enforces the 30% rule
	Seat		
	Škoda		
	VW		

Source: LE based on car manufacturers' questionnaire.

In most cases, we note that contracts have been changed due to the new BER and that, prior to 2002, the contracts included the full allowable set of restrictions on multibranding. This is perhaps the most significant element of the table. Under the current BER, a contract containing any such restrictions automatically loses the benefit of block exemption. Only provisions to avoid brand confusion are allowed under the block exemption.

The two tables below report the evolution of multibranding dealerships, based on data collected by LE's survey of vehicle manufacturers.

Figure 44: Evolution of the share of dealers selling brands of different manufacturers by country.

	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	16.1%	16.5%	20.0%	23.1%	27.9%	28.3%	31.6%	35.2%
Germany	1.6%	2.2%	2.5%	2.6%	4.3%	4.0%	8.1%	11.3%
Estonia	40.5%	41.3%	42.6%	40.0%	40.8%	37.8%	38.3%	38.9%
Spain	6.2%	8.0%	10.2%	10.8%	10.8%	11.4%	14.2%	15.4%
France	3.3%	4.2%	4.5%	8.1%	10.1%	12.3%	15.0%	20.0%
Italy	3.7%	4.0%	4.4%	7.6%	7.5%	7.7%	11.6%	11.7%
Hungary	4.2%	6.0%	5.9%	5.3%	4.8%	4.9%	4.8%	10.2%
Netherlands	6.2%	6.5%	6.9%	8.2%	9.4%	10.6%	11.5%	13.3%
Poland	1.8%	2.6%	2.6%	3.1%	3.2%	4.3%	5.6%	10.7%
Portugal	3.6%	6.3%	6.0%	4.5%	5.7%	4.6%	4.4%	9.1%
Sweden	26.3%	25.7%	25.3%	23.5%	25.6%	25.4%	28.9%	29.7%
UK	12.2%	15.1%	15.8%	18.5%	19.9%	20.6%	22.9%	23.1%

Source: LE Manufacturer Survey.

A common trend in the 12 countries, with the exception of Estonia, is an increase in the number of dealers selling vehicles produced by different manufacturers. In Denmark the share of retailers selling more than one brand doubled, in France the share increased six-fold while in Germany it increased by as much as seven-fold.

Figure 45: Proportion of multi-brand dealerships (1997-2004), by manufacturer.

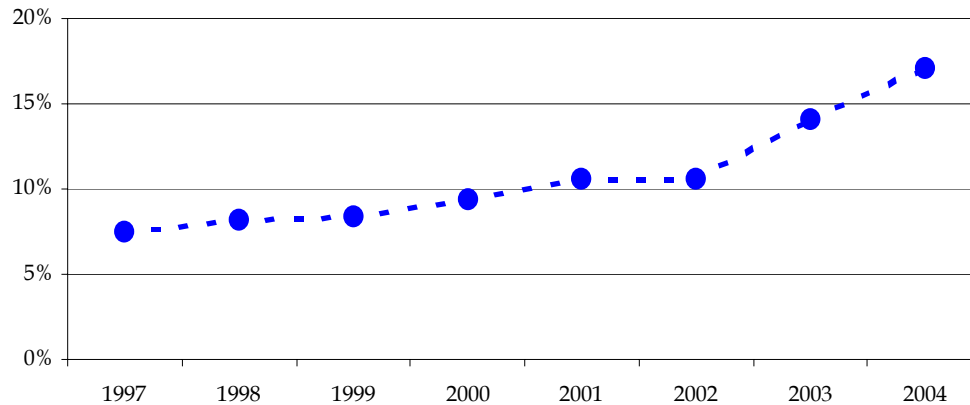
	1997	1998	1999	2000	2001	2002	2003	2004
Manufacturer Omitted	10.5%	10.7%	10.4%	10.8%	10.6%	14.4%	21.4%	32.7%
	6.5%	7.4%	7.7%	10.8%	11.7%	13.0%	26.7%	26.2%
	22.6%	21.4%	17.4%	17.9%	16.7%	13.1%	21.4%	26.0%
	3.1%	4.7%	8.1%	7.5%	9.6%	11.0%	17.8%	21.9%
	6.5%	7.5%	8.3%	10.6%	12.1%	13.5%	15.8%	19.5%
	7.5%	7.5%	10.2%	7.4%	17.7%	14.9%	14.2%	19.4%
	8.9%	9.9%	10.0%	14.2%	15.2%	16.0%	18.3%	19.0%
	7.5%	8.2%	8.4%	9.4%	10.6%	10.6%	14.1%	17.1%
	7.0%	7.3%	7.4%	11.5%	12.2%	12.1%	13.4%	16.8%
	2.7%	4.1%	4.2%	4.4%	5.1%	5.2%	6.8%	10.0%
	4.0%	6.3%	6.4%	6.4%	6.3%	6.7%	7.6%	9.2%
	4.7%	4.8%	4.7%	5.0%	5.2%	5.6%	6.8%	7.6%
	7.1%	6.6%	6.7%	7.1%	8.6%	6.4%	7.7%	7.2%
	6.5%	8.1%	8.4%	8.1%	7.3%	6.5%	5.8%	7.0%

Note: Manufacturer omitted for confidentiality.

Source: LE Manufacturer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

On a per brand basis (with the brands omitted for confidentiality) we also note large increases in the share of multi-brand dealerships. All but four brands more than doubled this share. Some brands see up to four-fold increases.

Figure 46: Proportion of multi-brand dealerships (1997-2004).

Source: LE Manufacturer Survey.

Overall, the proportion of multi-brand dealerships for the 12 countries in our study has seen a marked increase from 7% to 17% in the space of 7 years. The graph also shows how the trend has quickened in recent years, particularly after 2002.

The sample of dealers that responded to our dealer survey corroborates the results above.

In our survey of car dealers we found that, although a majority of dealers in our sample specialise in only one brand, almost half of them do sell multiple brands (Figure 47). Sales of brands from the same manufacturer are only very slightly more frequent than sales of cars from different manufacturers. The picture is very similar in the area of service contracts, although they are offered by fewer dealerships.

Figure 47: Multi-brand dealerships (1997-2004): LE Dealer Survey results.

Share of dealerships selling:	
One brand only	51.3
Multiple brands	48.7
% of which selling brands from the same manufacturer	52.7
% of which selling brands from different manufacturers	47.3

Source: LE Dealer Survey.

Moreover, Regulation 1400/2002 was intended to curb the manufacturers' right to insist upon physically separated showrooms for their brands.³² However, as Figure 48 shows, the proportion of dealerships in our sample that sell different brands from the same showroom has actually been decreasing, whereas the practice to physically separate showrooms in the same geographical location has become more widespread, showing a twofold increase over the period 1997-2004. In this, as in the results on multi-branding, (see Figure 47), our data seem to be at odds with the opinion of many market observers.³³

³² Manufacturers nonetheless still maintain the right to insist on certain standards to make their products distinguishable.

³³ With respect to the high proportion of multi-brand dealerships reported in our survey responses, it is possible that selection issues played a role and that larger dealers were more likely to return our questionnaire. In addition, missing observations, especially in the earlier years of the period under consideration, impairs the reliability of any trend analysis based on the survey responses.

**Figure 48: Multi-brand dealerships: showroom arrangements (1997-2004):
LE Dealer Survey results.**

		1997	1998	1999	2000	2001	2002	2003	2004
Different brands are sold..	..in the same showroom. (%)	58.2	53.2	51.6	49.3	46.4	46.7	45.5	43.2
	...in different showrooms, but at the same geographical location. (%)	16.4	22.6	25.0	27.5	30.4	30.7	31.2	30.7
	...in different showrooms at different geographical locations. (%)	25.5	24.2	23.4	23.2	23.2	22.7	23.4	26.1

Note: multi-branding refers to different brands not necessarily different manufacturers.

Source: LE Dealer Survey.

Stand-alone dealers

In this sub-section we report on the evolution of stand-alone dealers, i.e. dealers that do only car sales (no service and repair and no parts distribution). This is to investigate how the new regulation may have impacted the type of services offered by dealers. In most countries, in the past, most dealers would always also offer service and repair. Although stand-alone dealers remain a minority, not exceeding 10% of all dealers in ten of the countries we surveyed, we note a certain degree of increase in their share of the total number of dealers. This is more significant in Spain, Italy and Portugal, but also noticeable in other countries. Only Estonia and Sweden show a decline in the percentage of stand-alone dealers over the period 1997-2004 (Figure 49).

Figure 49: Percentage of stand-alone dealers (1997-2004).

	1997	1998	1999	2000	2001	2002	2003
Denmark	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.2%
Germany	0.3%	0.3%	0.3%	0.2%	0.2%	0.3%	0.6%
Estonia	18.5%	20.0%	17.9%	15.4%	18.5%	18.0%	16.7%
Spain	1.7%	4.1%	4.4%	3.3%	4.6%	4.5%	6.9%
France	1.8%	1.8%	1.9%	1.8%	2.2%	2.4%	3.0%
Italy	2.4%	3.5%	2.9%	2.8%	2.9%	3.4%	6.5%
Hungary	0.4%	0.6%	0.6%	0.6%	1.0%	1.3%	1.1%
Netherlands	0.0%	0.1%	0.1%	0.2%	0.2%	0.3%	0.8%
Poland	0.3%	0.8%	2.3%	2.0%	1.6%	1.3%	1.5%
Portugal	13.4%	23.4%	24.5%	23.2%	24.7%	20.5%	22.8%
Sweden	11.5%	11.0%	9.4%	10.8%	10.3%	9.8%	9.8%
UK	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.8%

Sources: LE Manufacturer Survey.

Internet sales

Sales of new cars over the Internet are extremely rare. According to our survey, no car producer is aware of any Internet sales being conducted through their distribution network. A few of the respondents to our dealer survey report some Internet sales (although the numbers are typically negligible), but in most cases these are specified as being sales of used cars. In this light it seems doubtful that even the small number of reports of Internet sales of new cars are accurate.

It is not difficult to see why consumers might be reluctant to buy new cars entirely over the Internet. Not only are cars high-value purchases, they are also experience goods, where, as a major dealer group told us, customers needed “to experience the look, feel, and handling of the vehicle” prior to purchase.

Consequently, the role of the Internet in car distribution is seen primarily as a marketing tool. As such it is used extensively, and car manufacturers, as well as individual dealers, have built an elaborate Internet presence that allows customers to access a range of pre-sale services, from doing preliminary research on a vehicle to checking availability and requesting test-drives.³⁴

³⁴ Several studies confirm that the Internet has become the most important research tool for prospective car buyers, and that the Internet heavily influences offline sales. (see Jupiter MMXI, Dec. 2001).

A recent report by Capgemini³⁵ expresses the view that “The web continues to grow in importance as an information resource for automotive consumers and can influence their purchasing decisions.” According to this report, an increasing number of consumers say they expect to use the Internet in some fashion during their research process before purchasing a new car. Moreover, according to the Capgemini study, the percentage of respondents that “consider purchasing a vehicle from a particular manufacturer more likely when they are happy with the features of the respective websites” is above 30% in all countries surveyed (UK, France, Germany, Italy and Sweden), and it is the highest in Sweden, the UK and Germany, at above 45% in all three countries.

As we report in the annexes to this chapter, data on actual Internet sales are scarce. However, even when the actual transaction does not take place across the Internet, its importance to the transaction should not be underestimated. Consumers have much greater access to information on prices, features, and competitors. They can easily compare different models and different brands without pressure from sales representatives. The car buyer of the future, even if still buying his/her car from a bricks and mortar dealership, may have obtained on the Internet a very clear picture of the car and the deal that they expect to get.

A small niche market for Internet sales nonetheless exists, but it appears to be served by specialist companies operating outside VMs’ networks, rather than by conventional dealerships who offer Internet sales in parallel to their on-site sales. The strategies used by such companies to entice customers to make their new car purchases online can be highly innovative, for example including reverse auctions, and can result in prices that are significantly lower than those offered by conventional dealers.³⁶

In spite of this, it is unlikely that more than a few thousand cars annually are currently sold over the Internet in the whole of Europe. This indicates that demand for Internet car sales, at least for the time being, is insensitive to price to a remarkable degree.

Sales of cars in supermarkets/hypermarkets

Supermarkets and hypermarkets have made small, occasional forays into car distribution in several European countries in recent years. A few hundred cars of different makes were sold in France by the large hypermarket groups Auchan and Casino. Similar episodes occurred in Belgium by Colruyt, and in Germany by Quelle, Schlecker, Edeka, Plus and Norma. The cars sold by those retailers were offered at prices up to 25% below the normal sales price.

³⁵ Capgemini (2004).

³⁶ Companies such as AutoeBid in the UK report prices up to 25% below list price. (Daily Telegraph, February 14 2006, p. 9).

So far, supermarkets and hypermarkets have not established themselves as permanent features of the car distribution system. Market observers categorise their attempts at entry above all as marketing strategies. This view is supported by the fact that supermarkets and hypermarkets have not extended their involvement in car distribution beyond a very limited period.

Manufacturers have not been supportive of such a course of action by supermarkets and hypermarkets. Edeka in Germany had to go through the courts to fight off a challenge against its sales of Fiat cars by the brand's authorised distributors. DaimlerChrysler simply refused to deliver 15,000 Smart cars for sale by the supermarket chain.

Sales of cars in "car supermarkets"

"Car supermarkets" operate in a slightly different way. They undertake practically no sales of new cars but mainly of pre-registered cars. Pre-registered cars are often "like new" cars except that, through the mechanism of pre-registration, the dealer or vehicle manufacturer can sell at a lower price without having to lower the price of all its inventory. From the point of view of the buyer, there is a downside to this pre-registration because it often cuts into the period of manufacturer's warranty at the time of final purchase. In a way, this is a form of price discrimination. However, sales in this form do not enter the statistics as sales of new cars and it is therefore difficult to assess their magnitude.

It is common that car supermarkets selling new cars source these cars from abroad. This often implies some variation in specifications. For more flexible buyers, car supermarkets can be a good way to get a new car quickly and cheaply.

Car supermarkets engaged in selling imported new cars have so far benefited from large price differences between Member States (see section 2.5.2 below), and are thus an established part of the distribution landscape in many countries, including Belgium and the Netherlands (e.g. Auto Cardoen), Italy (e.g. Euroscar), and the UK (e.g. Motor Point, Trade Sales).

There have been some high profile examples of failed car supermarkets (notably Virgin cars) but future trends may be favourable to this new retail format. According to a survey by UK trade magazine Auto Trader, one in five UK owners have bought from a car supermarket, and one in three would consider buying from one in the future.³⁷

³⁷ Auto Trader (2004).

2.3.5 Preliminary conclusions

Our analysis of the evolution of the car distribution networks in the 12 European countries has focused primarily on the density of the dealer networks, the concentration of dealers and dealer groups, and the involvement of car manufacturers in car distribution. In this subsection we present our preliminary conclusions with regards to this analysis.

- A large drop in dealer density is observed across all countries (with the exception of Estonia) and across all brands (that were already established by 1997). That being said, the number of dealers differs markedly across brands and across countries. This is illustrated by the comparison of sales per dealer which are particularly low in Denmark, Estonia, Portugal and Sweden, at levels below half those observed for Italy and the UK. In terms of brands, we observe cases where one brand has about twice the number of dealers per sale than another (e.g. the case of Renault versus Volkswagen).

Such wide remaining differences appear to leave an open door for further network rationalisation to take place, for at least some countries and some brands.

- With respect to market concentration at the distribution level, we observe increasing size of the average dealership (as discussed above) and increased prominence of dealer groups. Average turnover per dealership has increased more than two-fold over the period 1997-2004, for our sample of countries. The larger dealer groups have gained about 3% extra market share in France, Germany and Italy. Current market shares for the top 25 dealer groups range from 10% in Germany, Italy and Spain to over 30% in the UK. The trend appears to be for a continuing growing importance of this type of distribution format. This is significant for interbrand competition as these groups are most often multi-brand (Figure 40).
- Manufacturer ownership of retail outlets remains low, at a level of about 2% of the overall number of outlets, although it did see a sizeable increase over our sample period of about 70% in the combined totals for France, Germany, Italy and the UK.

2.4 Financial indicators

In this section we report on a series of financial indicators for the two groups of companies to which this first chapter relates, namely, car manufacturers and car dealerships.

For car manufacturers

In Figure 50 below we report data from Bloomberg³⁸ on the profitability of vehicle manufacturers.

Figure 50: Operating margin for vehicle manufacturers (in %).								
	1997	1998	1999	2000	2001	2002	2003	2004
Volvo	4.58	4.23	5.24	3.88	1.62	1.51	2.64	6.55
Kia	-0.58	-39.08	0.48	1.42	3.39	4.74	5.05	1.73
BMW	3.49	2.56	1.21	5.86	8.63	8.03	8.02	8.43
DaimlerChrysler	4.54	5.97	6.13	2.60	0.76	3.35	2.83	3.19
FIAT	3.89	1.63	1.63	1.48	0.55	-1.37	-1.05	0.05
FORD AG	0.20	0.39	-1.87	-4.51	-0.89	-0.89	-0.89	-0.89
FORD M. CO	6.79	6.22	6.07	4.82	-3.22	0.97	1.03	2.81
GM	2.17	4.23	5.61	4.32	1.28	1.59	2.56	1.90
Peugeot	1.97	4.54	3.12	4.40	4.78	4.75	3.71	3.62
Renault	1.01	4.44	3.95	4.24	1.94	3.35	3.68	5.28
VW	2.37	2.73	2.51	4.74	5.95	5.79	1.88	1.71
Honda	7.58	7.71	8.81	6.99	6.30	8.68	8.65	7.35
Hyundai	6.77	3.89	3.95	5.83	7.82	7.05	5.78	4.49
Mazda	0.01	1.62	3.04	1.16	-0.74	1.36	2.14	2.41
Mitsubishi	1.24	0.09	1.59	0.67	-2.25	1.26	2.13	-3.84
Nissan	2.95	1.28	1.67	1.38	4.77	7.89	10.80	11.10
Toyota	5.43	6.68	6.08	6.02	6.48	7.44	8.49	9.64
Suzuki	3.93	3.34	3.25	2.80	3.17	3.50	3.68	4.33

Note: Operating margin is defined as earnings and losses before taxes and interest divided by turnover.
Source: *Bloomberg*.

Figure 50 reports profit margin measured as earnings before interest payments and tax, divided by turnover. Companies do not generally report separate financial information according to geographic region. Therefore, these data refer to overall financial results for the companies concerned.

³⁸ Bloomberg Professional (financial and economic data service provider).

In the figure below we use data from Amadeus³⁹ on the same measure of profitability averaged across a set of European companies that report financial information under one of the vehicle manufacturer brands. These data may include some national distributors as well as car manufacturers' direct operations.

Figure 51: Average operating margin for vehicle manufacturers' European operations (in %).

	1998	2000	2002	2003	2004
BMW	4.73	5.98	4.55	3.71	3.88
DaimlerChrysler	3.05	2.71	2.17	1.97	2.17
Fiat	0.59	-1.54	-3.19	-3.06	-2.15
Ford	2.53	1.36	1.90	1.58	1.60
GM	2.03	1.82	0.42	1.68	1.32
Honda	1.30	-2.81	0.75	1.83	8.51
Hyundai	7.96	4.87	2.76	4.36	4.96
Kia	-	-	-0.75	0.00	-3.13
Mitsubishi	0.51	-9.86	-3.09	0.53	-4.48
Nissan	0.33	1.01	-0.18	1.11	0.90
PSA	-1.59	1.70	0.79	1.19	1.72
Porsche	5.51	11.07	13.86	10.40	7.87
Renault	1.04	2.22	3.17	1.74	1.63
Suzuki	1.74	0.24	0.35	0.28	1.29
Toyota	0.54	1.02	1.73	2.53	2.13
Volkswagen	3.16	2.01	2.75	2.52	2.20

Note: Operating margin is defined as earnings and losses before taxes and interest divided by turnover.

Source: Amadeus.

We observe relatively high profits for some manufacturers and low or at times negative profits for others. When compared to their overall profitability, European figures show large differences. With the exception of Honda and Volkswagen, all manufacturers' European operations are less profitable than their overall activities. In some cases, profitability is very significantly smaller in Europe. This is the case for BMW, Nissan, Renault, Suzuki and Toyota.

These observations can be taken as an indication of high levels of competition in the European automotive market.

³⁹ Bureau van Dijk, Amadeus Database.

Figure 52: Average % turnover change on a year earlier for vehicle manufacturers' European operations.

	1998	1999	2000	2001	2002	2003	2004	Average deviation from average
BMW	10.8%	15.7%	6.3%	24.6%	10.7%	2.3%	16.9%	5.6%
DaimlerChrysler	12.2%	13.9%	9.9%	13.0%	9.2%	4.3%	3.8%	3.2%
Fiat	12.6%	-0.9%	-1.7%	-3.9%	36.4%	-3.2%	-1.2%	10.9%
Ford	3.5%	18.7%	3.4%	4.2%	-10.6%	33.9%	-11.3%	11.6%
GM	18.0%	26.1%	-2.5%	3.5%	8.0%	-1.8%	-9.1%	9.7%
Honda	9.3%	3.9%	-5.6%	2.9%	11.6%	13.6%	3.0%	5.1%
Mitsubishi	68.3%	37.6%	-8.7%	-13.3%	7.2%	4.2%	12.2%	21.5%
Nissan	13.8%	3.5%	9.1%	0.9%	-0.6%	4.8%	6.9%	3.8%
PSA	6.7%	10.7%	10.2%	-1.0%	20.5%	-0.1%	3.4%	5.7%
Porsche	0.0%	0.0%	1.4%	0.4%	0.2%	8.1%	4.7%	2.5%
Renault	17.0%	11.5%	-9.7%	13.3%	4.1%	5.7%	12.3%	6.6%
Toyota	10.9%	9.1%	9.0%	27.6%	-2.9%	28.3%	7.7%	8.6%
VW	15.0%	17.9%	7.1%	9.6%	1.3%	-4.4%	10.0%	5.8%
Average deviations from average	9.0%	8.1%	6.0%	8.7%	7.6%	8.4%	6.1%	

Note: the data have been constructed based on turnover information for 60 company names in the Amadeus database that register under the rubric of "manufacture of motor vehicles" in different European countries. The full data set including company names is included in the confidential annex to this chapter (Volume II Section 1).

Source: Amadeus

The significant feature of the figure above is the high variance of turnover from year to year both upward and downward. In addition, turnover varies across companies in a relatively uncorrelated way, which implies that the high oscillations are not due to changes in market size but in relative market position of the different manufactures. These observations are reflective of a rather competitive market.

For car dealerships

In the following tables we report data from the Amadeus⁴⁰ database. This database covers financial information reported by companies. For the purpose of the present study, we looked at 53,000 companies in Europe who

⁴⁰ Bureau van Dijk, Amadeus Database.

report their main activity according to the NACE codes 501 (sales of motor vehicles), 502 (service and repair of motor vehicles) or 503 (sales of parts for motor vehicles). We used only the first group for the purpose of the current chapter.

The financial information reported in the following tables therefore corresponds mainly to dealers.

Figure 53: Average operating margin for car dealerships (in %).

	1998	2000	2002	2003	2004
Denmark	3.03	0.55	0.83	0.93	1.37
Germany	2.47	0.55	0.88	0.90	1.13
Estonia	1.00	3.35	3.94	3.57	2.02
Spain	1.70	1.31	0.98	1.20	1.45
France	1.62	1.52	1.24	1.19	1.63
Italy	1.18	0.85	0.74	0.57	0.44
Hungary	2.88	1.47	3.03	2.41	2.94
Netherlands	2.52	1.41	0.98	1.62	1.77
Poland	1.90	-0.30	1.11	1.53	2.20
Portugal	1.08	0.73	-0.28	-0.53	0.18
Sweden	1.62	2.34	2.14	2.31	2.32
UK	1.78	1.15	1.58	1.58	1.65
EU12	1.62	1.33	1.18	1.19	1.35
EU25	1.61	1.36	1.22	1.23	1.38

Note: Operating margin is defined as earnings and losses before taxes and interest divided by turnover.

Source: Amadeus.

In Figure 54 and Figure 55 below we report on average profit margins in two subsets of our sample of companies. In the first subset we have included the companies with above average turnover and in the second we included the complement set of companies. The question underlying this analysis was whether there was a marked difference in profitability between large and small dealerships. It is perhaps surprising that, in reality, there does not appear to be any significant difference between the two groups.

This is a somewhat surprising result as we expected to find some evidence of economies of scale in car distribution. The data from the Amadeus database, however, does not support this view. We have mentioned before that one of the reasons for car manufacturers to reduce the size of their networks is for the efficiencies gained through economies of scale. However, such efficiency gains seem to mainly affect operations at an upstream level of the supply chain, resulting from reduced transaction costs for VMs (including costs for

auditing dealers' compliance with quality and operational standards) as well as lower transport and other logistical costs for car deliveries. In addition we must allow for different motivations to explain that move to a more concentrated network.

The need for rationalisation may stem from the excessive number of dealerships compared to number of customers. Such an imbalance could affect the bigger dealerships disproportionately, thus explaining the findings above. Furthermore, the measures in the new BER intended to increase inter-brand competition may mean that it is becoming more crucial for automakers to distinguish their brands from those of other manufacturers.

**Figure 54: Operating margins for the larger companies
(turnover above average).**

	1998	2000	2002	2003	2004
Denmark	3.03	0.53	0.79	1.31	1.67
Germany	1.68	0.26	0.47	0.88	1.22
Estonia	2.00	2.17	4.13	3.30	2.03
Spain	1.88	1.66	1.20	1.60	1.40
France	1.25	1.05	0.74	0.93	1.12
Italy	1.15	0.98	0.57	0.70	0.55
Hungary	1.92	1.33	2.51	1.64	1.84
Netherlands	2.94	1.57	1.47	2.14	1.46
Poland	0.96	-0.88	1.66	2.41	2.95
Portugal	0.74	0.70	-0.05	0.02	0.27
Sweden	1.81	2.28		1.88	1.78
UK	1.87	1.32	1.72	1.43	1.79
EU12	1.50	1.2	0.99	1.15	1.06
EU25	1.51	1.22	1.04	1.21	1.12

Note: Operating margin is defined as earnings and losses before taxes and interest divided by turnover.

Source: Amadeus.

Figure 55: Operating margins for the smaller companies (turnover below average).

	1998	2000	2002	2003	2004
Denmark	-	0.55	0.85	0.83	1.23
Germany	5.01	1.24	1.31	0.92	1.07
Estonia	0.49	3.84	3.86	3.66	2.02
Spain	1.63	1.19	0.91	1.11	1.47
France	1.75	1.67	1.39	1.26	1.79
Italy	1.20	0.78	0.81	0.53	0.35
Hungary	3.49	1.55	3.31	2.57	3.25
Netherlands	2.25	1.32	0.72	1.51	1.92
Poland	2.58	0.02	0.95	1.41	2.06
Portugal	1.28	0.75	-0.38	-0.63	0.15
Sweden	1.57	2.35	2.23	2.40	2.47
UK	1.75	1.08	1.53	1.61	1.61
EU12	1.67	1.38	1.24	1.2	1.47
EU25	1.65	1.41	1.28	1.24	1.49

Note: Operating margin is defined as earnings and losses before taxes and interest divided by turnover.

Source: Amadeus.

Figure 56: Sector-wide operating margin for car retailing.

	1998	2000	2002	2003	2004
Denmark	4.03	1.49	2.31	1.89	2.95
Germany	0.17	0.57	0.24	0.20	0.24
Estonia	1.79	2.48	2.99	3.09	1.83
Spain	2.04	1.85	1.49	1.65	1.81
France	1.53	1.28	0.88	0.80	1.37
Italy	1.49	1.30	1.09	0.83	0.79
Hungary	1.80	1.06	2.31	1.42	1.79
Netherlands	1.63	2.28	2.03	2.05	2.54
Poland	0.92	0.66	2.54	2.33	2.47
Portugal	2.23	2.21	0.54	0.42	0.83
Sweden	1.36	1.54	1.62	2.38	1.84
UK	1.16	-0.06	-0.01	1.41	1.76
EU12	1.31	1.15	0.93	1.02	1.24
EU25	1.34	1.17	1.05	1.07	1.26

Note: Operating margin is defined as earnings and losses before taxes and interest divided by turnover.

Source: Amadeus.

Sector-wide profit margin differs from average profit margin in the way it is computed. While for average profit margins we took the simple average of profit margins reported by each company, for sector-wide profit margin we add all profit and loss reports and add all turnover reports and divide one number by the other, for each country and in each year.

Sector-wide profit margins are generally lower than average profit margins, which indicates that, on average, smaller companies have higher profit margins than larger companies, confirming our observations on Figure 54 and Figure 55.

Additional data on the financial situation of dealerships is provided by our dealer survey. The overall average turnover of the dealerships in our sample has to be treated with caution, mainly because it aggregates over countries that find themselves in very different economic circumstances. With this in mind, it is nonetheless the case that the dealerships in our sample report a 44% increase in turnover between 1997 and 2004. The greatest part of turnover stems from the sale of new cars. However, this share is decreasing rapidly, whereas turnover from sales of spare parts doubled during the same time (Figure 57). This development may be explained by the fact that authorised dealers have become more attractive as sellers of spare parts due to the fact that they possess all of the technical information needed to repair increasingly complex vehicles.

Figure 57: Turnover of car dealerships (1997-2004): LE Dealer Survey results.

	1997	1998	1999	2000	2001	2002	2003	2004
Average turnover (€'000)	10,245	11,145	11,081	12,800	12,406	12,628	13,475	14,738
Turnover from new car sales (% of total)	77.3	78.7	78.5	77.2	64.9	69.0	68.6	66.9
Turnover from service and repair (% of total)	14.6	13.9	14.0	14.7	22.7	16.1	16.4	17.0
Turnover from parts sales (% of total)	8.1	7.4	7.5	8.1	12.5	14.9	15.1	16.1

Note: the average is calculated using the number of respondents in each year; the underlying total is thus different for each year. The % shares of the different activities add up to 100, where in fact the dealerships undertake other activities in addition to the ones we asked for. The figures thus do not represent the true proportions, but rather the relative importance of the three activities.

Source: LE Dealer Survey.

**Figure 58: Financial indicators (1997-2004): LE Dealer Survey results.
(€'000)**

	1997	1998	1999	2000	2001	2002	2003	2004
Average operating profit	232.1	263.8	266.3	290.0	240.1	223.1	205.4	330.1
Average capital expenditure	277.4	307.3	258.5	472.6	379.0	359.5	567.9	1420.2
Average value of assets	3252.6	3098.1	3127.2	3650.4	3231.0	3233.3	3658.5	13228.9
Average outstanding equity	1222.1	1061.2	1259.0	1320.8	1152.1	939.8	1155.7	1991.8

Notes: the average is calculated using the number of respondents in each year; the underlying total is thus different for each year; due to the low number of responses to this question, the reported averages are highly sensitive to outlying observations.

Source: LE Dealer Survey.

The average net profit margin of the dealerships we surveyed lies slightly above 2 percent and has remained stable over the period under investigation, which accords with the reports of many market observers (Figure 59). The increase in the value of assets relative to profits can be seen as evidence of increasing investments in facilities over recent years, which are often required to meet quality standards set by car manufacturers. (For example, see Figure 63.)

Figure 59: Selected financial ratios (1997-2004): LE Dealer Survey results.

	1997	1998	1999	2000	2001	2002	2003	2004
Average operating profit/ average turnover	2.3%	2.4%	2.4%	2.3%	1.9%	1.8%	1.5%	2.2%
Average operating profit / average assets	7.1%	8.5%	8.5%	7.9%	7.4%	6.9%	5.6%	2.5%
Average operating profit / average outstanding equity	19.0%	24.9%	21.1%	22.0%	20.8%	23.7%	17.8%	16.6%

Notes: the percentages reported in this Figure are based on averages taken over the number of replies we received for each of the individual indicators. The underlying total is thus different for each year. Due to the low number of responses to this question, the reported averages are highly sensitive to outlying observations, which contributes to the volatility shown in the data.

Source: LE Dealer Survey.

Dealer margins on new car sales

In this part, we discuss dealer profitability from a different angle – from the perspective of margins on new car sales offered by car manufacturers. This is based on a recent study by the ICDP on dealer margins (2005).

One of the most important elements of the dealer-manufacturer relationship is indeed the size and the structure of the dealer margin. Margins offered on new car sales by manufacturers to dealers in their authorised network are divided into three main categories:

- **Base margin** – this is a fixed unit margin granted by manufacturers to dealers, irrespective of other elements
- **Quantitative bonus** – this is an additional variable unit margin granted by manufacturers to dealers upon achievement of quantitative objectives (units and/or model mix, compliance with manufacturer ordering schedule)
- **Qualitative bonus** – this is an additional variable unit margin granted by manufacturers to dealers upon achievement of specific qualitative standards. The two most relevant qualitative bonus elements in the franchise relationship are: the bonus linked to customer satisfaction indices (CSI) and the bonus linked to corporate image (CI). These bonuses are used by more than half the brands (according to ICDP) and add up to an average of about 2% of the value of sales (according to the same source)

The manufacturers' desire to improve standards resulted in a shakeout of dealers, as the new standards became financially more demanding and not all dealers had the financial capability to comply. According to ICDP, over recent years, the importance of franchise standards in the automotive industry has grown. One reason for this is the growing competitive nature of the sector; manufacturers are thus resorting to brand standards to foster customer loyalty.

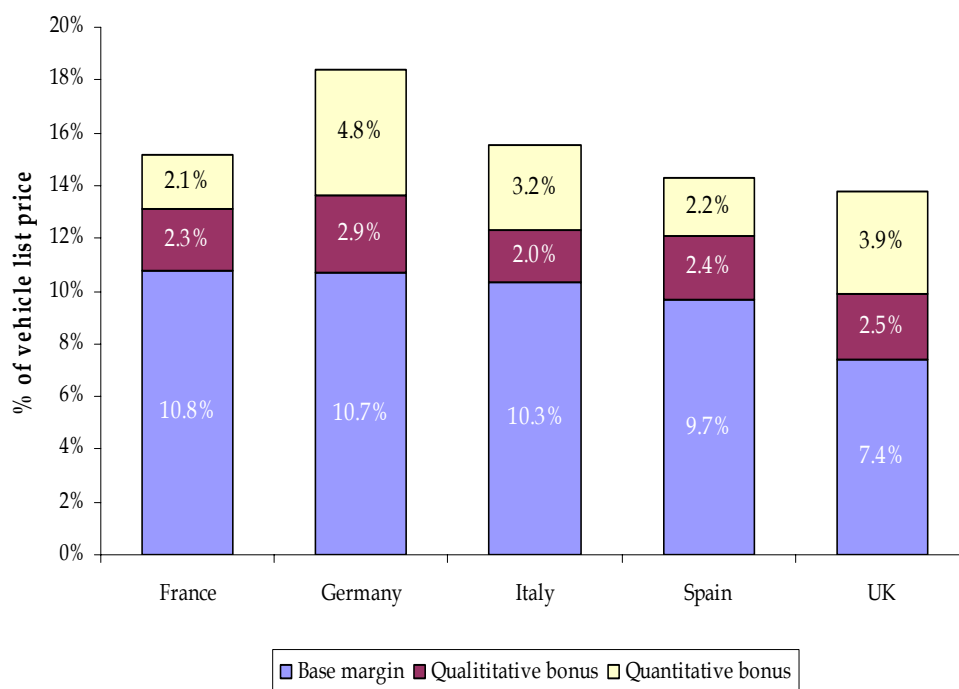
This drive for standards has taken place in parallel with the evolution in margin structures. While quantitative bonuses are an incentive system to achieve sales volumes, qualitative bonuses are an incentive to raise standards of facilities and the level of customer service.

Increasingly demanding standards have resulted in growing amounts being spent on “must-have” standards. As a result, standards e.g. relating to corporate image, process certification and information systems, as they are met by most dealers, no longer represent ingredients of a variable bonus.

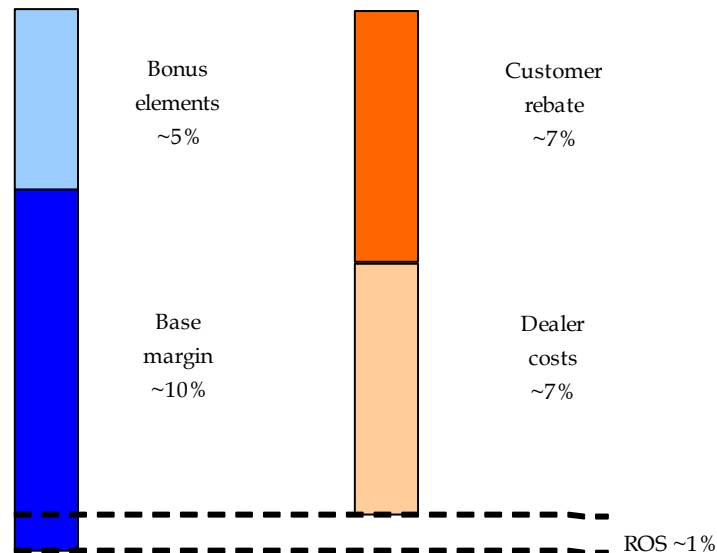
The total margin corresponds to the sum of base margin (i.e. the discount from the list price at which the dealer buys the car from the manufacturer) plus bonus elements and represents the maximum potential margin if all quantitative and qualitative criteria are met. These margins and bonuses are expressed as a percentage of the list price of the vehicle; therefore they do not

reflect discounts to customers which, according to the same study by ICDP, are typically about 7% of the retail price for a “volume brand”.

Figure 60: Average Margin Structure.



Source: ICDP.

Figure 61: Dealer's typical profit structure.

Source: ICDP.

Germany is noticeably different from the other countries in shown in Figure 60. Dealer margins at around 19% are almost 5 percentage points more than those in Italy and other major European countries. The reason for such a discrepancy is not obvious. Evidence suggests that German manufacturers operate higher margins and enjoy a very strong market position in Germany, with the resultant effect on the typical German dealer's profit structure.

Alternatively the explanation could be found in Germany's higher number of dealers that, consequently, tend to be smaller in size. This implies that the number of cars sold per German dealer is lower than that of its European counterparts and, therefore, the average German dealer needs to operate higher margins on the each vehicle to fulfil investment requirements set by manufacturers. This is also what we see in Figure 25 on page 43. Germany's numbers are well below the Western Europe average and about 30% below those for France and Spain, for example.

According to the views expressed by CECRA affiliated dealers, the evolving bonus system makes dealers more dependent on the vehicle manufacturer. In order to be eligible for all the bonus schemes the dealer has to comply with a large number of investments on standards required by the manufacturer.

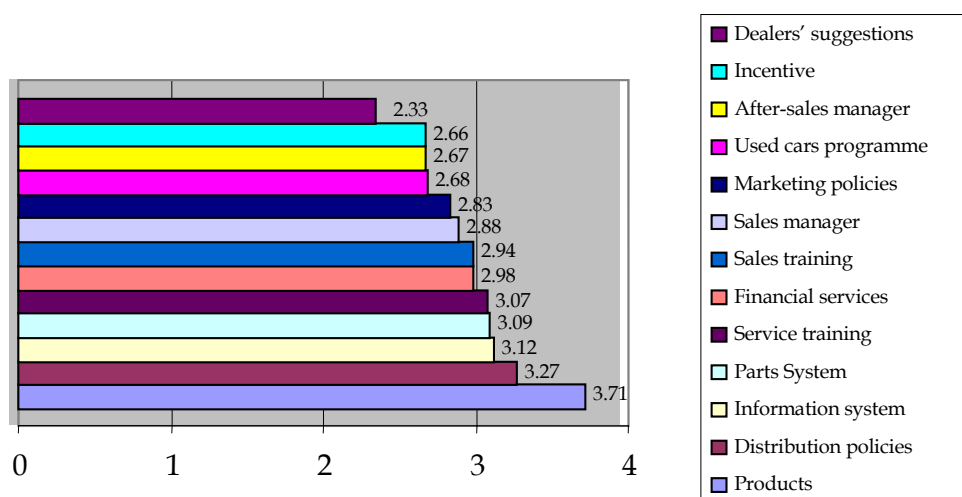
A study about automotive distribution in Italy conducted in 2005 by Leonardo Buzzavo and Claudio Pizzi at Ca' Foscari University in Venice,⁴¹

⁴¹ See Buzzavo, Leonardo and Pizzi, Claudio (2005).

confirms that the current trend among manufacturers is to reduce the size of dealers' margin but, more importantly, to transform fixed margins into variable bonuses. The authors conclude that by increasing the share of non-fixed margins, manufacturers gain influence over dealers. The authors estimate that if an Italian dealer meets all the criteria to achieve full margin, this corresponds to about 14% of the vehicle's price (basic margin plus various bonuses). Considering an average rebate to customers close to 8% and dealer costs of another 6%, it is quite straightforward to understand how strictly franchised dealers must fulfil manufacturers' requirements in order to survive.

The authors also provide evidence on dealer ratings of their relationship with the respective car manufacturer by highlighting the Italian case, where profitability of car distributors is falling.

Figure 62: Dealers' satisfaction by business area.



Note: Views from 1 (totally dissatisfied) to 5 (totally satisfied).

Source: Buzzavo and Pizzi (2005).

Yet, it appears that, when it comes to products, distribution policies (logistics, mainly), information system and parts system, the relationship remains quite satisfactory. On the other hand, incentives and willingness of manufacturers to listen to dealers' suggestions can be considered downsides of the relation.

In the following figure we report on results from LE's survey of dealers on the required levels of dealer investments to meet manufacturer standards. We have not encountered very definite patterns in terms of increased levels of

required investments over the sample period (some regression coefficients reported below are positive and some are negative in Figure 63). In addition, in the following figure (Figure 64) we also do not find a completely uniform pattern of the switch away from fixed and into variable margins.

Figure 63: Trends of Required Investments over time (1997-2004), by brand.

	Regression Coefficient, required marketing investment on time	Regression Coefficient, required technological investment on time	Regression Coefficient, required non-technological investment on time
Alfa Romeo			
Audi	0.128135	-0.01967	0.863457
BMW		-0.19419	0.108526
Citroën			
Daewoo	0.446202*	0.460739*	0.576971*
Fiat	0.506658	-2.70805	-0.33213
Ford	0.082708*	0.088217*	0.34792*
Honda	-0.13865	0.013496	0.006365
Hyundai	0.730342*	-0.0884	0.623378*
Jaguar	0.115039*	0.097043	0.011656
Kia	0.397247		
Lancia	-0.69315	-2.81341	-0.58779
Lexus	0.001452	0.001339*	0.001339*
Mazda	-0.03922	-0.23833	-0.49789
Mercedes Benz			
MINI	0.312621*	-0.47079	-0.70861
Mitsubishi			
Nissan	-0.03495	-0.5583*	-0.14682*
Opel/Vauxhall			
Peugeot	0.034953	0.158228*	0.651771*
Renault	0.09275*	0.145628	0.219502*
Saab	0.020035	-0.1205	0.345434
Seat	0.202883*	0.262961*	0.178328
Škoda	0.208286*	0.594789*	0.718532*
Suzuki	0.034542	0.451211	0.265848*
Toyota	0.117309*	0.187215	0.202023
VW	-	-	-
Volvo	-	-	-

Note: * denotes significant at 10% or better. The details of the regressions can be found in Volume II Section 1.

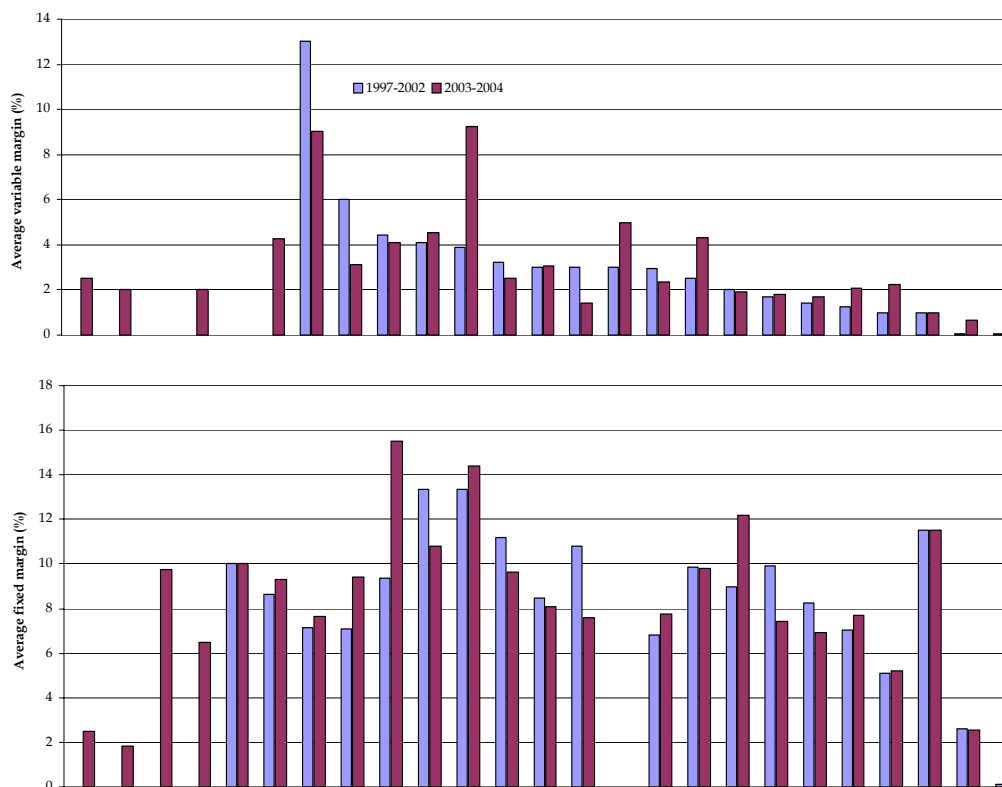
Source: LE Dealer Survey.

Almost all coefficients that are statistically significant are positive with the exception of non-marketing investments reported by Nissan dealers. With regard to the latter, the levels of non-marketing-related investments seem to have gone down over the sample period.

For about half of the brands reported above, the increases in investment levels over time, in all three categories, have been very significant.

According to answers received to LE's dealer survey, investment levels differ markedly across brands, as we report in the confidential annex. For marketing related investments, BMW and Saab have the highest levels of expenditure. For other investments brands like Audi, Fiat, Nissan, and Seat have investment levels that are several times the levels reported for some of the other brands.

Figure 64: Average fixed and variable margins per brand, 1997-2002 and 2003-2004.



Note: Brand names have been removed for confidentiality.

Source: LE Dealer Survey.

Detailed data are provided in the confidential annex to this chapter (Volume II Section 1).

In any vertical structure, there is always the issue of double marginalisation. The fact that two or more layers in the vertical chain have market power relative to those directly below may result in pricing policies that are even more socially inefficient than a single vertically integrated monopoly.

Double marginalisation would hurt both vehicle manufacturers and final consumers, to the benefit of dealers. In this light, changes in the market whereby manufacturers increase the level of control over their retailers may in principle work to the benefit of final consumers. Manufacturers need to combine incentives for investments on standards and incentives for not overpricing to final consumers. This can be achieved through a combination of incentives for sales volumes and competition among dealerships. It is in the workings of this balance that we must look for the final impact of recent changes and current trends on final consumers.

The question really is whether there is any risk of a scenario where most dealerships are very large operations, with market power which they use to increase prices for final customers. But, since car manufacturers would be hurt by such practices, it may be positive for final customers that the control of car manufacturers over their dealer networks remains tight, provided that inter-brand competition between car manufacturers continues to evolve in line with the trends outlined above in section 2.2.

2.5 Competition Analysis: Evolution of competitive environment

In this section we provide a summary of factors affecting the evolution of the competitive environment of car manufacturers and car dealerships in the 12 European countries to which our study refers. The discussion is divided into two main headings: inter-brand and intra-brand competition.

2.5.1 Factors affecting inter-brand competition at the distribution level

Vehicle manufacturers' margins and profitability ratios

Relatively low operating margins (earnings before tax and interest payments as a percentage of total turnover) for vehicle manufacturers suggest a healthy competitive environment in the car sector. Even the best-performing car manufacturers, above all Nissan, Toyota, BMW and Honda, managed only rarely to achieve operating margins in the double figures (Figure 50), so that overall margins do not seem excessive compared with other industries. The average operating margin for the selected car manufacturers in 2004 was 3.9%, compared with, for example 10.5% for chemical manufacturing, 8.1% for the tools/appliances industry, and 6.8% for the technical/scientific instruments industry.⁴²

The trend in operating margins has been volatile over most of the period 1997-2004. Many manufacturers experienced a slump in their earnings around the years 1998 to 2000, but margins for most car manufacturers increased markedly in 2004. Only a few manufacturers experienced negative operating margins over the period 1997-2004 (Kia, Fiat, Ford, Mazda and Mitsubishi), and of those who did, all but Ford and Mitsubishi managed record positive margins again by 2004.

Overall, it seems that the special protections granted to car manufacturers by the BER have not resulted in inflated profits.

Volatility versus stability of vehicle manufacturers' market shares

Car manufacturers market shares are relatively stable over time, although changes in manufacturers' relative positions are not uncommon. As could be seen in Section 2.2.1, the difference between competitors in terms of market shares is typically small.

Moreover, the overall European market concentration, as measured by the four-firm concentration ratio, decreased by 2.8% between 1997 and 2004.

⁴² Source: Reuters.

Much larger decreases of 10% and more were recorded in several countries, including both new and older Member States (Italy, Hungary, Poland, Sweden). This suggests that the observed increase in concentration in some markets (Denmark, Germany, Estonia, France, Portugal) is a result of local market conditions, rather than an artefact of the European environment, or of structural characteristics of the car industry. (See Section 2.2.1.)

Some large and well-established manufacturers have lost market shares across the 12 countries we studied. GM, Ford and Fiat all experienced a significant decline in their aggregate market shares. Manufacturers of premium brands, such as Mercedes BMW, but also innovative volume manufacturers, such as Renault, PSA, Toyota and VW, were able to increase their market shares over the period 1997-2004.

There are thus two defining features for the competitive landscape in the Europe:

- first, the market remains concentrated, with a small number of large manufacturers controlling more than two thirds of the market.
- Secondly, there is considerable movement in the market, with relative market positions changing constantly in response to changing consumer demand.

Overall it appears that competition in the European car market is vigorous and that consumers are offered a choice from a large variety of manufacturers that have to struggle to maintain their position in the market.

Market entries and exits by vehicle manufacturers

The European car market continues to attract entry by new manufacturers. Following the successful entry of Japanese and South Korean manufacturers, Europe is currently experiencing entry by Malaysian manufacturer Proton, which first entered the UK market in 1989, and most recently by Jiangling Landwind Motor, the Chinese partner of Ford, which started exporting to the Netherlands in 2005. Other manufacturers that are long established in their home market, such as the Indian companies Tata and Mahindra, are also trying to penetrate the European market with new models.

The eastern European market is seen as particularly promising for new entrants, as customer loyalties are less developed and demand in the low-price segment in which the new entrants want to compete is strong. With the exception of Škoda (part of the Volkswagen Group) domestic eastern European and Russian manufacturers, such as Lada and Zastava, which used to have a strong presence, struggle in comparison.

However, western European markets are also in the sights of new Asian manufacturers, and further entries can be expected. Surveys have shown that consumers are receptive to the offerings of new Chinese and other brands, a result of the positive experiences with high-quality Japanese and South

Korean brands that made up the previous wave of entrants.⁴³ As with previous entrants, acceptance of new brands is highest for compact models and in the low-price segment.

The only exit of a manufacturer from the European market, over the period covered by our study was that of MG Rover in 2004.

The continuing entry into the European market suggests that barriers to entry are low. The rationalisation of their dealer networks by established manufacturers is likely to make entry costs lower, as dealership sites and qualified personnel become available and are ready for appropriation by entrants.

Barriers to entry

Many commentators see access to a distribution network as the crucial issue for manufacturers wishing to enter the automotive retail market. For a long time, manufacturers in the European market imposed tough restrictions on multi-branding, which made entry on a small scale exceedingly difficult.

The recent streamlining of manufacturers' distribution networks, together with a wide range of multi-branding restrictions no longer benefiting from block exemption under BER 1400/2002, changed the situation fundamentally. A large number of dealer sites and qualified personnel suddenly became available in recent years as a consequence of the reduction in dealer numbers observed throughout the market after 2003.

At the same time, encouraged by the BER, multi-branding has become more widespread. Large multi-brand dealerships, in particular, have used the new rules to complement their offerings by adding new brands. Manufacturers at the budget end of the market appear to be profiting most from this trend. An example is Kia, which in 2005 cooperated with three of the biggest dealer groups in Britain to open several new multi-brand showrooms across the country.⁴⁴

Overall, barriers to entry into the car retail market can now be considered relatively low, a conclusion that is supported by recent episodes of entry, as discussed above.

Differentiation of distribution formats

There is a trend towards more direct manufacturer involvement in distribution in a number of countries. This trend is particularly evident in Germany, France, Italy, Sweden and the United Kingdom and is reflected in both the increase in absolute numbers of manufacturer-owned outlets, and

⁴³ Financial Times Deutschland, 13/09/2005.

⁴⁴ What Car (2005). However, not all of the 12 new showrooms were multi-brand.

the increase in turnover of manufacturer-owned outlets compared with total sales. (See Figure 30 and Figure 31 above.)

However, looking at the development at brand level reveals that not all manufacturers follow a strategy of increasing outright ownership of the distribution network. Moreover, manufacturer-owned dealerships still represent only a small proportion of manufacturers' total networks, with most brands owning less than 10% of their authorised network. (See Figure 28 above.)

From a consumer perspective, the impact of manufacturer-involvement in distribution is neutral. While intra-brand competition is potentially weakened by an increase in the number of manufacturer-owned dealers, there is no reason to fear an overall negative effect on competition in the market, as competitive constraints from other brands and independent dealers remain in place.

Another notable development in terms of distribution formats has been the growth of multi-branding. As Figure 44 above showed, multi-branding increased in all the markets within our sample, with the exception of Estonia. Multi-branding was particularly widespread in smaller nations, such as Denmark and Estonia, where more than a third of all dealers sold brands from different manufacturers in 2004. The largest increases in the proportion of multi-brand dealerships over the period 1997-2004 were recorded in Germany and France.

According to our survey of car manufacturers, all manufacturers but one saw the proportion of multi-brand dealerships in their authorised network increase over the period 1997-2004. (See Figure 45 above.) With few exceptions, the growth in multi-branding was remarkably large. Eight manufacturers recorded more than double the proportion of multi-brand dealerships in 2004 than in 1997.

Multi-brand dealerships increase competition, both intra and inter-brands, by giving consumers the chance of directly experiencing and comparing cars by different manufacturers. Thus, the proliferation of multi-brand dealerships represents a positive development from the point of view of consumers.

2.5.2 Factors affecting intra-brand competition at the distribution level

Various welfare concerns stem from the impact of restrained intra-brand competition on market access, prices, and inter-brand competition. Subject to a customer's geographic mobility, exclusive territories can lower intra-brand competition, and so partition markets in ways that facilitate price discrimination. Yet welfare effects are ambiguous, as a manufacturer's attempt to profitably sub-segment the market may or may not expand consumption and total surplus.

This part discusses the evolving incentives in the vertical structure for automotive retail in Europe.

Consequences of network reorganisation versus optimisation of dealers' economies of scale

Network reorganisation, above all the reduction in the number of sub-dealers, has been dramatic. The main observed results with respect to size and costs are: lower number of dealerships; more prevalence of large dealerships and dealer groups; and higher investments in manufacturer-required standards.

Concurrently we do not observe any particular trend in dealer profitability. In most countries and across most years we observe average dealer profitability that is relatively stable at between 1% and 2% of profit margin. Dealerships appear to have been able to roughly cover the increase in costs to meet manufacturers' standards with lower unit costs due to economies of scale. The change in structure of manufacturers' margins to dealers does not appear to have affected profitability in a noticeable way either.

Overall, therefore, the financial situation of dealers does not show significant changes over the period 1997-2004.

Consequences of dealers' costs increases versus vehicle manufacturers' margins

Cost increases for dealers arising from the increased level of manufacturer-imposed standards appear to be moderate.

The investments required by manufacturers are seen by dealers as beneficial overall. Non-technical investments get the lowest score, whereas technical investments and obligatory marketing expenditures are seen as equally useful.

Figure 65: Perceived benefit of obligatory brand-specific investments

Non-Technical investments	3.0
Technical investments	3.4
Marketing investments	3.4

Notes: Respondents were asked to rank the benefit of brand-specific investment for their business on a scale from 1-5, 5 representing the highest benefit. The figures represent the average over the number of replies.

Source: LE Dealer Survey.

Margin structures appear to have been shifted towards "variable bonuses" and away from "fixed bonuses" as we have previously discussed. This, however, does not in itself have a very direct impact on dealers' profitability.

In a vertical structure such as the one for car retailing, manufacturers need to give dealers incentives to invest in the value of the brand and incentives to price cars efficiently. For a given wholesale price, manufacturers benefit from

low resale prices to increase volumes sold. Dealers, however, naturally lack the incentives to either invest in brand value-enhancing strategies or to set low prices.

The change in dealer margin structures can be seen as addressing these two problems and thus favour more efficient levels of both brand-related investment and car pricing.

Degree of innovation at the retail level, including development of multi-branding

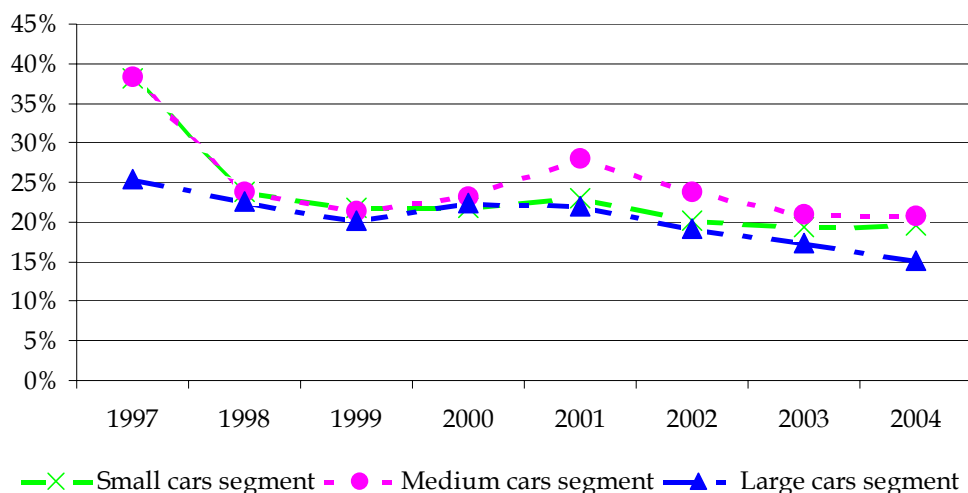
Innovation at the retail level has not been dramatic. We observe a noticeable increase in multi-brand dealerships but the development of other new forms of retail has been slow. The Internet has remained insignificant in terms of new car sales. The same is largely true of sales by supermarkets and car supermarkets (see Section 2.3.4).

There is potential for consumer benefit arising from new retail formats competing with the traditional dealerships. However, the nature of a selective distribution system, with high levels of manufacturer-imposed standards, as has been chosen by most car manufacturers across Europe, does not particularly favour the rise of innovative retail formats. The exception would be if the dealerships themselves were to venture into the new formats.

It is still early days to predict the ultimate effect of the on-going trends. It is likely that as new, bigger dealerships become more sophisticated retailers, the potential of new retail formats will seem increasingly attractive to them.

Price differentials across the EU

Pre-tax car prices across the EU have converged. As Figure 66 shows, price differentials between the most expensive and the cheaper Member States have come down considerably in the period 1997-2004. Whereas in 1997 consumers in some Member States were facing pre-tax prices up to 40% higher for the same car model in the small and medium-sized car segments than in other Member States, in 2004 this had come down to around 20%. A similar drop in pre-tax price differentials, albeit on a slightly smaller scale, occurred in the large car segment, where the differential decreased from 25% in 1997 to 15% in 2004. Whereas the speed of the movements towards more uniform prices across the EU has picked up again in the large car segment, the trend in the small and medium car segments has been relatively flat in recent years.

Figure 66: Car price differentials across EU Member States (1997-2004).

Notes: The figures show the difference in percentage terms between the pre-tax car prices in the cheapest Member State compared with the most expensive one. Differentials are calculated as the average of the differentials of five (or six) reference models in each segment. The small segment includes: Opel Corsa, Ford Fiesta, Renault Clio, Peugeot 206, Fiat Punto (from 2002) and VW Polo; the medium segment includes: VW Golf, Opel Astra, Ford Focus, Renault Mégane and Peugeot 307; the large segment includes: BMW 318i, Audi A4, Ford Mondeo, Mercedes C180 (from 2002), VW Passat and Opel Vectra.

Source: European Commission Car Price Reports, 1998-2005.

However, cross-country price comparison reveals that the integration of the car retail markets is still limited, as pre-tax prices can still differ by more than 15% between Member States. Thus there is still ample scope for consumers in many Member States to take advantage of price differentials through cross-border trade.

Car prices in Europe are converging. Responsible for the convergence are the new Member States, while in the older Member States convergence appears to have peaked.⁴⁵ Germany continues to be the most expensive market, while Denmark is the cheapest, followed by Estonia.

Location clauses, threat of entry and expected trends in dealers' strategies

One interesting finding of our survey concerns the expected impact of the abolition of the location clause. Almost three quarters of dealers told us they were not planning to open new outlets after they are contractually allowed to do so (Figure 67). Lack of economic interest is cited as a reason for this

⁴⁵ European Commission (2005): "Competition: convergence of car prices improves within EU while remaining constant in the euro zone." Press release Ref. IP/05/1027, 01/08/2005.

reluctance by more than half of our respondents, with another quarter mentioning the lack of financial means to make use of the opportunity (Figure 68). Of those that do plan to open new outlets, the majority want to stay within the country. Almost half of the dealers we asked saw the potential entry of other dealers in their area of operation as a threat to their business (Figure 69).

Figure 67: Effect of new rules on location clauses: perspectives of dealers.

No new openings planned	New openings planned within the country		New openings planned in another Member State	
74.5%	Selling point	Delivery point	Selling point	Delivery point
	17.6%	5.9%	1.3%	0.7%

Source: LE Dealer Survey.

Figure 68: Reasons for not opening new outlets in response to new rules on location clauses: perspectives of dealers.

Lack of financial means	21.7%
Lack of economic interest	52.2%
Fear of "retaliation"	14.5%
Other	11.6%

Source: LE Dealer Survey.

Figure 69: Perception of threat of new entry in response to new rules on location clauses: perspectives of dealers.

Entry of new competitors following the abolition of the location clause is a threat to the business.	49.3%
Entry of new competitors following the abolition of the location clause is no threat to the business.	50.7%

Source: LE Dealer Survey.

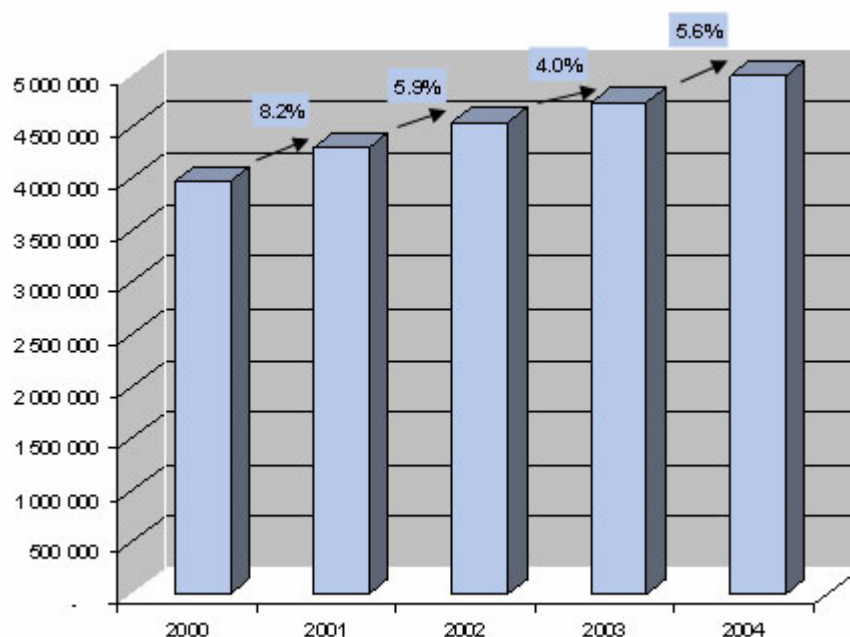
Car ownership versus long-term leasing and fleet purchases

The option of leasing a car is increasingly popular with car users as an alternative to outright purchase, above all with business customers.

The market for company cars in Europe is growing quickly. A 2005 report by Datamonitor shows a 20% increase in European company car fleet size

between 1998 and 2005, while the number of cars used under operational leasing arrangements increased by 72% over the same period.⁴⁶ Figure 70 shows the growth in the market for leased cars in Europe for the period 2000-2004.

Figure 70: The market for leased cars: fleet size in Europe* (2000-2004).



Note: * The countries included are: BE, ES, FR, DE, IT, NL, UK.

Source: Datamonitor.

A study by the Corporate Vehicle Observatory on the leasing market in 5 European countries found that between 36% (France) and 56% (Portugal) of all companies are taking advantage of the financing solutions offered by car manufacturers, banks and leasing companies for the purchase cars.⁴⁷

The most common leasing options available in European markets are described below. A breakdown by market share of the different types of contract is shown in Figure 71 for the United Kingdom, although it must be noted that the UK is an atypical example among the sample of Member States analysed in the present study.

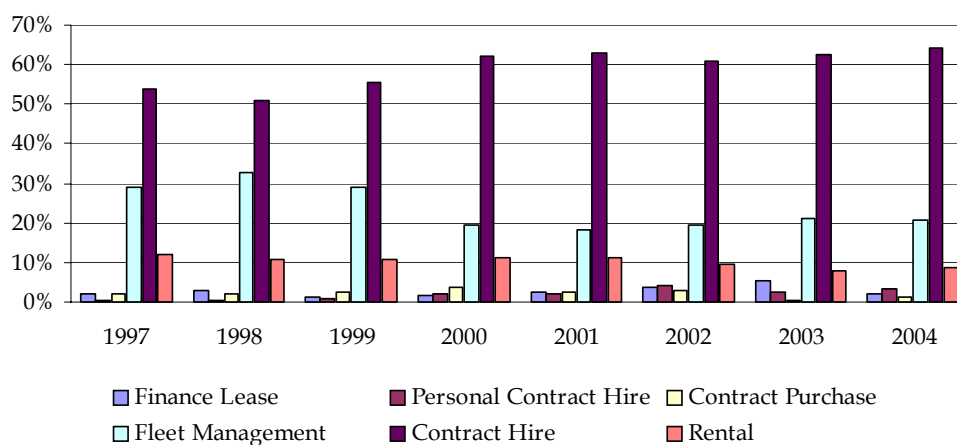
⁴⁶ Datamonitor (2005).

⁴⁷ Corporate Vehicle Observatory Barometer (2005). The study covers Germany, France, Italy, Portugal and Switzerland.

- **Full Service Leasing**, or **Contract hire**, is the most popular form of vehicle acquisition in business today. In the UK, it accounted for more than 60% of the total leasing market in 2004 (Figure 71). Under Contract Hire, vehicles continue to be owned by the leasing company and are hired for a set period of time and at a fixed monthly rate, based upon the cost of the vehicle, the contract period and the anticipated resale value. This method of finance can be useful for companies wanting to free up credit lines or improve cash flow by implementing fixed cost fleet operation.
- **Fleet Management** arrangements, which represent the second largest part of the leasing market in the UK, offers the same features as full service leasing contracts, the difference being that users are liable for the actual cost of maintenance and repairs, rather than a fixed monthly cost.
- **Finance Lease** arrangements allow customers to choose to pay either the entire cost of the vehicle, including interest charges, over an agreed lease period or to opt to pay lower monthly rentals with a final payment based on the anticipated resale value of the vehicle.⁴⁸
- **Personal contract hire** is a relatively new development in the leasing market. Here, the car is financed through a Credit Sale Agreement between the driver and the leasing company, but the cost is borne by an employer who then pays the driver a monthly allowance. This form of car financing has seen rapid growth recently, with an almost tenfold increase in the fleet under personal contract hire in the UK in the period 1997-2004 (Figure 71).
- **Contract purchase** is a method of financing where an individual leases a vehicle for a set period at a fixed monthly charge, and where, at the end of that period the user can choose either to buy the vehicle or to return it with nothing further to pay.

⁴⁸ Total Fleet Services. <http://www.lease-hire.co.uk>.

Figure 71: The market for leased cars: breakdown by contract type, UK (1997-2004).



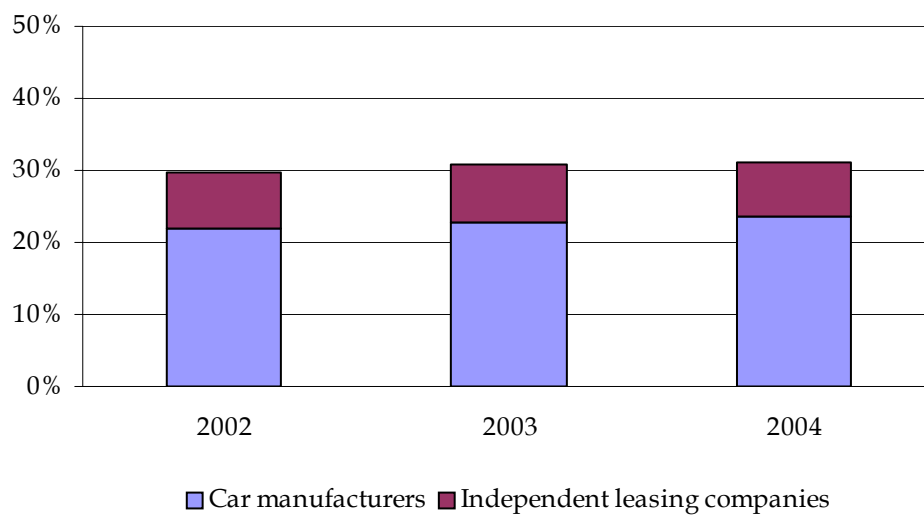
Source: BVRLA.

Customers in the leasing market divide into two groups: whereas small and medium-sized companies, as well as private individuals, tend to prefer leasing models that offer an option to buy the vehicle, large companies usually opt for full service leasing.⁴⁹

The leasing market is a significant part of the total market for passenger cars. As Figure 72 shows, about a third of all newly registered passenger cars in Germany in the years 2002-2004 were leased.⁵⁰ Leasing contracts offered by car manufacturers or their subsidiaries accounted for the greater part of leased cars.

⁴⁹ According to the Corporate Vehicle Observatory Barometer (2005), 87% of large corporations in France finance their vehicles by way of Operational Leasing, as opposed to only 31% of SMEs.

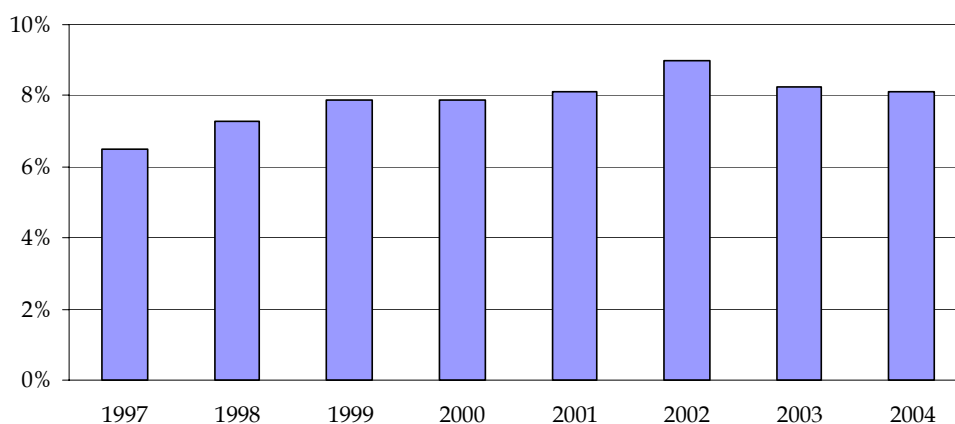
⁵⁰ Institut für Wirtschaftsforschung - IFO (2005).

Figure 72: Leasing market: share of new registrations, Germany (2002-2004).

Source: BDL, ifo.

As a large number of leased vehicles are sold at a later stage, either to leasing customers themselves or on the second hand market, leased cars make up only a comparatively small proportion of the total stock of vehicles (Figure 73).

Figure 73: The market for leased cars: percentage of total car parc, UK (1997-2004).



Source: BVRLA.

Despite significant growth rates for the European market as a whole, figures from countries such as Germany and the United Kingdom suggest a slowdown in the growth of the leasing market in recent years in the more mature markets.

Figure 74: Leasing market in the United Kingdom: units (1997-2004).

	1997	1998	1999	2000	2001	2002	2003	2004	% change 97-04
Finance Lease	31,514	46,299	23,655	27,052	44,070	77,830	114,109	39,875	26.5%
Personal Contract Hire	7,414	7,650	17,317	38,638	41,562	87,517	48,494	70,227	847.2%
Contract Purchase	30,758	32,427	44,744	69,773	51,826	63,837	12,048	25,848	-16.0%
Fleet Management	407,913	526,050	517,688	351,479	355,782	430,178	432,327	432,384	6.0%
Contract Hire	755,706	818,547	994,842	1,131,574	1,218,207	1,342,249	1,289,136	1,340,905	77.4%
Rental	171,645	172,410	190,603	202,347	219,478	206,006	163,811	179,753	4.7%

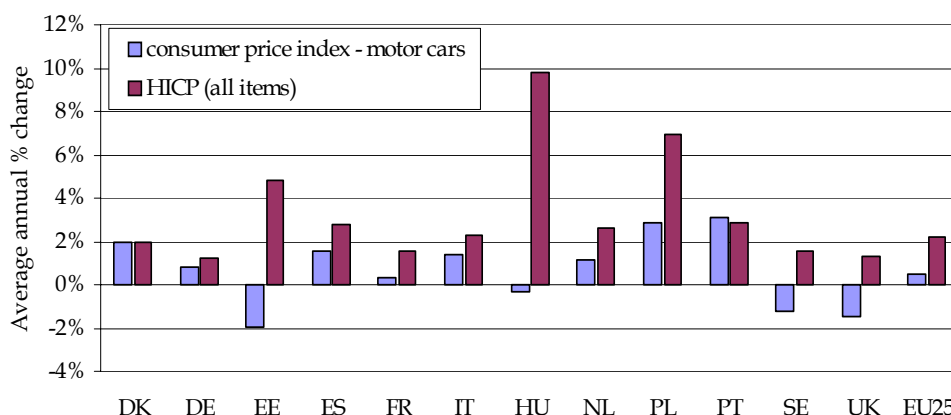
Source: BVRLA.

2.6 Effects of observed trends on consumers

2.6.1 Trends in motor vehicle real price levels

Overall, competition in the car market has succeeded in bringing prices down for European consumers. However, the persistence of cross-country differences in pre-tax prices suggests that further integration can improve outcomes for consumers in most countries still further.

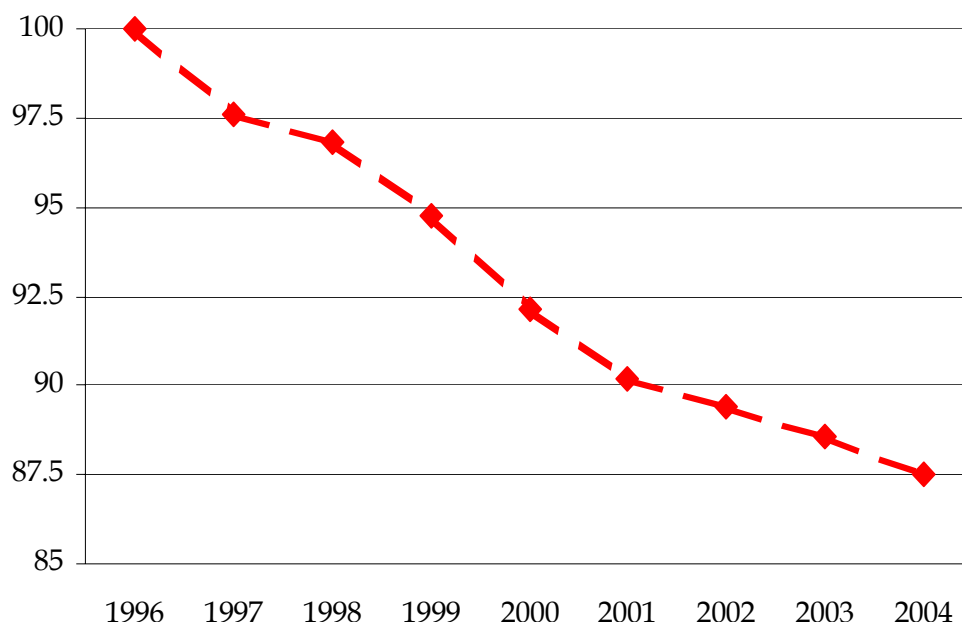
Figure 75: Average annual rate of change of car prices compared with overall price level (1997-2004).



Source: Eurostat.

Real car prices have been falling across Europe between 1997 and 2004. As Figure 76 shows, the decline in average car prices over the period 1996-2004 was of the order of 12.5% in real terms.

The decline in real car prices has been more pronounced in some countries than in others. The most significant drops, of more than 6% per year in individual years, have been observed in Spain, Poland and the United Kingdom. Notable increases in car prices occurred only in Denmark: here, prices increased in real terms in four of the eight years of the period.

Figure 76: Change in real car prices, EU25 (1997-2003).

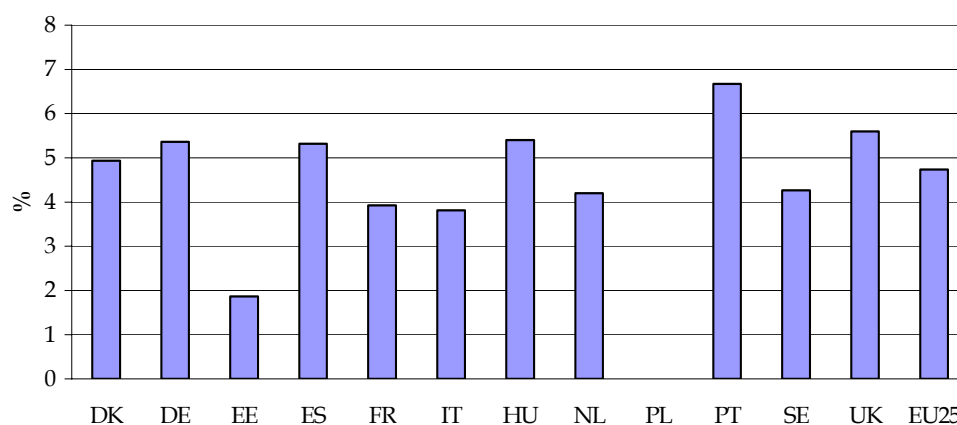
Source: Eurostat.

2.6.2 Motor vehicle expenditure trends

Expenditure on motor vehicles has been growing in all Member States in our sample since 1997. It showed the strongest growth over the period 1997-2004 in Estonia and Hungary, but growth was also high in Spain, France and the UK (Figure 78).

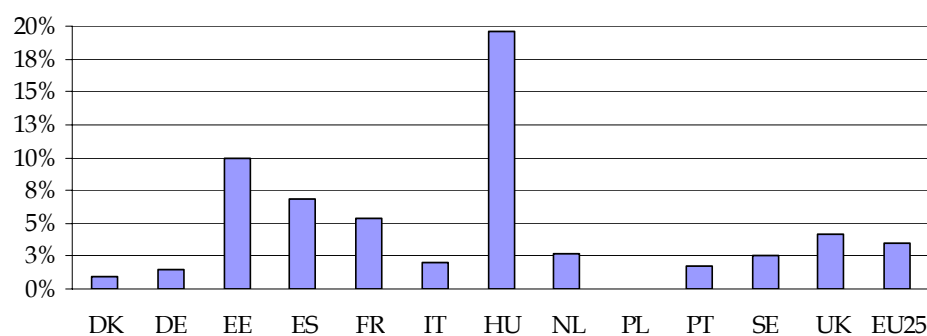
Overall, European consumers spend on average 4.7% of their total consumption expenditure on motor vehicles (Figure 77). The pattern of real consumer expenditure on motor vehicles is very volatile, with large drops often followed by significant increases in the following year. Although consumer expenditure increased on average across the 12 countries, there is no smooth upwards trend (Figure 79).

Figure 77: Purchases of motor vehicles: percentage share of total consumer expenditure (1997-2004).



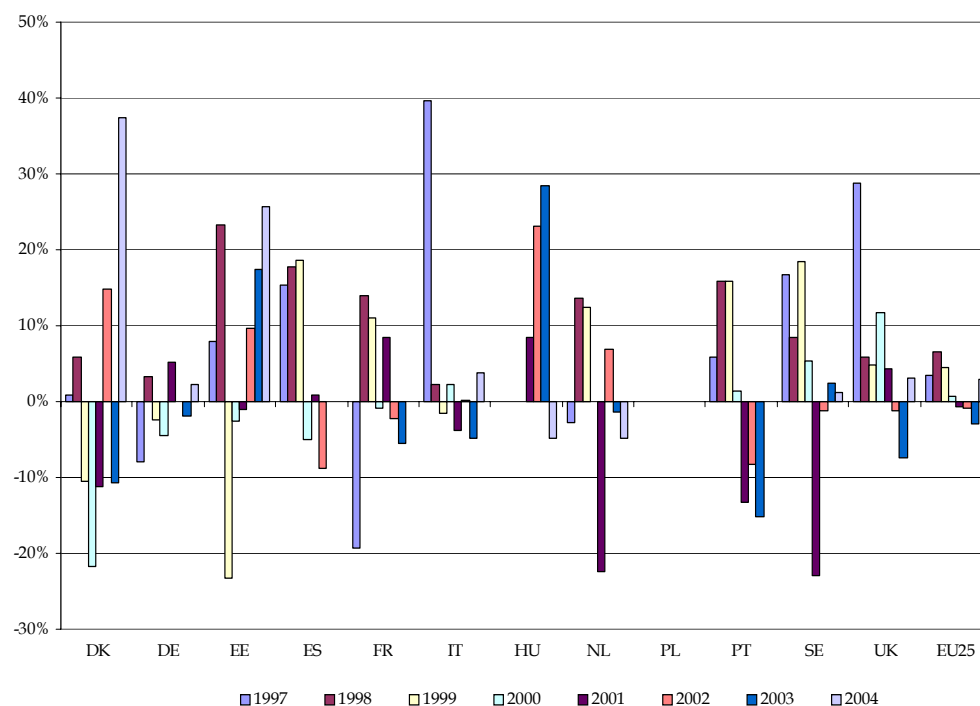
Source: Eurostat.

Figure 78: Average annual percentage change in consumer expenditure on motor vehicles (1997-2004).



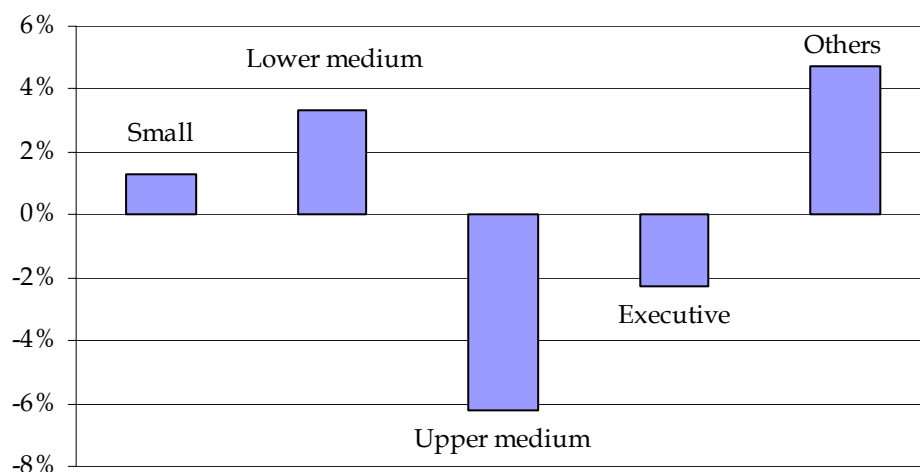
Source: Eurostat.

Figure 79: Change in real consumer expenditure on motor vehicles (1997-2003).



Source: Eurostat.

Figure 80: Evolution of consumer preferences: changes in demand by car segment (1997-2004).



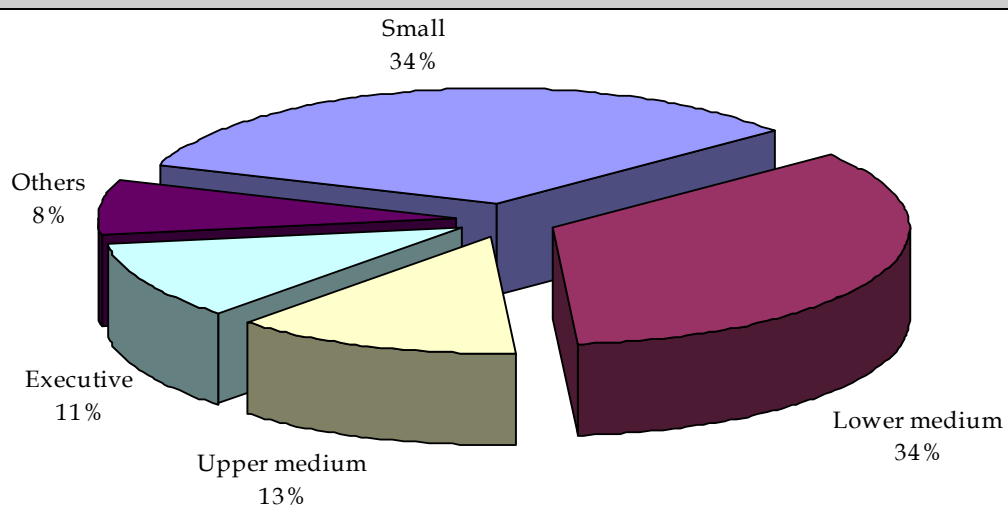
Note: figures refer to new registrations in EU15 + Iceland, Norway and Switzerland.

Source: ACEA.

Clear trends can be observed in terms of consumer preferences for different types of cars. As Figure 80 and Figure 82 show, cars in the upper medium segment and traditional saloons have lost significant market shares over the period 1997-2004.

Small cars and cars in the lower medium segment, on the other hand, have seen a big increase in terms of new registrations (Figure 80). Together, these two segments accounted for nearly 70% of the total car parc in 2004 (Figure 81). An important factor in the success of the more economical segments, besides external factors such as concerns over increasing fuel prices, has been the development of monospace cars (Figure 82), in which European manufacturers play a major role.

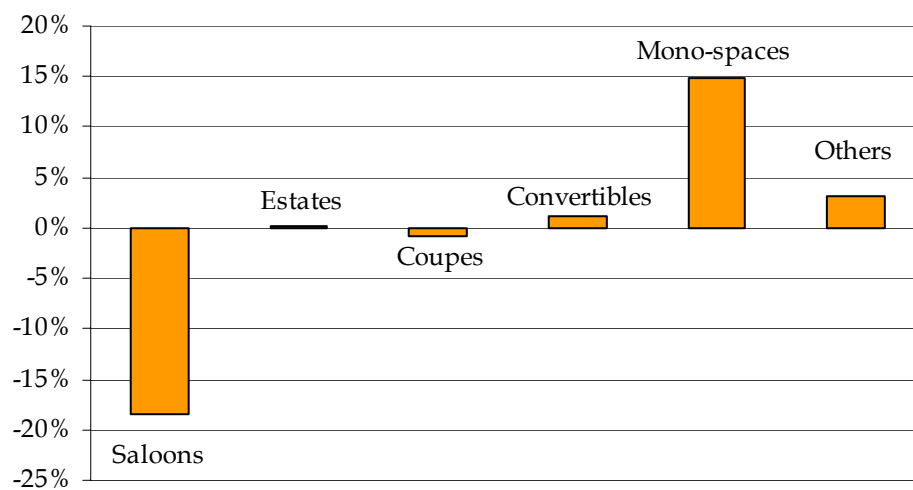
The greatest percentage increase, however, has been seen in the “other” segment, which includes specialist vehicles, such as sports cars, 4x4s and SUVs. Although still a small proportion of the overall car parc in European countries (see Figure 81), this confirms a trend away from traditional “all purpose” cars towards more individualistic choices by consumers who want their cars to fit their personal circumstances.

Figure 81: New registrations by car segment (2004).

Note: figures refer to new registrations in EU15 + Iceland, Norway and Switzerland.

Source: ACEA.

Figure 82: Evolution of consumer preferences: changes in demand by car body type (1997-2004).



Notes: figures refer to new registrations in EU15 + Iceland, Norway and Switzerland; in 2002, there was a change in the definition of the monospace segment. This category now includes "classic" monospaces, "compact" monospaces and "minispaces".

Source: ACEA.

2.7 Summary and conclusions: overall impact of Regulation 1400/2002 on the car distribution sector

In this section we present the summary of our results and the conclusions from our analysis of the various aspects of the car distribution sector in Europe and relate it to the impact of the introduction of Regulation 1400/2002.

Trends in final car sales

The key facts emerging from the review of the trends affecting car sales in the European market are the following:

- Aggregate demand is volatile, reflecting the cyclical nature of durable goods purchases. This volatility is observed in all countries covered by the study with the exception of Italy and the UK. Volatility differs across brands: “older” brands suffer lower volatility than newer, smaller volume brands. Germany, Italy and the UK also have lower levels of volatility in the number of new registrations.
- New registrations trends vary across countries and brands. The overall trend is only very slightly positive. Growth was high in Estonia and Hungary, while significant decreases occurred in Denmark and Poland. In terms of brands, the best performing were Daewoo, Kia and Lexus.
- The link between car registrations and household income is tenuous over the period 1997-2004. In the sample covered by the study, the best predictor of the growth in the car parc is the level of the car parc per 1,000 inhabitants at the beginning of the period.
- The changes in the car parc per brand highlight the competitive nature of the market. Over the period 1997-2004 newer brands grow significantly at the expense of some of the more established ones.
- The clearest illustration of this high level of competition is given by the evolution of manufacturers’ market shares. Although a relatively small number of large, mostly multi-brand, manufacturers account for a majority of sales in the 12 countries, market shares at the top do not only move considerably from year to year but have also generally decreased (albeit slightly) over the period 1997-2004, reflecting vigorous competition.

Overall, we would conclude that this as a highly competitive market, where the main players have relatively unstable market positions and new entrants have managed considerable growth. That being said, it is noteworthy that in practically all countries only 5 car manufacturers have occupied the top four market share positions.

Trends in the car distribution network

Our analysis of the evolution of the car distribution networks in the 12 European countries has focused primarily on the density of the dealer networks, the concentration of dealers and dealer groups, and the involvement of car manufacturers in car distribution. In this subsection we present our preliminary conclusions with regards to this analysis.

- A large drop in dealer density is observed across all countries (with the exception of Estonia) and across all brands (that were already established by 1997). That being said, the number of dealers differs markedly across brands and across countries. This is illustrated by the comparison of sales per dealer which are particularly low in Denmark, Estonia, Portugal and Sweden, at levels below half those observed for Italy and the UK. In terms of brands, we observe cases where one brand has about twice the number of dealers per sale than other (e.g. the case of Renault versus Volkswagen).

Such wide remaining differences appear to leave an open door for further network rationalisation to take place, for at least some countries and some brands.

- With respect to market concentration at the distribution level, we observe increasing size of the average dealership (as discussed above) and increased prominence of dealer groups. Average turnover per dealership has increased more than two-fold over the period 1997-2004, for our sample of countries. The larger dealer groups have gained about 3% extra market share in France, Germany and Italy. Current market shares for the top 25 dealer groups range from 10% in Germany, Italy and Spain to over 30% in the UK. The trend appears to be for a continuing growing importance of this type of distribution format. This is significant for interbrand competition as these groups are most often multi-brand (Figure 40).
- Manufacturer ownership of retail outlets remains low at a level of about 2% of overall number of outlets, although it did see a sizeable increase over our sample period of about 70% in the combined totals for France, Germany, Italy and the UK.

Analysis of financial indicators

We observe relatively high profits for some manufacturers and low or at times negative profits for others. When compared to their overall profitability, European figures show large differences. With the exception of Honda and Volkswagen, all manufacturers' European operations are less profitable than their overall activities. In some cases, profitability is very significantly smaller in Europe. This is taken as further indication of high levels of competition in the European automotive market.

We observe high variance of vehicle manufacturers' turnover from year to year both upward and downward. In addition, turnover varies across

companies in a relatively uncorrelated way, which implies that the high oscillations are not due to changes in market size but in relative market position of the different manufactures. These observations are again reflective of a rather competitive market.

The average net profit margin of the dealerships we surveyed lies slightly above 2 percent and has remained stable over the period under investigation, which accords with the reports of many market observers (Figure 59). The increase in the value of assets relative to profits can be seen as evidence of increasing investments in facilities over recent years, which are often required to meet quality standards set by car manufacturers. (For example, see Figure 63.)

Evolution of the competitive environment

Our analysis has concluded that there exists strong competition among car manufacturers in the market for car sales. Overall, the average operating margin for a sample of car manufacturers in 2004 was 3.9%, compared with, for example 10.5% for chemical manufacturing, 8.1% for the tools/appliances industry, and 6.8% for the technical/scientific instruments industry.⁵¹

An analysis of barriers to entry into car retailing has found that these barriers can be considered relatively low, a conclusion that is supported by recent episodes of entry, as discussed in the main text. Entry has been particularly facilitated by the reduction in the number of dealer contracts/outlets of the major brands and by the increasing popularity of multi-brand distribution.

Moreover, the overall European market concentration, as measured by the four-firm concentration ratio, decreased by 2.8% between 1997 and 2004. Much larger decreases of 10% and more were recorded in several countries, including both new and older Member States (Italy, Hungary, Poland, Sweden). This suggests that the observed increase in concentration in some markets (Denmark, Germany, Estonia, France, Portugal) is a result of local market conditions, rather than an artefact of the European regulatory environment, or of structural characteristics of the car industry. (See Section 2.2.1.)

There are thus two defining features for the competitive landscape in the Europe:

- first, the market remains concentrated, with a small number of large manufacturers controlling more than two thirds of the market.
- Secondly, there is considerable movement in the market, with relative market positions changing constantly in response to changing consumer demand.

⁵¹ Source: Reuters.

Overall it appears that competition in this European market is vigorous and that consumers are offered a wide choice, which leaves vehicle manufacturers struggling to maintain their market positions.

Effects of observed trends on consumers

Real car prices have been falling across Europe between 1997 and 2004. As Figure 76 in the text shows, the decline in average car prices over the period 1996-2004 was of the order of 12.5% in real terms.

Our analysis thus concludes that car manufacturers compete strongly at the distribution level, a fact which is borne out by continued market entries and exits, as well as frequent changes in the market position of major manufacturers. In addition, and most importantly from a consumer perspective, car prices have been falling relative to the general price level, and there has been convergence across Member States.

Part II
**Developments in the European market for repair
and maintenance of motor vehicles**

3 The repair and maintenance of motor vehicles

3.1 Introduction

In this section we report on the evolution of the European motor vehicle repair and service sector. It is structured as follows:

- Section 3.1.1 introduces the elements of BER 1400/2002 that apply to the service and repair market.
- Section 3.2 describes the service and repair market in the EU and provides an estimate of its size.
- Section 3.3 looks at the repair and service industry as a whole.
- Section 1.4 focuses the various segments of the repair and service sector.
- Section 3.5 discusses recent innovations in the market.
- Section 3.6 analyses the competitive landscape prevailing in the service and repair market, and the different layers of competition.
- Market outcomes for consumers are briefly addressed in Section 3.7
- Finally, Section 3.8 draws conclusions about the state of competition in the market based on the preceding analysis and assesses the impact of BER 1400/2002.

3.1.1 Elements of BER 1400/2002 concerning the service and repair market

BER 1400/2002 introduced important changes, both for authorised and independent repairers.

Authorised networks

For the authorised networks, the major innovations are

- The introduction of the concept of stand-alone authorised repairers⁵²
- A greater freedom in the use of spare parts⁵³
- The prohibition of the agreements preventing multi-branding⁵⁴

⁵² Art. 4(1)(h).

⁵³ Art. 4(1)(k) and (j).

⁵⁴ Art. 5(1)(b).

Where hitherto the only exempted business model had been a model combining sales and aftersales, it is now possible for the two functions to be separated. Recital 22 of the Regulation states that

“it is not necessary, in order to adequately provide for repair and maintenance services, for authorised repairers to also sell new motor vehicles. The exemption should therefore not cover vertical agreements containing any direct or indirect obligation or incentive which leads to the linking of sales and servicing activities or which makes the performance of one of these activities dependent on the performance of the other”.

Furthermore, to benefit from the safe haven offered by the BER, vehicle manufacturers’ agreements with authorised repairers must not restrict the latter’s freedom to buy spare parts from third parties.

“the restriction of a distributor’s or authorised repairer’s ability to obtain original spare parts or spare parts of matching quality from a third undertaking of its choice and to use them for the repair or maintenance of motor vehicles, without prejudice to the ability of a supplier of new motor vehicles to require the use of original spare parts supplied by it for repairs carried out under warranty, free servicing and vehicle recall work”⁵⁵

This provision has a counterpart provision, which prohibits vehicle manufacturers from imposing restrictions on spare parts producers to supply parts to parties other than the vehicle manufacturers.⁵⁶ This point is addressed in greater detail in the next chapter.

Furthermore, any agreements that prevent authorised repairers from engaging in multi-branding are also not exempted under BER 1400/2002. Indeed, article 5(1)(b) states that *“any direct or indirect obligation limiting the ability of an authorised repairer to provide repair and maintenance services for vehicles from competing suppliers”* will not be exempt.

As in the case of authorised dealers, manufacturers still have the right to set selection criteria for authorised repairers. In practice, repairers are selected on a qualitative basis, which means that any repairers who fulfil these qualitative criteria can join the network.

Independent repairers

With respect to independent repairers, BER 1400/2002 seeks to create a level playing field in terms of their competitive position *vis-à-vis* the authorised networks.

This objective finds its expression in the BER clauses relating to:

⁵⁵ Art. 4(1)(k).

⁵⁶ Art. 4(1)(j).

- Access to spare parts;⁵⁷ and,
- Access to technical information.⁵⁸

The BER aims to improve the independent dealers' position in terms of access to spare parts and technical information in line with technical advances, especially in the field of electronic devices and diagnostic equipment, and including all relevant software, and training required for the repair and maintenance of motor vehicles.⁵⁹ The relevant clause states that

*"The exemption shall not apply where the supplier of motor vehicles refuses to give independent operators access to technical information, diagnostic and other equipment, tools, including any relevant software, or training required for the repair and maintenance of these motor vehicles (...)"*⁶⁰

BER 1400/2002 stipulates further that *"access must be given to independent operators in a non-discriminatory, prompt and proportionate way, and the information must be provided in a usable form."*⁶¹

Finally, the BER promotes improved access to spare parts for independents. Authorised distributors are a crucial source of parts for independent repairers. To guaranty access to such parts,

*"the restriction of the sales of spare parts for motor vehicles by members of a selective distribution system to independent repairers which use these parts for the repair and service of motor vehicles"*⁶²

is classified as a hardcore restriction and therefore not exempt.

Obviously, independent repairers also benefit from the prohibition of any restrictions on parts producers regarding their sales of parts to different types of clients.

⁵⁷ Art. 4(1)(i) and (j).

⁵⁸ Art. 4(2).

⁵⁹ Recital 26.

⁶⁰ Art. 4(2).

⁶¹ Ibid.

⁶² Art. 4(1)(i).

3.2 The evolution of the demand for service and repair

The European market for the service and repair of motor vehicles was worth approximately 100 billion euros in 2004.⁶³ This represents about one fifth of the whole car market, and makes the service and repair segment the second largest sub-market in the car sector, after the sale of new cars sector.⁶⁴

Our market size estimates for the 12 countries in our sample are shown in Figure 83 below.

⁶³ ZDK, Zahlen und Fakten 2005.

⁶⁴ ZDK, Zahlen und Fakten 2005.

Figure 83: Service & repair of motor vehicles: market size for selected countries (1997-2003), € millions.

	1997	1998	1999	2000	2001	2002	2003	% change 97-03	% change 97-02	% change 02-03
Denmark	-	-	2,767	2,626	2,552	2,617	2,529	-8.6%	-	-3.4%
Germany	-	-	25,837	22,464	18,487	16,832	-	-34.9%	-	-
Estonia	-	-	-	-	-	-	109	-	-	-
Spain	-	-	7,363	7,506	7,671	8,651	9,383	27.4%	-	8.5%
France	10,904	11,500	12,339	12,944	13,424	14,185	14,533	33.3%	30.1%	2.5%
Italy	14,117	19,122	16,929	15,371	15,919	16,767	15,862	12.4%	18.8%	-5.4%
Hungary	-	-	-	-	437	523	550	25.9%	-	5.2%
Netherlands	2,073	2,161	2,323	2,707	2,956	2,889	2,692	29.9%	39.4%	-6.8%
Poland	1,345	1,628	2,092	2,314	1,791	2,270	-	68.8%	68.8%	-
Portugal	2,691	1,868	1,501	2,010	1,558	1,339	1,499	-44.3%	-50.2%	11.9%
Sweden	3,042	2,958	3,021	3,155	3,204	3,256	3,530	16.0%	7.0%	8.4%
UK	13,569	15,278	19,174	21,073	21,828	21,599	20,533	51.3%	59.2%	-4.9%

Notes: Market size computed as total turnover (since motor vehicle service and repair activities are neither imported nor exported in any significant way, value of turnover equates expenditure and equates market size). The turnover data from Eurostat is divided by number of independent plus stand-alone authorised repairers, and multiplied by total number of companies. Where data to 2003 are not available, we report changes from 2000 to 2002 instead of 2001 to 2003.

Source: London Economics calculations based on Eurostat data.

According to our estimates, the service and repair market grew in eight out of the 12 countries, with particularly strong growth being recorded in Poland and in the UK. On the other hand, the market decreased over the period 1997-2003 in Denmark and Portugal, and, in particular, in Germany, where our figures show a drop of 35%.⁶⁵

Looking just at the last year of the period, we observe that the market size decreased in a further three countries, Italy, the Netherlands and the UK, although the latter countries still experienced significant growth over the entire period. In Portugal, the opposite is the case, and we observe a pick up in growth from 2002 to 2003, although over the whole period 1997-2003, the market shows a decrease.

Overall, the picture is thus a mixed one with some markets showing solid growth while others fell in size over the period 1997-2004.

The fact that, between 2002 and 2003, four out of the nine countries for which we have data show negative growth could be viewed as suggesting a more negative outlook for the service and repair market more generally in the coming years.

However, it should be noted that our figures also show considerable volatility in the market size. The overall trend in the market is thus difficult to establish from looking at market size data alone.

To investigate the issue further, we have computed the average expenditure per vehicle in the car parc.⁶⁶ The results are shown in Figure 84, which allows us to analyse how the evolution of the repair market relates to the evolution of the size of the car parc.

⁶⁵ Germany is a somewhat special case whose economy has been impacted by a long period of slow economic growth. As noted later in this chapter, the car parc in Germany is aging. One would expect owners of older cars to have a particularly low propensity to spend money on them in the context of an economic downturn. This element seems to be confirmed by the very low profit margins accruing to repairers in that country.

⁶⁶ The evolution of the car parc used for this computation is provided in chapter 2 (Figure 8).

Figure 84: Average yearly service and repair expenditure per vehicle - selected countries (1997-2003).

	1997	1998	1999	2000	2001	2002	2003	% change 97-03	% change 97-02	% change 02-03
Denmark	-	-	1.52	1.42	1.38	1.4	1.34	-11.8%	-	-4.3%
Germany	-	-	0.61	0.53	0.42	0.38	-	-37.7%	-	-
Estonia	-	-	-	-	-	-	0.25	-	-	-
Spain	-	-	0.44	0.43	0.42	0.46	0.5	13.6%	-	8.7%
France	0.39	0.41	0.43	0.44	0.45	0.47	0.48	23.1%	20.5%	2.1%
Italy	0.47	0.62	0.53	0.47	0.48	0.5	0.46	-2.1%	6.4%	-8.0%
Hungary	-	-	-	-	0.18	0.2	0.2	11.1%	-	0.0%
Netherlands	0.36	0.36	0.38	0.43	0.45	0.43	0.39	8.3%	19.4%	-9.3%
Poland	-	-	0.23	0.23	0.17	-	-	-	-	-
Portugal	0.89	0.58	0.43	0.56	0.42	0.34	0.38	-57.3%	-61.8%	11.8%
Sweden	0.82	0.78	0.78	0.79	0.8	0.81	0.87	6.1%	-1.2%	7.4%
UK	0.63	0.69	0.84	0.91	0.91	0.88	0.82	30.2%	39.7%	-6.8%

Note: expenditure includes parts and labour.

Sources: Eurostat, car parc figures from NSAs, National associations (for details see Figure 8 in chapter 2).

We note that, for all countries, repair and maintenance expenditure per vehicle decreased more (or increased less) than the market.

Although volatility is again high (due to the influence of the market size data reported in Figure 83), overall repair and maintenance expenditure per vehicle is showing a downward trend in Portugal, where it is particularly pronounced, and also in Germany, Denmark and Italy.

Overall, developments in repair and maintenance expenditure per vehicle have a negative impact on the size of the service and repair market, which is (partially or wholly) offset by a growing car parc.

Below, we review a number of demand factors which impinge on the service and repair market.

Determinants of demand

Several factors affect the size of the European car service and repair markets, some positively, some negatively.

Positive factors include:

- The growing size and rising average age⁶⁷ of the European car parc;
- The evolution of repair processes which increasingly tend to privilege the replacement of parts over their repair, and the higher cost of parts in general;
- The growing adoption of periodical roadworthiness schemes throughout Europe.

Key negative demand drivers are:

- The increased reliability of vehicles which leads to increased service intervals;
- Measures adopted to increase road safety which reduce the number of accidents;
- Traffic control measures and reduced mileage per vehicle in some cases.

While there is general agreement over the type of factors that impact on the demand for service and repair, the precise contribution of many of them is difficult to quantify.

Because of this, and because the age of the car parc is the most consistently mentioned driver, we limit ourselves to a brief discussion of car parc age.⁶⁸

⁶⁷ Although it should be noted that repairs of older cars are potentially cheaper, as owners chose providers/spare parts etc. whose price is consistent with the lower time value of an older car.

The age of the car parc and the demand for service and repair

While there is no doubt that an ageing car parc would, all things being equal, benefit the repair market, this phenomenon cannot be viewed in isolation. In reality, more reliable vehicles are entering the older segment of the car parc, and, as a result, the average vehicle requires less frequent maintenance than it did ten years ago.⁶⁹

In addition, while an ageing car parc may potentially increase the volume of repairs, it will not necessarily augment the size of the market in value terms. This is because owners of older cars are likely to have a lower propensity to spend money on them, for instance by delaying periodic servicing, fixing minor body damage, or having recourse to cheaper independent repairers that may use less expensive matching quality spare parts.

While motorists of older cars are more likely to require repairs to their vehicle, they are also less likely to be willing to pay premium prices for brand-authorised repair services.

An aging car parc can benefit independent repairers, who cater for the more price conscious motorist, although the magnitude of this effect is uncertain. While the authorised segment has so far shown a limited ability to retain customers beyond the very first few years of a vehicle's life, it is possible that the technological evolution of vehicles and their respective repair techniques may have an impact on this situation.

Indeed, as increasingly complex vehicles enter the older segment of the future market, independent repairers may lack the technical know-how necessary to fix them. Thus cheaper service and repair options may become less available than they are at the present time. Already, for instance, independent repairers report that they are forced to take certain repair jobs to their local authorised repairer, since they are unable to complete a repair because of a lack of technical information.

3.3 Service and repair networks

This section contains data on the supply side of the service and repair market in the 12 countries in our sample. We present in turn data on the number of market participants, both in absolute terms and relative to the number of cars in use, and detailed financial information on the sector.

⁶⁸ As we have seen in chapter 2 (Figure 12), the age structure of the national car parcs in the 12 countries does not change much over the sample period. Cross-country differences, however, are substantial. In particular, some countries have much older car parcs than others. In our sample, these are above all Estonia, Hungary and Poland. Poland's ageing car parc is likely to contribute significantly to the steep growth in the country's repair market shown in Figure 83.

⁶⁹ This is one of the reasons behind the shrinking repair market in Germany, since the car parc in that country contains more sophisticated vehicles that require less frequent maintenance.

Figure 85: Estimated total number of service & repair businesses (1997-2003).

	1997	1998	1999	2000	2001	2002	2003	% change 97-03	% change 97-02	% change 02-03	change 02-03
Denmark	-	-	5,961	6,091	5,909	5,772	5,521	-7.4%	-	-4.3%	-251
Germany	42,079	41,176	40,810	39,959	38,625	38,145	39,208	-3.9%	-9.4%	2.8%	1,063
Estonia	-	-	-	653	645	693	741	13.5%	-	6.9%	48
Spain	46,074	46,111	46,120	48,227	48,164	48,591	48,373	4.9%	5.5%	-0.4%	-218
France	39,066	38,825	38,660	39,171	39,295	39,301	40,623	4.0%	0.6%	3.4%	1,322
Italy	103,982	102,919	103,726	102,863	100,188	98,158	95,947	-7.7%	-5.6%	-2.3%	-2,211
Hungary	-	-	-	-	10,720	10,545	10,229	-4.6%	-	-3.0%	-316
Netherlands	5,517	5,529	5,564	5,684	5,606	5,428	5,023	-9.0%	-1.6%	-7.5%	-405
Poland	45,664	50,775	50,755	45,601	40,248	43,104	-	-5.6%	-5.6%	-	-
Portugal	19,554	15,576	16,943	17,439	16,772	16,390	17,334	-11.4%	-16.2%	5.8%	944
Sweden	10,887	10,842	10,879	11,252	11,193	11,238	11,511	5.7%	3.2%	2.4%	273
UK	25,839	28,415	29,643	31,109	31,790	32,393	33,593	30.0%	25.4%	3.7%	1,200
12 countries estimate*	355,903	357,415	360,381	358,766	349,155	349,758	351,191	-1.3%	-1.7%	0.4%	1,433

Notes: This figure is constructed as the sum of Figure 7 and Figure 8; * total estimated by using imputed figures in the case of missing observations: DK: 1997-1998, EE: 1997-1999; ES: 1997-1998; HU 1997-2000, PL: 2003. Imputed figures based on the next/last available values for no. of enterprises listed under NACE G502.

Source: Eurostat, LE Manufacturer Survey; ZDK.

The numbers in Figure 85 show that, while in the aggregate for the 12 countries there is practically no change in the number of service and repair businesses, the evolution for individual countries differs markedly from this global picture.

In fact, significant decreases in the number of businesses have occurred in Denmark, Germany, Italy, Hungary, the Netherlands, Poland and Portugal. In contrast, the number of businesses increased in Estonia, Spain, France, Sweden and the UK.

The information on individual sub-periods provided in Figure 85 shows that the decline in the number of businesses was more pronounced in recent years.

It is beyond the scope of the present study to quantify the extent to which the current size of repairer networks departs from an ideal, or optimal, size. In particular, no fixed relationship between the number of businesses and the number of outlets appears to exist. For example, countries such as Germany and the Netherlands combine above average outlet density⁷⁰ with a low number of enterprises relative to the size of the car parc (Figure 86).

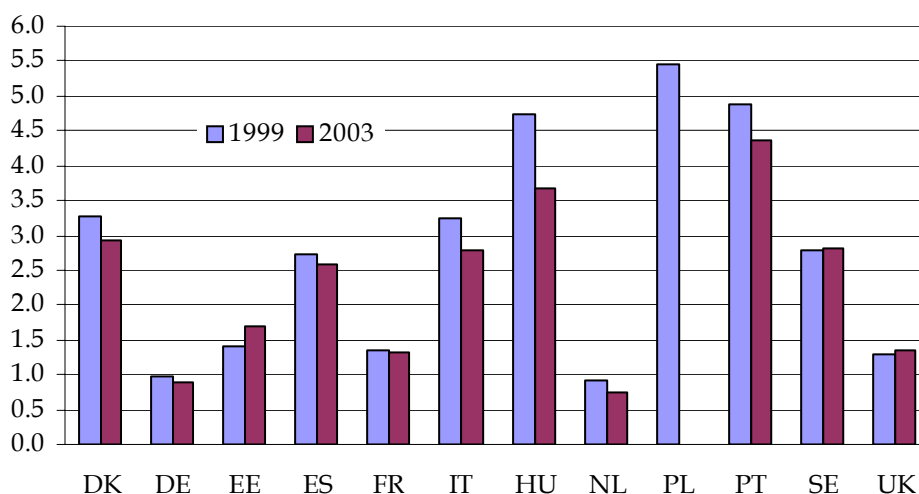
Overall, the number of service and repair businesses per 1,000 cars appears large in a number of countries, given that cars are serviced about once a year, with repairs even less frequent.⁷¹

More than two repair businesses existed for every 1,000 cars in Spain, Italy, and Sweden in 2003-04, while in Denmark, Hungary and Portugal this figure was greater than three (Figure 86).

⁷⁰ At least for authorised outlets, see Figure 99.

⁷¹ 0.76 repairs per car in Germany in 2004. Source: DAT Report 2005. Also note that some of the businesses counted in Figure 85 have several outlets, which leads to an even greater density from a consumer's point of view.

Figure 86: Number of service & repair enterprises (authorised & independent) per 1,000 cars, 1999-2000 and 2003-04.



Notes: EE: 2000 figure was substituted for 1999. 1999 was chosen as the reference year because of missing observations for individual countries in earlier years; no information available for 2004.

Sources: LE Manufacturer Survey, Eurostat, National industry associations, NSAs.

3.3.1 Financial indicators

In this section we report on a series of financial indicators for companies whose main activity in the Amadeus databank is reported to be service and repair of motor vehicles (NACE 502). It should be noted that the information in the Amadeus databank does not allow us to distinguish between authorised and independent repairers.

This data reported to the Amadeus database is based on company balance sheets and profit and loss accounts. As such, data that refers to turnover will correspond to the total turnover of a repairer business. Therefore it may include in some cases the sales of car parts. For most repairers, the sales of car parts take place only in the context of a repair. Authorised dealers/repairers, on the other hand, will often have a parts sales activity independent of repairs. However, we do not believe that our sample from the Amadeus databank actually includes a large number of authorised dealers/repairers. The activity of the latter would, most likely, be reported as being "car sales" (as this is probably their main activity) rather than as "car service and repair".

In the first set of tables we report average operating margins (earnings and losses before interest and tax divided by turnover).

Figure 87: Average operating margin for service and repair of motor vehicles.

	1998	2000	2002	2003	2004
Denmark	0.71	1.43	3.44	1.66	2.24
Germany	0.65	2.45	2.45	2.17	2.27
Estonia	-0.07	2.48	5.89	4.36	2.79
Spain	3.21	3.09	2.48	2.94	3.38
France	3.15	3.13	2.81	2.55	2.71
Italy	2.03	1.91	2.07	1.63	1.90
Hungary	2.55	1.80	5.04	4.64	3.00
Netherlands	3.15	1.05	3.51	1.66	5.30
Poland	1.79	0.67	2.10	1.77	4.44
Portugal	2.76	2.12	2.68	1.37	2.14
Sweden	3.12	3.56	3.72	3.97	4.04
UK	3.98	3.83	2.49	3.44	3.04
EU12	2.92	2.87	2.72	2.61	2.75
EU25	2.73	2.69	2.57	2.50	2.67

Source: Amadeus.

Average profitability across the 12 countries is below 3% and there is no noticeable trend over the sample period. The same is true for the data for firms in the EU-25 countries. With respect to the last two years for which data is reported, profitability figures in Italy and Portugal are markedly below the EU-25 average. Estonia, Spain, Hungary, Sweden and the UK, on the other hand, show operating margins above the EU-25 average values.

Figure 88 and Figure 89 below provide information on average profit margins in two subsets of our sample of companies. In the first subset we have included the companies with turnover above average turnover and in the second we included the complement set of companies. The issue underlying this analysis was whether there was a marked difference in profitability between large and small automotive repairers.

The data reported in the two figures lead us to conclude that, although the difference is of the order of half a percentage point, the smaller firms have generally higher profits margins than the larger ones.

Although this may appear somewhat surprising, it may reflect the fact that larger firms have invested more in recent years in order to grow their businesses and their profitability will be higher in the future.

**Figure 88: Profit ratios for the larger car service and repair companies
(turnover above average).**

	1998	2000	2002	2003	2004
Denmark	0.71	0.79	1.07	0.00	0.41
Germany	0.47	2.95	3.13	2.41	2.34
Estonia	-1.70	2.75	3.64	2.38	0.85
Spain	3.02	2.53	1.85	2.93	3.34
France	3.10	2.65	1.73	2.29	2.38
Italy	1.32	1.27	1.18	1.03	1.62
Hungary	4.03	-0.74	6.48	2.12	0.36
Netherlands	5.37	0.34	8.05	3.77	3.14
Poland	2.36	-2.10	1.79	1.31	1.61
Portugal	3.21	3.33	2.47	1.13	2.33
Sweden	2.39	3.43	2.02	2.78	2.81
UK	4.28	1.86	0.17	1.75	3.00
EU12	2.50	2.07	1.70	1.98	2.12
EU25	2.32	1.93	1.65	2.00	2.15

Source: Amadeus.

**Figure 89: Profit ratios for the smaller car service and repair companies
(turnover below average).**

	1998	2000	2002	2003	2004
Denmark	-	2.02	4.70	2.24	3.01
Germany	1.02	1.46	1.79	2.05	2.23
Estonia	0.65	2.39	6.55	4.85	3.29
Spain	3.30	3.30	2.73	2.94	3.40
France	3.16	3.25	3.10	2.60	2.80
Italy	2.50	2.29	2.45	1.84	2.09
Hungary	1.57	3.07	4.04	5.39	4.18
Netherlands	1.82	1.19	1.00	1.43	5.66
Poland	0.35	5.52	2.35	2.02	8.53
Portugal	2.03	1.03	2.85	1.47	2.05
Sweden	3.27	3.59	4.04	4.18	4.29
UK	3.84	4.64	3.42	3.80	3.06
EU12	3.07	3.17	3.08	2.77	3.00
EU25	2.90	3.00	2.91	2.63	2.88

Source: Amadeus.

Figure 90: Sector-wide profit margin for car service and repair.

	1998	2000	2002	2003	2004
Denmark	1.21	2.38	3.51	1.18	2.49
Germany	0.46	0.11	0.42	0.33	0.25
Estonia	1.28	1.96	6.18	3.94	2.64
Spain	2.36	2.50	1.88	2.39	3.14
France	3.24	2.86	2.68	2.97	2.99
Italy	1.67	1.18	1.34	1.17	1.26
Hungary	2.11	-1.87	3.27	2.58	2.44
Netherlands	1.65	1.05	2.97	3.59	3.17
Poland	2.13	0.76	2.23	1.48	2.03
Portugal	3.66	4.54	4.15	2.21	2.86
Sweden	2.91	2.82	2.55	2.46	3.03
UK	5.91	1.46	5.38	3.16	4.06
EU12	2.08	1.59	1.97	1.77	1.99
EU25	2.03	1.60	2.00	1.85	2.01

Source: Amadeus.

The sector wide-profit margin, shown in Figure 90, differs from the average profit margin in the way it is computed. While for average profit margins we took the simple average of profit margins reported by each company, for the sector-wide profit margin we took the ratio of the sum of the profit and loss of all the companies to the sum of the turnover of all the companies.

The advantage of this indicator is that it does not give equal weight to profits reported on very small levels of turnover relative to those reported on much higher levels of turnover. The comparison of the two also gives an indication of whether profits are more likely to be found in firms with higher or lower turnover levels.

In the present case, one observes that sector-wide profit is lower than average reported profits of companies. This again indicates that smaller companies have relatively higher profit margins than larger ones.

Evolution of repairers' costs

It has often been argued that the increasing technological complexity of vehicles has made repairs more costly, particularly in terms of the tools and know-how required to deal with even the simplest faults. Looking at the evolution of repairers' costs allows us to evaluate whether this trend has had a noticeable impact.

The data from Amadeus used in Figure 91 below represent "costs of goods sold" divided by turnover. "Costs of goods sold" is an accounting definition

aggregating the costs incurred by the repairers in order to carry out their business. We divide by turnover in order to control for scale effects.

Unfortunately, the data recorded for some countries had too few observations and have been dropped. In our final sample we have been able to use data from 230 companies, which is still a good-sized sample for the present purpose.

Figure 91: Evolution of “cost of goods sold” divided by turnover for selected countries.

	1998	1999	2000	2001	2002	2003	2004
Denmark	-	-	73.7	71.1	72.5	74.0	73.3
Estonia	96.7	93.4	91.3	93.3	91.6	93.3	93.1
Portugal	69.2	66.3	59.5	59.4	62.4	61.0	60.9
Sweden	85.0	85.2	86.1	86.8	85.9	87.2	85.5
UK	75.9	74.7	72.2	72.4	72.9	73.2	74.2

Source: Amadeus.

In spite of the data covering only 5 countries, we note that there is no clear upward trend in these costs. Given that the companies covered in the Amadeus database (under NACE 502) are mostly independent repairers, we conclude that these have not seen a disproportionate increase in costs in the recent years. However, since the measure provided by Amadeus is in fact an amalgamation of different types of costs, we cannot be certain whether there have been significant increases with respect to technical information and related costs.

3.4 The structure of the repair sector

To a degree much greater than in the case of the distribution market, the market for service and repair is characterised by a multiplicity of different players.

A deeper understanding of the evolution of the market thus requires a detailed analysis of the different types of suppliers. Businesses engaged in service and/or repair can be distinguished according to:

- a) Their relationship with vehicle manufacturers, and
- b) The range of activities they undertake.

The first criterion refers to the authorised/independent split that lies at the heart of the market, while the second refers to the segmentation within these two groups.

Before turning to a detailed analysis of the different types of market participants, we provide overleaf an illustration of the complex competitive landscape of the service and repair sector, using the French market as an example.

Figure 92: Repairer structure in France, 2005.

Company Total	Outlets 25 004	Share of outlets in category	Company	Share of outlets in category	Share of outlets in category
Manufacturer owned	2 394	9.6%	Outlets offering bodywork	14 470	57.9%
Eurorepar	1 250	52.2%	Authorised repairers	5 250	36.3%
Motrio	1 000	41.8%	Specialists	3 980	27.5%
Motorcraft	144	6.0%	Independents	3 140	21.7%
			Distributors	2 100	14.5%
Independent	8 143	32.6%			
Generalist	3 982	48.9%	Body shop	1 241	15.2%
AD	1 159	29.1%	AD Carrosserie	381	30.7%
Top Garage	700	17.6%	Axial	280	22.6%
Précisium	400	10.0%	Five Star	235	18.9%
Autoprime	331	8.3%	Alcoat Selected	160	12.9%
Gel'Auto	300	7.5%	Top Carrosserie	100	8.1%
Autologistes	300	7.5%	Precisium Carrosserie	70	5.6%
Bosch Car Service	181	4.5%	Autoneo	15	1.2%
Autofit	140	3.5%			
La signature du pro	130	3.3%	Autocentres	1 073	13.2%
Mon Garage	100	2.5%	Feu Vert	303	28.2%
Elit'Auto	100	2.5%	Norauto	244	22.7%
Autoservice AD	89	2.2%	France Auto pièces	140	13.0%
Proximeca	52	1.3%	Roady	130	12.1%
			L'Auto	74	6.9%
Fast-fit	2 475	30.4%	Maxauto	57	5.3%
Speedy	400	16.2%	Formule 1	40	3.7%
Midas	360	14.5%	Etap Auto	33	3.1%
Eurotyre	330	13.3%	Bricauto	22	2.1%
Euromaster	300	12.1%	Happy Car	20	1.9%
Point S	300	12.1%	Formauto	10	0.9%
Vulco	300	12.1%			
Côté Route	260	10.5%	Others	480	5.9%
Siligom	185	7.5%			
Axto	40	1.6%			

Source: Le tissu des points de vente se rétracte encore (Jean-Pierre Genet, l'Argus de l'Automobile, 7.7.2005. <http://pboursin.club.fr/pdgmeca6.htm>).

In the following sections, our analysis focuses on the authorised and independent service and repair networks.

Since the independent sector includes many small-scale businesses information on this sub-sector is often limited and more data exist for the authorised networks.

Information on other sub-segments of the market will be provided mainly in the context of the discussion of the independent repairers segment.

3.4.1 The authorised/independent segmentation

The market for the service and repair of motor vehicles is split between authorised and independent providers. While the formal distinction between the two is simply the existence (or absence) of a contractual relationship with a vehicle manufacturer, in practice, the two groups are quite distinct.

On the face of it, the advantages of authorisation are matched by a number of potentially onerous obligations. They include, for example, the obligation to provide warranty repairs for the manufacturers; the obligation to source a certain percentage of spare parts directly from the manufacturer; and the costs of meeting the VM-imposed standards.

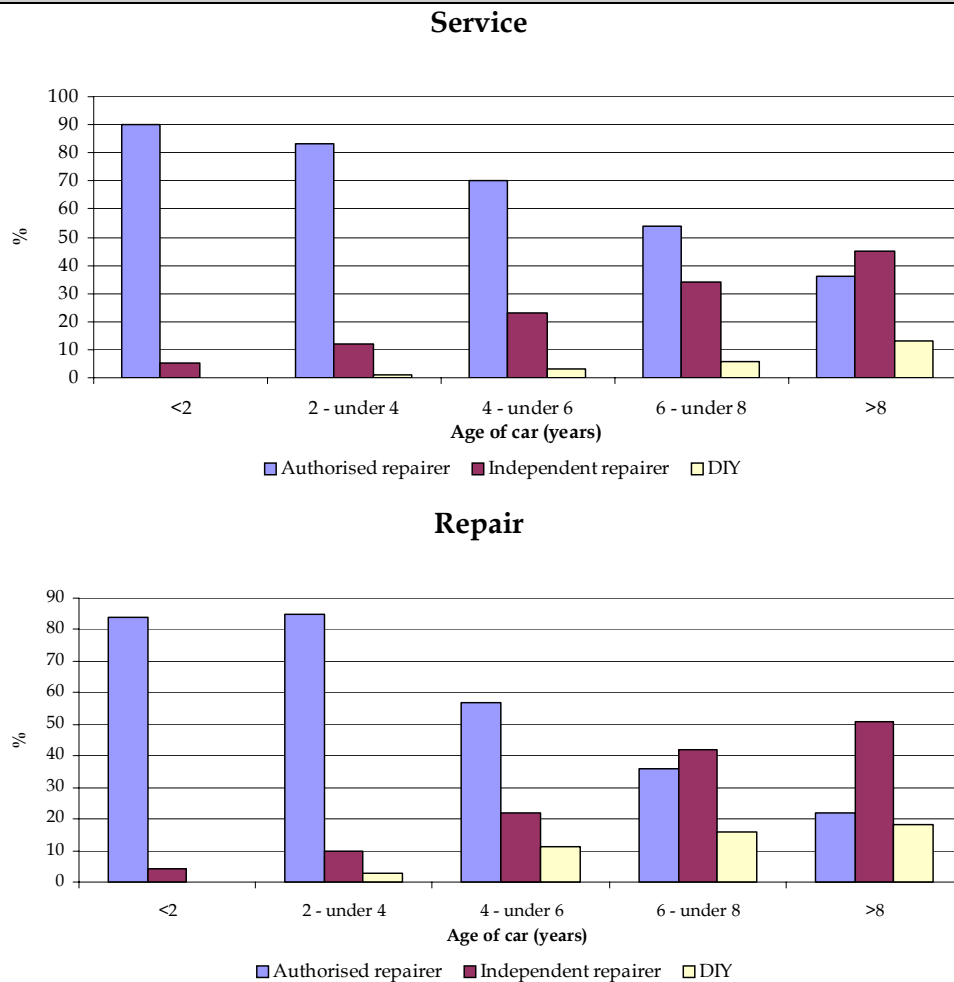
Important advantages for authorised repairers are mainly the brand value and the ability to capture a large market share among the new-car owners of the respective brand, with minimal sales effort.

Independent repairers on the other hand have a crucial advantage in the ability to service all brands, which gives them a much larger reservoir of potential customers. Moreover, the independent status offers the potential to specialise as well as the potential for greater entrepreneurial autonomy. The two main downsides of the independent repairers business are the existence of a somewhat negative customer perception of quality image, and, increasingly important, difficult and costly access to technical information.

Vehicle age as driver of repairer choice

Market observers agree that the single most important factor determining whether a car is repaired by an authorised repairer or an independent is the car's age. This pattern is consistent across countries. Overleaf we show an example from Germany (Figure 93).

Figure 93: Market shares of different types of repairers, by age of car - Germany (2004).



Source: DAT Report 2005.

The figure above shows clearly that the overwhelming majority of new cars is serviced and repaired by the authorised providers, and that the market share of the authorised segment declines steadily with the age of the car, while the opposite is true for independent repairers, and, to a lesser extent, DIY. This pattern is largely the same for repairs and service jobs.

There is some evidence that the pattern described above shows some cross-brand variation. For instance, in the German market, it has been observed that, while garages belonging to the authorised networks of foreign - above all Japanese - manufacturers have a combined market share of over 70% in

the service of cars of their respective brands, the average for authorised garages catering for domestic brands was only 56% in 2004.⁷²

Relative market position of authorised and independent repairers

Independent repairers outnumber authorised repairers in all major European markets (Figure 107). In Italy and Spain, the preponderance of independent repairers is particularly striking. These two countries also show a much higher number of service and repair businesses per 1,000 vehicles than in most of northern Europe (Figure 86).

A comparison with information on the age structure of the car parc (see chapter 2) offers support for the often-posed⁷³ link between the age structure of the car parc and the market position of independent repairers: countries such as Spain and Italy, in which a comparatively high proportion of cars in use is older than ten years (see chapter 2) tend to have a large independent repair sector.

While independent repairers outnumber authorised repairers, recent developments in the market appear to have favoured the authorised networks (see Figure 94).

In all countries for which data was available, the ratio of the turnover of independent repairers to the turnover of authorised repairers fell. This reduction is particularly noticeable in Spain, France, Italy and Portugal.

⁷² These observations refer to the German market only. Figures are taken from the DAT Report.

⁷³ See for example OFT (2003).

Figure 94: Ratio of the number of independent to authorised repairers (1999-00 versus 2003-04).

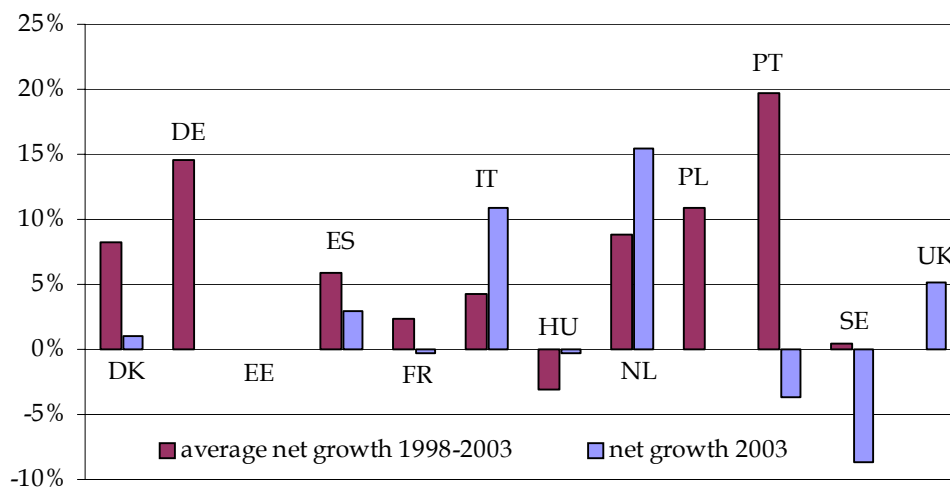
	1999-00	2003-04
Denmark	4.2	4.0
Germany	1.5	1.2
Estonia	-	7.1
Spain	12.4	8.4
France	7.1	4.8
Italy	16.3	13.2
Hungary	-	15.9
Netherlands	1.7	1.4
Poland	50.1	
Portugal	20.8	16.5
Sweden	5.9	5.7
UK	6.6	6.2
12 countries	7.3	5.2

Source: LE.

The trend in the relative development of repairer turnover suggests that, at least, a subset of independent repairers is doing less well. Growth over recent years has been stronger in the authorised sector than in the independent sector. Figure 95 shows the growth in turnover achieved by authorised repairers over and above the growth in the overall market reported in Figure 83.

With the exception of Hungary, all countries saw higher growth in the turnover of authorised repairers than in the repair and service sector as a whole between 1998 and 2003.

However, the most recent figures for 2003 suggest that the decrease in the number of independent repairers in some countries, including France, Portugal and Sweden, has run its course.

Figure 95: Excess growth of authorised repairer turnover (1998-2003).

Note: excess growth was calculated by subtracting for each year the growth in the overall market (Figure 83) from the growth in authorised repairer turnover. The underlying data on authorised repairer turnover (by brand) are included in Volume II Section 2.

Source: LE calculations based on LE Manufacturer Survey, Eurostat, ZDK.

Reasons for being independent: LE survey results

In light of a market environment that seems in some respects to be evolving unfavourably, we have asked the views of independent repairers on joining a manufacturer's authorised network.

A certain proportion of respondents has indeed expressed a wish to enter into some form of relationship with a vehicle manufacturer: 10.9 percent have applied for authorised repairer status, and 6 percent have entered into a soft-franchise agreement with a vehicle manufacturer.

The remaining respondents cited the high value they place on independence, high costs necessary to meet manufacturers' requirements, and limited economic promise as reasons for not becoming authorised. The detailed responses are listed in Figure 96 below.

Figure 96: Independent repairers' views on becoming authorised.

	No. of answers	% of total*
High value of own independence	105	57.1
Costs to meet manufacturer standards are too high	77	41.8
Not economically promising	54	29.3
Have applied to gain authorised status and been accepted	13	7.1
Have entered into a "soft-franchise" agreement with manufacturer	11	6
Have applied to gain authorised status and been denied	7	3.8

Note: * This question allowed multiple selections, so totals differ across questions.

Source: LE Dealer Survey.

In conclusion, the fact that a not insignificant minority of independent repairers sees authorised status as an attractive option can be viewed as a response to recent market pressures on the independent sector.

However, the value of own independence and the costs to meet standards are the principal deterrents to joining an authorised network. Refusal to gain status as authorised dealer is rare. Only 3.8% of respondents have applied and been denied.

3.4.2 Authorised repairers

This section looks in detail at the authorised repairer networks. We review the size, evolution, density and typology of networks, primarily on the basis of LE's manufacturer survey. The main results on network size are shown in Figure 97 and Figure 98 on the following pages.

Figure 97: Authorised repairers: total no. of contracts in selected Member States (1997-2004).

	1997	1998	1999	2000	2001	2002	2003	2004	% change 97-04	% change 97-02	% change 02-04	change 02-04
Denmark	1,114	1,102	1,135	1,162	1,135	1,018	1,094	1,120	0.5%	-8.6%	10.0%	102
Germany	18,121	16,899	16,451	16,609	15,396	15,707	17,186	18,880	4.2%	-13.3%	20.2%	3,173
Estonia	35	43	47	53	59	69	69	95	171.4%	97.1%	37.7%	26
Spain	3,442	3,433	3,408	3,438	3,373	3,295	4,707	5,201	51.1%	-4.3%	57.8%	1,906
France	5,139	4,729	4,564	4,827	4,899	4,713	7,005	7,054	37.3%	-8.3%	49.7%	2,341
Italy	5,874	5,893	5,828	5,997	5,978	5,856	6,782	6,739	14.7%	-0.3%	15.1%	883
Hungary	466	491	489	528	534	565	580	605	29.8%	21.2%	7.1%	40
Netherlands	2,308	2,239	2,093	2,081	1,974	1,897	1,929	2,210	-4.2%	-17.8%	16.5%	313
Poland	776	857	924	994	1,027	990	1,001	1,041	34.1%	27.6%	5.2%	51
Portugal	752	743	747	777	792	752	913	998	32.7%	0.0%	32.7%	246
Sweden	1,489	1,472	1,451	1,609	1,582	1,563	1,779	1,716	15.2%	5.0%	9.8%	153
UK	3,861	3,793	3,626	3,958	3,993	4,046	4,572	4,647	20.4%	4.8%	14.9%	601
12 countries	43,377	41,694	40,763	42,033	40,742	40,471	47,617	50,306	16.0%	-6.7%	24.3%	9,835

Source: LE Manufacturer Survey. Underlying data (by brand) can be found in Volume II Section 2.

Figure 98: Authorised repairers: total no. of outlets in selected Member States (1997-2004).

	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	% change 97/98- 03/04	% change 97/98- 02/03	% change 01/02- 03/04	change 01/02- 03/04
Denmark	1,750	1,782	1,754	1,698	1,617	1,500	1,440	-17.7%	-14.3%	-11.0%	-177
Germany	28,037	28,281	27,133	25,902	24,452	22,801	23,529	-16.1%	-18.7%	-3.8%	-923
Estonia	63	67	97	112	126	92	125	98.4%	46.0%	-0.8%	-1
Spain	8,980	9,727	9,389	9,616	9,468	8,956	8,277	-7.8%	-0.3%	-12.6%	-1,191
France	22,598	21,561	22,373	21,354	20,515	19,219	17,445	-22.8%	-15.0%	-15.0%	-3,070
Italy	19,160	19,138	20,285	19,033	19,910	17,509	15,563	-18.8%	-8.6%	-21.8%	-4,347
Hungary	913	923	938	961	1,010	855	955	4.6%	-6.4%	-5.5%	-55
Netherlands	4,274	3,997	3,928	3,885	3,613	3,565	3,402	-20.4%	-16.6%	-5.8%	-211
Poland	1,425	1,440	1,874	1,956	1,904	1,364	1,514	6.3%	-4.3%	-20.5%	-390
Portugal	1,866	1,848	2,136	1,892	1,804	1,978	1,650	-11.6%	6.0%	-8.5%	-154
Sweden	3,727	3,544	3,611	3,456	3,174	2,929	2,785	-25.3%	-21.4%	-12.3%	-389
UK	6,885	6,687	6,583	6,287	6,203	6,250	6,026	-12.5%	-9.2%	-2.9%	-177
12 countries	99,678	98,995	100,101	96,152	93,796	87,018	82,711	-17.0%	-12.7%	-11.8%	-11,085
EU25*	118,562	117,352	117,687	112,271	109,895	102,953	97,224	-18.0%	-13.2%	-11.5%	-12,671

Note: * excludes CY, LU, MT.

Source: HWB International Ltd.

It is interesting to note that, within the period of 2002-2004, the number of outlets decreases while the number of contracts increases (see Figure 97 and Figure 98). Most of the reduction in the number of authorised repairer outlets comes from reduction in numbers of sub-repairers.⁷⁴ Since these did not hold a contract directly with the vehicle manufacturers, the number of contracts is not affected by this exit. In addition, while a large number of former authorised sub-repairers exited towards the independent sector, there has also been an increase in stand-alone repairer contracts offered to a fraction of these sub-repairers.

This trend is likely to increase competitive pressure on the traditional independent sector.

The number of authorised service and repair outlets declined over the period 1997-2003 by 18% for the EU-25, and the three most recent years accounted for two thirds of this change (Figure 98).⁷⁵ Italy and Poland showed the greatest decline in outlet numbers, a fall of more than 20% in the last three years. The only exceptions from the declining trend can be observed in Estonia, Hungary and Poland.

While overall the rationalisation process began around 2000, it is noteworthy that, in a number of countries, this process is still well underway in the period 2003-2004. This is most notably the case in France, Italy, Portugal and Spain, where the rationalisation accelerated considerably in the more recent period.

Authorised network density

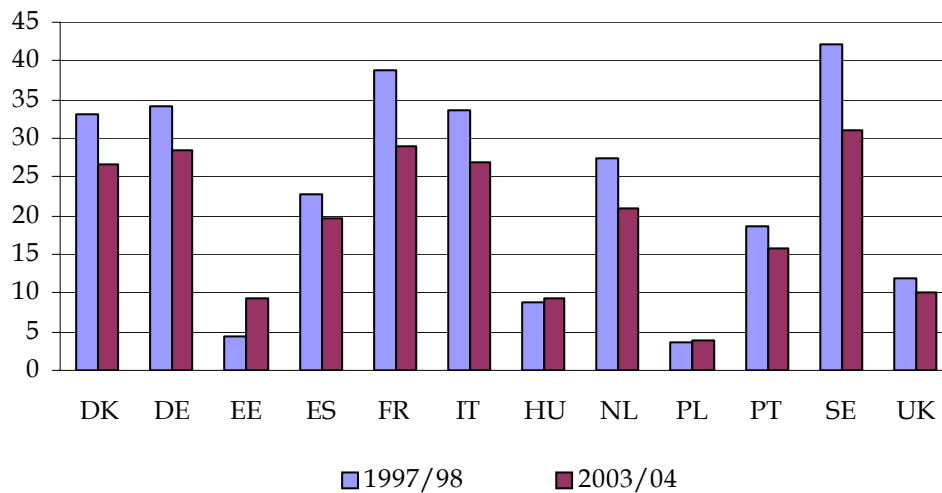
The density of the authorised service and repair networks, measured by the number of outlets per 100,000 inhabitants reveals large differences between countries (Figure 99). While most western European Member States (with the exception of Portugal and the UK) have 20 or more authorised repairers per 100,000 inhabitants, Estonia and Hungary have fewer than 10, while Poland has fewer than 5.

The high density of the authorised service and repair network in Sweden (see Figure 99) points to another noteworthy feature of the service and repair market: the fact that it is overwhelmingly local. Consequently, a country with a small number of inhabitants per square kilometre, such as Sweden, has a comparatively larger number of repairers per inhabitant.

⁷⁴ HWB International Ltd.

⁷⁵ We used HWB data rather than the replies from the vehicle manufacturers' questionnaire for this question because manufacturers' reports of outlets do not include sub-repairers, while the HWB numbers do. Therefore the HWB numbers appear a better source to evaluate trends in the density of the authorised repairer network.

Figure 99: Density of the authorised network: outlets per 100,000 inhabitants (1997; 2003).



Source: HWB International Ltd.

Per brand

An examination of the distribution of service and repair outlets at the brand level reveals that the top 13 brands control most of the service points (Figure 100). They are also responsible for most of the variation observed over the period.

In the case of top brands, the decline in the number of outlets was at first relatively slow, but then accelerated sharply from 2001 onwards, especially in 2003 and 2004. It is noteworthy that the share of the top 13 in total outlets has been decreasing steadily.

**Figure 100: Make Trends. Total authorised service and repair outlets.
West Europe (16 Markets)**

	1997	1998	1999	2000	2001	2002	2003	2004
Total number of outlets	119,847	116,583	116,007	116,158	111,969	109,625	102,833	97,727
Number of outlets - top 13 Brands*	87,554	83,966	83,181	82,831	80,001	77,504	71,572	66,490
Top 13 brands' share of total outlets	-73%	-72%	-72%	-71%	-71%	-71%	-70%	-68%
Number of outlets - other brands	32,293	32,617	32,826	33,327	31,968	32,121	31,261	31,234

Variation 1997-2004

Total -22,123

Top 13 -21,064

Top 13 95% of total change

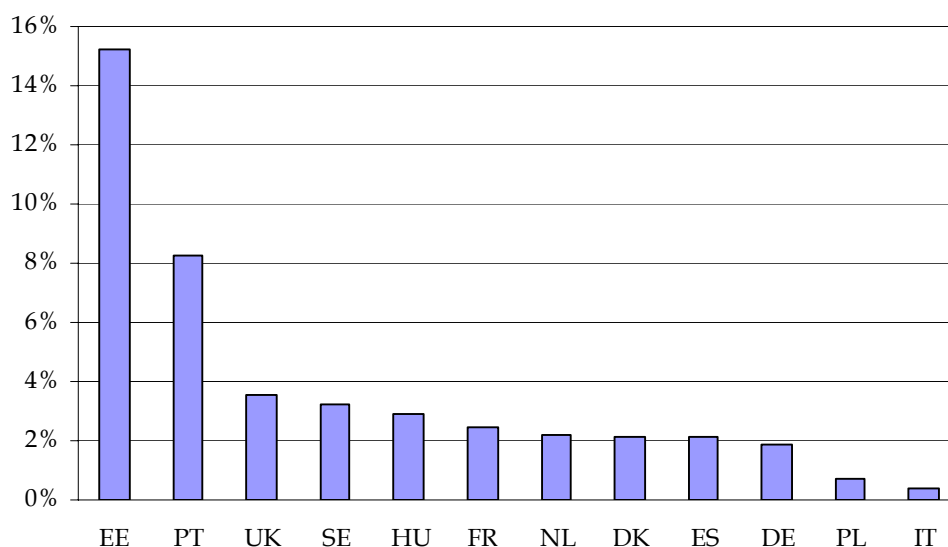
Note: * Renault, Peugeot, Citroen, VW, Audi, SEAT, Opel, Ford, Nissan, BMW, Fiat, Mercedes, Toyota.

Source: HWB International Ltd.

Manufacturer-owned repairer outlets

Manufacturer-owned repairer outlets as a percentage of total number of authorised outlets vary between 15% in Estonia and about 1% in Italy. For most countries, this percentage is in the range 2-3%.

Figure 101: Manufacturer-owned repairer outlets as a percentage of total repairer outlets, 2004.



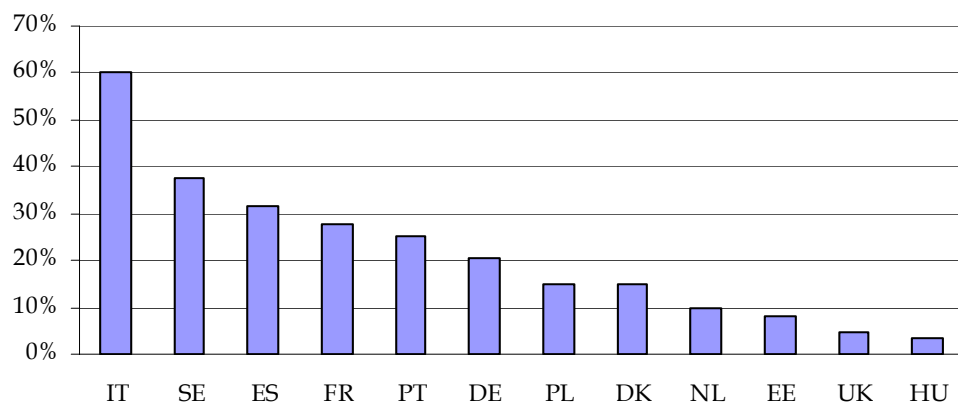
Source: HWB International Ltd.

Stand alone authorised repairers

Before the coming into force of Regulation 1400/2002, stand-alone authorised repairer contracts were not covered by the block exemption, which meant that, traditionally, only a small minority of authorised repairers were stand-alone service and repair businesses. The vast majority were primarily authorised dealers, who also offered repair and service. The change after the entry into force of the new BER has been rapid, as illustrated by the data for 2004 from HWB International.

For Germany, Portugal, France, Spain, Sweden and Italy, more than 20% of all authorised repair outlets are stand-alone. This percentage reaches an astonishing 60% in Italy. Italy's case is particular in that we find evidence of a very large number of small repairer businesses.

Figure 102: Stand-alone repairer outlets as a percentage of all service and repair outlets (2004).



Source: HWB International.

3.4.3 Independent repairers

This section focuses on the independent segment of the service and repair market. Independent repairers, that is, repairers without a franchise contract with a vehicle manufacturer, come in very different shapes and sizes, from one-man corner shops to multinational networks. Some data characterising an average independent repairer, based on LE survey results, are shown in Figure 103.

Figure 103: Independent repairers' turnover and its components.

	1997	1998	1999	2000	2001	2002	2003	2004
Average turnover (€'000)	694.4	722.3	788.0	733.5	734.3	808.7	713.7	754.3
Of which (%)								
Car service	39	31	35	35	38	31	31	27
Other mechanical	21	23	21	19	17	17	15	16
Body work	13	14	14	12	15	14	13	19
Parts sales	14	18	17	22	20	27	28	26
Service contracts	14	14	12	12	10	11	12	12

Note: the proportions reported in this table are based on the number of replies in each year, which is not constant over time. Changes in the proportions therefore reflect changes in the composition of the sample as well as underlying trends.

Source: LE Dealer Survey.

General car service represents the largest component of turnover, followed closely by the sale of spare parts. It is not clear from the responses we received whether the reported share of spare parts sales includes parts sold in connection with repair and servicing undertaken on-site by the repairer, which would explain the surprisingly high figures.

Service contracts represent a relatively stable share of turnover of 10 to 14%. The share of both bodywork and parts sales increased at the expense of car service and mechanical repairs. However, since the responses we received tended to be more complete towards the end of the period it is possible that this trend appears exaggerated in our figures.⁷⁶

Average turnover of the independent repairers in our sample is shown in Figure 103. It has remained relatively stable over the years, growing at a rate of approximately 1.2% per year, implying a small decline in real terms.

It should be noted that the data described above mask the heterogeneity of operators of the sector. This heterogeneity, and the atomised nature of the independent sector mean that data on many aspects of the market are not readily available.

Therefore, we focus our analysis on developments in the independent sector as a whole, and then provide a brief analysis of the segmentation of this sector, highlighting especially the role played by independent repairer franchise networks.

⁷⁶ The reliability of figures for earlier years is inevitably lower than for later years, as they are invariably based on fewer responses.

Methodological note

We provide below a brief discussion of how the data for number of service and repair businesses from Eurostat was interpreted and used for the purpose of estimating the number of independent service and repair businesses.

The data from Eurostat include only repairers that report their main activity as being “motor vehicle service and repair” (NACE category G502). Authorised dealers who are also authorised repairers will thus not be included. These businesses will be recorded under sales of motor vehicles rather than under service and repair. The exception is stand-alone authorised repairers, who will report under motor-vehicle service and repair and not under sales of motor vehicles. Prior to 2003, however, there were practically no stand-alone authorised repairer contracts.

For the purpose of estimating the number of independent service and repair businesses one needs to adjust the 2003 data from Eurostat for the presence of stand alone authorised repairers. This correction is done by subtracting the numbers of stand-alone authorised repairers, using HWB data, from the Eurostat totals. Figure 104, shows the final results.

A complication is that HWB does not report the number of stand-alone authorised repairer contracts (although it does report on the number of stand alone repairer outlets). We estimated a figure for stand-alone repairer contracts by subtracting, from all authorised repairer contracts, the number of authorised sales contracts, reflecting the common assumption that, in general, all sales dealers also have repairer contracts, while the converse has become less the case after the changes introduced by the new BER.

Our estimates of the number of independent repairers for the 12 countries in our sample are shown in Figure 104 overleaf.

Figure 104: Total no. of independent service & repair businesses in selected Member States (1997-2003).

	1997	1998	1999	2000	2001	2002	2003	% change 97-03	% change 97-02	% change 02-03	change 02-03
Denmark	-	-	4,826	4,929	4,774	4,754	4,427	-8.3%	-	-6.9%	-327
Germany	23958	24277	24359	23350	23229	22438	22022	-9.6%	-6.3%	-1.9%	-416
Estonia	-	-	-	600	586	624	672	12.0%	-	7.7%	48
Spain	-	-	42,712	44,789	44,791	45,296	43,666	2.2%	-	-3.6%	-1,630
France	33,927	34,096	34,096	34,344	34,396	34,588	33,618	-0.9%	2.0%	-2.8%	-970
Italy	98,108	97,026	97,898	96,866	94,210	92,302	89,165	-9.1%	-5.9%	-3.4%	-3,137
Hungary	-	-	-	-	10,186	9,980	9,649	-5.3%	-	-3.3%	-331
Netherlands	3,209	3,290	3,471	3,603	3,632	3,531	3,094	-3.6%	10.0%	-12.4%	-437
Poland	44,888	49,918	49,831	44,607	39,221	42,114	-	-6.2%	-6.2%	-	-
Portugal	18,802	14,833	16,196	16,662	15,980	15,638	16,421	-12.7%	-16.8%	5.0%	783
Sweden	9,398	9,370	9,428	9,643	9,611	9,675	9,732	3.6%	3.0%	0.6%	57
UK	21,978	24,622	26,017	27,151	27,797	28,347	29,021	32.0%	29.0%	2.4%	674
12 countries estimate*	312,526	315,721	319,618	316,733	308,413	309,287	303,574	-2.9%	-1.0%	-1.8%	-5,713

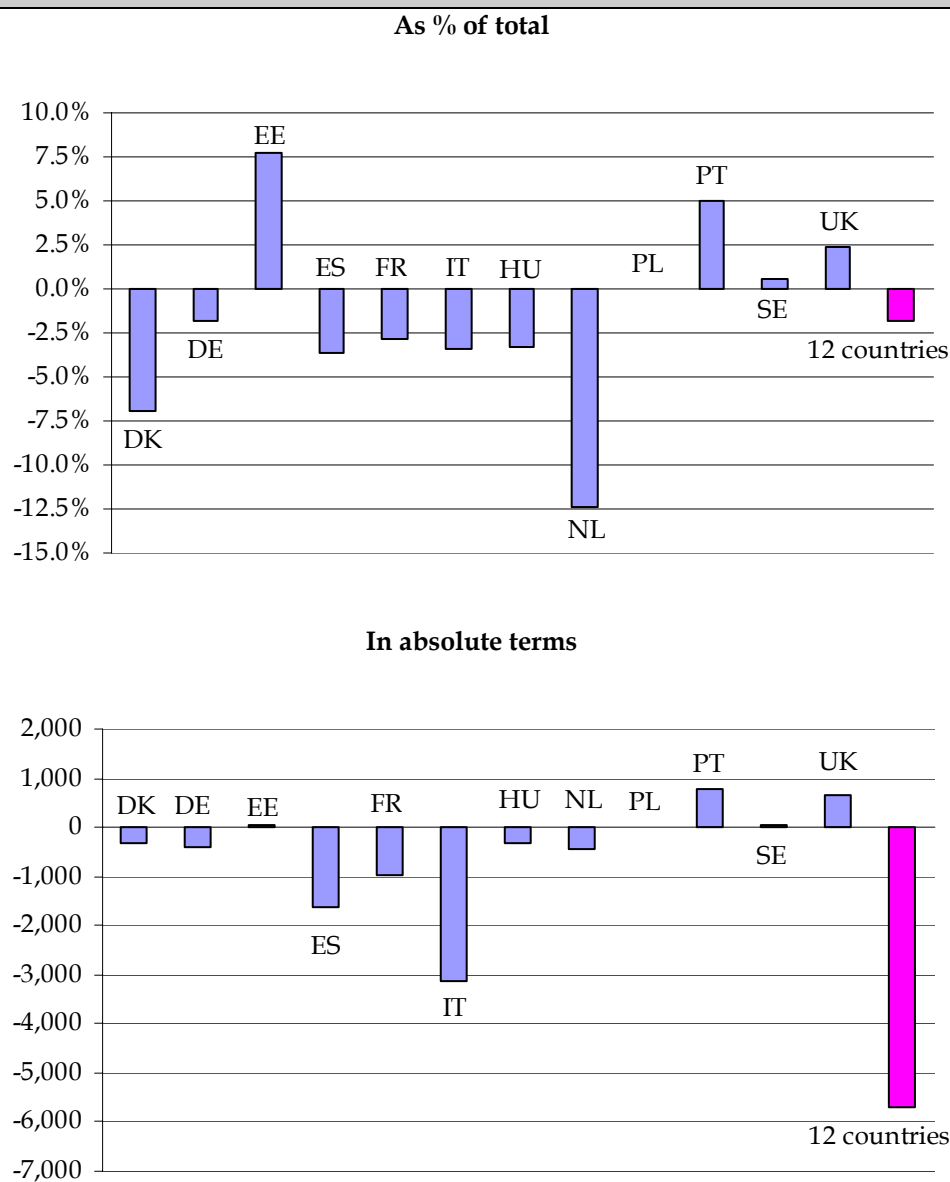
Note: * total estimated by using imputed figures in the case of missing observations: DK: 1997-1998, EE: 1997-1999; ES: 1997-1998; HU 1997-2000, PL: 2003. Imputed figures based on the next/last available values for no. of enterprises listed under NACE G502.

Source: Eurostat, LE Manufacturer Survey; ZDK.

We observe a relatively small decrease in the overall number of independent service and repair businesses over the period 1997-2003. Although small in percentage terms, in absolute terms the decrease affected a large number of businesses. The decrease appears to be accelerating in the last year of the period for which data are available.

Spain, France and Italy together experienced a reduction of close to 6,000 businesses over the period 1997-2003. Germany, Denmark and the Netherlands also saw a significant reduction. The UK is an outlier in this overall picture of declining number of businesses, with a significant increase of more than 30% in the number of businesses over the period 1997-2003.

Figure 105 below provides a summary picture of the evolution of the number of independent businesses, focusing only on the change between 2002 and 2003. It is clear that the downward trend in business numbers is significant, both in percentage and absolute terms.

Figure 105: Change in the number of independent repairers (2002-2003).

Sources: Eurostat, HWB International Ltd, ZDK.

Types of independents

The generic term “independent repairer” covers a wide range of businesses, with considerable differences both in terms of the scale of operations, and in terms of the type of work they undertake.

The answers to our survey indicate that stand-alone independent repairers have decreased in numbers relative to independent repairers belonging to chains.

Figure 106 also shows that fast-fits' weight increased moderately but fell in the more recent period, while autocentres⁷⁷ and other chains are the formats gaining the most over the sample period.

Figure 106: Membership of service/repair chains (%).

	1997	1998	1999	2000	2001	2002	2003	2004
Stand -alone independent repairers*	83.0	82.1	81.1	78.8	74.7	73.4	73.6	72.2
Fast-Fit Chain	3.5	3.4	4.1	3.8	5.9	5.8	5.1	5.3
Autocentre	0.7	0.7	0.7	1.3	2.9	4.6	5.1	5.3
Other chain	12.8	13.8	14.2	16.0	16.5	16.2	16.3	17.1

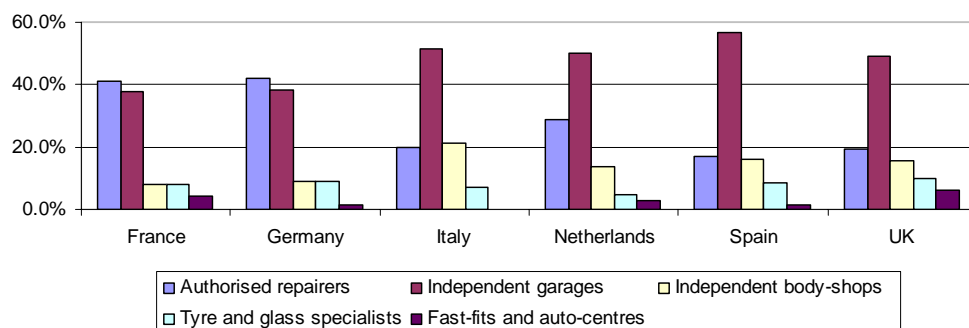
Note: *not part of chain or VM network. The proportions reported in this table are based on the number of replies in each year, which is not constant over time. Changes in the proportions therefore reflect changes in the composition of the sample as well as underlying trends.

Source: LE Dealer Survey.

The distribution of independent repairers across the different sub-categories varies across countries.

Fast-fits and autocentres are more widespread in France and in the UK than in Germany and Spain; in Italy they are virtually unknown. The age structure of the car parc, which we identified as the prime driver of the authorised/independent split, cannot properly account for such differences, and it seems that engrained consumer preferences, rather than objective market characteristics are responsible.

⁷⁷ Autocentres are retail areas for certain types of car parts with adjoining areas where a limited range of service and repairs are performed.

Figure 107: Repair market structure by type of repairer, 2004.

Source: ICDP.

Section summary

The market for car servicing and repairs is characterised by the presence of a number of different types of operator. The most important distinction is to be made between independent and authorised repairers.

The independent segment is also split into further sub-markets, which are delineated by the scope of the services they undertake.

In the authorised repairer segment, two major developments have taken place over the period 1997-2004:

- An increase in the number of franchise contracts; and
- A decrease in the number of authorised repairer outlets.

The reduction in the number of authorised businesses mirrors the development in the market for car distribution discussed in the preceding chapter. The concomitant increase in the number of authorised repairer outlets can be explained as an increase in the number of stand-alone authorised repairers, which have quickly gained a significant presence in a number of national markets.

Observers agree that the newly emerging stand-alone repairers are for the most part ex sub-dealers, i.e. repair subsidiaries of authorised car dealers. The increase in contract numbers is thus an artefact of a change in contract form rather than *de novo* entry.

The decrease in the number of outlets, however, represents a real loss of density in the authorised networks. However, it has often been observed that, while some of the loss of authorised outlets is attributable to market exit, a significant proportion of ex-authorised repairers have continued to operate as independents.

The number of independent repairer businesses shows an overall decrease between 1997 and 2004. The above-mentioned influx into the independent segment of repairers that used to belong to authorised networks thus masks a more dramatic decline in the numbers of traditional independent garages.

Even more worryingly for independents, the trend seems to be accelerating towards the end of the period under study.

Taken together, these developments imply that the density of the total repairer network (including both independent and authorised repairers) has decreased.

Although authorised and independent repairer numbers are both declining, there is evidence that stand-alone independents are being hit hardest.

3.5 New developments/innovation

It has proved particularly difficult to obtain statistical data for the analysis of innovation of service and repair formats. While this section draws upon an extensive literature survey of journal articles and industry analysis, it has not been possible to construct time-series-based indicators.

As a result, this section reports on a series of developments that have been commented upon by the specialist articles and also presents an overview of main developments for some of the most important groups of repairers and repairer chains.

We discuss in turn the following characteristics of the European repairer markets: with respect to the authorised networks, we describe the chosen forms of organisation, the extent of multi-branding, manufacturer ownership and evolution of stand-alone authorised repairers; with respect to the independent segment we discuss the evolution of repairer groups, complementing our analysis with a few examples of some of the more significant ones.

3.5.1 Innovation within the authorised sector

Multi-branding

While all independent repairers generally offer repair services for a wide range of brands, this has not been so much the case in the authorised sector. The reason for this is not so much an unwillingness to provide these types of services, but mostly a lack of demand from motorists. Because authorised dealers/repairers are generally perceived as more expensive, it would be unusual for a motorist to bring their car to an authorised dealer for other than the car's brand.

Meanwhile, manufacturers have perceived that, in light of the provisions of the new BER, multi-brand repairing is a market set for growth. In some countries, manufacturers have thus been eager to establish a presence in this market segment. In France, for example, three of the main VMs have created a large network of repair centres that offer a wide range of multi-brand repairs (see below).

Stand-alone authorised repairers

Former sub-repairers (who had repairer contracts with authorised dealers rather than with the VM directly) gained the status of authorised repairers or moved towards either the independent sector or the new repairer franchises, either VM-owned or independently owned.

On top of this, entry of authorised stand-alone repairers, newly appointed by the vehicle manufacturers upon the entry into force of the new BER is likely

to have occurred. Evidence for this is found in our survey of independent repairers, in which a number of respondents reported their recent entry into an authorised network.

These movements reflect the different choices made by vehicle manufacturers in light of the changes contained in BER 1400/2002.

While some ventured into soft-franchise repairer agreements under other than the manufacturer's own brand, others chose to appoint former sub-dealers of their dealerships as new stand-alone repairers.

In addition, some authorised repairers are businesses which have left the authorised distribution segment but remained linked to the vehicle manufacturer as an authorised repairer.

As Figure 102 shows, in some countries the percentage of stand-alone repairers in the overall total of authorised repairers is significant. However, a part of this does not, in all likelihood, represent any particular new trend in the market but rather the fact that former sub-repairers who had only an indirect contract with VMs were offered authorised repairer status upon entry into force of the new BER.

3.5.2 Innovation within the independent sector

The most notable development in the independent sector in the EU is the emergence of large, sometimes multinational, repairer groups.

Of particular relevance to the independent repairer market, the BER stipulates that car makers must allow independents access to all necessary technical information, tools, equipment, including diagnostic equipment and training.⁷⁸ Furthermore, the regulation does not exempt contracts containing clauses which seek to prevent authorised repairers from supplying parts to independent repairers.

As already noted, the new BER has opened up new opportunities for independent operators. According to industry observers, the main beneficiaries were, above all, independent repairer groups, that could exploit economies of scale and outperform traditional independent garages in terms of technical expertise and price (Figure 111 and Figure 112). This has allowed these groups to expand quickly and, according to some commentators, also opened up opportunities in the market for cars younger than 4 years, a segment in which authorised repairers still enjoy a considerable advantage.⁷⁹

In addition, the costs of independent garages are still on average 30% lower than those of their authorised competitors, a state of affairs that is due mainly

⁷⁸ Although, as we discuss further ahead, the provision of access to technical information by vehicle manufacturers has been less than satisfactory.

⁷⁹ Automobilwoche No. 19, 13/09/2004. p. 18.

to costly quality standards imposed by car manufacturers.⁸⁰ Although independent repairer groups have their own quality standards, the cost of meeting them is typically lower, which makes joining a group an attractive proposition not only for established independents, but also for existing or recent members of an authorised network.⁸¹

It follows that members of independent repairer groups can enjoy advantages similar to those offered by authorised networks in the form of information exchanges, training, marketing and parts purchasing systems, while still incurring lower costs than their authorised competitors.

Finally, independents are also improving their access to original spare parts⁸². The fact that many of the successful repairer groups are in fact connected either through direct ownership or close cooperation, with either major parts manufacturers (such as Bosch, Liqui Moly, Valvoline), parts distributors, and even car manufacturers (such as Citroen, Ford, Volkswagen), means that access to spare parts is often offered at the same conditions than those faced by authorised repairers, a development that has been aided by the new definition of original spare parts in the BER. This definition equates parts with the car manufacturer brand to those with the parts manufacturer brand as long as the manufacturer self certifies that the parts at least match the production methods and technical specifications of the manufacturer-branded versions.

To our knowledge, repairer groups do not often use car-maker-branded parts, except in the case of “captive parts” where there is no alternative. Instead, they source parts directly from the original parts supplier or from matching-quality parts suppliers. In the case of stop + go, a repairer franchise owned by VW, OE parts are used for Audi and VW cars. This may also be the case for some other groups, although there is scarce data to assess the extent to which this is the case.

⁸⁰ Automobilwoche No. 19, 13/09/2004. p. 19. From the garage owners’ point of view, the value of high quality standards, especially those regarding the appearance and interior of their premises is debatable. According to a Forsa poll in 2004, 70% of repair customers do not place a great value on a garage’s appearance.

⁸¹ For example, German group 1a autoservice, a full-service franchise network with 1,250 outlets in Germany and Austria, requires a one-off investment of €3,560, which includes a distinctive forecourt sign, standardised Internet presence and other marketing tools. Typically, garages can acquire additional “modules” on top of such a basic package, including management tools, specialist training, etc. In addition, the network operator normally requires regular contribution to marketing activities conducted both locally and at the group level. Source: www.autoservicepraxis.de. French fast-fit network Speedy, on the other hand, estimated a total cost of €137,000 for new franchisees, which included stocks, tools and equipment, as well as interior and exterior design alterations and marketing expenditures.

⁸² Here, we refer to “original spare parts” according to the new definitions included in BER 14000/2002. According to the definition therein, ‘original spare parts’ means spare parts which are of the same quality as the components used for the assembly of a motor vehicle and which are manufactured according to the specifications and production standards provided by the vehicle manufacturer for the production of components or spare parts for the motor vehicle in question. Art. 1(1)(t).

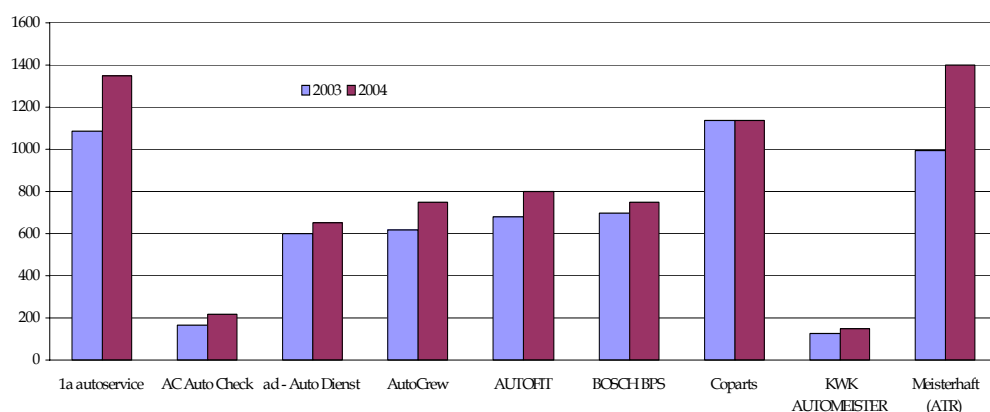
Growth of repairer groups

This section assembles various pieces of information, drawn from a number of different sources⁸³, that suggest that the emergence of groups of independent repairers represents a major development with the potential to transform the independent sector. It is also important to note that repairer groups have already achieved significant market shares in some countries.

In Germany, for instance, in 2004 there were already more than 7,000 outlets of independent repairer groups, about a third of the total number of independents, and an 18% increase on the previous year.

Despite the already high market penetration, growth remains strong. Of the nine groups shown in Figure 108, six reported a double-digit increase in the number of their outlets between 2003 and 2004. Overall, the combined total increase in repairer outlets belonging to one of the groups was 18%. In 2003, these franchises represented 28% of the total number of independent repairers in Germany. That percentage increased to 33% in 2004.

Figure 108: Full-service repairer franchises in Germany, 2003-2004.



Source: ZDK.

Similarly impressive growth rates are reported by repairer groups in other countries. Examples include:

- **Norauto**, which is present in France, Spain, Belgium, Italy, Austria, Poland and Portugal, is increasing the number of its outlets at a rate of around 10% per year. The company reported a turnover of 1,184 million

⁸³ Primarily company publications and websites, as well as national aftermarket associations.

euros in 2005 for its 1,000 outlets in Europe and South America. The group's growth over recent years has been helped by a number of acquisitions; Auto 5 in 2002, Maxauto in 2003, and Midas in 2004.

- **Feu Vert**, which achieved a turnover of €756m in 2005 (up from €735m in 2004), and has over 300 outlets in France, as well as a presence in Spain (68 outlets in 2003), in Poland (8 outlets), and one outlet in Portugal since 2005, a 30% increase in the number of outlets compared with 1999. Feu Vert's acquisition in 2003 of 55 Service Auto Carrefour outlets is another example of growth through consolidation of independent repairer groups across Europe.
- **Kwik-Fit**, which operates 566 Kwik-Fit centres and 106 other branded centres in the UK, 173 Kwik-Fit centres in the Netherlands, and 326 Pit-Stop centres in Germany (2004). The networks total turnover was €260m in 2005, an increase of 15.1% compared with the previous year; profits increased by 52%. Acquisition (of France's Speedy) again played an important role in the group's performance.

VMs' involvement in the fast fit and autocentre sector

Several car manufacturers maintain their own networks of fast-fit repairers. Well-known examples are Rapid-Fit (Ford), MasterFit (Opel/Vauxhall) and Renault Minute. Such networks represent a significant strategic expansion for car manufacturers into the market for older cars and multi-brand service that used to be the preserve of the independent sector, and in which low prices and convenience are crucial factors.

The independent part of the fast-fit market experienced significant consolidation in recent years. By now, a number of major international competitors have emerged in this sector, notably KwikFit (including Speedy, PitStop and now Axto), Norauto of France (now incorporating Maxauto and Midas), ATU of Germany and Michelin's Euromaster network (having acquired Viborg).

Both manufacturer-owned and independent fast-fit chains often report growth well above the market average. Among independents, acquisitions of competitors play an important role in the growth of individual companies, but overall organic growth is also strong, with brands like MasterFit, for example, reporting a growth rate of 60% for its network in the UK in 2004/05.

Vehicle manufacturers Citroen, Ford and Renault, in France, have decided to create their own networks of multi-brand repair centres. Correspondingly, the brand names Eurepar, Motorcraft and Motrio have been raised over the facades of numerous garages in the last two to three years. In just a matter of months after the new Block Exemption came into effect, these new networks gained hundreds of new members, repairers who previously were independent or authorised repairers for a brand.

Given the new opening of the repair market to competition, VMs considered it fundamental to establish a tight network of repairers through which they could continue to distribute their aftermarket products.

Eurorepar, of a total of 1,300 repair outlets, currently includes 46% of old Citroen repairers. 48% were previously independents and 6% were authorised repairers for another brand.

Motrio has 1,150 garages, of which 16% were former Renault authorised repairers and 6% came from a different brand. Renault has created several levels of partnership with repairers and has allowed a percentage of its authorised repairers to keep operating under the Renault symbol. 77% of the 1,150 outlets are therefore coming from the independent segment.

At Motorcraft, 14% were old Ford repairers and 86% were independents.

Stop+go is a fast-fit network operated by Volkswagen. The relationship with Volkswagen means members get access to original parts and technical information under the same conditions as authorised repairers for VW brands. Starting in Germany in 1999, the stop+go network saw a steady growth in outlet numbers, as well as expansion into other countries.

There are currently about 100 stop+go outlets in Germany, a number that is planned to double by 2008. Stop+go entered the Italian market in 2003 with two outlets, a number that has increased to 16 outlets today, with further expansion planned. The company is also present in Norway since 2001.

The union of old independent repairers with the new networks of repairers, either those formed by vehicle manufacturers or independently-owned ones, has not always lived up to independents' expectations. In particular, independents joining these networks expected benefits such as brand recognition, promotional prices on parts, training and regularly updated technical information, but found less than expected investment in brand marketing, poor availability of parts, and uncompetitive pricing. As a result, some of the old independents are looking forward to regain their "freedom" and exit the networks that they have only so recently joined.

Financial information for repairer groups

The financial performance of the main repairer groups is documented in Figure 109 overleaf.

Figure 109: Financial information for the 50 largest repairer groups*.

		1997	1998	1999	2000	2001	2002	2003	2004
profit margin	mean	0.75	2.41	2.17	1.49	2.20	2.29	2.07	2.68
	standard deviation	4.48	2.56	2.63	2.60	2.49	8.58	5.05	5.21
return on capital employed	mean	31.5	28.2	28.1	18.2	23.9	22.1	21.2	20.4
	standard deviation	39.3	25.4	27.9	20.3	29.1	30.1	20.8	24.0
assets by turnover	mean	49.5	48.1	49.5	49.1	52.4	48.0	46.0	79.4
	standard deviation	38.0	39.4	38.7	36.3	40.5	40.1	33.3	267.5
Turnover €m	mean	121.4	108.1	111.4	123.0	178.1	218.0	215.3	231.7
	standard deviation	329.2	230.0	258.6	241.8	410.2	760.5	719.7	764.3

Notes: * these companies were identified as the 50 largest in terms of reported turnover. These are generally repairer groups or repairer companies who own a large number of outlets. Only the mother company and the owned outlets are included in the reported turnover. Franchisee (non-owned outlets) turnover, profitability, etc, is not included in the reports. Largest companies selected according to the value of 2003 turnover.

Source: Amadeus.

The profit margins for the 50 largest repairer groups are generally slightly larger/smaller than the average of the larger/smaller firms presented earlier. However, there are large variations in profitability across groups as shown by the large standard deviations.

The average turnover of the 50 groups in the sample increased significantly over the sample period, at an average annual rate of 12%, reflecting the rapid growth of these groups. This is particularly remarkable in relation to the trend in the turnover of the automotive repairer sector as a whole.

Section summary

Innovative developments are taking place in both the authorised and the independent segment. The eventual effect of these developments on the structure of the service and repair market is as yet difficult to predict.

In the authorised segment, the most notable development has been the emergence of stand-alone repairers, facilitated by the new BER.

Stand-alone repairers have taken off to a considerable extent, mainly through ex sub-dealers becoming separate businesses, but also through entry of ex-independents and *de novo* entry. In some countries, stand-alone authorised repairers represent a significant fraction of the total authorised market.

A second major innovation of the new BER, the promotion of multi-brand repairing by authorised garages, is seen as a growth opportunity by VMs. However, while multibranding has so far made limited inroads in the authorised repairers segment, VMs have established soft-franchise networks to cater for this market. The reason for the reluctance of the authorised network to engage in multibranding is due to the fact that brand image represents a considerable asset for authorised repairers, which might be damaged by multibranding.

In the independent repairer segment, the main developments have been a greater segmentation of the market, and especially the continued expansion of large-scale repairer groups, often organised as franchise systems.

Overall, independent repairer groups of all types are expanding, to the extent that many of the groups we looked at report double-digit growth in outlet numbers. In terms of financial performance, repairer groups also perform better than the sector average.

An interesting feature of this expansion is the strong involvement of parts distributors, parts manufacturers, and vehicle manufacturers. Parts manufacturers seem to see independent repairer groups as a convenient way to bypass car manufacturers and deal with customers directly, a strategy which is also facilitated by the BER.⁸⁴ At the same time, the large independent groups can be credited with increasing professionalism and technical expertise in the independent sector.

All this means that, from the consumer's perspective, the distinction between independent and authorised repairers is perhaps less clear than some years ago. With respect to brand image, some of the new repairers enjoy a strong

⁸⁴ Art. 4(1)(j) and Art. 4(1)(k)

reputation in terms of perceived reliability of the repair service. In terms of skill levels, the repairers who are part of some of these groups have access to group-internal training schemes, and may also benefit from the fact that some of them are former authorised repairers.

In terms of access to technical information, the situation for individual repairers is still reportedly difficult. However, the members of repairer groups, particularly of those associated with vehicle manufacturers or OE manufacturers, certainly have much less of a disadvantage than the “stand-alone” independent repairers.

Finally, in terms of access to parts, although this is not often considered a significant problem for independent repairers, the range of parts accessible to the new repairers groups is considerable, especially in the case where parts distributors or parts manufacturers are involved in the operation of the group.

3.6 Competition analysis

Competition in the repair and service market takes place along several dimensions.

There is a large degree of market segmentation in some sub-markets.

For example older cars are very unlikely to be clients of authorised repairers. The competition for this sub-market mostly takes place among independent repairers.

Similarly, for the very new cars, at least up to the present time, competition takes place mostly among authorised repairers and, in particular, this is generally almost exclusively intra-brand competition.

Finally, there is competition between independent and authorised repairers, and this is the dimension where the new BER has the potential to have the most impact. The choice between these two types of repairers depends on the age of the car, the make, and the type of fault, among other factors.

We discuss all these in the sub-sections below.

3.6.1 Competition between authorised repairers

The number of authorised repairer contracts has increased. But, as we have also discussed, this may not in fact reflect a true increase in the number of competitors. From a competition perspective, thus, the increase in the number of authorised repairer contracts could be considered neutral.

Apart from the emergence of the stand-alone authorised repairer (which is in part explained by the replacement of former sub-repairers), this segment has seen relatively little evolution in terms of changes that may affect the degree of competition among this type of repairers.

3.6.2 Competition between independent repairers

In the independent segment the situation differs markedly. There has been a rapid emergence of new formats, mostly reflecting the new “franchise” approach adapted from the authorised segment into the independent segment, in some cases by the VMs themselves.

The most important change is undoubtedly the drive by former stand-alone independent repairers to become part of large repairer groups. Concurrently, consolidation across these groups is taking place. This suggests a possible trend towards the emergence of a limited number of large repairer groups with European presence, likely at the expense of traditional independent repairers.

These groups are able to offer low prices on parts (bulk buying, logistics, economies of scale and scope) and also better access to training, technical information, and parts distribution systems.

From the point of view of the more traditional segment of the independent service and repair market, the rapid growth of these new organisational structures represents both a threat and an opportunity. It is a threat in the sense that these groups compete directly with the traditional independent repairers who generally have low investment capacity for either brand recognition, technical information and tools or training, and are thus at a competitive disadvantage *vis-à-vis* these groups. On the other hand, it is an opportunity because the costs of joining one of these repairer groups are generally considered to be an order of magnitude smaller than those of joining an authorised network. By joining, the former single-shop independents can enhance their competitive position *vis-à-vis* the authorised repairers.

3.6.3 Competition between authorised and independent repairers

Ideally we would have liked to present data on a number of relevant indicators that would allow a thorough examination of the evolution of the relative competitive position of authorised and independent repairers. Among these indicators we would include:

- 1) The evolution of market shares;
- 2) A comparison of prices charged;
- 3) A comparison of financial margins;
- 4) Market entries/exits.

Unfortunately, for most of these indicators we are able to construct only approximate and indicative values given the unavailability and/or unreliability of data.

To assess the evolution of market shares we need data on turnover of independent repairers and on turnover of authorised repairers. For independent repairers, we can proxy the turnover with the information from Eurostat on total turnover of firms whose main activity is service and repair of motor vehicles.

For the evolution of authorised repairers' turnover, we received rather incomplete replies to our questionnaire sent to vehicle manufacturers.⁸⁵ In effect, it does not appear that turnover data is recorded separately for car sales and car service and repair. This means that repairer turnover data, even for the few brands for which the information has been provided, is likely to include turnover for more than just service and repair work.

A further distorting impact is the influx of ex authorised repairers or sub-repairers into the independent sector post-2002. This influx implies that part of the market share of independents observed in recent years is actually

⁸⁵ This was the case even after a second reminder letter was sent.

related to these formerly authorised repairers, but corresponds in effect to loss of market share by the group of independent repairers that were operating in the market prior to 2002.

The analysis of market shares must in addition take into account the evolution of the scope of repairs that independent repairers are able to carry out. As reported in the IKA (2004) study, this scope is likely to be declining due to a lack of technical information needed to repair increasingly complicated vehicles, including information embedded in brand-specific electronic repair tools.

Competitive position of authorised repairers

There are a number of structural and institutional factors that confer competitive advantages on authorised repairers. They include:

- Consumer loyalty;
- Lack of awareness among purchasers of new cars that they can have them serviced other than by a franchised dealer;
- “Free” extended warranties;
- Reluctance on the part of consumers to take the risk of having a car under warranty serviced by other than the franchised dealer, for fear that this could lead to difficulties should a major fault develop;
- Need for a complete service record to enhance the resale value of the vehicle;
- Financial incentives, for example the cost of the first servicing being included in the sale price of the car;
- Privileged access to VMs’ technical information.

That being said, the competitive position of authorised repairers is evolving.

A large majority were traditionally part of a dealership and got most of their business from the dealership customers. Recent developments in the market, however, are pointing to a reduction in the size of this type of market and an increase in the market for what are considered the typical independent repairer jobs.

As a result, authorised repairers have seen the need for a change of business model. The nature of the authorised networks of repairers is thus changing and likely to change further in the near future.

A large fraction of authorised repairers are now stand-alone operations (i.e. separate from car sales operations) and new forms of soft franchise⁸⁶ arrangements are being introduced by the vehicle manufacturers to gain

⁸⁶ Some VMs are developing networks of repairers that are not exactly “authorised” but yet can benefit from the VM’s infrastructure, in a regime that has become known as “soft-franchise” (in relation to the much more rigid structures imposed by the titles of either authorised dealer or authorised repairer).

market penetration under the new market reality. These soft franchises seem an attractive alternative to tap into a sizeable market for repairs that are more price-conscious and less brand-sensitive. In addition, these organisations are more naturally multi-brand than authorised repairers.

Competitive position of independent repairers

As we have seen in our analysis in section 1.2, the number of independent repairer businesses has fallen over the period 2000-2003. This reduction is not large in percentage terms, about 1.8%, but significant in terms of the number of businesses, close to 6,000. This trend is particularly significant if we take into account that the number of authorised repairers has gone up and the overall size of the market has edged downwards.⁸⁷

Thus, against a background of tough competition in a shrinking market, we see one group of players expanding and another contracting. This is a clear illustration of the competitive challenges affecting the independent automotive repairer sector.

Traditionally, the main competitive advantages of independent garages have been:

- a) The ability to offer repair and servicing for cars of all brands; and,
- b) The competitive price.

On the downside, several factors impinge negatively on the independents' competitive position, such as access to technical information, training and equipment. Factors such as these not only put independents at a disadvantage relative to authorised repairers, but they can even prevent independents from competing at all, as they render nil their capacity to perform certain repair and maintenance work altogether.

In order to gain an understanding of the competitive challenges as seen by independent repairers themselves, we asked our survey respondents to rank the competitive challenges faced by their business on a scale from 1 to 5 (where 5 represents the greatest perceived challenge). Figure 110 displays the average ranking given for each category.

The general impression is that the competitive environment has become tougher between 1997 and 2004: an increase in the perceived challenge is reported in 5 of the seven categories.

The greatest challenge, and the one that has seen the greatest increase during the period under consideration, is posed by the costs of equipment, followed by training costs and competition from service and repair chains.

⁸⁷ The reduction of the number of authorised repairer outlets that occurred in 9 out of the 12 markets we investigated (the exceptions being Estonia, Hungary and Poland, Figure 98) was more pronounced over the period 1997-2004 than the reduction in independent service and repair businesses. In Estonia, Spain, Hungary and the UK, the number of independents actually increased.

Access to spare parts, on the other hand, is seen as the least challenging of the five aspects of competition listed in the questionnaire.

It should also be noted that, despite the apparent increase in competitive pressure, the competitive situation in the market is seen as relatively neutral overall, with an average across categories of 2.6 in 2004.

Figure 110 probably fails to reflect the pervasiveness of issues related to electronic equipment in the independent repairer business model. The use of electronic equipment is now required for all but the most basic tasks, and an increasing percentage of the technical information required by a repairer is embedded in such tools.

Moreover, an increasing proportion of this technical information is brand-specific, and much of this is not provided in generic electronic tools, so independent repairers are increasingly forced to buy specific tools for the most common brands that they repair, together with updates.

In addition, the proliferation of brand-specific information means even those repairers that choose to operate with generic tools have to subscribe to expensive update packages, since without these, the tool will rapidly become useless. This process is driving up repairers' equipment bills.

Figure 110: Perception of competitive challenges.

	1997	1998	1999	2000	2001	2002	2003	2004	Change 97-04
High/increasing costs of equipment	2.9	3	3.1	3.2	3.3	3.3	3.5	3.5	0.6
High/increasing costs of training	2.5	2.5	2.6	2.6	2.8	2.8	2.9	2.9	0.4
Competition from other service and repair chains	2.6	2.5	2.6	2.7	2.8	2.8	2.8	2.8	0.2
Difficult access to technical information	2.8	2.8	2.8	2.7	2.7	2.7	2.7	2.7	-0.1
Competition from authorised repairers	2.2	2.2	2.3	2.4	2.5	2.5	2.6	2.5	0.3
Competition from sub-repairers/sub-dealers	2	2	2	2.1	2.2	2.3	2.3	2.2	0.2
Difficult access to spare parts	1.6	1.6	1.5	1.5	1.6	1.5	1.5	1.6	0

Note: Ranked on a scale 1-5, where 5 represents the greatest challenge.

Source: LE Survey.

The problem of access to technical information

Given the high priority that access to information has on the list of independent repairers concerns, we now turn to this issue in more detail.

As cars' technical features have become more complex and computerised over the past decade, many independent repair shops argue that car makers have made it hard for them to get hold of the diagnostic tools – by pricing them too high and/or limiting their availability – thus reducing access to the information required to identify the origin of a break-down and fix it in a timely manner.

The new BER's provisions aiming at ensuring that independent repairers have sufficient access to technical information to perform their service and repairs do not appear to have been wholly successful.

A 2004 study by IKA⁸⁸, a German independent research group, on the provision of access to technical information by vehicle manufacturers, concluded that car makers are failing to give independent repair shops the technical information they need to compete with authorised repairers.

Surveyed were car manufacturers BMW, DaimlerChrysler, Fiat, Ford, GM, PSA, Renault, Toyota, and Volkswagen, in Germany, Italy, France, the UK, the Netherlands, Ireland, Denmark and Poland. The study reports that technical information for almost all car models launched in the last 10 years is available but is often of poor quality.

Car makers are making documents hard to find or selling large and costly packages that are not within reach for the small repairers. In addition, content is often insufficient in terms of, for example, necessary information required by diagnostic tools manufacturers. Diagnostic tools manufacturers are in most cases the only low cost alternative to expensive diagnostic tools sold by car manufacturers.

But the information provided to diagnostic tool manufacturers is generally not sufficient to produce multi-brand diagnostic tools and moreover the situation has in fact worsened in recent years and after the entry into force of the new BER. Independent tool manufacturers, while they used to be able to access tailored information from manufacturers, are now referenced to the technical information systems for the independent repairers.

Publishers also have problems getting the technical data they need to produce manuals essential for repairers, according to the report.

The issue of access to technical information is particularly relevant for cars that are at least three years old and thus outside manufacturers' warranty period. Smaller repair shops that work on multiple brands are hardest-hit since it is very expensive for them to invest in each car brand's scan tool and

⁸⁸ IKA report "Do motor vehicle suppliers give independent operators effective access to all technical information as required under the EC competition rules applicable to the motor vehicle sector? (COMP/F-2/2003/26 S/2.371920 Final Report)

website. Instead, these shops tend to rely on a few general tools and sites that work for multiple brands.

A major problem for repairers is the price of the technical information. Due to inadequately designed information systems and/or insufficient cost models, independent operators are not able to purchase technical repair information at a price at which repairs can be conducted under competitive conditions.

A parallel issue of relevance is whether pricing of information and tools is non-discriminatory between the authorised and the independent repairer segments. The IKA study did not identify any instances of discriminatory pricing among those surveyed. Yet, this still implies that the costs related to technical information are much higher for independent repairers who must cater for many brands than for authorised dealers who are often brand-specialised.

As a result of the difficulty and cost to access necessary information and tools, the independent sector cannot directly compete in equal footing with the authorised sector. One way around the problem is to become specialised repair shops (catering for just some types of repair jobs) and thus invest in only one sub-set of tools. Another alternative is to form alliances and groups of repairers with a joint organisation for accessing and making available technical information for all members.

Both trends are presently quite noticeable in the independent sector, showing the impact that constraints in access to technical information have had in shaping the competitive landscape in the automotive service and repair.

At the same time, parts manufacturers often have a good part of the required knowledge and can use it and share it with their own newly established franchised networks of repairers. Electronic repair manuals, parts catalogues and order-facilities (often as integrated systems), provided online and constantly updated, form part of the franchise package in many independent networks.

Similarly, the garage equipment specialists are also increasingly making available to the independent sector the diagnosis tools and software required to communicate with even the most recent car models. To a certain degree, facilitated by the new BER, this type of activities are likely to contribute to a more level playing field in the automotive repair market over the medium term.

The role of independent repairer groups in the competitive landscape

A promising response to the challenges outlined above has been the creation of repairer groups within the independent sector. Such groups are widely predicted to increase their market share in the coming years, as they offer the flexibility and cost advantages associated with their independent status combined with the strong brand image of a large group, as well as economies of scale, for example in marketing and training. Crucially, they also improved

the position of their members with respect to access to technical information and spare parts.

The ascent of repairer groups is closely connected to the fact that car repair and service is steadily becoming more technical and complex, a trend that is likely to continue. This has meant that traditional single-outlet garages are finding it harder to keep up with the latest technology, and gives an edge to members of larger repairer networks, which function as information exchanges, and which, by strength of their numbers, are able to enforce their rights to access technical information kept by car manufacturers.

While, on the one hand, it is true that these groups, in general, represent only a small percentage of the overall market and are not a direct indication of market consolidation but mostly a measure of organisational structure in some Member States, it is nevertheless a potentially very important development for the state of competition in the repair market.

Although these repairer groups do not represent consolidation in the usual sense of the term, i.e. in the sense of common ownership, they are a potentially very important development for the evolving competitive position of the independent segment of the market. These groups can, to some extent, mimic some of the advantages that members of the authorised network have traditionally held, particularly in relation to brand investments, access to training, technical information, cost effectiveness of parts deliveries, etc.

The importance of these groups, at this point in time, differs widely from country to country, but their presence is being felt, to differing degrees, across the 12 countries.

Average price differences for services by authorised and independent repairers

There have been very few data sources that we could draw upon to gain information on the price differences between authorised and independent repairers. For this section we have thus decided to include the price information on only the sub-set of countries for which this was available. There is, however, a very clear pattern, as discussed below, of consistently lower prices for the independent sector. Unfortunately, such data are not collected consistently over time, thus precluding any analysis of trends in price differentials.

Germany

We provide below, in Figure 111 and Figure 112, the results of two surveys of independent repairer franchises and on authorised repairers. Data for the same year for both types of repairers was not available, thus we report data for the available years, 2003 for independents and 2001 for authorised repairers. However, we are able to make a comparison between the two sets

of observations by taking into account that the overall price index for repair services in Germany increased by about 5 % between 2001 and 2003⁸⁹.

Figure 111: Price and service quality in selected German independent repairer franchises (2003).

	Minimum price (€)	Maximum price (€)	Average price (€)	Overall rating* (out of 5)
AD Auto-dienst	155	254	196	2.0
Auto Crew	102	339	208	2.1
Autofit	183	332	238	2.1
Automeister	139	364	214	3.0
A.T.U Auto-Teile-Unger	127	186	158	3.6
1a Auto-service	199	288	231	3.6
Bosch Service	121	291	181	3.7
Pit-Stop Auto Service	112	234	165	3.8
Total	102	364	199	3.0

Notes: * the overall rating is based on service quality (60%), transparency/timeliness/convenience (30%), overall impression/ambience (10%); for the test, cars that had been prepared with 6 different typical defects were given for servicing to 40 different outlets belonging to the above mentioned franchise groups.

Source: Stiftung Warentest.

⁸⁹ Source: Eurostat.

Figure 112: Price and service quality of selected authorised repairers, Germany (2001).

	Minimum price (€)	Maximum price (€)	Average price (€)	Overall rating* (out of 5)
Audi, VW	143	377	252	2.1
BMW	90	463	283	1.6
Fiat	147	252	190	3.2
Ford	141	244	198	2.5
Mercedes Benz	143	483	306	2.4
Opel	142	306	215	2.7
Renault	61	193	120	2.9
Toyota	111	276	194	3.4
Total	61	483	224	2.5

Notes: * the overall rating is based on service quality (60%), transparency/timeliness/convenience (30%), overall impression/ambience (10%); for the test, cars that had been prepared with 6 different typical defects were given for servicing to 49 different garages belonging to authorised networks of the above mentioned brands.

Source: *Stiftung Warentest*.

The comparison of the two figures above, taking into account the rate of inflation of German car service and repair prices between 2001 and 2003, leads us to conclude the following with regards to prices and service quality rating:

- The average price charged is 16% higher at authorised repairers;
- The average quality rating is 13% lower for authorised repairers;
- Price variability is highest among authorised repairers for the same brand than among independent garages belonging to the same chain;
- The lowest price for authorised repairers is on average lower than the lowest price for independents.

Spain

In the following table we provide a summary comparison of prices in authorised and in independent repairers for Spain.

Figure 113: Spain: Average prices by type of outlet.

	Labour rate	Check-up	Battery change
Independent repairers	28.8	64	73
Authorised repairers	37.8	85	78
Fast fits	31.2	75	65
Average for all	32.2	73.6	73

Source: OCU.

As was the case for Germany, independent repairers are significantly cheaper than authorised ones. The difference in this small sample of repairs ranges between 7% and 33%. Fast-fits prices are also cheaper than those of authorised repairers but the difference is smaller.

UK

For the UK we also have evidence of higher prices for authorised repairers when compared to independents. We report data gathered by a DTI mystery shopping exercise carried out in 2002⁹⁰.

Approximately 1% of all service and repair outlets in England, Scotland and Wales were investigated for the exercise. The exercise covered the 5 largest fast-fit chains (by number of outlets, see Figure 26). Locations were selected to provide national coverage and as even a spread across the five chains as practicable. Quality was ranked according to a scale from 1-5 (5=best). Authorised repairers were selected at random from the 10 largest brands by new car sales, accounting for over 70% of sales. Independent repairers were selected at random.

Independents were 37% cheaper than the average repairer surveyed. The difference for a typical service job between independents and some of the highest priced brands of authorised repairers was more than 120%.

In terms of service quality, authorised repairers fare better in comparison with their independent counterparts. An overall average of quality rating for authorised repairers was about 2% higher than that for independent repairers.

Repairer chains have higher quality ratings than either authorised or independent repairers. The difference in average quality ratings is 24% in relation to independents and 21% in relation to authorised repairers. The "Total" above refers to the total for the chains in the chart only.

⁹⁰ DTI (2002).

Section summary

Due to the increasing technical complexity of motor vehicles, car service and repair now requires a large set of technical skills as well as specialised tools for both diagnosis and repair.

However, the fact that BER 1400/2002 promotes equal access to technical information has not been fully translated in industry practice. As already mentioned in this report, the IKA study leads one to suspect that authorised repairers' possession of the full range of necessary technical information is making independent repairers dependent upon them. Authorised repairers only provide such information on condition that independent repairers turn to them for spare parts purchases. This in turn leads independent repairers to use more expensive car-maker-branded parts, thereby removing consumer choice. Moreover, since independent repairers lack the information embedded in brand-specific electronic repair tools, they are obliged to turn to authorised repairers to complete certain repair jobs, thereby adding a second string to the dependent relationship.

In terms of market entry, the most notable development has been the introduction of soft-franchise operations by vehicle manufacturers. Groups like Motrio (Renault), Eurepar (Citroen) and stop+go (Volkswagen) can be seen as attempts by vehicle manufacturers to exploit the new opportunities in the multi-brand repairs that have been created by Regulation 1400/2002.

The role of groups of independent repairers is often mentioned in this context.⁹¹ With a business model built around increasing professionalism and the ability to provide a range of services comparable to that offered by authorised repairers, they have become a force to be reckoned with.

Contrary to the overall trend in the independent sector, repairer groups experienced significant growth over recent years. In part, this growth is a direct result of the influx of highly qualified personnel (and sites) from formerly authorised repairers leaving the vehicle manufacturers' networks.⁹² The crucial factor benefiting the independent groups, however, is the direct involvement of major parts distributors, parts suppliers, and even car manufacturers.

The emphasis placed by the groups on training and technical expertise, in an environment in which advanced skills are becoming ever more important, can explain why their members score highly on service quality. Independent

⁹¹ See for example Auto Service Praxis 05/09/2000 "Systemalternativen" and the GVA Marktübersicht (www.gva.de).

⁹² For Germany, the parts distributors' association GVA even reports a net flow of customers from the authorised to the independent sector (see Figure 19). Part of this is said to be due to repairers leaving the authorised network and taking their customers with them. (GVA Marktübersicht).

tests in Germany⁹³ have shown that the best independent groups compete on an equal footing with authorised repairers.

Recent developments in the market for garage equipment suggest that many market participants, independents well represented among them, are investing heavily to meet the challenges posed by the changing market environment.

By investing in advanced diagnostic equipment, independents are beginning to counter what has been perceived as a fatal threat to the sector, namely the increasing use of on-board electronics and the resulting need for adequate tools and software, including necessary updates.

However, despite the improving technical capability, the lack of access to car manufacturers' own diagnostic information and software means that authorised repairers retain an edge in the aftermarket for new models.

There are signs, however, that car manufacturers themselves are showing an interest in the independent equipment market, as a means of increasing revenue from proprietary software and improving customer service.⁹⁴ Such developments suggest that from the manufacturers' perspective, competition between independent and authorised aftermarket is not a zero-sum game, and that they can benefit from growth in the independent aftermarket.

An educated guess in terms of a longer-term analysis would probably suggest that the smaller independent repairers with traditional business models are unlikely to survive in the new competitive landscape. The cost of investments needed to service and repair even the simplest faults in present-day vehicles have made these independent models unsustainable. Belonging to some sort of repairer chain may be the only way out for those who want to stay in business. Chains allow some of the fixed costs involved in gaining access to technical information to be spread among larger number of repairers. However, there is nevertheless an increase in costs that cannot easily be spread across different garages (such as the need to diagnosis tools), suggesting a forecasted trend of overall reduction in the total number of outlets.

These market developments have given greater importance to other groups of market players such as those providing consolidated information on car repairs and those supplying garage equipment and tools. These markets are viewed as having large potential for growth as the needs of the independent sector become increasingly sophisticated.

The conclusion from the analysis of the price data presented in this section would seem to be that independent repairers have to offer prices substantially below those prevalent in the authorised networks in order to compete. One possible reason is that they have to do this because they are not

⁹³ Stiftung Warentest, see Figure 111 and Figure 112 below.

⁹⁴ Frost & Sullivan (2003).

able to offer a one-stop-shop for the full range of repair services, since *inter alia* they don't have access to the necessary technical information including that embedded in brand-specific electronic diagnosis and repair tools.

This conclusion is further reinforced by the fact that, in terms of quality ratings, the independent sector fares quite well, often receiving higher ratings than authorised repairers. This implies that the "price discount" mentioned in the paragraph above is in fact even higher than just the difference in prices would lead us to believe.

It is however not possible to pass judgement on the evolution over time of these differences. Such an assessment would be crucial to evaluate the extent to which the new BER may have helped the independent repairers in this apparently quite disadvantageous competitive position.

3.7 Effects on consumers

In this section we look at the evolution of prices for repairs when compared to overall price levels, and at the evolution of consumer expenditure in service and repair compared to overall rate of inflation. The aim of the section is to investigate the impact that the evolution of the competitive landscape has had on these two important variables.

Evolution of consumers' expenditure compared to headline inflation

Most statistical agencies do not record consumer expenditure data for this category. However, given the non-tradable nature of the output of this industry, expenditure can be closely proxied by turnover.

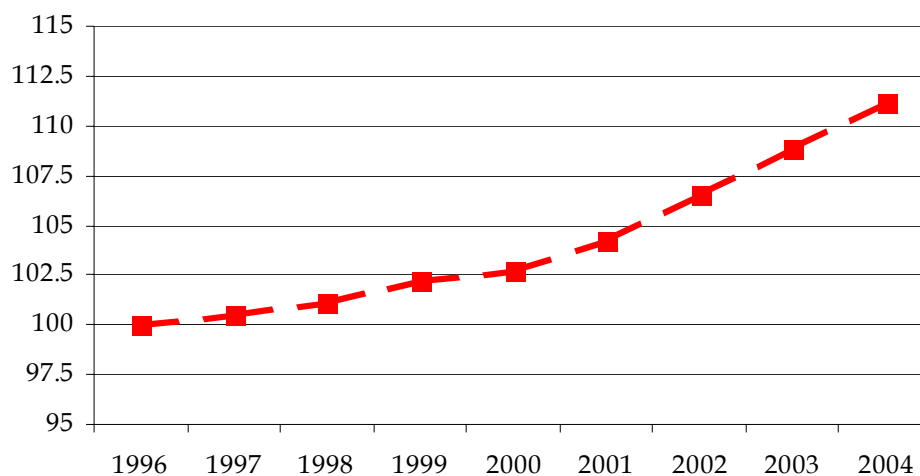
As already noted earlier, turnover is recorded for companies that report their main activity under NACE code 502 (motor vehicles service and repair). Thus turnover data do not include service and repair turnover corresponding to businesses whose main activity is not reported under NACE code 502. This is likely to be the case with the authorised dealers who are also authorised repairers but may often report their activity under NACE code 501 rather than NACE code 502.

In light of these limitations, Figure 83 provides an approximate picture of the evolution of consumer expenditure in service and repair. Expenditure trends are quite different across countries. For example, while in Spain expenditure increased by 25% in recent years, it decreased by 25% in Germany in roughly the same period. Similarly, while in France and Sweden it increased by 12%, in the UK it decreased by 7%. Figure 84 shows very similar trends in terms of the evolution of expenditure per vehicle in the car parc.

Evolution of service and repair prices compared to headline inflation

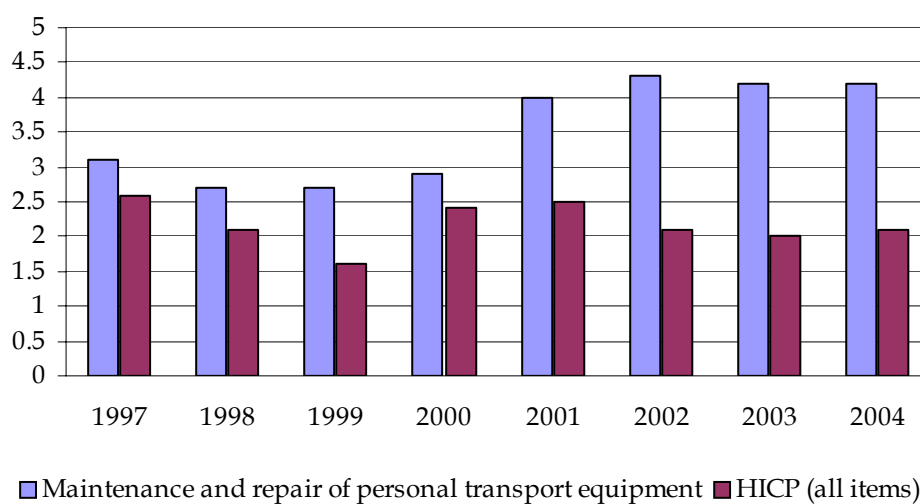
The picture for the evolution of the prices of repair and service is one of a generalised increase well above the rate of inflation for the period under study. This is apparent from the two figures below.

Figure 114: Trend in real prices of service & repair of motor vehicles, EU25 (1996-2004).



Source: Eurostat.

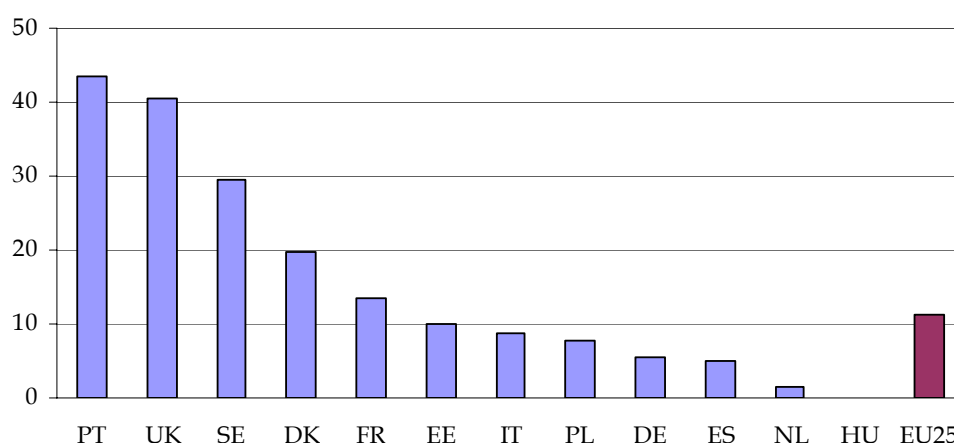
Figure 115: Maintenance and repair price inflation compared with headline inflation, EU25 (1997-2004).



Source: Eurostat.

On a country basis, prices of repair and service increased more than the general price index in all countries over the period 1997-2004. Portugal, the UK, Sweden, Denmark and France post above EU-average price growth while the opposite is the case for Germany and Spain.

Figure 116: Trend in real prices for repair & maintenance of motor vehicles (1997-2004).



Source: Eurostat.

Section summary

It is interesting to note that one observes simultaneously a decrease of expenditure in real terms and an increase in real prices.

One factor that may be contributing to the price trend is the increasing complexity of repair jobs and correspondingly higher costs for repairers.

It is also possible that competition in the market has been working at less than optimal level. It is however difficult to measure this without further information on the evolution of repairer costs. In our analysis of financial indicators, nonetheless, we have failed to encounter evidence of higher profit ratios for the larger repairers and repairer groups. Overall profit ratios are not dissimilar from those encountered in other segments of the automotive market and are overall low.

A relative increase in the market share of authorised repairers, seen over the last few years, also contributes to an increase of the service and repair average price level since these repairers are on average consistently more expensive than the independents.

3.8 Conclusion

In this section we briefly summarise our conclusions from our analysis of the evolution of the automotive service and repair market in the 12 countries.

Market size

Our estimates of the market size for car service and repair show a decrease in some countries (notably, Germany, the UK, Denmark and Portugal) and an increase in others (with highest rates in Spain, France, Hungary and Sweden). Given that these observed changes are somewhat correlated with the business cycle, we cannot clearly identify an overall trend. Most analysts seem to believe that the overall market size trend is neither positive nor negative. This appears to be the case given the fact that the size of the repair market is impacted by opposing forces. On the positive side, we have:

- the growing size and average age of the European car parc;
- the evolution of repair processes – replacing parts instead of repairing them – and the higher cost of parts in general;
- the spread of periodical roadworthiness schemes throughout Europe.

On the negative side, we have:

- vehicles have become more reliable, leading to increased service intervals;
- measures adopted to increase road safety;
- traffic control measures and reduced mileage per vehicle in some cases.

Number of repairers and repairer outlets

The total number of service and repair businesses is roughly stable, in aggregate, for the 12 countries. This aggregate includes a large increase in the number of authorised repairer contracts, which has been compensated or over-compensated by a reduction on the number of independent businesses. Significant net reductions in the number of enterprises occurred in Denmark, Italy, Hungary and the Netherlands.

In terms of outlets, there has been a sizeable reduction in the authorised repairer networks' density of about 12% over the last two years. The number of authorised repairer outlets fell most in Denmark, Spain, France, Italy, Poland and Sweden.

These observations are explained by the fact that a large number of sub-repairers have lost their position in the authorised network, while a fraction managed to stay on with newly issued contracts with the vehicle manufacturer. This means that, in spite of possibly large increases in the

number of contracts (because sub-repairers did not previously hold contracts with vehicle manufacturers), the number of authorised repairer outlets has decreased significantly.

It is estimated that these former sub-repairers, who lost their contract with the vehicle manufacturer, will most likely continue their business as independent repairers. This influx of potential direct competitors into the traditional independent repairers market is likely to strongly increase the competitive pressures bearing upon these independent repairers.

There has been a large increase in the number of outlets offering car service and repair only. Thus, it seems that the BER has been successful in its objective of unbundling car service and repair from sales.

Access to the authorised network

Under BER 1400/2000, contracts that link sales and servicing are no longer exempt. It has therefore become regular practice for the manufacturers to issue separate contracts for sales and service. In order to meet the conditions to become (or remain) an authorised dealership, dealers may choose whether they wish to carry out repairs themselves, or to sub-contract them to another authorised member of the manufacturer/wholesalers' network.

In addition, manufacturers can issue service and repair contracts to operators with whom they do not have a distribution contract. These new provisions are aimed at enhancing competition in the market for after-sales services, by facilitating new entry.

So far, it appears that independent repairers may find it too costly to comply with a vehicle manufacturer's requirements in terms of the basics such as tooling, training and size of premises. This is a barrier to joining the authorised networks, although it does not imply that the costs are set too high in absolute terms: they would have to be measured against an appropriate benchmark.

But even if the standards are set at fair levels, all too often it is found that only a limited number of potential entrants have the necessary managerial, financial and technical resources to take advantage of the new opportunities. In addition, a monthly visit by the VM representative is most likely something that independents are all too happy to do without.

But barriers to access authorised repairer status appear to remain high and independent repairers have shown little interest in accessing the authorised network even though this has in principle become immediately possible as long as they meet the qualitative criteria set by the vehicle manufacturer.

In addition, independents are viewed as valuing their independence, which would be compromised upon becoming an authorised repairer. Furthermore, some reports suggest that independents believe that, upon becoming authorised repairers for a certain brand, they would lose current business on some of the other brands.

Access to diagnostic tools and technical information

As cars' technical features have become more complex and computerised over the past decade, many independent repair shops say car makers have made it hard for them to get hold of the diagnostic tools – by pricing them too high and/or limiting their availability thus reducing access to the information required to identify the origin of a break-down and fix it in a timely manner.

The reported trend with respect to access to technical information for independent operators seems thus to be going against the objectives of the Commission. Access to VM proprietary technical information, which is indispensable for most repairs in present-day vehicles, seems to be increasingly complicated and costly.

Diagnostic tools manufacturers are in most cases the only low cost alternative to expensive diagnostic tools sold by car manufacturers. But the information provided to diagnostic tool manufacturers is generally not sufficient to produce multi-brand diagnostic tools and moreover the situation has in fact worsened in recent years and after the entry into force of the new BER. Independent tool manufacturers, while they used to be able to access tailored information from manufacturers, are now referenced to the technical information systems for the independent repairers.

Smaller repair shops that work on multiple brands are hardest-hit since it is very expensive for them to invest in each car brand's scan tool and website. Instead, these shops tend to rely on a few general tools and sites that work for multiple brands.

Market structure trends

There is scarce data to evaluate trends in terms of market structure and in particular on the evolution of the relative market shares of independent and authorised repairers. However, some limited examples point to an increase of the market share of the independent segment. This is reported for Germany and Sweden. Overall, however, we observe a more rapid growth on average turnover of the authorised segment than of the independent segment. This difference is more significant in Germany, Italy, the Netherlands, Poland and Portugal.

Innovation in formats and business models

Overall, independent repairer groups of all types are expanding. A particularly striking feature of this expansion is the strong involvement of parts manufacturers, who seem to see independent repairer groups as a convenient way to bypass car manufacturers and to deal with customers directly, a strategy which is also facilitated by the BER. At the same time, the large independent groups can be credited with increasing professionalism and technical expertise in the independent sector.

Manufacturers have also been introducing “soft-franchise” concepts in some countries, whose business models resemble those of successful independent repairer groups.

The development of these groups has led to a decrease of the functional distinction between authorised and independent repairers. Future developments, such as increasing multi-brand activity by authorised repairers, might make the differences still smaller.

Impact of trends and changes on independent repairers

It is perhaps important to distinguish between independent repairers that belong to a chain or group of repairers; and independent repairers that do not belong to such groups. Our view is that the two groups of independent repairers differ markedly in terms of competitive prognosis in face of the evolving trends in automotive repair and service.

The main reason for this distinction is the much increased need to invest in training, technical skills, tools and diagnosis equipment as required by vehicles that have become loaded with computerised equipment. Vehicle repairing has become more complex and the tools and training it requires more expensive. Belonging to a group allows better access to some of these elements although it does not entirely spread some of the costs.

It is natural to expect that as the nature of the “repair” product evolves so will the solutions offered to and chosen by market players. The old business model of the wrench wielding, oil stained mechanic on their tiny repair shop is unlikely to survive. The needs of repairers are being met by a whole new market of diagnosis equipment, software publishing, and similar services whose indispensability was unthinkable only a few years ago.

The combination of technical demands imposed by evolving vehicle technology and competitive opportunities enhanced by the BER is likely to result in a completely changed market structure with lots of new types of players, and new formats and business models. Under these conditions, the difference between a threat and an opportunity is often blurred.

Impact of trends on consumers of repair services

Prices for service and repair are increasing in real terms, driven by the increasing technical complexity of repairs but, at the same time, there is a reduction in expenditure in real terms.

A market situation where prices are rising against a background of a shrinking market is in principle unexpected. One factor that may be contributing to this is the increasing complexity of repair jobs and correspondingly higher costs for repairers.

Another possible explanation or contributing factor may be that the level of competition in the market is sub-optimal. Markets where competition is distorted and/or where market players can exert market power can be

characterised by decreasing sales and rising price levels, similarly to the situation encountered in the European service and repair market.

It is however difficult to measure this without further information on the evolution of repairer costs. In our analysis of financial indicators, nonetheless, we have failed to encounter evidence of higher profit ratios for the larger repairers and repairer groups. Overall profit ratios are not dissimilar from those encountered in other segments of the automotive market and are overall low. These facts are more supportive of an explanation of rising prices driven by rising costs rather than by worsening competition conditions.

A relative increase in the market share of authorised repairers, seen over the last few years, also contributes to an increase of the service and repair average price level since these repairers are on average consistently more expensive than the independents.

Part III
**Developments in the European market for
automotive spare parts**

4 The spare parts market

4.1 Introduction

According to the latest Block Exemption Regulation for the automotive sector (BER 1400/2002), “Spare parts are goods which are to be installed in or upon a motor vehicle so as to replace components of that vehicle, including goods such as lubricants which are necessary for the use of a motor vehicle, with the exception of fuel”.⁹⁵

The market for spare parts is sizeable. Due to the complexity of the market, estimates of market size are difficult to obtain, and existing estimates vary widely, and range from €36 billion⁹⁶ to €97 billion.⁹⁷

This chapter reports on developments in the EU automotive spare parts market. We analyse the many links between the different market segments and market players, how they have evolved, and how channels and market players have reacted to the changes introduced by the new BER. The structure of this chapter is as follows:

- In Section 4.1.1 we discuss the main features of the BER 1400/2002 as they pertain to the market for automotive spare parts.
- Section 4.2 describes the different players in the spare parts market and provides a high-level overview of their interaction.
- The following three sections analyse in greater detail the different layers of the spare parts market, namely production (Section 4.3), distribution (Section 4.4), and retail (Section 4.1). We focus in particular on the characteristics of distribution networks and their development over the period 1997-2004, and selected financial indicators for different groups of market participants.
- In Section 4.6 we describe innovations in the spare parts market, especially in distribution. We look at the developments within manufacturers’ authorised networks (size of networks, stand-alone distributors), the increasing role of logistics in parts distribution and the emergence of collaborative purchasing arrangements of authorised and independent actors on the retail level.

⁹⁵ EU Block Exemption Regulation 1400/2002, Article 1(1)(s).

⁹⁶ ZDK.

⁹⁷ LE estimate based on Datamonitor data. Note that this figure is high compared with the size of the aftermarket estimated by ZDK, which we refer to in Section 3.2.

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- In Section 4.7 we address the question of how the developments described in the previous sections affect the competitive environment in the spare parts market.
 - The effects of the developments in the spare market on consumers are discussed in Section 4.8.
 - Finally, in Section 4.9 we present summary conclusions regarding the effects of BER 1400/2002 on observed recent trends and the outlook for the market for automotive spare parts in the EU.

4.1.1 Elements of BER 1400/2002 concerning the spare parts market

Increasing consumer choice and competition between parts suppliers and distributors, and improving the competitive position of the independent aftermarket vis-à-vis the authorised sector are the main objectives of the BER in the market for automotive spare parts. The commission considers that certain agreements have hitherto hindered the achievement of those objectives. Of particular concern are agreements that:

- restrict the access to spare parts by the independent aftermarket; and,
- cement the concentration of power in the hands of vehicle manufacturers (and their authorised distributors) by foreclosing independent parts manufacturers and distributors.

BER 1400/2002 addresses these concerns by setting out a number of rules that vertical agreements in the automotive sector have to satisfy in order to benefit from the safe havens provided by the regulation.

The provisions of the new BER that are most relevant for the spare parts market are the following:

- the designation “original spare parts” is to be based exclusively on the objective characteristics of the parts;⁹⁸
- an authorised network must be allowed to purchase outside vehicle manufacturer (VM) channels;⁹⁹
- original equipment suppliers (OESs) must be allowed to sell outside VM channels;¹⁰⁰
- independent repairers must be given access to VMs’ captive parts;¹⁰¹

⁹⁸ Art. 1(1)(t).

⁹⁹ Art. 4(1)(j) and Art. 4(1)(k).

¹⁰⁰ Art. 4(1)(j).

¹⁰¹ Art. 4(1)(i).

- where the supplier's market share is above 30%, access to the authorised parts distributor status is to be based on qualitative selection criteria alone.¹⁰²

Below, we provide definitions of a number of key terms such as "original spare parts", "captive parts", etc.

Original spare parts

An important innovation for the independent aftermarket is the new definition of "original spare parts" provide by BER 1400/2002. The regulation states that:

*"original spare parts" means spare parts which are of the same quality as the components used for the assembly of a motor vehicle and which are manufactured according to the specifications and production standards provided by the vehicle manufacturer for the production of components or spare parts for the motor vehicle in question. This includes spare parts which are manufactured on the same production line as these components. It is presumed, unless the contrary is proven, that parts constitute original spare parts if the part manufacturer certifies that the parts match the quality of the components used for the assembly of the vehicle in question and have been manufactured according to the specifications and production standards of the vehicle manufacturer"*¹⁰³

According to the BER there are three categories of spare parts that count as "original spare parts":

- Spare parts produced in-house by vehicle manufacturers themselves. Vehicle manufacturers may require their authorised repairers to use this category of original spare parts for repairs carried out under warranty, free servicing and vehicle recall work,¹⁰⁴ but may not limit the right of their distributors to sell this category of parts, actively or passively, to independent repairers which use them for the repair and maintenance of motor vehicles.¹⁰⁵
- Spare parts produced by spare parts manufacturers and sold to vehicle manufacturers who distribute them via their authorised partners. The same conditions apply to these parts as to spare parts produced by VMs. In addition, a vehicle manufacturer may require the use of its logo on the parts distributed via its channel; however, the spare parts producer may not be hindered from using its own

¹⁰² Art. 3(1) 3rd subparagraph.

¹⁰³ Art. 1(1)(t).

¹⁰⁴ Art. 4(1)(k).

¹⁰⁵ Art. 4(1)(i) or Art. 4(1)(b)(i).

trademark either.¹⁰⁶ Moreover, spare parts producers may not be prevented from supplying these spare parts to any authorised or independent distributors or the authorised or independent aftermarket, nor may authorised repairers be restricted from using them.

- Spare parts, manufactured by spare parts producers (whether or not they are OE suppliers), which are not sold to vehicle manufacturers, but which are manufactured according to the specifications and production standards provided by the vehicle manufacturer. These parts are supplied either via authorised or independent parts distributors or directly from parts manufacturers to the authorised or independent aftermarket. Again, authorised repairers may not be restricted from using them. Parts belonging to this category, of course, bear only the trademark of the spare parts producer.¹⁰⁷

The term “original spare parts” is thus no longer defined with regard to the vehicle manufacturer’s distribution system, but instead is based on quality and technical specifications of the component.

Spare parts of matching quality

The new BER departs from its predecessor in that it also defines “spare parts of matching quality”. These must (at least) match the quality of the components which are or were used for the new vehicle:

“‘spare parts of matching quality’ means exclusively spare parts made by any undertaking which can certify at any moment that the parts in question match the quality of the components which are or were used for the assembly of the motor vehicles in question”¹⁰⁸

The new definition takes account of the fact that some parts produced by companies who do not supply vehicle manufacturers themselves, can nonetheless match, or even exceed, the quality of parts produced by VMs and OESs.

Together with the presumption that the assurance of a part’s manufacturer is sufficient for the part to be classified as being of “matching quality”, this provision allows non-OE parts producers to compete on a more equal footing with VMs and OESs.

The new BER also does not exempt agreements that prevent authorised dealers and authorised repairers from purchasing competitively priced spare parts from the independent after market. These can be original spare parts as well as spare parts of matching quality purchased from independent parts

¹⁰⁶ Art. 4(1)(l).

¹⁰⁷ Art. 4(1)(l).

¹⁰⁸ Art. 1(1)(u).

wholesalers.¹⁰⁹ The only exception to this is set out in Article 4 and concerns parts used for works under warranty, free servicing or in the context of recall campaigns.¹¹⁰

The restrictions which are no longer exempted and classified as “hardcore restrictions” are:

“the restriction agreed between a supplier of original spare parts or spare parts of matching quality, repair tools or diagnostic or other equipment and a manufacturer of motor vehicles, which limits the supplier’s ability to sell these goods or services to authorised or independent distributors or to authorised or independent repairers or end users”¹¹¹

“the restriction of a distributor’s or authorised repairer’s ability to obtain original spare parts or spare parts of matching quality from a third undertaking of its choice and to use them for the repair or maintenance of motor vehicles, without prejudice to the ability of a supplier of new motor vehicles to require the use of original spare parts supplied by it for repairs carried out under warranty, free servicing and vehicle recall work”¹¹²

The new BER also protects OE suppliers’ freedom to supply their components to independent parts distributors or directly to independent or authorised repairers.¹¹³

In addition, the BER exempts only those arrangements that allow access to vehicle manufacturers’ parts to independent repairers via dealers and authorised repairers. Specifically, the following restriction is classified as hardcore and thus not exempt.

“the restriction of the sales of spare parts for motor vehicles by members of a selective distribution system to independent repairers which use these parts for the repair and maintenance of a motor vehicle”¹¹⁴

Through this requirement the new Regulation aims to ensure that all independent repairers receive the necessary parts for a repair, even the captive parts that the independent distribution cannot deliver. Vehicle dealers and authorised repairers may not refuse the sale of such parts to independent repairers.

¹⁰⁹ Art. 4(1)(j) and Art. 4(1)(k).

¹¹⁰ Art. 4(1)(k).

¹¹¹ Art. 4(1)(j).

¹¹² Art. 4(1)(k).

¹¹³ Art. 4(1)(j).

¹¹⁴ Art. 4(1)(i).

When the market share of the vehicle manufacturer is greater than 30%, which is typically the case, agreements conferring authorised status on parts distributors are only exempt under the BER if selection is based on qualitative criteria.¹¹⁵

¹¹⁵ See the answer to Question 72 in the explanatory brochure for Regulation 1400/2002. (The reasoning applies equally to parts distributors.) If the car manufacturer's market share is below 30%, "*the supplier can base its network of authorised repairers either on quantitative selective distribution or on exclusive distribution and may choose not to appoint particular repairers even though they meet the quality criteria for appointment.*"

4.2 The spare parts supply chain

The spare parts supply chain comprises a number of stages with, at one end, the parts producers and, at the other end, the final customers, which include both repairers and car owners.

Between producers and end customers there exists a layer of wholesalers. These businesses fulfil an aggregating function, whereby a very large number of parts from many different suppliers are made available from a single distributor. The aggregating function in between layers is a crucial component of the parts supply chain, as it would be impractical for OESs to sell directly to repairers. Given the vast number of parts that a typical repairer requires, buying each type of part from different suppliers would be costly and a logistical nightmare.

Spare parts production

Spare parts producers include:

- Vehicle manufacturers (VMs);
- Original equipment suppliers (OES) who often supply both the VMs and the independent parts distribution channel;
- Independent equipment suppliers (IES) who only supply the aftermarket.

It should be noted that a firm may act as an OES with respect to some parts it produces and as an IES with respect to others. The classification hinges solely on whether a certain part is supplied under contract to a VM that uses this part as a component in its new cars.

Spare parts distribution

Spare parts are distributed via two basic channels (Figure 117): the vehicle manufacturer and the independent channel.

The two channels, vehicle makers and independents are competing for aftermarket sales and all players are currently reviewing how their market positions may change under the new BER. Responses and outcomes are likely to vary widely, even within the same category of operators, according to circumstance.

It is estimated that, although VMs supply a large portion of all the parts, they do not themselves produce more than about 20% of that total. VMs source most of the parts they distribute from OESs.

Overall, they have gained a strong position at the wholesale distribution level, with a market share estimated at about 55%.¹¹⁶ The other 45% are distributed through independent wholesalers who purchase parts from both OES and firms that supply their products directly, in some cases exclusively, to the independent aftermarket.

Carmakers have traditionally supplied most of the spare parts used by the dealer network, a majority of which are sourced from the OESs. They have also assumed responsibility for the distribution of spare parts to the aftermarket, a task for which they charge substantial premiums.

For the distribution of spare parts, car manufacturers have invested heavily in sophisticated systems for parts procurement, logistics, cataloguing and IT systems. According to estimates reported by PwC,¹¹⁷ car manufacturers take a gross margin of about 65% in return for performing these parts distribution activities. Thus, the spare parts business is a very important contributor to car manufacturers' overall profitability

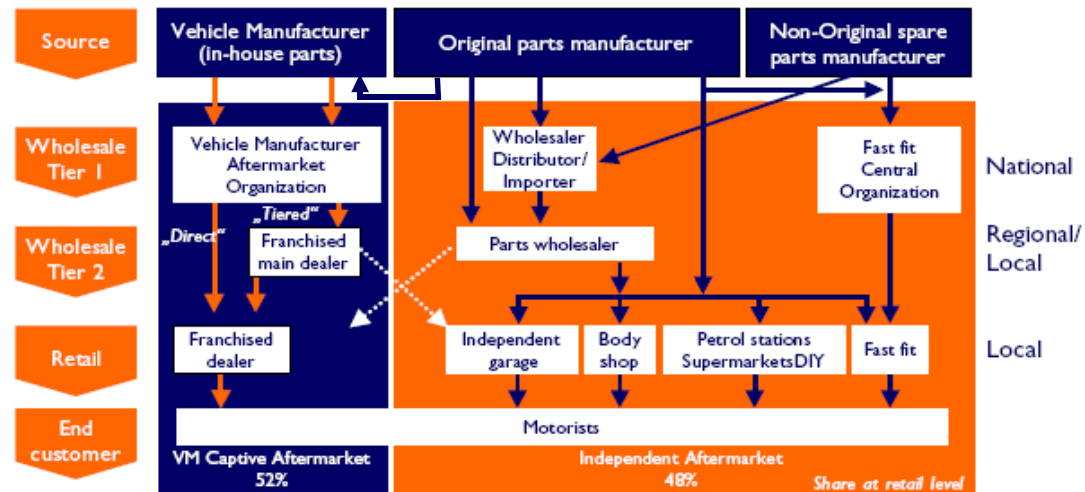
The parts moving down each distribution channel are not exactly the same. In particular, the independent channel has little or no access to parts produced by the vehicle manufacturer and may have limited access to parts produced by the OE suppliers. More importantly, the independent channel provides incomplete access to captive parts, a situation which prevents this channel from offering a complete range of parts. The relative position of independent distributors is stronger in other categories of parts, such as lubricants, tyres and accessories.

The supply chain mapped out in Figure 117 also highlights the fact that independent parts wholesalers and distributors have very little access to the authorised repair market.

¹¹⁶ Source: ECAR.

¹¹⁷ PwC (2003).

Figure 117: EU spare parts market structure.



Source: TPG 2002; Source for market shares is Datamonitor.

4.3 Vehicle parts production

As noted earlier, car parts are being produced by vehicle manufacturers, original equipment suppliers and independent parts producers. This section reviews below each of these three groups of parts producers in greater detail.

4.3.1 Vehicle manufacturers

Today's vehicle manufacturers (VMs) produce only about 20% of the components used in vehicle production. The remainder is sourced from original equipment suppliers. Some of these parts may be produced by parts manufacturers using VMs' IPRs. This growing reliance on parts from OESs leads increasingly to a situation where vehicle manufacturers just assemble a relatively limited number of highly complex ready-made modules that often represent large parts of the finished car. As a result, the share of parts that can only be provided by VMs in the total number of parts making up a vehicle has decreased over time.

4.3.2 Original equipment suppliers

Original equipment suppliers (OESs) are not only the most important source of automobile components, but they are, in addition, often thoroughly involved in the creation of new products and designs for the automotive

industry. A number of important innovations in automotive technology have come from independent motor-vehicle parts suppliers.

The OESs who supply directly VMs are also sometimes called Tier 1 suppliers, to distinguish them from other parts suppliers who supply Tier 1 suppliers but not directly the vehicle manufacturers.

The scope for the OESs to sell parts directly to independent distributors depends on the intellectual property right arrangements between the parts producer and the VM, including the so-called tooling arrangements by virtue of which a VM owns part of the tools used to produce the component.

As noted earlier, the revised BER brought about an important change when it came into effect on 1 October 2002: henceforth, original spare parts are no longer defined as such by the fact that they are being distributed by vehicle manufacturers or their authorised network, but rather their definition as original spare parts depends on who was the producer of the component installed as original equipment and how it is produced. So if, for example, parts producers supply one and the same shock absorber to both a vehicle manufacturer and an independent parts distributor, the product distributed to the independent market must also be considered an “original” spare part under the new BER.

It is important to note, however, that the BER does not impose any labelling definitions, and market operators are free to use the terminology of their choice.

4.3.3 Independent equipment suppliers

This segment of the parts industry comprises firms that supply their products directly, in some cases exclusively, to the independent aftermarket. It is thus distinct from the OE segment, although many firms are active in both segments. Some parts in their product portfolio are sold directly to the VM as first equipment and some may be entirely sold in the aftermarket.

These independent suppliers play an important role in the market by catering for consumers whose needs are inadequately served by OE suppliers.

This customer market segment includes:

- Drivers of older cars who are interested in a time-value compatible supply, meaning that the value of the parts installed must be proportional to the residual value of the vehicle.¹¹⁸
- Drivers of sports cars, for example, are interested in offers in the field of suspension engineering exceeding the technical standards of the original equipment - special shock absorbers, for example.

¹¹⁸ All the same, such parts must, of course, comply with all the necessary rules regulations, e.g. in the field of health and safety.

4.3.4 Largest car parts producers in Europe

The top 30 independent automotive parts producers, i.e. parts producers other than vehicle manufacturers, in Europe are listed in Figure 118 below, together with information on their European sales in 2003 and 2004 and the description of their core business.

As can be seen in Figure 118, the major parts producers specialise in a limited number of parts and components. They often supply such parts to more than one vehicle manufacturer.

Figure 118: Top 30 European parts suppliers - Ranked on 2004 European OES parts sales.

Rank 2004 (2003)	Company	Headquarters	Total European OES automotive parts sales (€m)		Total European OES automotive parts sales, % of global total		Products
			2004	2003	2004	2003	
1 (1)	Robert Bosch GmbH	DE	13,339	12,511	61%	52%	Fuel injection systems, chassis systems, energy and body systems, automotive multimedia and electronics
2 (2)	Faurecia	FR	9,085	9,610	85%	82%	Seats, cockpits, doors, acoustic packages, front ends, exhaust systems
3 (10)	Magna International Inc.	CA	7,066	4,070	44%	23%	Interiors, exteriors, body and chassis systems, seats, mirrors, closures, electronics, engines, transmissions, drivetrain
4 (5)	Johnson Controls Inc.	US	6,592	5,264	42%	31%	Seats, interior trim, batteries, electronics, cockpits and instrument panels
5 (3)	Siemens VDO Automotive	DE	6,248	6,131	67%	60%	Electrical and electronic components and systems
6 (6)	ZF Friedrichshafen AG	DE	5,788	5,074	72%	57%	Transmissions, steering systems, suspension components axles, clutches, dampers
7 (7)	Lear Corp.	US	5,357	5,011	39%	33%	Interior systems, seats, instrument/door trim panels, overhead, flooring and acoustic systems, electronic/electrical distribution systems
8 (4)	Valeo SA	FR	5,195	5,573	65%	63%	Transmissions, climate control, engine cooling, lighting, electrical and wiper systems, motors and actuators, security systems, switches, electronics
9 (8)	TRW Automotive Inc.	US	4,748	4,539	53%	46%	Steering, suspension, braking, engine components, fasteners, occupant restraint systems, electronic safety and security
10 (11)	Continental AG	DE	4,486	4,031	60%	49%	Electronic brakes, stability management systems, tyres, foundation brakes, chassis systems, safety system electronics
11 (9)	Delphi Corp.	US	4,069	4,950	21%	23%	Steering, chassis, electrical, energy, engine and thermal management, interiors, electronic components, in-vehicle entertainment system
12 (12)	ThyssenKrupp Automotive AG	DE	3,624	2,969	50%	37%	Body systems, chassis modules, powertrains, suspensions, steering systems, drivetrains
13 (13)	Visteon Corp.	US	2,988	2,656	21%	17%	Interiors, climate control and electronics/lighting
14 (16)	Magneti Marelli Holding S.p.A.	IT	2,851	2,308	83%	61%	Engine control systems, air/fuel systems, lighting instrumentation and electronic systems, shock absorbers, suspension & exhaust systems
15 (14)	Autoliv Inc.	SE	2,795	2,577	57%	48%	Airbags, seat belts, safety electronics and steering wheels

Figure 118: Top 30 European parts suppliers - Ranked on 2004 European OES parts sales.

			Total European OES automotive parts sales (€m)		Total European OES automotive parts sales, % of global total		
16 (25)	ArvinMeritor Inc.	US	2,368	2,181	42%	35%	Emission technologies, aperture and undercarriage systems, drivetrains, braking and suspension systems, specialty components
17 (15)	Benteler Automobiltechnik GmbH	DE	2,307	2,164	70%	60%	Chassis & exhaust systems, door beams, roof rails, pillars and bumpers
18 (29)	GKN plc UK	UK	2,257	2,182	50%	44%	Constant velocity products, powdered metal components, traction systems
19 (21)	Behr GmbH & Co. KG	DE	2,090	2,291	69%	68%	Engine cooling, air conditioning
20 (18)	Denso Corp.	JP	2,083	1,758	13%	10%	Thermal, powertrain control, electronic and electric systems; small motors, telecommunications, industrial and environmental systems
21 (17)	Michelin Group	FR	1,952	2,150	53%	53%	Tyres
22 (19)	Hella KG Hueck & Co.	DE	1,877	1,998	84%	81%	Lighting, electrical systems and modules
23 (22)	Mahle GmbH	DE	1,679	1,594	58%	50%	Pistons, rings, bearings and assemblies, valvetrain and filter systems
24 (23)	Brose Fahrzeugteile GmbH & Co.	DE	1,613	1,482	81%	68%	Window regulators, door modules, seat adjusters, closure systems
25 (20)	DuPont	US	1,604	1,704	35%	34%	Coatings, engineering polymers, fibers, chemicals, refrigerants and finishes, small motor and transmission components
26 (26)	Federal-Mogul Corp.	US	1,578	1,363	59%	46%	Pistons, piston rings and liners, valvetrain and transmission products, systems protection, bearings, lighting, seals
27 (28)	Dana Corp.	US	1,456	1,330	20%	17%	Axles, driveshafts, structures and related systems; sealing, thermal management, fluid transfer and engine power products; chassis
28 (24)	Kolbenschmidt Pierburg AG	DE	1,405	1,459	76%	72%	Pistons, emission control products, oil/water pumps, engine blocks, manifolds, bearings
29 (27)	Compagnie de Saint-Gobain	FR	1,363	1,367	75%	68%	Glass, abrasives, fiberglass reinforcements, coatings, compounds, bearing, seals
30 (-)	Honeywell International	US	1,359	976	65%	42%	Turbochargers, brake friction materials & systems, air & oil filters, antifreeze, spark plugs and sensors

Source: Automotive News

4.3.5 Profitability of parts production

The figure below provides information on the evolution of profit margins of parts manufacturers in each of the 12 countries. The average profit margin for each country includes the profit margins of all parts producers including those on OES sales to VMs and those on part sales by VMs. In the case of VMs, only the profits and sales made by separate legal entities, whose annual accounts are public, are included in the computation of the sector-wide margin.

Figure 119: Profit margins of parts manufacturers (1997-2004).

	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	-	-	-	1.73	2.82	4.59	4.17	5.82
Germany	10.66	11.95	11.30	8.29	2.02	1.43	2.84	4.95
Estonia	-2.61	-4.82	15.96	12.84	-2.91	5.72	2.62	7.63
Spain	6.71	7.18	6.46	4.89	3.61	3.18	3.28	4.15
France	4.23	4.43	4.48	2.84	1.59	1.96	1.60	1.63
Italy	3.97	4.26	4.10	3.23	1.86	1.72	2.28	1.98
Hungary	4.94	7.16	9.28	7.54	4.64	0.93	5.33	7.24
Netherlands	5.43	5.88	3.23	0.76	0.35	4.20	6.58	6.20
Poland	10.42	1.53	-3.43	-0.81	-3.16	0.10	4.82	11.03
Portugal	4.24	5.98	3.28	3.77	1.36	3.31	2.61	5.41
Sweden	5.87	5.60	6.11	5.22	0.66	1.98	2.97	4.08
UK	4.28	-1.37	-0.93	-4.23	-3.67	-2.21	0.33	1.71

Source: London Economics, based on Amadeus.

Profit margins are high compared to what we have observed in other market segments, especially with regards to the production of cars. They are, however, highly volatile and vary widely across countries.

That being said, parts sales make a very large and important contribution to manufacturers' profits even if they account for only a very small share of total turnover (see Figure 120).

Figure 120: Relative contribution of car parts to manufacturers' profits

Share accounted for	Turnover	Profits
Car sales	95%	50%
Parts sales	5%	50%

Source: PwC (2003).

Regarding OESs, the aftermarket is also an important source of profits, accounting about 50% of total profits of OES even so sales to the aftermarket account only for about 20% of total OES turnover (see Figure 121).

Figure 121: Relative contribution of the aftermarket to OESs' profits

Share accounted for	Turnover	Profits
Sales to VMs	80%	50%
Sales to the aftermarket	20%	50%

Source: PwC (2003).

The aftermarket is thus a key source of profits for all parts producers, but more particularly for VMs.

4.4 Distribution of spare parts

4.4.1 General context

Distributors perform a crucial function in the spare parts market, and the importance of their role has grown over recent years.

The sheer number of different car parts and parts producers means that individual repairers have to rely on specialist intermediaries to help them manage their supplies.

Moreover, parts distributors are fulfilling increasingly complex functions, in terms of logistics, as well as in terms of the increasingly important transmission of technical information, especially in the case of authorised repairers that also undertake some parts distribution activities. Independent repairers are less involved in the transmission of technical information, as they are unlikely to hold much of the brand-specific information.

Rather than acting merely as a go-between between parts producers and garages or end users, parts distributors represent an important part of the aftermarket value chain.

This section describes the size and structure of the distribution market, including the dynamics within the independent and authorised sub-segments, as well as the financial situation of the market participants.

A broad distinction can be made between:

- The manufacturer-owned distribution system;
- The authorised network of parts distributors; and,
- The independent channel for parts distribution.

Below we review in greater details the evolution in recent years of these three channels.

4.4.2 Vehicle manufacturer owned parts distributors

Many vehicle manufacturers own separate centralised parts distribution organisations and subsidiaries, mainly to sell on to authorised and independent repairers and parts distributors, as well as a number of traditional parts distributors.

As shown in Figure 122 and Figure 123, the number of such distributors in each of the 12 countries is small, both in absolute terms and as share of the total number of parts distributors. Indeed, this share is below 1% in most of the 12 countries.

Some countries have witnessed a noticeable increase in the number of manufacturer-owned parts distributors. This is the case of Germany, Italy and the UK. As a percentage of overall authorised parts distributors these increases have been generally very small and in none of the 12 countries have they exceeded 0.2 percentage points.

That being said, while the vehicle manufacturer-owned parts distributors account only for a small share of the total number of parts distributors, their market share in terms of volume or value of sales is much larger. According to Figure 130, manufacturer-owned parts businesses turnover grew an average of 50% in the period 2002-2004, while according to Figure 132 the other businesses' turnover grew just over 10% in the same period. This is an indication that the weight of the parts distribution carried by manufacturer owned distributors has increased in the period.

Figure 122: No. of manufacturer-owned parts distributors - 1997-2004.

	1997	1998	1999	2000	2001	2002	2003	2004	<i>Change 2002- 2004</i>
Denmark	0	0	0	0	0	3	5	6	3
Germany	76	80	84	84	118	121	130	142	21
Estonia	0	0	0	0	0	0	0	0	0
Spain	54	53	56	56	56	55	53	56	1
France	240	244	222	229	239	239	253	223	-16
Italy	12	12	14	12	14	14	22	29	15
Hungary	0	1	1	1	2	1	5	5	4
Netherlands	7	8	10	12	15	15	13	14	-1
Poland	0	0	0	0	0	2	2	7	5
Portugal	8	8	12	12	15	15	19	16	1
Sweden	5	5	4	4	5	6	7	7	1
UK	52	54	58	62	66	69	68	90	21

Source: LE Manufacturer Survey.

Figure 123: Share of vehicle manufacturer-owned parts distributors in total number of distributors - 1997-2004.

	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	0	0	0	0	0	0.3%	0.4%	0.5%
Germany	0.4%	0.4%	0.5%	0.5%	0.7%	0.8%	0.7%	0.7%
Estonia	0	0	0	0	0	0	0	0
Spain	1.1%	1.1%	1.2%	1.2%	1.2%	1.2%	1.0%	1.0%
France	2.1%	2.2%	2.0%	2.2%	2.2%	2.3%	2.4%	2.1%
Italy	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%	0.4%
Hungary	0	0.2%	0.2%	0.2%	0.4%	0.2%	0.8%	0.8%
Netherlands	0.3%	0.4%	0.5%	0.6%	0.7%	0.8%	0.6%	0.6%
Poland	0	0	0	0	0	0.2%	0.2%	0.6%
Portugal	0.9%	1.0%	1.4%	1.4%	1.5%	1.2%	1.9%	1.5%
Sweden	0.3%	0.3%	0.2%	0.2%	0.3%	0.4%	0.4%	0.4%
UK	1.4%	1.4%	1.6%	1.6%	1.7%	1.7%	1.5%	1.9%

Source: LE Manufacturer Survey.

4.4.3 Authorised and independent parts distributors

These two types of distributors are the most numerous in the sector.

Both the number of authorised and independent parts distributors and the split between these two groups of parts distributors varies markedly across the EU.

- For example, in Germany, there is not only a much higher number of part distribution businesses than in the other four countries, but franchised distributors also account for a much larger share of the total distributor population (Figure 125).
- There are fewer authorised parts distributors in Italy and Spain relative to the overall numbers of parts distributors.
- It is interesting to note that in France, Germany and the UK, where the number of authorised parts distributors is three or more times larger than the number of independents, their corresponding share of the retail market is much lower. Namely, this share is 48% in Germany, 29% in France and 27% in the UK (Figure 145). As these figures refer to the retail value only, they underestimate the market position of the authorised sector, as independents purchase a proportion of the parts they sell from VMs (between 10% and 30% according to Figure 124).

The market shares of the two distribution channels have been largely stable over the period 1999-2004. (See section 4.5.3 below).

An illustration of the relative importance of the authorised distribution network for different types of parts users is given in Figure 124.

For the four countries where data was available, the table below shows a very high dependency of authorised dealers on vehicle manufacturers for the sourcing of spare parts.

Figure 124: Spare parts sourced from VM relative to total sourcing, 2004 (%).

	France	Germany	Italy	UK
Authorised dealers	97%	85%	95%	90%
Sub-dealers	80%	85%	65%	
Independent repairers	30%	20%	20%	10%
Independent body shops	65%			85%
Service chains and others	30%	15%	0%	0%

Source: ICDP

France is the market where dealers show the highest degree of reliance on VM-supplied parts. In general there is a difference between dealers and sub-dealers. Sub-dealers tend to be slightly more multi-brand organisations and rely less on VMs' parts supply networks.

German dealers and sub-dealers purchase 15% of their parts requirements outside the VM network. This is a high percentage relative to other countries. Historically, German dealers have sourced a proportion of their purchases from their own central buying organisations, separate from the car manufacturers.

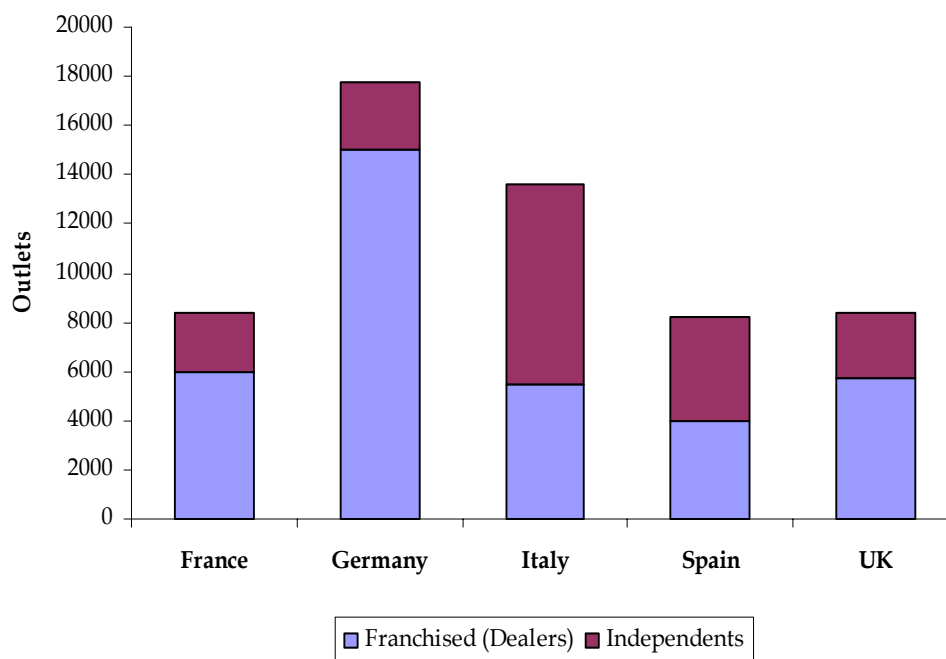
Where we have separate data for independent repairers and independent body shops, we observe that body shops always source a much higher percentage of their parts requirements from VMs. This is clearly related to design protection and the VMs' "captive parts". France, along with Germany, has adopted very conservative rules in the protection of industrial designs. Consequently, in theory, body parts are only available from the car manufacturers' networks. For Europe as a whole, the European Commission estimates the market share of vehicle manufacturers in the market segment covered by design protection to be around 85%.

In the UK, independent body shops source about 85% of parts from VMs' networks. Since the UK is one of the most liberal countries in terms of the application of intellectual property rights regulations, this may seem surprising. A possible explanation may be the level of service offered by the authorised network, perhaps in terms of short delivery lead times, frequent

deliveries, and availability, making it easier in terms of logistics to source parts from dealers.

France's independent repairers are, within the sample, the most reliant on VM-supplied parts. This is mainly due to the concentration of the French market in terms of vehicle manufacturer brands. French car brands (Renault, Peugeot and Citroën) account for about two-thirds of the French car parc. This has led to a historic relationship between French brand dealers and independent garages. For a French independent repairer, the Renault, Peugeot and Citroën dealers are often their main suppliers, along with one or two independent parts distributors.

Figure 125: Parts distributors in major markets (2004).



Source: ICDP.

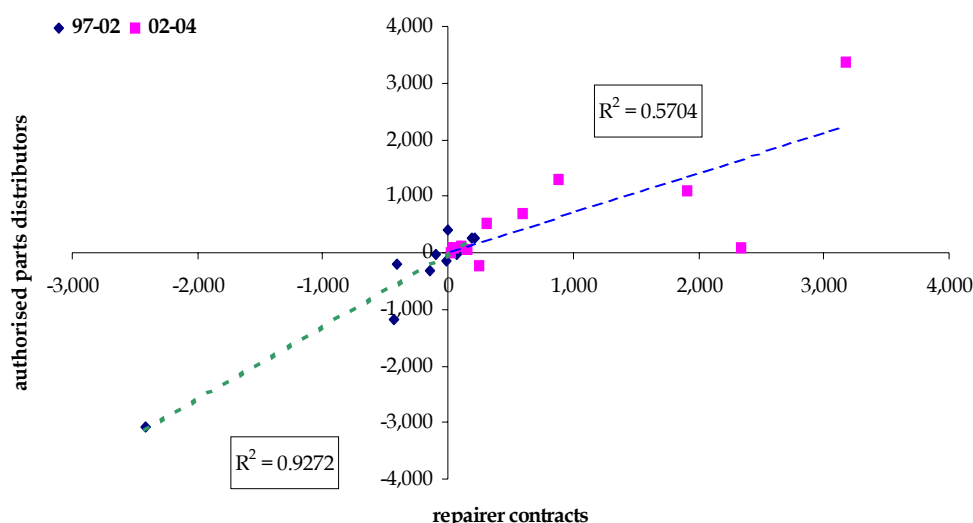
4.4.4 The authorised network of parts distributors

As Figure 127 shows, the number of authorised parts distributors increased significantly in the period 2002-2004 while it was falling over the period 1997-2002. The coincidence of the increase in the number with the entry into force of the new BER is therefore remarkable and is in part due to the fact that the number of authorised repairers also grew over the most recent period. As authorised repairers often also act as authorised parts distributors, an

increase in their number will also result in an increase in the number of authorised parts distributors.

That being said, the link between changes (in absolute terms) in the number of authorised parts distributors and the number of authorised repairers is much tighter over the period 1997-2002 than over the period 2002-2004. Indeed, a simple statistical analysis¹¹⁹ shows that the change in the number of authorised repairers explain about 90% of the change in the number of authorised parts distributors over the period 1997-2002 and slightly less than 60% over the period 2002-2004 (see Figure 126).

Figure 126: Changes in authorised parts distributor numbers and repairer contracts, 1997-2002 and 2002-2004.



Source: LE, based on Manufacturer Survey.

In the last two years, the number of authorised parts distributors increased in all the countries of the sample with the exception of Portugal. The increases were most marked in Germany, Spain, Netherlands and Italy (see Figure 127).

¹¹⁹ The analysis is based on the results of a simple regression relation the change (in absolute terms) in the number of authorised parts distributors to the change (in absolute terms) in the number of authorised repairers. Over the period 1997-2002, a change of 1 in the number of authorised repairers is associated with a change of 1.5 in the number of authorised repairers. In contrast, over the period 2002-2004, the this latter number drops to 0.6.

Figure 127: Number of authorised spare parts distributors 1997-2004.

	1997	1998	1999	2000	2001	2002	2003	2004	Annual percentage change	
									1997-2002	2002-2004
Denmark	1,044	1,025	1,002	978	1,068	1,013	1,117	1,127	-0.6%	5.6%
Germany	19,170	18,000	17,669	17,243	16,853	16,081	17,915	19,437	-3.2%	10.4%
Estonia	38	47	52	57	67	81	82	92	22.6%	6.8%
Spain	4,846	4,828	4,606	4,511	4,516	4,525	5,363	5,608	-1.3%	12.0%
France	11,679	11,120	10,860	10,631	10,748	10,488	10,342	10,561	-2.0%	0.3%
Italy	6,734	6,633	6,536	6,546	6,654	6,576	7,326	7,881	-0.5%	9.9%
Hungary	440	460	462	487	553	566	664	647	5.7%	7.2%
Netherlands	2,195	2,138	2,033	1,968	2,018	1,984	2,204	2,495	-1.9%	12.9%
Poland	748	807	887	947	1,045	1,001	1,057	1,091	6.8%	4.5%
Portugal	878	840	850	863	997	1,286	1,018	1,068	9.3%	-8.5%
Sweden	1,635	1,631	1,624	1,673	1,637	1,598	1,846	1,664	-0.5%	2.1%
UK	3,781	3,773	3,715	3,798	3,988	4,045	4,665	4,744	1.4%	8.6%
Total	53,188	51,302	50,296	49,702	50,144	49,244	53,599	56,415	-1.5%	7.3%

Source: LE Manufacturer Survey.

Stand-alone authorised parts distributors

A further distinction within the authorised parts distribution network can be made between multi-function dealerships that offer parts distribution as a part of their service, besides car sales and/or repairs, and specialist, or “stand-alone” authorised parts distributors.

Relative to the overall size of the authorised parts distribution network, the share of stand-alone distributors is extremely small and has not seen any noticeable increase over the period (Figure 129). In terms of numbers (Figure 128), however, we do see some increase, in the years after the entry into force of the new BER, in the UK, Spain, France and Germany. These increases are due to increases in ARs’ numbers following the entry into force of the BER.

Figure 128: Number of stand-alone authorised spare parts distributors (1997-2004).

	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	0	0	0	0	0	0	0	0
Germany	3	6	10	10	11	11	15	20
Estonia	1	1	1	1	1	1	1	1
Spain	0	0	0	0	0	0	0	4
France	0	0	0	0	0	0	2	2
Italy	0	0	0	0	0	0	1	1
Hungary	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0
Poland	1	1	1	1	1	1	1	1
Portugal	42	42	42	42	42	40	1	5
Sweden	0	0	0	0	2	2	2	2
UK	0	0	0	0	0	0	3	8

Source: LE Manufacturer Survey.

Figure 129: Share of stand-alone authorised spare parts distributors in total number of authorised parts distributors (1997-2004).

	1997	1998	1999	2000	2001	2002	2003	2004
Denmark	0	0	0	0	0	0	0	0
Germany	0	0	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Estonia	2.6%	2.1%	1.9%	1.8%	1.5%	1.2%	1.2%	1.1%
Spain	0	0	0	0	0	0	0	0.1%
France	0	0	0	0	0	0	0	0
Italy	0	0	0	0	0	0	0	0
Hungary	0	0	0	0	0	0	0	0
Netherlands	0	0	0	0	0	0	0	0
Poland	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Portugal	4.8%	5.0%	4.9%	4.9%	4.2%	3.1%	0.1%	0.5%
Sweden	0	0	0	0	0.1%	0.1%	0.1%	0.1%
UK	0	0	0	0	0	0	0.1%	0.2%

Source: LE Manufacturer Survey.

4.4.5 Independent parts distributors

Data on independent parts distributors is sparse.

The survey of independent parts distributors associations conducted by LE yielded a limited number of responses (from Denmark, Germany, Spain, Italy, the Netherlands and Poland), mostly incomplete, especially where quantitative information was concerned.

As a result, the following discussion of the independent parts distribution channel is based on less robust evidence than that available for the authorised distributor channel.

While authorised distributors cater above all to the authorised service and repair market, independent distributors of vehicle spare parts act as a market alternative to both the distributors directly owned by the manufacturers and the authorised distributors, primarily in the independent segment.

For the most part, the independent distributors are pure wholesalers, who count among their clients commercial end users and other retail companies (e.g. auto centres or supermarket chains). Traditionally, the core target market consisted of independent repairers, specialised parts retailers and filling stations.

However, article 4(1)(k) of the new BER gives authorised dealers of vehicle manufacturers the scope to purchase spare parts from the independent parts distributors provided that the parts are original or matching quality spare

parts. Consequently, authorised dealers of vehicle manufacturers also purchase parts from the independent parts distributors, although we understand only to a limited extent so far.¹²⁰

Independent distributors will typically buy their parts from both OEMs and independent part producers.

Independent distributors do not always resemble their authorised competitors, either in scope or in the service they offer. The largest independent distributors are large companies with extensive branch networks, sometimes on a multi-national scale. Some wholesalers are reported to constantly keep up to 200,000 items on stock for current vehicle models.¹²¹ Moreover, independent distributors compete heavily on service levels, for example offering two to three daily deliveries as standard, with additional express deliveries on request.

The current share of the number of independent distributor outlets across five countries of interest for our study can be seen in Figure 125 above. An insight into concentration within the independent sector is provided by Figure 147 below, which shows that distributor chains have a considerable presence in the independent segment, although their share in total sales exceeds 50% only in one country (France).

4.4.6 Economic and financial performance of the parts distribution sector

In the following sub-sections we present information on the turnover and profitability of parts distributors over the period 1998-2004.

The analysis is based on the data from the Amadeus database.

We first present information on the economic and financial performance of the part distribution channel owned by vehicle manufacturers, and next we discuss more extensively the economic and financial performance of authorised and independent distributors. In the latter case we examine the performance of the sector as whole as well as that of the 100 largest distributors.

¹²⁰ According to Figure 124, parts that are not sourced from VMs account for only between 3 and 15% of the parts demand of authorised dealers/repairers, although this increases to 35% in the case of sub-dealers in Italy.

¹²¹ FIGIEFA (International Federation of Automotive Aftermarket Distributors), Market Info: The Automotive Aftermarket - Competition to the benefit of the consumer

Vehicle manufacturers' parts distribution businesses

There is scant information about the economic and financial performance of VMs' parts distribution business

In Amadeus, the business information regarding vehicle manufacturers is mainly reported under NACE 501 (sales of motor vehicles). In addition, it is a difficult exercise, from a theoretical point of view, to separate profitability between two different branches of activity that are highly interdependent. The parts business may be highly profitable in itself, but the profit in parts is inextricably connected to the low profit on car sales.

In spite of these theoretical considerations we nonetheless constructed some tentative indicators of the performance of the parts businesses of the main vehicle manufacturers. To that end, we used data in the Amadeus database on companies bearing the VM's name but registered under NACE 503 (sale of motor vehicle parts and accessories).

A key assumption underlying this analysis is that such companies are owned by the vehicle manufacturer. To the extent that they are not, and this is a frequent occurrence in the case of car dealership businesses for example, we will have included in the VMs group companies which do not belong there.

On the other hand, some VM-owned distributors may not necessarily have the name of the VM in the business name of the distributor. In this case, we are erroneously excluding companies from the VM group.

The considerations above suggest that the data on the economic performance of the VM-owned part distributors should be viewed as less robust than those for authorised and independent distributors.

In the following Figure 130 we review the evolution of turnover for VMs' parts businesses, bearing in mind that the sample represents only a sub-set of all VMs' parts businesses.

This figure illustrates the growth in individual companies' parts business. The very large standard deviation around the mean turnover shows that our sample contains a wide range, in terms of size, of parts businesses of the different VMs.

The data in Figure 130 show very strong growth in the vehicle manufacturers' parts businesses as measured by turnover.

Figure 130: Indicators on the evolution of VMs' parts business turnover.

	1997	1998	1999	2000	2001	2002	2003	2004
Mean turnover (€'000)	231.8	311.8	344.1	476.0	466.1	499.1	586.2	760.7
% change		34.50%	10.30%	38.30%	-2.10%	7.10%	17.50%	29.80%
Std. dev. ('000)	472.6	738.5	891.3	927.7	824.4	943.2	1127.4	1328.2
Max ('000)	1793.1	3017.6	4151.3	3790.7	3287.8	3573.8	4259.6	4192.5
% change		68.30%	37.60%	-8.70%	-13.30%	8.70%	19.20%	-1.60%
Est. total (€'000)	4636.6	6236.5	7225.9	10946.9	13049.7	14472.6	18170.9	22822.1
% change		34.50%	15.90%	51.50%	19.20%	10.90%	25.60%	25.60%
# of obs.	14	16	21	23	28	29	31	24

Note: observations used for the numbers herein include VMs' parts businesses registered in particular countries as often there is not a single company name representing the VM's parts business in its entirety.

Source: London Economics based on Amadeus.

Profit margins, on average, have fallen almost steadily from 1997 to 2000 and have recovered significantly since then (see Figure 131).

Figure 131: Indicators on the evolution of VMs' parts business profitability.

	1997	1998	1999	2000	2001	2002	2003	2004
Mean profit ratio	2.89	2.03	1.61	1.16	3.01	3.53	2.97	2.46
Std. dev.	4.93	5.02	3.27	5.99	5.90	10.82	5.01	3.81
Min	-6.91	-11.52	-6.01	-10.49	-6.41	-5.62	-6.46	-4.48
Max	10.27	9.99	9.23	14.22	24.14	48.60	18.22	9.36
# of obs.	13	15	17	18	21	21	22	18

Note: observations used for the numbers herein include VMs' parts businesses registered in particular countries as often there is not a single company name representing the VM's parts business in its entirety.

Source: London Economics based on Amadeus.

Authorised and independent part distributors

The sectoral classification of businesses used by Amadeus is only based on the companies' reported main activity. This means that we cannot distinguish between the independent and authorised distributors in our analysis.

The businesses included in the analysis below are those that report their main activity as being the “sale of motor vehicle parts and accessories”. Thus, it is possible that, in addition to distributors, a number of parts retailers are included in the group whose financial performance we analyse below.

We first review trends in the level of activity of parts distributors, as proxied by turnover and next we examine profitability trends.

Level of activity and trends in turnover

The average turnover of all parts distributors in the Amadeus database, excluding businesses with a VM brand name is reported below in Figure 132.

The data in that figure show that the average turnover for parts distributors increased considerably over the period 1997-2004. In many, but not all, countries, the strongest growth occurred over the period 2002-2004.

Figure 132: Evolution of turnover for parts distributors 1997- 2004, 2004=100.

	1997	1998	1999	2000	2001	2002	2003	2004	% change over period	
									1997-2004	2002-2004
Denmark				111	103	107	79	100		-6.5
Germany	97	74	89	96	110	115	120	100	18.6	-13.0
Estonia	39	44	50	57	68	83	88	100	112.8	20.5
Spain	62	72	77	80	86	91	99	100	46.8	9.9
France	68	70	73	77	81	90	93	100	32.4	11.1
Italy	74	78	82	81	86	89	90	100	20.3	12.4
Hungary	40	43	59	63	65	78	92	100	95.0	28.2
Netherlands	63	71	70	76	75	69	72	100	9.5	44.9
Poland	51	60	76	65	65	64	62	100	25.5	56.3
Portugal	83	74	70	68	73	70	73	100	-15.7	42.9
Sweden	72	67	79	78	80	84	90	100	16.7	19.0
UK	56	59	71	77	84	81	84	100	44.6	23.5
EU12	62	66	77	81	87	90	93	100	45.2	11.1
EU25	63	69	79	83	89	92	94	100	46.0	8.7

Note: The companies included here exclude those which were used to estimate financial indicators for the VMs' parts distribution business

Source: London Economics based on Amadeus

Profitability

In the first two figures below we report average operating margins (earnings and losses before interest and tax divided by turnover).

As Figure 129 and Figure 133 show, average operating margins in the industry have been fluctuating around the 3 percent mark, although there has been an upward trend in the recent years. Margins increased between 1999 and 2004 in 10 out of the 12 countries, the exceptions being Estonia and the Netherlands.

Countries where profit margins are highest are Hungary, Sweden, Estonia and Poland. Profit margins are lower in Italy and Portugal.

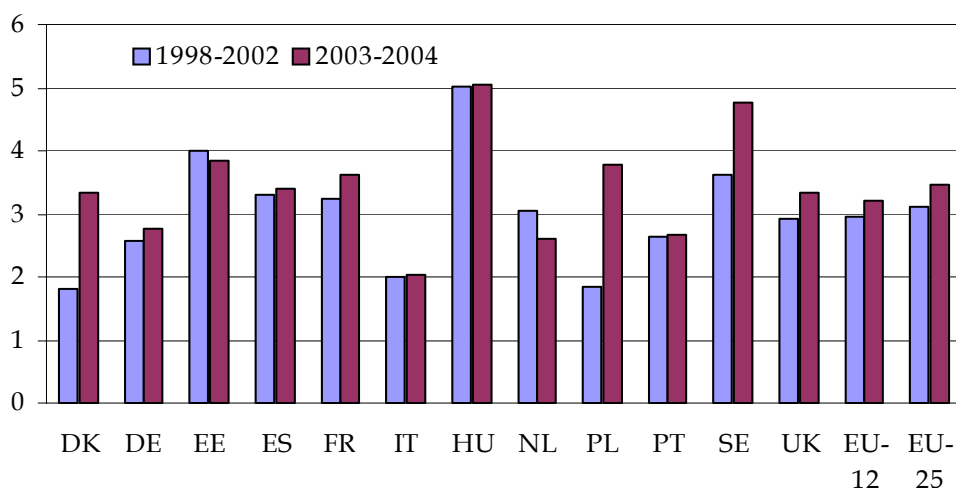
On average across all countries, profitability dipped in 2000, but has been increasing steadily since then.

Figure 133: Average operating margin - sale of motor vehicle parts and accessories, 1998 - 2004.

	1998	2000	2002	2003	2004
Denmark		0.49	3.16	4.06	2.62
Germany		2.80	2.36	2.14	3.39
Estonia	1.9	4.56	5.57	4.52	3.19
Spain	3.42	3.3	3.14	3.16	3.65
France	3.63	2.98	3.06	3.41	3.82
Italy	2.36	2.02	1.58	1.92	2.14
Hungary	6.13	3.62	5.27	4.26	5.81
Netherlands	3.74	3.12	2.28	1.78	3.41
Poland	3.08	-0.08	2.54	3.2	4.35
Portugal	3.29	2.25	2.36	2.47	2.89
Sweden	3.25	3.99	3.64	4.56	4.96
UK	3.94	1.88	2.98	3.25	3.40
EU12	3.32	2.79	2.78	3.06	3.37
EU25	3.43	2.93	3.00	3.29	3.63

Source: London Economics based on Amadeus.

Figure 134: Average operating margin - sale of motor vehicle parts and accessories, 1998 – 2002 and 2003 – 2004



Source: London Economics based on Amadeus.

In Figure 54 and Figure 55 below we report the average profit margins in two subsets of our sample of companies.

- The first subset includes all the companies with turnover above average sector-wide turnover; and,
- The second subset includes all the companies with below average sector-wide turnover.

The sample separator is the average 2003 turnover specific to each country.

Such a split sample analysis allows one to investigate whether there is a marked difference in profitability between larger and smaller companies in this sector and thus to indirectly gain some insight into whether economies of scale are a significant factor in the part distribution sector.

Obviously, the analysis of differences in profit margins between larger and smaller businesses will yield some useful information only if both types of businesses operate in the same market and the market is characterised by robust competition.

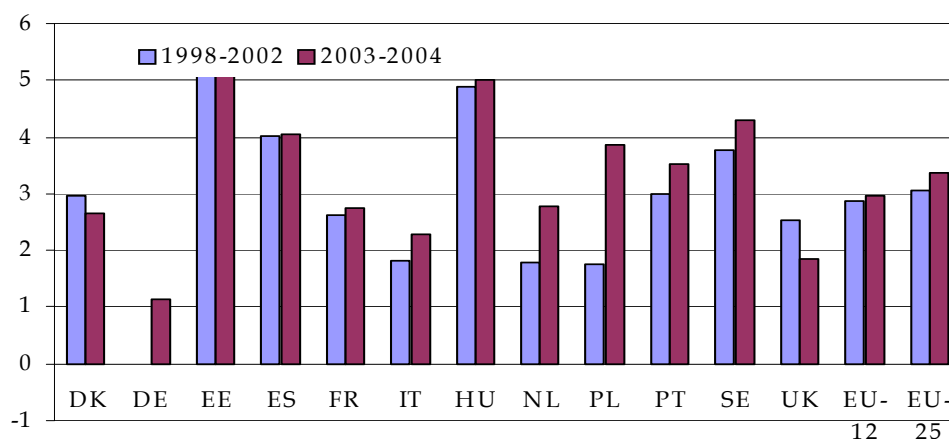
Overall, with only a few exceptions, the differences in profitability between large and small companies are small, and smaller companies tend to be more profitable than large ones. The difference between the two sub-samples is most marked for Germany and the UK.

Figure 135: Profit ratios for the larger companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is above the sector average, 1998 – 2004.

	1998	2000	2002	2003	2004
Denmark		1.03	4.87	2.50	2.83
Germany	-1.83	-0.28	2.09	1.09	1.20
Estonia	3.64	6.83	5.76	5.03	5.23
Spain	4.44	4.02	3.63	4.19	3.88
France	3.32	2.20	2.39	2.51	3.01
Italy	2.31	1.90	1.29	2.22	2.34
Hungary	5.41	3.99	5.22	3.66	6.38
Netherlands	2.49	1.44	1.45	2.96	2.59
Poland	3.77	-0.20	1.72	3.29	4.46
Portugal	3.48	2.67	2.85	3.65	3.41
Sweden	2.89	4.32	4.08	5.01	3.59
UK	3.83	1.57	2.16	1.19	2.51
EU12	3.39	2.57	2.61	2.97	2.94
EU25	3.57	2.71	2.86	3.42	3.32

Source: London Economics based on Amadeus.

Figure 136: Profit ratios for the larger companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is above the sector average, 1998 - 2002 and 2003 - 2004.



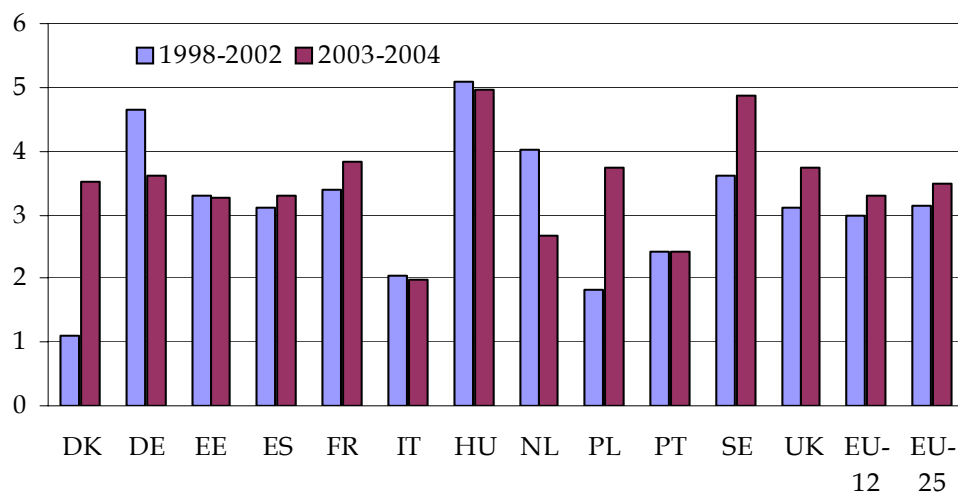
Source: London Economics based on Amadeus.

Figure 137: Profit ratios for the smaller companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is below the sector average, 1998 – 2004.

	1998	2000	2002	2003	2004
Denmark	-	0.16	2.01	4.55	2.48
Germany	-	6.65	2.62	2.68	4.56
Estonia	0.99	3.46	5.49	4.29	2.26
Spain	3.16	3.12	3.01	2.96	3.62
France	3.72	3.22	3.26	3.60	4.05
Italy	2.37	2.06	1.65	1.88	2.06
Hungary	6.55	3.43	5.30	4.44	5.48
Netherlands	5.10	4.27	2.73	1.48	3.86
Poland	2.48	0.01	2.96	3.17	4.29
Portugal	3.17	2.03	2.09	2.18	2.65
Sweden	3.32	3.93	3.55	4.47	5.27
UK	3.99	2.02	3.35	3.73	3.77
EU12	3.30	2.86	2.84	3.08	3.50
EU25	3.39	3.00	3.04	3.26	3.73

Source: London Economics based on Amadeus.

Figure 138: Profit ratios for the smaller companies whose main activity is the sale of motor vehicle parts and accessories and whose turnover is below the sector average, 1998 - 2002 and 2003 - 2004.



Source: London Economics based on Amadeus.

In addition to providing information of average profit margins in each of the 12 countries of interest, we also report sector-wide profit margins in Figure 139 and Figure 140.

While the average profit margin is simply the average of the profit margins reported by each company, the sector-wide profit margin is the ratio of the all the profits and losses reported by the companies to the sum of the turnovers of these companies.

The advantage of this sector-wide indicator is that it does not give equal weight to profits reported on very small levels of turnover relative to those reported on much higher levels of turnover. The comparison of the two also gives an indication of whether profits are more likely to be found in firms with higher or lower turnover levels.

Sector-wide profit is lower than sector average reported earlier. This again indicates that smaller companies have somewhat higher profit margins than larger ones.

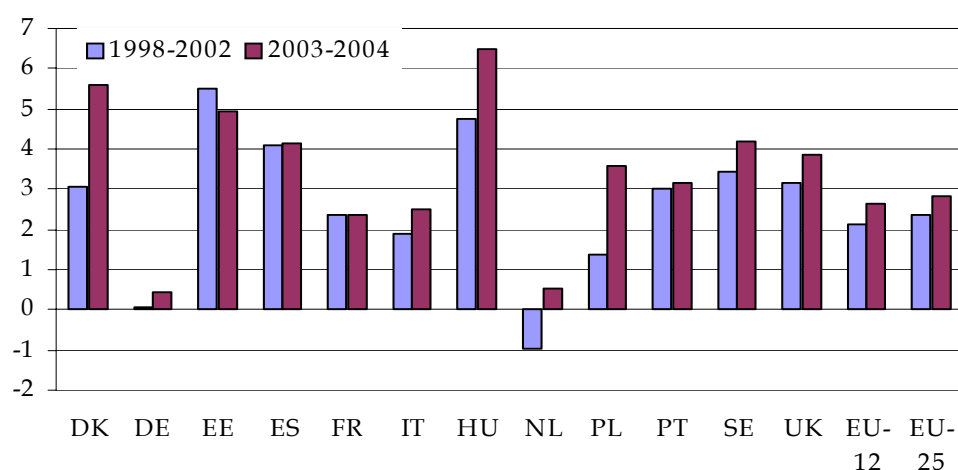
But, as in the case of the trend shown by the sector average, sector-wide profit margins dipped sharply in 2000, to below 2.0%, and have since then grown steadily, reaching a level of 2.8% in the 12 countries of interest, and in 2004 were higher than in 1998.

Figure 139: Sector-wide profit margin for companies whose main activity is the sale of motor vehicle parts and accessories, 1998 – 2004.

	1998	2000	2002	2003	2004
Denmark		1.14	4.94	4.44	6.72
Germany	-0.82	0.20	0.81	0.47	0.44
Estonia	4.98	5.80	5.72	5.50	4.34
Spain	4.56	3.92	3.84	3.83	4.49
France	2.84	2.20	2.08	2.31	2.39
Italy	2.59	1.82	1.33	2.48	2.56
Hungary	5.27	3.93	5.11	4.79	8.18
Netherlands	1.51	-3.68	-0.73	1.82	-0.76
Poland	2.20	-0.02	1.97	2.93	4.25
Portugal	3.24	3.20	2.57	2.81	3.49
Sweden	2.39	4.38	3.53	4.28	4.11
UK	5.05	2.32	2.16	3.19	4.55
EU12	2.47	1.90	2.07	2.51	2.76
EU25	2.66	2.10	2.25	2.72	2.92

Source: London Economics based on Amadeus.

Figure 140: Sector-wide profit margin of companies whose main activity is the sale of motor vehicle parts and accessories in distribution of spare parts, 1998 – 2002 and 2003 – 2004.



Source: London Economics based on Amadeus.

Economic and financial performance of the 100 largest parts distributors

Of interest for assessing the dynamics of the market structure is whether the performance of largest businesses in the sector differs systematically from that of the sector at large. To that end we also review the economic and financial performance of the 100 largest parts distributors in the 12 countries (see Figure 141).

Figure 141: Financial information for the 100 largest parts distributors.									
		1997	1998	1999	2000	2001	2002	2003	2004
profit margin (%)	mean	2.34	2.76	2.78	1.56	1.98	2.40	2.29	2.71
	standard deviation	5.99	5.45	5.58	5.63	7.32	4.87	5.18	5.86
return on capital employed (%)	mean	41.0	31.7	29.7	15.7	22.1	32.3	30.8	31.0
	standard deviation	99.4	64.9	51.6	95.6	89.2	97.8	58.3	65.2
assets by turnover (%)	mean	56.0	59.4	62.1	58.6	56.1	56.2	51.6	49.6
	standard deviation	54.0	69.0	123.9	40.6	40.4	45.0	28.6	24.4
Turnover €m	mean	127.8	146.3	163.8	191.0	196.0	211.6	221.9	244.8
	standard deviation	219.3	318.0	383.2	412.6	387.3	409.9	418.2	498.7

Note: Largest companies selected according to the value of 2003 turnover.

Source: *London Economics based on Amadeus.*

The large distributors have grown more rapidly than the sector as whole, both before the implementation of the new BER and after.

For example, over the period 1997-2002, the turnover of the 100 largest distributors in the 12 countries of interest grew by 66% while that of all the authorised and independent distributors increased by only 45% (see Figure 132).

Moreover, since 2002, the turnover of the 100 largest distributors has grown by 16% while the sector as whole posted an increase of only 11%.

A shift in the structure of the distribution sector towards larger distributors is clearly taking place, but it started well before the new BER came into force.

The profit margins for the 100 largest companies are generally lower than the average for the overall sample. However, there are large variations of profitability across companies, as shown by the reported standard deviation.

4.5 Retail market for spare parts

In this section we present some facts about the retail end of the parts value chain.

First, we review the size of the retail market for spare parts and its growth in recent years in a number of EU Member States.

Next, we look in greater detail at a number of drivers of the retail market for spare parts.

Finally, we present information on the split of the retail market between authorised and independent distributors.

4.5.1 Evolution of size of the market per country

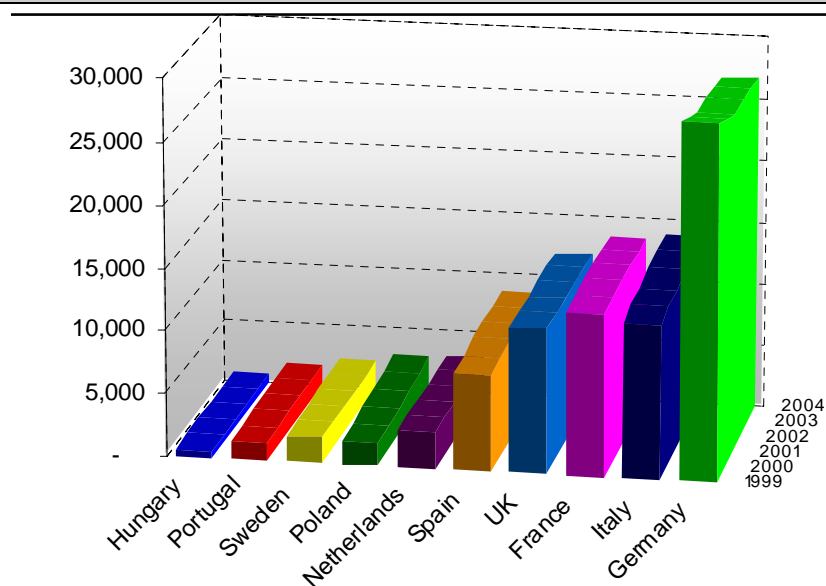
A number of elements impact on the demand of car parts. These include the age and size of the car parc, repair processes,¹²² cost of parts, requirements relative to road-worthiness tests, average mileage driven, vehicle and parts quality and reliability, and road safety and traffic control measures in place.

A graphic illustration of the market size evolution is provided in Figure 142 below. It is evident that, at an estimated €83 billion for the ten countries covered by our data, the European light vehicle spare parts market is of considerable size.¹²³

In the ten countries as a whole, the market grew by only 2.9% between 1999 and 2004. However, these low growth figures mask considerable variation among the ten countries with Hungary and Poland showing growth of more than 40% over this period and Germany showing a decline of almost 6% (see Figure 143). In the next sub-section, we review some of the reason for this market inter-country variation in the growth of the retail spare parts market.

¹²² For example, the demand for parts is greater the more parts are replaced (as is increasingly the case) rather than repaired.

¹²³ Robust data on the size of the market do not exist. For example, estimates obtained from FIGIEFA and ECAR both report a figure of €44 bn for the EU15 countries (average over the last 4 years), although this figure does not include sales of tyres and lubricants and sales taxes. German Aftermarket association ZDK gives a considerably lower estimate at €36bn for all 25 Member States, which includes tyres, lubricants and sales taxes. Assuming proportionality between a country's total car parc and the parts market, we estimate the size of the parts market across all 25 Member States at €96.7 billion

Figure 142: Spare parts market size at retail value 1999-2004 (€m).

Source: London Economics based on Datamonitor data.

The detailed figures on the retail value of the spare parts market in the 10 countries, as well as the market's growth in each of the 10 countries from 1999 to 2004 are provided in Figure 143.

Figure 143: Spare parts market size - value of retail market 1999-2004 (€m).

	1999	2000	2001	2002	2003	2004	% change 1999-2004
Germany	28,311	27,613	26,934	27,025	26,839	26,652	-5.9%
Spain	7,670	7,871	8,217	8,241	8,291	8,369	9.1%
France	12,988	13,161	13,359	13,393	13,361	13,244	2.0%
Italy	12,268	12,651	12,747	13,300	13,583	13,662	11.4%
Hungary	538	572	608	661	724	754	40.1%
Netherlands	2,871	2,870	2,854	2,897	2,913	2,914	1.5%
Poland	1,839	2,031	2,182	2,417	2,617	2,730	48.5%
Portugal	1,386	1,428	1,492	1,549	1,619	1,664	20.1%
Sweden	2,064	2,084	2,066	2,087	2,118	2,148	4.1%
UK	11,584	11,655	11,662	11,793	11,916	11,758	1.5%
Total	81,519	81,936	82,121	83,363	83,981	83,895	2.9%

Note: includes spare parts used in repairs. Spare parts only for the light vehicle aftermarket at retail prices (cars and light commercials to 3.5t GVW); excludes labour charges. Relevant sales taxes are included; "Parts" includes tyres, accessories and lubricants.

Source: London Economics based on Datamonitor data

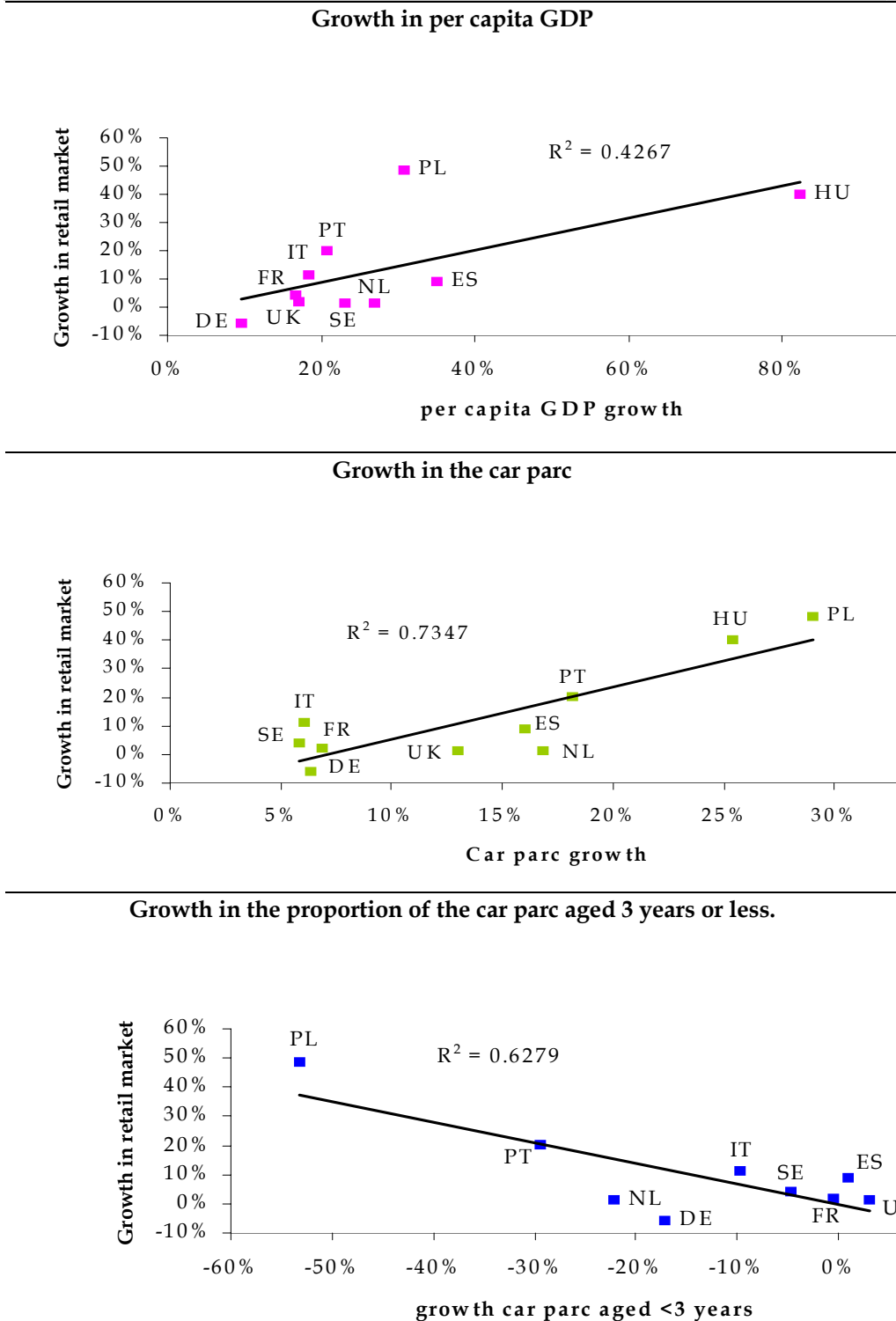
4.5.2 The drivers of the retail spare parts market

A more detailed analysis of some of the key drivers of demand for automotive spare parts is shown in Figure 144.

A strong positive relationship can be observed between spare parts demand and the increase in a country's overall stock of cars (Panel 2 of Figure 144).

A positive relationship, albeit less significant, also exists between the growth in spare parts demand and growth in GDP per head (panel 1 of Figure 144).

Finally, our analysis also shows, not surprisingly, that an ageing car parc increases the demand for spare parts. This can be seen in the third panel of Figure 144.

Figure 144: Drivers of retail demand for spare parts - 1999-2004.

Notes: the underlying data on retail market size are shown in Figure 143. In the last panel, data for Hungary was not used in the estimation of relationship.

Source: LE calculations based on Datamonitor data.

4.5.3 Evolution of the retail parts market shares of authorised and independent distributors

The data used in this section describe the retail value of the spare parts market. Since part of the retail sales occurring in the independent sector are in fact sales of parts that were purchased from authorised repairers in their role as parts distributors, the total share of the authorised sector in the parts market is higher than the figures suggest. The extent of this cross-trade at the wholesale level is said to be increasing. One of the contributing factors is that independent repairers are buying parts from authorised repairers that they are unable to source from independent wholesalers. A snapshot of the situation is provided in Figure 124 according to which between 10% and 30% of parts used by independent garages, and up to 85% of parts used by independent body shops, are sourced from vehicle manufacturers.

Moreover, it has to be noted that the figures provided in this section treat all spare parts as belonging to one market, which does not necessarily correspond to an appropriate market definition from the point of view of an anti-trust analysis. Therefore, the market position of authorised networks may be dramatically higher in certain markets (e.g. captive parts) and substantially lower in other markets (e.g. lubricants, tyres, and especially accessories).

The figures reported below thus only represent the position of the authorised network on the retail market, i.e. the market for parts sold to final consumers.

Given these caveats, the following analysis of the evolution of the retail market shares of authorised and independent distributors is to be viewed as tentative at this stage. It must be emphasised that when one looks at the retail market one should also keep in mind the market position of VMs' networks at the wholesale level (where they have a 55% market share) as indicated in section 4.3.

Authorised dealers would seem to occupy a substantial part of the market in all ten countries. But, in 2004, independents appear to account for more than 50% of parts sales at the retail level in all Member States.

Figure 145: Market share of the authorised network in the spare parts retail market (1999-2004).

	1999	2000	2001	2002	2003	2004	<i>change 1999-2004</i>
Germany	52.2%	51.5%	50.8%	50.1%	49.1%	48.3%	-4.0%
Spain	18.8%	18.3%	17.8%	17.3%	17.7%	18.1%	-0.7%
France	30.0%	29.9%	29.6%	29.5%	29.4%	29.4%	-0.6%
Netherlands	41.0%	40.5%	40.2%	40.0%	39.6%	39.2%	-1.8%
Italy	23.4%	23.3%	23.1%	23.1%	23.8%	24.4%	1.1%
Hungary	25.5%	25.7%	26.2%	26.5%	26.5%	26.8%	1.3%
Poland	21.0%	21.7%	22.6%	23.3%	24.1%	24.4%	3.4%
Portugal	24.8%	25.6%	26.1%	26.8%	27.4%	27.5%	2.7%
Sweden	40.9%	41.2%	41.3%	41.2%	41.3%	41.2%	0.4%
UK	25.6%	26.1%	26.5%	27.0%	27.4%	27.5%	1.9%
Total	35.4%	34.8%	34.3%	34.0%	33.8%	33.6%	-1.8%

Note: Includes spare parts used in repairs. Includes spare parts only for the light vehicle aftermarket at retail prices (cars and light commercials to 3.5t GVW); Excludes labour charges. Relevant sales taxes are included; "Parts" includes tyres, accessories and lubricants.

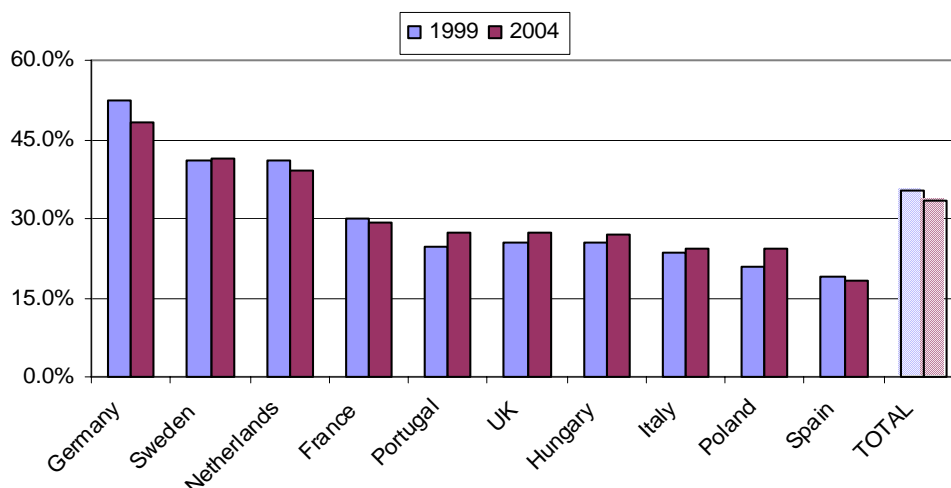
Source: London Economics based on Datamonitor data

It is interesting to note that the market share of the authorised dealers in the spare parts market has registered very little change, in any of the countries above, over the period 1999 to 2004 (Figure 145).

In most countries the changes amount to less than two percentage points. Across the ten countries, the authorised network lost 1.8 percentage points in market share over the period 1999 to 2004.

This slight erosion in market share occurred more or less continuously with no clear change in trend following the entry into force of the new BER.

Figure 146: Market share of the authorised network in the spare parts retail market, 1999 vs. 2004.



Source: London Economics based on Datamonitor data.

The drop in the proportion of retail sales through the authorised channel has been most marked in countries such as Germany and the Netherlands, where the initial market share was particularly high (see Figure 148). In contrast, their market share has grown in countries with low initial market share. The threshold 1999 market share below/above which the market share grew/fell over the period 1999-2004 is about 30%.

Further detail on the independent parts market is given in Figure 147. The data reported in this figure show that the vast majority of outlets in Germany, Spain, Italy and the Netherlands are independent outlets which do not belong to a service chain.

Service chains, including fast fit chains and autocentres,¹²⁴ have gained significant market shares in the UK and in France. In the latter case, service chains accounted for more than half (51%) of all parts sales at the retail level in 2004.

¹²⁴ Autocentres are retail areas for certain types of car parts with adjoining areas where a limited range of service and repairs are performed (see previous chapter on the car repair sector).

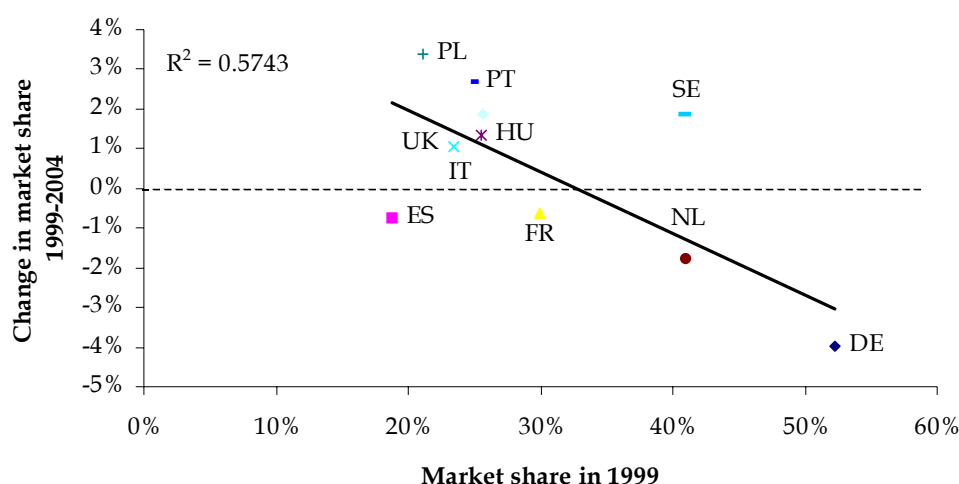
Figure 147: Split of the non-VM-authorized parts market⁽¹⁾ for selected Member States - 2004

	Germany	Spain	France	Italy	Netherlands	UK
Independent channel ⁽²⁾	78%	85%	49%	91%	85%	57%
Service chains and others ⁽³⁾	22%	15%	51%	9%	15%	43%

Notes: (1): Market share of parts sales at retail value including parts used in repairs (2): Independent repairers, independent body-shops, parts distributors; (3): Fast-fit and auto-centre chains, tyre and glass specialists.

Source: ICDP.

Figure 148: Changes in the market share of authorised networks compared with initial market shares (1999-2004).



Source: LE calculations based on Datamonitor data.

In addition to the two caveats noted at the beginning of this section, the market share figures provided in this section need also to be interpreted in the light of the shares that the authorised networks hold on the market for repair services. As authorised repairers buy an average of 87 to 95% of their spare parts requirements from vehicle manufacturers, there should be a very close correlation between their market position in the spare parts sector and their position in the repair services sector.

4.6 Innovation in distribution channels

The independent repair and service outlets operate differently from the dealers. Traditionally, independent repairers had much more frequent deliveries of parts while authorised repairers had larger stocks of parts and less frequent deliveries.

However, the *modus operandi* of the two markets is converging. Delivery systems are advancing enormously across a number of European countries. Leading edge delivery is now offering two deliveries per day to dealers and six per day to independents.

Also there is a trend to hold less stock at dealers.

The result is that there is some convergence in the way that the two types of repairers and their respective delivery networks are organised.

A 2005 study for the UK¹²⁵ investigates average parts delivery times by the aftermarket sector, finding that independent parts distributors retain an edge over authorised dealers, some of which have no same-day service at all, being still focused primarily on internal workshop sales.

The study also investigates respondents' attitudes to training investment, and finds staff technical knowledge increasingly more important than customer handling techniques. Sources of sales growth are investigated and are acknowledged to be primarily related to the increasing electronics content of vehicles. This fact seems to confirm the widely-held perception that the holding of such technical information gives authorised repairers a competitive advantage that attracts independent repairer customers. According to a survey carried out in the context of the study, nearly 40% of independent garages saw access to diagnostic information as a problem.¹²⁶

The report further shows that the independent aftermarket distributors are increasingly sticking to their core customer segments; while authorised dealers show a somewhat higher tendency to diversify, in terms of expanding trade sales operations alongside their traditional franchise service department supply role.

In this section we discuss some of the developments taking shape in the automotive parts distribution methods and channels. First we examine the market position evolution of VMs and parts manufacturers. Then we look into advances in the way the sector benefits from tools such as the Internet and logistics and delivery management systems. Finally we investigate the prevalence of buying clubs of independent and authorised repairers.

¹²⁵ The CAT Index report, issue IX, August 2005

¹²⁶ *Ibid.*, p. 103.

4.6.1 Stand-alone authorised parts distributors

As we have seen in Figure 128 and Figure 129, the number of stand-alone authorised parts distributors is still very small, particularly when seen as a percentage of the overall number of authorised parts distributors.

However, in terms of numbers, there have been noticeable increases in some countries. In addition, we also see increased interest by vehicle manufacturers in the car parts distribution businesses, with some measure of success as the turnover figures in Figure 131 attest.

A series of initiatives is taking shape across Europe and altering the structure of the two channels for parts distribution.

For example, although franchised dealers constitute the normal channel through which manufacturer parts are distributed to the independent sector, by the end of 2005, in what is believed to be the first deal of the sort between a manufacturer and an independent spare parts supplier, Euro Car Parts was appointed franchised parts distributor by Citroën. Traditionally, Citroën issues separate contracts for sales, servicing and spare parts supply and therefore the deal was not entirely unexpected.

In sum, although the number of stand-alone authorised parts distributors is still very small, certain VMs, for strategic reasons, have expressed a clear interest on both appointing new authorised parts distributors and even entering the business themselves.

4.6.2 Evolution of parts manufacturers' own distribution networks

The consolidation process in the spare parts wholesale business demands new, complete concepts from parts manufacturers.

Where a few years ago there was a large number of small and medium-sized automotive parts retailers, the trend is changing more and more towards a few extremely price-competitive wholesalers, who expect parts manufacturers to provide not only a quality-oriented range of original parts, but also a high degree of product competence, added value in the form of complete marketing and logistics concepts as well as technical service.

One example of a prominent parts manufacturer that has entered the parts distribution business is provided by Hella. One of Hella's answers to the new market conditions is the "Service Partner" concept started in the year 2000, which currently has 4,348 partner garages in Europe. Under this program, Hella provides a wide range of services, such as technical information, technical training, special equipment for test and fault diagnosis, technical hotline, etc, which allow the garages to provide the advanced technical services expected by the market place.

4.6.3 Internet sales

The Internet is also increasingly being used to manage the distribution of spare parts.

- For example, in France, Renault has developed an Internet portal for sub-dealers and independent repairers to order parts from its main dealers.
- European car parts distribution networks such as GOLDA and NORAUTO make extensive use of Internet-based systems to provide on-line exchange between parts suppliers and distributors/retailers.

The importance of fast and seamless communication among the many different market players in the aftermarket distribution of parts cannot be over-emphasised. Communication capabilities are greatly enhanced by the technologies made available by the Internet.

Four European marketing groups (ADI, ATR, GAU, TEMOT) and 32 suppliers have decided in 2002 to create the Common Aftermarket Protocol (CAP) with a view to elaborate common standards for electronic communication between automotive aftermarket trade and parts manufacturers. This standard, open to all companies involved in the independent automotive aftermarket, is based on Internet technology and on XML language.

Parts manufacturers are also using the Internet to support their aftermarket customers. In Germany, for example, Hella¹²⁷ claims that a total of 70 percent of parts orders are now processed online.

For wholesalers, the use of electronic parts ordering and dispatching systems yields a range of benefits such as time saved for order, delivery and payment processing, reduced administration, lower error rates and fewer incorrect deliveries, as well as significantly reduced costs for order processing and storage.

4.6.4 Changes in logistics and stocking systems and requirements

The development of powerful logistics management software programmes and the advent of parts and truck fleet tracking devices has brought about major changes in the field of parts logistics¹²⁸.

Logistics represents an increasingly crucial challenge for actors in the parts market, for which four principal developments can be held responsible:

¹²⁷ From <http://www.hella-press.de/>

¹²⁸ This section draws on the article "Aftermarket Logistics - The fast show", Institute of the Motor Industry, October 2005. <http://www.motor.org.uk/magazine/Aftermarket-Logistics--The-4420.shtml>.

- An increase in the number of parts, due to increasing product differentiation and shortening model cycles.
- The increasingly international nature of parts sourcing.
- Increasing cost pressures.
- Increasing environmental awareness and regulation (for reverse logistics).

In addition, certain characteristics inherent to the parts market add to the complexity of the challenge it poses for actors in the supply chain.

One feature that plays a pivotal role in shaping the logistics of the market can be found in the typology of the parts themselves. Parts can be divided into two categories, each requiring a different logistics approach:

- First, so-called distress items, such as exhausts, batteries and tyres, and all parts for mechanical repair, which need to be replaced upon breakdown.
- Secondly, items such as oil filters, spark plugs and brake pads, which are usually replaced in the course of routine servicing.

In terms of logistics, the first group of items is considerably more demanding. Not only are distress parts often bulkier and heavier, and therefore more expensive to store, they also typically need to be replaced at times that are inconvenient for the customer.

Thus, while the cost savings imperative dictates that stocks be kept to a minimum, this has to be weighed against customer demands for prompt service and reduction in waiting times.

In contrast, the second group of parts poses less of a challenge as they are typically delivered at set time intervals, due to their demand being more predictable.

These differences are reflected in the logistics structures that have developed around different types of parts.

In the case of distress items, where the timing of delivery to the repairer is the pivotal consideration, there are fewer layers between parts producers and their end customers. Increasingly, and especially in the case of repairer groups, direct supply relationships between repairers and parts producers have been established.

In contrast, the supply chain of parts that are less time-sensitive typically still has several layers of distribution between producer and repairer.

Reverse logistics, which involves the returning of used parts to recycling facilities, play a role regardless of the type of part, and represent an increasing challenge for all actors in the industry.

Attempts to streamline the aftermarket operations in the face of a rapidly evolving market environment, while addressing the trade-off between minimising storage costs and ensuring availability of the necessary parts at

the time and the location of need, have led to a number of developments in aftermarket strategies.

The most important ones are:

- The centralisation of warehousing capacity in a few locations in Europe; and,
- An increased use of independent logistics companies.

These two developments are interrelated in the sense that fewer warehouse locations require an increase in the number of deliveries, in which logistics specialists have a competitive advantage.

Consequently, both strategies are adopted by VMs and OESs alike. Recent examples of VMs' relationship with specialist logistics companies are:

- Hyundai UK, which outsourced to its logistics operator Lex the following activities: inventory management, demand forecasting, product management, reverse logistics and dealer training;
- DaimlerChrysler UK, which contracted TNT to handle all its parts logistics in the UK;
- BMW, which uses Exel for the management of global parts distribution for the Rolls Royce brand.

Another new development in aftermarket logistics concerns the role of VMs' authorised networks. Indeed, the decline in the margins on new car sales has contributed to a renewed interest in the aftermarket on the part of VMs.

As a consequence, many VMs are attempting to increase their sales to the independent aftermarket, for example through schemes like Opel's Trade Club or Ford's Parts Plus. These schemes allow independent garages to buy original spare parts from manufacturers at favourable conditions, similar to, or on a par with those enjoyed by members of the authorised network. Audi, VW and Renault envisage similar schemes.

For the time being, VMs continue to rely on the efforts by their authorised networks for distribution and logistics. However, the performance of authorised distributors in terms of delivery speed pales in comparison with independents.¹²⁹

Commentators, such as the British Institute of the Motor Industry, expect that VMs will increasingly attempt to bypass their own authorised networks in order to sell to the independent aftermarket directly or via other independent channels. However, it has to be noted that in doing so they would remove an

¹²⁹ According to the CAT Parts Distribution Trend Index, an authoritative source on the UK aftermarket, the average time it takes authorised dealers to deliver parts is 15 hours, compared with just over one hour for independents. Moreover, 17% of authorised dealers do not offer delivery service at all. According to CAT, this difference is evidence that "the typical parts department of a franchised dealer is geared towards supplying to the dealer's own servicing operation and hence ordering parts for next day delivery is common practice". Source: Institute of the Motor Industry (2005).

important profit centre from their authorised network and thus jeopardise its ability to invest properly in vehicle sales and repair facilities.

Overall, the field of the aftermarket parts distribution is marked by a high degree of dynamism and innovation. The high profitability of the aftermarket compared with the market for new cars, makes it an increasingly important area for the competition between parts producers, VMs, and independent distributors.

4.6.5 Involvement of dealers

Dealers are responding to the challenge described above by innovating.

Associations of dealers can take steps to integrate downstream logistics and for parts storage and sourcing. In fact dealer groups may play a key role in reshaping the parts supply chain, although this may require the implicit or explicit agreement of the vehicle maker. Frequency, speed of delivery and range of parts offered are important components of any parts supply offering, but “service” in this context includes also technical information about the parts, how to install, reset systems, diagnose faults, etc.

Large dealers and dealer groups have begun to move upstream on the supply chain to parts distribution and wholesaling.

- An example is Lookers, a large dealer group in the UK, which has acquired FPS Distribution thereby entering the vehicle-parts-wholesaling sector and broadening their revenue stream from vehicle after sales. FPS is a UK distributor of “distress” auto parts, offering nationwide “just-in-time” delivery to the independent distributors, who then supply spare parts to their customers, the garages and body-repair shops.
- Another example is provided by Reg Vardy, another large dealer group in the UK, which developing the concept of providing independent garages with regional “all makes” centres with all replacement items. These centres will act as a one-stop shop for all the marques it represents at its dealerships.

4.7 Evolution of competitive environment

In this section we discuss the evolution of the competitive environment in the EU automotive spare parts market.

There are several levels at which it may be relevant to discuss competition.

At the very upstream part of the supply chain, parts manufacturers and vehicle manufacturers' parts compete with each other for wholesale clients.

One tier below, there is competition between the authorised and the independent wholesale distribution networks. Players in this tier compete for the business of retailers such as parts retailers and authorised and independent repairers.

Finally, at the very downstream end of the supply chain, a number of players compete in the sales of parts to the final consumer. These include parts retailers (for do-it-yourself repairs) and authorised and independent repairers.

4.7.1 Competition at the upstream end of the spare parts supply chain

The nature of competition at this stage of the supply chain is the result of the interaction of two main forces. While the driving force is arguably the set of strategies adopted by automobile assemblers, the ability of components suppliers to influence the strategies chosen by assemblers plays also a relevant role.

The accepted view states that automobile assemblers retain all the power, as opposed to components manufacturers that have to simply respond to their pressures; although the argument is fair, there is more to the story.

For instance, Governments, through their ability to impose regulations, continue to be main actors and key players in determining trends and developments of the car sector in general, both from a geographical and organisational point of view.

In order to provide itself with materials and components, the automobile industry has adopted organisational arrangements which differ both across companies and across time.

- An example of such a change is provided by some of the major US VMs (GM and Ford) who until the recent past produced the majority of required components "in-house", within their vertically integrated production chain; then spun-off their former in-house component divisions into freestanding, independently-owned companies – Delphi and Visteon respectively – that had to compete for business with their former "mother" companies. More recently the strategy of total separation is being toned down to create tighter links with the

suppliers and a closer alignment of production and logistics to the needs of the vehicle assembler.

- Another example of a similar organisational structure is provided by Daewoo, which, according to a 2002 interview,¹³⁰ purchases a very large share of materials and components at arm's length from external, independent suppliers. Daewoo decided to produce only those parts of a vehicle that affected its external look (such as panels) or performance (engines) itself, thereby outsourcing as much as 90% of the total cost of the vehicle.
- In the middle of this spectrum we can find major Japanese producers, such as Toyota, that developed strong long-term relationships with geographically close independent or semi-independent suppliers; this particular behaviour was eased by the existence of the keiretsu system.

Nevertheless, in almost all cases, VMs and suppliers are distinctive and functionally separate. The industry-wide standard agreement between VMs and suppliers required the former to specify design and engineering requirements that the latter had to meet at an agreed price.

Through time, price became the key determinant of the relationship; suppliers and VMs grew separate in their functions and their relationship distanced as the search for convenient components and materials became more important and widely spread.

Moreover, technological progress lowered transportation and communication costs, making geographical distance a marginal factor in the assembler-supplier relationship.

Instead, in line with the concept of "just-in-time", a long-term commitment that allowed VMs to closely and constantly consult the supplier, to make sure that design requirements were invariably updated and met, to shorten development and delivery cycle, became highly desirable for VMs.

But, not all organisational changes have been in the direction of outsourcing. In some cases, the reverse has occurred, because of unfavourable market conditions or quality concerns.

VW, for example, has started once again to manufacture its own seats in its Eastern European operations, partly because the seat manufacturing segment had become so highly concentrated and the number of potential suppliers correspondingly reduced.

It is a mistake, therefore, to expect a unidirectional and irreversible trend towards increased outsourcing across the board. Not only do firms need to identify and retain their major core competences but also they must constantly monitor and react to the competitive situation in the parts markets.

¹³⁰ As reported in *Global Production Networks in Europe and East Asia. The Automobile Components Industries*, GPN Working Paper 7, May 2003

The use of outsourcing by VMs led to a shift of responsibility (in terms of aspect of components, module, design and engineering) from assemblers to suppliers; this change indeed contributed to increase the potential and the bargaining power of cost-effective and innovative supplier firms, as long as they developed technologies not possessed by others.

Two examples of such strategies pursued by components firms can be found in Bosch and GKN.

- Bosch, the world's third largest automobile components manufacturer, generates more than 60% of its sales from the automotive equipment division. Bosch's automotive division ranges from engines to transmissions, from braking to steering systems; the firm now enjoys a comparatively high degree of power and freedom from the assemblers' demands and pressures. Rather than "following the assembler", Bosch's approach, based on the building of a global network in which aftermarket sales are fundamental, has enabled the company to establish itself as the only alternative available to assemblers in some product areas, such as diesel fuel injection systems.
- More specialised, but similarly successful, is the case of GKN that has as much as 41% of the world market for constant velocity joints (CVJs) and dominates the world market of driveshafts. In this market, GKN's main competitors are not so much the other suppliers but, rather, major assemblers that produce this particular component on their own. GKN either produces and sells driveshafts to assemblers or licenses the VMs to use its technology. Quite recently, GKN took over the production of the component for both Nissan in Japan and GM/Opel in Germany.

The trend of alliances and consolidation observed worldwide across all sub-sectors of the automotive branch is extending to automotive parts and original equipment suppliers. For example, PwC reported recently that 274 components firms were acquired in 2002 and 262 in 2003.¹³¹ This is from a sample of mostly publicly quoted Tier-1 firms and the actual number is likely to be much larger if the acquisitions of numerous small car parts suppliers are also taken into account.

The consolidation of suppliers has had the obvious effect of reducing the number of suppliers on which manufacturers can call for any given set of components.

Within Europe and North America, for example,¹³² acquisitions have given Johnson Controls and Lear a near duopoly in seating systems supply. Given

¹³¹ PwC (2004).

¹³² Example cited in "Motor vehicle industry trends affecting component suppliers" ILO Sectoral Activities Programme, Geneva, 2005

the integration of airbags in some seats (and in the case of some expensive models, as many as nine electric engines installed in a single driver's seat to effect multi-directional movement and seat temperature control), the achievement of scale has brought undoubted benefits to the surviving companies.

A concurrent trend towards greater outsourcing of supplier responsibilities by vehicle manufacturers is currently encouraging a different form of consolidation more akin to the partnerships and shareholding alliances that exist among many vehicle manufacturers.

A case in point is that of "front-end modules". These are increasingly being sourced by vehicle manufacturers as a single product while, in the past, they were assembled from individual components by the manufacturers themselves. The production of front-end modules requires considerably diverse specialist know-how, including lighting, heating and air-conditioning, and shock-absorbing panelling. The demand for complex parts such as these modules has prompted the creation of joint ventures as, for example, that by German firms Hella and Behr with French firm Plastic Omnium.

This trend towards more extensive responsibilities being taken on by Tier-1 suppliers may have a negative impact on the independent Tier-2 suppliers. As a result of Tier-1 concentration, one is likely to see downward pressure on the prices that Tier-2 suppliers are able to charge their Tier-1 customers, by virtue of the latter's increased buying power.

4.7.2 Competition at the distribution level

The distribution level of the part supply chain is crucially important in determining the relative market strength of intervening players.

To understand the relative strength of respective competitive positions one needs to understand which factors clients of this market consider as important.

As already noted, service is crucial and often seen as more important than price. "Service" in this context means speed and efficiency of parts delivery structures, and support services offered with parts such as technical support and systems to help with diagnosis and repair.

To assess whether competition is changing at the distribution level, we discuss the following points:

- Are OESs moving to compete with VMs distribution networks?
 - Are OESs benefiting from marketing parts as "original"?
 - What is the impact of design protection laws?
 - How do prices between captive and non-captive parts differ?
 - How do parts prices differ across different retail channels?
-

- Are consumers aware of the types of parts used to repair their cars?
- What is the role of insurance companies in the selection of spare parts used to repair a car?
- What is the impact of the repairers' scope to source parts from alternative suppliers?
- What is the effect of the relationship between authorised repairers and independent repairers regarding the diffusion of technical information?
- What are the views of car parts manufacturers?
- What are the views of independent distributor associations?
- What are the factors affecting intra-brand competition at the distribution level?

Are OESs moving to compete with VMs' distribution networks?

In some instances, parts manufacturers have moved into parts distribution (e.g. Hella). This, however, does not appear to be a widespread trend among major parts manufacturers.

Our survey of parts manufacturers shows that about half of respondents have increased their sales to VMs over the period, and for about half these have decreased.

In those instances where sales to VMs are decreasing, we observe an increase in sales to independent parts wholesalers and a concomitant decrease in sales to the independent aftermarket.

Are OESs benefiting from marketing parts as "original"?

We have received the views from a number of associations of independent parts distributors on the impact of the new definition of original spare parts set out in the new BER. At present there appears to be no uniform opinion on this matter.

On the one hand it is reported that the new definitions offer better marketing opportunities for parts manufacturers, particularly for those who do not produce the respective part as component or equipment.

It is also expected that the change will contribute to an increase in consumer awareness with regards to the relationship between origin and quality of parts. Some associations report that it is slightly easier to sell replacement parts and to have access to authorised repairers.

However, the associations agree that there are as yet no significant changes that can be reported.

Specific comments from the associations are reported below:

- The association of the wholesale sector of the Society of the Irish Motor Industry (SIMI) believes strongly that the new BER is neither applied nor respected by the franchised sector in the manner in which parts are advertised as “original” or “genuine”. SIMI members believe that VMs’ resources applied to advertising have impeded the objective of creating a market whereby the quality of the part and not its distribution channel is the major factor in determining consumer perception and purchase decisions.
- The Italian Aftermarket association ADIRA (Associazione Distributori Indipendenti Ricambi Autoveicoli), reports as well that the sale into the authorised network is still very difficult. Authorised dealers and garages buy from the independent aftermarket only as a last resort, for example, if the delivery from the authorised channel does not arrive or takes too long.

In general, the independent parts associations who replied to our questionnaire, which include those of Denmark, Finland, France, Germany, Ireland, Italy, Latvia, Netherlands, Poland, Spain, Switzerland, and the UK, deplored the fact that parts suppliers do not make sufficient use of the new definitions for the advertisement of their aftermarket products. The main reason is probably the fear that such actions would be considered “unfriendly” by the VMs.

In Germany, there is an additional difficulty because advertising “original parts” as such is legally not possible for anyone other than the OES. Due to German fair trade legislation, such an advertisement would be considered as misleading or fraudulent since in the perception of the average consumer, up to now, “original parts” are linked to vehicle makers’ parts. As such, parts suppliers in Germany must look for alternative wordings for their advertisements.

A related issue regards the quality certificates that parts manufacturers are, according to the new BER, able to issue to certify the quality of their parts. It is generally noted by the associations of independent parts distributors contacted, that the provision and use of quality certificates has not materialised as a feature of the aftermarket. The new BER does not lay down any particular wording requirement, and as a result, in practice, there are still some uncertainties about the wording of such certificates. In particular, there is no consensus on whether each quality certificate must refer to the specific quality requirements of the brands for a specific model, or a general certificate would be sufficient.

It is reported that in Germany, more than 70 parts producers have issued quality certificates. They are available only from the German independent parts distributors association, Gesamtverband Autoteile-Handel (GVA) and, so far, show relative low use by authorised repairers.

For authorised repairers needing to justify the non-manufacturer supplied car parts on their shelves, the quality certificates are a useful tool because they reverse the burden of proof in favour of the authorised repairers. Parts

producers, however, do not undertake intensive marketing concerning the parts quality. Again, the reason may be a certain fear of “provoking” the vehicle manufacturers.

Impact of design protection laws

Vehicle manufacturers benefit from design protection and other intellectual property rights protection linking the original equipment and the aftermarket in complex ways:

- There are currently a large number of intellectual property rights and patents that are valid both in OE and aftermarket segments;
- Parts for both markets are often produced by the same companies, using the same tools, which opens the possibility of transferring costs/profits between market segments.

Parts for car repairs are manufactured by different parts manufacturers. As a rule, the respective vehicle manufacturers themselves produce bodywork parts but a large fraction of these, such as complex lighting installations and car glass are usually produced by suppliers who manufacture these products both for initial equipment as well as for replacement.

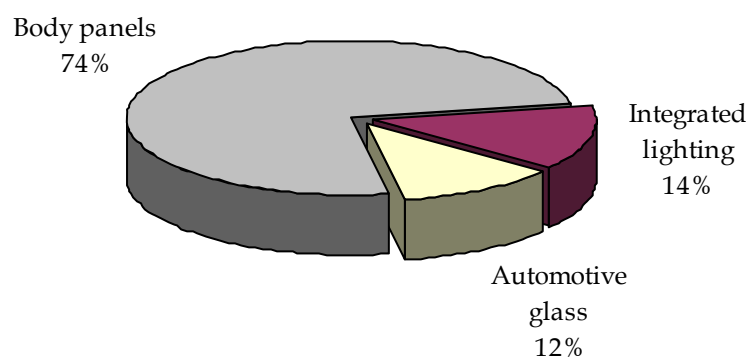
Visible parts for replacement requirements in particular are distributed through the supply chains of the vehicle manufacturers, but also through independent parts wholesalers.

For all garages, whether franchised or independent, the latter channel in principle represents a source to purchase parts on favourable terms. If identical parts are sold through the manufacturer’s channels, prices are usually substantially higher.

At the present time, EU Member States apply different regimes of design protection for visible car spare parts. This is unsatisfactory in terms of internal market. In effect, there is not a single market for the design-protected spare parts segment of the automotive industry.

Currently, a design directive is under discussion that seeks to restrict the right of manufacturers to limit visible parts copying for aftermarket purposes. The adoption of the new legislation on the EU-25 countries may encourage further incursions into vehicle parts aftermarket by non-OE suppliers.

“Visible” replacement vehicle parts are parts such as bonnets, bumpers, doors, lamps, rear protection panels, windscreens and wings. The proposal would amend the legal protection of designs Directive (98/71) by removing Member States’ option to maintain design protection for such items. The proposal would allow independent part manufacturers –not linked to the producers of finished vehicles – to compete throughout the EU market for visible replacement parts, potentially worth some €10 billion annually. Non-visible parts, like engine or mechanical parts, are not concerned by the proposal. Neither are components in new vehicles.

Figure 149: Market for “must match” spare parts, EU15.

Source: ECAR.

In some Member States, free competition has a clear impact on parts' prices. In others, VMs exert a monopoly and price accordingly. A survey by the Comité Européen des Assurances (CEA)¹³³ shows that in such “monopoly” countries, prices for visible parts were on average 9.8% higher.

¹³³ Comité Européen des Assurances, “Spare Parts Price Survey”, January 2004.

Figure 150: Price differences between suppliers in Germany, 2003.

Car model/part	Price (€)		Surcharge on consumer	
	VM	Independent market	€	%
<i>BMW 316 i (E36)</i>				
Front wing	130	40	90	223%
Bonnet	236	117	119	102%
Front lamp	268	226	42	19%
<i>Fiat Punto (176)</i>				
Front wing	75	51	24	48%
Bonnet	225	125	100	81%
Front lamp	116	91	25	28%
<i>VW Golf III</i>				
Front wing	91	29	62	212%
Bonnet	197	109	88	80%
Front lamp	96	81	15	18%
<i>Source ECAR.</i>				

The differences in prices observed in Figure 150 are striking.

The example of Germany, depicted in Figure 150, is by no means unique in relation to the average price differences between design protected and non-design protected parts.

A recent study by the European Commission on the impact of design protection laws has concluded that “all car parts that are visible externally are significantly more expensive in countries with design protection for spare parts than in countries without such protection. These differences range from 6.4% for rear doors to 10.3% for rear wings.”¹³⁴

The true, effective impact of the design protection of body-integrated spare parts can only be assessed properly if the unique structure of the automotive spare parts and repair market is taken into account.

Despite modest volume of self-production, as a result of purchasing parts from their suppliers and wholesaling them, VMs have reached a dominant position in the distribution of these specific spare parts. A realistic estimate is that at present vehicle makers in the European Community control about 88% of the sub market in vehicle body spare parts.¹³⁵

¹³⁴ European Commission, “Proposal for a Directive of the European Parliament and of the Council Amending Directive 98/71/EC on the Legal Protection of Designs”, 2004, http://europa.eu.int/comm/internal_market/indprop/docs/design/sec-2004-1097_en.pdf.

¹³⁵ FIGIEFA estimate.

As regards visible, must-match spare parts, vehicle makers produce only body panels themselves. They source both lighting and automotive glass. These parts are purchased, for both the assembly of new cars ("OES") and spare parts supply ("OES"), from renowned parts producers - such as Bosch, Hella (Maesa), Valeo, Pilkington, St. Gobain ("Sekurit") and Asahi. These parts producers can find themselves in the position of being alternatively original parts ("OE")-suppliers (if they received the first equipment contract for a vehicle model) or in the position of being a "non-OE" parts supplier, like any other independent parts producer (in the event that they did not obtain the first equipment contract).

This difference at the supply side has a direct bearing on the competitive situation in spare parts: as regards body panels, vehicle makers compete against "independent", medium-sized and privately owned parts producers, as regards lighting and automotive glass they primarily compete against their own suppliers.

The independent wholesalers act as distributors of the parts industry. Their function is to bundle the offer of various parts producers (almost all of them being specialised in certain product lines) and to provide a full range of spare parts for all vehicle marques and all vehicle models.

In this way, they are an effective and economical source of supply for non-franchised repair shops, body repair shops, garages, self-repairing fleet-owners (including municipal service units) and - to a lesser degree - franchised car dealers. To the extent that parts producers are prevented by design protection to sell their products in the aftermarket, wholesalers lose their source of supply.

A similar threat is looming for the independent repair shops. Procurement from parts producers and their distributors is hindered by design protection regulations. Captive parts have to be bought from authorised car dealers with which they are in direct and fierce competition. When buying there they do not receive the same or at least a similar trade discount as the car dealer enjoys; instead, they are supplied at retail prices or at tariffs which at best reach 30 % - 40 %¹³⁶ of a car dealer's margin but are by no means competitive.¹³⁷

An example of captive and non-captive parts pricing

In the figure below we present a comparison of price evolution for captive and non-captive parts. The left-hand column lists the models that were included in the sample. Figures for 1999 refer to the price of the named car

¹³⁶ Also according to FIGIEFA.

¹³⁷ Recent developments suggest that this situation may change in the future. For example, the VW-owned independent repairer franchise Stop + Go has begun offering its members the same conditions as authorised repairers with respect to VW and Audi parts.

part, for that particular model, in 1999, and similarly for 2004. The ratio column represents the ratio between 2004 prices and 1999 prices.

A final figure was computed for average price increases for each type of part, weighting the variation in price by the value of the part and the average frequency with which each part is replaced.

Figure 151: Price evolution of body parts and non-body parts - France 1999-2004.

		1999	2004	ratio		1999	2004	ratio
Mégane Scénic	Bumper (front)	175.32	194.22	1.11	Shock absorber	53.72	49.90	0.93
Clio		182.94	188.43	1.03		53.72	53.84	1.00
Safrane		300.61	275.79	0.92		92.54	92.93	1.00
Saxo		167.04	174.06	1.04		45.51	46.51	1.02
Xsara		146.34	150.07	1.03		50.56	56.58	1.12
Evasion		306.42	314.19	1.03		82.17	123.51	1.50
206		94.44	154.01	1.63		44.24	42.64	0.96
309		114.39	130.35	1.14		63.20	60.50	0.96
406		232.22	276.14	1.19		56.87	54.35	0.96
Mégane Scénic	Bonnet	182.94	185.94	1.02	Water pump	68.75	70.65	1.03
Clio		160.07	175.61	1.10		68.60	70.65	1.03
Safrane		320.14	343.25	1.07		173.39	118.13	0.68
Saxo		160.87	174.97	1.09		68.60	65.54	0.96
Xsara		179.19	194.89	1.09		68.60	65.54	0.96
Evasion		161.48	216.62	1.34		55.43	69.49	1.25
206		150.92	178.12	1.18		68.60	62.57	0.91
309		198.63	226.35	1.14		73.94	74.54	1.01
406		225.80	325.96	1.44		68.60	75.99	1.11
Mégane Scénic	Wing (front)	78.51	85.00	1.08	Clutch set	132.33	129.00	0.97
Clio		60.83	72.25	1.19		132.42	129.00	0.97
Safrane		131.11	122.63	0.94		242.55	249.26	1.03
Saxo		65.65	70.00	1.07		127.64	163.00	1.28
Xsara		77.91	83.08	1.07		125.78	153.00	1.22
Evasion		84.07	89.65	1.07		255.04	268.88	1.05
206		62.43	74.46	1.19		141.32	186.85	1.32
309		69.04	79.53	1.15		149.85	186.85	1.25
406		114.98	131.15	1.14		166.86	207.05	1.24
Mégane Scénic	Door (front)	218.61	250.26	1.14	Brake discs	57.91	57.91	1.00
Clio		228.67	242.24	1.06		122.00	52.93	0.43
Safrane		323.99	364.23	1.12		122.00	114.34	0.94
Saxo		185.53	198.30	1.07		61.62	66.31	1.08
Xsara		218.59	227.40	1.04		65.60	73.64	1.12
Evasion		269.45	280.31	1.04		101.13	134.09	1.33
206		160.07	191.76	1.20		71.42	66.30	0.93
309		173.55	197.16	1.14		71.42	66.30	0.93
406		292.21	336.60	1.15		88.49	66.30	0.75
Mégane Scénic	Grill	47.11	40.00	0.85	Brake pads	38.11	38.42	1.01
Clio		23.15	50.00	2.16		38.11	38.42	1.01
Safrane		434.48	512.80	1.18		69.79	54.88	0.79
Saxo		89.27	100.53	1.13		43.61	47.22	1.08
Xsara		11.80	12.27	1.04		51.81	55.84	1.08
Evasion		171.40	180.09	1.05		74.58	80.74	1.08
206		36.59	43.20	1.18		48.04	51.17	1.07
309		51.70	58.91	1.14		34.13	38.42	1.13
406		51.76	59.05	1.14		48.04	51.17	1.07

Note: Weighted based on estimated volume of sales.

Source: FEDA (Fédération des Syndicats de la Distribution Automobile).

The figure above is interesting in that it shows a much stronger average price increase in body parts other than on mechanical parts. This is relevant because body parts are supplied by car manufacturers in an effective

monopoly situation due to the protection of designs legislation, while mechanical parts are open to competition.

As one can see, there is a large difference between price evolutions for each category: while the average price of mechanical parts registered practically no increase over the period, the price of body parts increased by 14%.

Clearly this is only a very small sub-sample of the spare parts market. The number of spare parts in the aftermarket is in the order of tens of thousands so it would not be practical to carry out an analysis at that level of detail.

In addition to the information on parts prices, FEDA has also provided an estimate of the manufacturer rebates to dealers for each of the two categories of parts. According to FEDA, the rebates given to dealers in the captive parts are of the order of 12 to 30%, while those offered in competed parts are in the range of 30 to 55%.

Although one should not read too much into such a small set of indicators, it is still worth noting that, at least with respect to some groups of parts, three trends can be observed:

1. In competed parts, car manufacturers choose a quite conservative pricing policy.
2. In the captive segment of market, manufacturers are increasing prices considerably, possibly to compensate for lower profitability in the other segment but also because they can increase prices without affecting their sales in any significant way; and,
3. Manufacturers continue to be able to resort to margins, payments, bonuses, rebates and such schemes to influence, among other things, dealers' choice between VM-supplied parts and those supplied by the independent market.

While this sub-section has focused on price differences between captive and non-captive parts, the next sub-section focuses on price differences for similar parts across different distribution channels.

Price comparison: parts prices across different retail channels

IMI, the Institute of the Motor Industry in the UK, has collected information on the comparison of prices for a sample of parts retailed across different channels. The results are shown in Figure 152 below. It is striking that:

- Price differences for all types of spare parts are large, and
- Franchised dealers are able to sell spare parts at a considerable premium.

The premium charged by franchised dealers, which exceeds 500% in one case, and 150% in all examples reported, suggests that consumers are prevented from switching to cheaper alternatives. Although it is not possible in the absence of cost data for the different retail channels to determine differences in mark-ups, the fact that such price differences persist lends support to the

view that behavioural and structural factors exist (such as inertia on the part of consumers, or an inability on the part of independent garages to compete on an equal footing) that lead to a situation in which members of the authorised network enjoy a competitive advantage. This seems to imply that independent repairers are unable to compete on equal terms with authorised repairers. In a competitive market, such price differentials could not be maintained without authorised repairers losing substantial market share. Instead, as shown in section 3.4.1, the relative market positions of authorised and independent repairers have not changed significantly over the reference period.

Figure 152: Price differentials across different retail channels for selected spare parts, UK (2005).

Model	Part	Authorised dealer	Independent garage	High street motor accessory retailers	Difference between highest and lowest price
Honda CR-V	Wheel bearing	£135.13	£116.33	£21.88	517%
Vauxhall Astra	Wheel bearing	£145.70	£111.63	£25.26	476%
Toyota Previa	Shock absorber	£68.29	£80.82	£16.94	303%
Nissan Primera	Shock absorber	£61.57	£89.45	£22.40	299%
Peugeot 306	Shock absorber	£79.43	£56.40	£21.88	263%
VW Golf	Air con	£528.75	£450.31	£169.42	212%
Renault Mégane Scénic	Air con	£233.70	£352.50	£130.54	170%
Mercedes E Class	Air con	£630	£432.13	£234.04	169%

Source: Warranty Direct (2005)

Consumer awareness of parts used to repair their vehicle/ consumer participation in decision-making

Obviously, it would be interesting to gauge the consumers' awareness of the different types of parts available for a certain task and her/his involvement in the selection of the part. Anecdotal evidence suggests that the consumer is not really involved and that the repairer is the main decision taker. It would be desirable to complement such anecdotal evidence with more robust, survey-based evidenced but, unfortunately, at the present time we are not aware of such studies in Europe.

Insurance companies' role in the choice of spare parts during crash repair

The proportion of non-VM-branded parts used in car body repair in the UK, has increased to 22% of all replacement parts used by body shops in 2003. This finding, based on a survey of body shops which is part of a larger study on the car body repair market by independent automotive analysts MFBI¹³⁸, reveals a much larger increase in non-VM-branded parts usage following the initial introduction of the new BER in October 2002, which brought about a more competitive market for replacement parts. Prior to this, the usage of non-OE parts in car repair had been less than 10%.

The increase in the usage of this type of parts in car repair is therefore a significant threat to the vehicle manufacturers. Much of the increase in non-VM-branded parts usage by body shops has been at the behest of insurance companies who pay for 76% of all accident repairs in the UK. These parts provide a much cheaper alternative to the vehicle manufacturers' branded OES parts, and so insurance companies have been specifying their use in a higher proportion of repairs in an attempt to reduce the cost of accident insurance claims.

Although the increasing usage of advanced and more crash-resistant materials such as high-strength steels means that cars incur less damage in low speed impacts than before, if a car is involved in a major collision, the increasing technical complexity of new cars means that the repair cost of heavily damaged cars is increasing due to the high cost of replacement parts.

Data from the MFBI's report shows that the proportion of accident-damaged cars written off as being too expensive to repair by insurance companies has increased by 39% since 1998 to reach 0.59 million cars compared with 5.69 million cars that were repaired.

Authorised repairers' freedom to source parts from alternative suppliers

Under the new BER, car manufacturers cannot require their authorised dealers or repairers to buy more than 30% of their overall parts requirements from the VM's supply network. For the remaining share, car manufacturers often specify in the contracts with their dealers and authorised repairers the type of parts and the conditions under which they can be used. One condition that we have often found in the contracts that we received from the manufacturers is that the repairer will be liable for any damage to the car or loss to the manufacturer that may result from the use of a non-manufacturer-supplied spare part.

A summary table of the conditions that we found in the contracts that we received is provided in the table overleaf.

¹³⁸ The Car Body Repair Market in the UK, MFBI, 2003

Figure 153: Manufacturer restrictions on use of non-manufacturer-branded spare parts.

Manufacturer	Brand	Current	Prior
BMW	BMW	mfr-OE exclusive for mfr-owned and original parts only for all service	
	Mini		
PSA	Citroën	mfr-OE exclusive for warranty service and all service paid for by manufacturer. For other service must use original parts or of equivalent quality	Requirements were different before new BER
	Peugeot		
General Motors	Chevrolet (Daewoo)	mfr-OE exclusive for warranty service	The onus was on repairer to prove that non-Chevrolet parts were of equivalent quality – this requirement has been removed
	Opel/Vauxhall		Under previous BER, full use of allowed restrictions
	Saab		
Ford	Ford	mfr-OE exclusive for warranty service Volvo and Jaguar require 30% manufacturers' parts purchase. Prohibition on parts of non matching quality	No change over time except for the 30% clause, introduced after the new BER
	Jaguar		
	Land Rover		
	Mazda		
	Volvo		
Honda	Honda	mfr-OE exclusive for warranty service and not allowed to use or sell parts that do not match manufacturer's quality	No change over time
Hyundai	Hyundai	mfr-OE exclusive for warranty service	-
Fiat	Alfa Romeo	mfr-OE exclusive for warranty service	mfr-OE exclusive for warranty service and all service paid for by manufacturer. For other service must use parts of equal or superior quality and give explicit notice to customer
	Fiat		
	Lancia		
Daimler Chrysler	Mercedes Benz	mfr-OE exclusive for mfr-owned. mfr-OE exclusive for warranty service Up to 30% on non-warranty service	Under previous BER, full use of allowed restrictions
Mitsubishi	Mitsubishi	mfr-OE exclusive for warranty service and all service paid for by	-

Figure 153: Manufacturer restrictions on use of non-manufacturer-branded spare parts.

Manufacturer	Brand	Current	Prior
		manufacturer	
Nissan	Nissan	mfr-OE exclusive for warranty service, mfr-OE exclusive for owned repairers. Prohibition on parts of non matching quality	No changes over time
Renault	Renault	mfr-OE exclusive for warranty service and all service paid for by manufacturer	Has changed according to the new definition of original part
Suzuki	Suzuki	-	-
Toyota	Toyota	mfr-OE exclusive for warranty service	No change over time
	Lexus		
Volkswagen	Audi	mfr-OE exclusive for warranty service. Require 30% manufacturers' parts purchase	Changed in accordance with new BER
	Seat		
	Škoda		
	VW		

Source: LE, based on car manufacturers' questionnaires.

We see, in general, that the contracts have indeed been changed to take into account the regulation BER 1400/2002.

However, these new freedoms do not necessarily translate in an immediate ability for the authorised repairer to source spare parts from alternative suppliers.

Arrangements such as extended warranties, extended servicing packages, and the need to stock VM's parts for the repair of vehicles under the particular circumstances set out in the contracts with the VMs can contribute to restrict these freedoms.

Authorised repairers stock large amounts of VM parts in order to carry out these services to the standards specified by the VM. As a result, sourcing and stocking parts from alternatives sources is costly.

The ability to source parts from a single supply point lowers costs related to stock management and inventory. This gives an immediate advantage to VMs when competing with alternative parts suppliers for the business of their authorised repairers.

In addition, VMs can utilise schemes such as bonus payments, which depend on amount (value or volume) of parts sourced from the VM. In particular, schemes can be linked to the volume or value of captive and non-captive parts bought from the VMs. Generally, such schemes are geared towards encouraging the purchase of non-captive parts. Incentives of this type can lower the AR's ability/ willingness to buy other brands of parts.

Effect of relationship between authorised repairers and independent repairers as regards the diffusion of technical information

The fact that authorised repairers have access to the VMs' technical information makes them an attractive source of parts supplies even for independent repairers. The ability of authorised repairers to supply not only a broader range of parts, but also better service and customer support gives them a competitive advantage over independent parts distributors who lack access to such proprietary technical information.

Views of car parts manufacturers

The fact that car manufacturers are by far the most important customer group for the parts manufacturers in our sample is confirmed by the results in Figure 154, where respondents were asked to rank different customer groups according to their importance for their businesses. Car manufacturer come first by a long way, followed by parts wholesalers and the independent aftermarket, which includes independent garages, petrol stations, fast-fit shops etc. Direct sales to authorised car repairers are the only category that is classed as relatively unimportant overall.

Figure 154: Perceived importance of different customer categories.

Customer category	Index of perceived importance
Car manufacturers	4.7
Authorised car repairers	2.8
Parts wholesalers/distributors	3.8
Independent aftermarket	3.3

Note: respondents were asked to rank the importance of customer categories on a scale from 1 to 5, where 5 indicates the highest importance. The figures reported above are unweighted averages.

Source: LE Survey.

The survey also sought the views of car parts manufacturers about the perceived importance of different types of competitors. OESs are clearly identified by car parts producers in general as the most important competitors (see Figure 155).

Figure 155: Perceived importance of different competitor categories.

Customer category	Index of perceived importance
Original equipment manufacturers	4.1
Spare parts manufacturers	3.6
Car manufacturers	3.5

Note: respondents were asked to rank the importance of competitor categories on a scale from 1 to 5, where 5 indicates the highest importance. The figures reported above are unweighted averages.

Source: LE Survey.

Whether the perceptions reported above correspond to the actual situation in the market can be seen in the following tables. Figure 156 shows that the manufacturers that took part in our survey represent a sizeable proportion of the total parts market in the EU.

As mentioned above, the sales of equipment for new cars is indeed by far the most important source of revenue for the manufacturers in our sample, while spare parts sales represent less than a fifth of total revenue (see Figure 156)

In the case of OES, sales under the OES brand name account for two to three times as much revenue as do parts sold under the brand of a car manufacturer, although the gap, according to our data, has narrowed in recent years (see Figure 157).

Figure 156: Total sales by car parts producers by market segment 1997-2004.

	1997	1998	1999	2000	2001	2002	2003	2004
Total sales (€m)	13,559	15,715	17,581	18,976	20,855	21,728	22,421	31,196
% of which equipment*	82.9%	85.2%	85.9%	87.1%	87.3%	87.2%	86.6%	82.9%
% of which spare parts	17.1%	14.7%	14.1%	12.9%	12.7%	12.8%	13.3%	17.1%

Note: for new vehicles.

Source: LE Survey.

Figure 157: Branding of spare OES spare parts.

	1997	1998	1999	2000	2001	2002	2003	2004
% of spare parts sold under OES's brand name	71.0%	76.0%	68.8%	69.7%	67.9%	68.2%	68.1%	66.1%
% of spare parts sold under VM's brand name	29.0%	24.0%	31.2%	30.3%	32.1%	31.8%	31.9%	33.9%

Source: LE Survey of Parts Suppliers.

In 2004, around 50% of spare parts, that is replacement parts used in servicing and repair, as opposed to parts used for the equipment of new cars, are sold to independent parts distributors (Figure 158).

The data reported in Figure 158 also show that the structure of the customer base has changed markedly in recent years.

Of note is the fact that the share of independent parts distributors has been dropping steadily while that of VMs distribution network and the independent aftermarket show a clear upward trend.

In contrast, the proportion of spare parts sold to authorised repairers has remained relatively stable. Authorised repairers buying directly make up only 3% of parts manufacturers' business.

The independent aftermarket is slightly more important as a source of custom, accounting currently for about 11% of the spare parts sales by the manufacturers in our sample.

Figure 158: Sales of spare parts to different customer groups, percentage of total EU spare parts sales.

	1997	1998	1999	2000	2001	2002	2003	2004
Car manufacturers	28.3%	26.7%	29.6%	29.7%	30.8%	33.8%	35.8%	35.9%
Authorised car dealers/repairers/parts distributors	2.8%	3.2%	3.7%	3.0%	3.3%	3.0%	2.8%	2.9%
Independent parts wholesalers/distributors	65.3%	66.3%	62.6%	57.5%	55.9%	52.4%	50.9%	49.8%
The independent aftermarket*	3.6%	3.8%	4.1%	9.8%	10.0%	10.8%	10.5%	11.4%

Note: * includes independent garages, petrol stations, supermarkets, fast fit shops, etc.

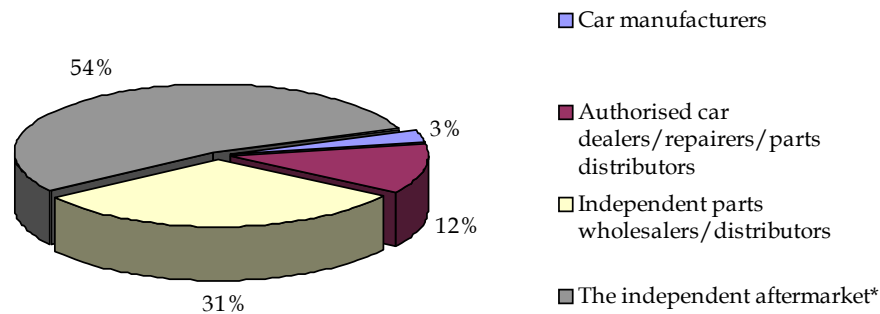
Source: LE Survey.

As could be seen in Figure 156, the proportion of parts sold under the parts manufacturer's brand name is declining.

We have received only very few detailed responses from parts producers to the question regarding their customer base for the spare parts sold under their brand name. Nevertheless, these data provide an interesting perspective on the nature of the client base of parts producers even though this perspective can only be tentative in light of the limited data.

These data again show a very high dependency on the independent channel. Direct sales to the independent retail market accounts for 54% of the sales of parts bearing the parts manufacturer name and the independent distribution channel for another 31% (see Figure 159).

Figure 159: Volume of EU-wide sales of spare parts bearing the parts manufacturer's brand name, by customer group (2004).



Note: based on small number of survey responses. * including independent garages, petrol stations, supermarkets, fast-fit shops, etc.

Source: *LE Survey of parts manufacturers*

A constant source of interest for observers of the car parts market is the role of car manufacturers, and their power over suppliers. Figure 160 shows the distribution of profits across different categories of customers for a major European parts manufacturer. It should be noted that the table is not representative of our sample, nor does it allow us to draw conclusions for the market as a whole.

Instead, Figure 160 is meant to illustrate a common concern of market participants: the fact that sales to the aftermarket are used to subsidise losses incurred from the crucial but unprofitable sales to car manufacturers for use as first equipment. In this example, losses incurred in selling to manufacturers, in some years at least, are substantial, and often significantly higher than total profits. Our example shows that those losses are recouped through more profitable sales to car manufacturers for use as spare parts and to independent parts distributors in particular.

Figure 160: Distribution of profits across different segments, 1997-2004.

Customer group	1997	1998	1999	2000	2001	2002	2003	2004
Car manufacturers (for sales of original	-499%	-30%	76%	69%	-3%	66%	-149%	71%
Car manufacturers (for sales of spare	245%	49%	10%	12%	34%	15%	21%	12%
Authorised car dealers, repairers,	0%	0%	0%	0%	0%	0%	0%	0%
Independent parts wholesalers,	307%	69%	12%	16%	61%	16%	22%	13%
Independent aftermarket	47%	12%	2%	3%	8%	3%	6%	4%

Note: the figures above were reported to us by a major European parts manufacturer in answer to the following question: "What percentage of your profits comes from sales to ...". Columns all add to 100%. Some segments have negative profits, represented by a negative percentage contribution to total profit.

Source: LE Survey.

Another part of our survey addressed the perception of the new BER in the parts manufacturing industry. Firms were asked to rank the benefits of the key innovations in the BER for their own business and to make a judgement on the impact of the spare parts market as a whole. Figure 161 shows these results.

The two measures seen as most beneficial are the ability to sell original spare parts under the parts manufacturer's own brand name and the ability to sell original spare parts directly to the independent aftermarket. Both measures undoubtedly strengthen the competitive position of parts manufacturers vis-à-vis vehicle manufacturers.

The greater freedom of authorised repairers to source spare parts directly from parts manufacturers, without having to go through the vehicle manufacturers distribution channels, is also seen as beneficial.

The impact on the spare parts market as a whole, shown in the right-hand column of Figure 161, is perceived as being moderate, indicating that although parts manufacturers feel strengthened by some of the new measures adopted in the BER, there is no suggestion that major structural changes in the market are afoot as a result of it, at least so far.

Figure 161: Perceived benefits and impact of the BER on the spare parts market.

Changes in the BER (Regulation 1400/2002)	Index of perceived benefit of changes	Index of perceived impact of changes on the operation of the spare parts market
Ability to use the term “original spare parts” based on self-certification that parts are produced according to the quality and production standards of the car manufacturer	3.9	3.3
Ability to use the term “spare parts of matching quality” based on self-certification that parts match original spare parts in terms of quality	3.7	3.1
Freedom to sell original spare parts under the parts manufacturer's own brand name	4.4	3.7
Freedom of authorised repairers to source original spare parts directly from parts manufacturers	4.2	3.3
Freedom of parts manufacturers to sell original spare parts (directly or via distributors) to the independent aftermarket	4.4	3.5
Improved access to technical information for the independent aftermarket	3.9	3.3

Note: respondents were asked to rank the benefit/impact of the central innovations in the new BER on a scale from 1 to 5. The ranking of benefits goes from 1 (harmful) to 5 (beneficial), while the ranking of the impact goes from 1 (no impact) to 5 (strong impact). The figures reported above are unweighted averages.

Source: LE Dealer Survey.

Views of independent distributors associations

It is generally felt that neither the independent parts distributors nor the non-OE parts suppliers have achieved any significant inroads into the market held by the vehicle manufacturers' parts supply networks.

Although, according to the new BER, the proportion of VM-supplied parts that the VMs can require their authorised dealers and repairers to purchase is limited to 30%, it is considered doubtful whether the 70% optional purchase allowance had any impact in encouraging dealers to source their products from non-OE providers.

Apart from the reasons that we have already discussed, the associations of independent parts distributors surveyed mentioned also the following:

- There is a certain resistance on the part of dealers to make changes to the way business is done. To some extent, there may also be a certain lack of awareness of the new parts purchase opportunities;
- The bonus systems used by VMs are still a big incentive not to buy parts outside the VM supply channel. Some associations report the

use of certain subtle methods to convince authorised dealers to buy more from respective VMs. Examples are special bonuses on captive parts prices if a certain percentage of “competed” parts is bought from the VM, high rebates on sales of competed parts to the independent repairers, year-end bonus for high purchases of VM’s competed parts, the offer to supply technical information under the condition that the necessary parts are bought, etc.; and

- Aggressive price offers of the vehicle manufacturers for their replacement parts can be observed. It seems that, as a general trend, the prices of competitive replacement parts are maintained or lowered whereas the prices of captive parts are increased;

The associations also fear that parts suppliers do not supply products to independent distributors on terms and conditions as favourable as those that they offer the car manufacturers.

Another concern of the independent parts distributors relates to the parts ordering systems used by some manufacturers. These systems are often designed in ways that preclude the ordering of parts from independent suppliers. In order to access the independent channel, the authorised dealers and repairers must install a separate ordering system, which is costly and cumbersome.

The new BER introduces the option for independent parts distributors to gain a contract as authorised distributors. In this regard, several of the independent parts distributors associations that we have contacted replied that a number of their members have contacted almost all passenger vehicle manufacturers and have been unable to receive any information on the set of standards required to become an authorised parts distributor.

Most of the vehicle manufacturers, according to the associations, replied that these standards do not yet exist, or that no separate spare parts distribution contracts are offered (that is separate from authorised repairer contracts). Some noted exceptions are Ford and Toyota who have issued these standards for the German market.

In the UK, a couple of independents have recently become “authorised”. Citroën, in particular appears to be keenly pursuing this strategy, whereby it chooses specialist distributors to supplement its dealer coverage.

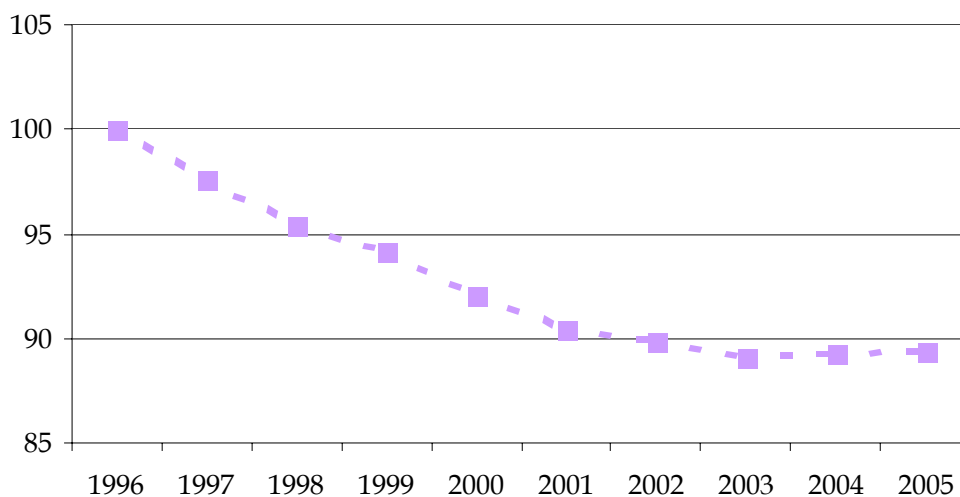
On the other hand, independent parts distributors have not shown a keen interest in becoming an authorised distributor. Such a contract would almost certainly imply a commitment to buy a minimum of 30% of spare parts from the respective VM in addition to the installation of a separate electronic ordering system.

4.8 Effects of observed trends on consumers

This section looks on the evolution of consumer spending on automotive spare parts compared to headline inflation.

Eurostat does not report consumer spending for motor vehicle spare parts and accessories, nor do most other national statistical agencies. It has therefore not been possible to source consumer expenditure data in terms that would be comparable across years and across countries in our sample. The information below refers rather to evolution of price indices for motor vehicle spare parts and accessories in relation to general consumer price indices.

Figure 162: Evolution of real prices of parts & accessories for personal transport equipment, EU25 (1966-2004).



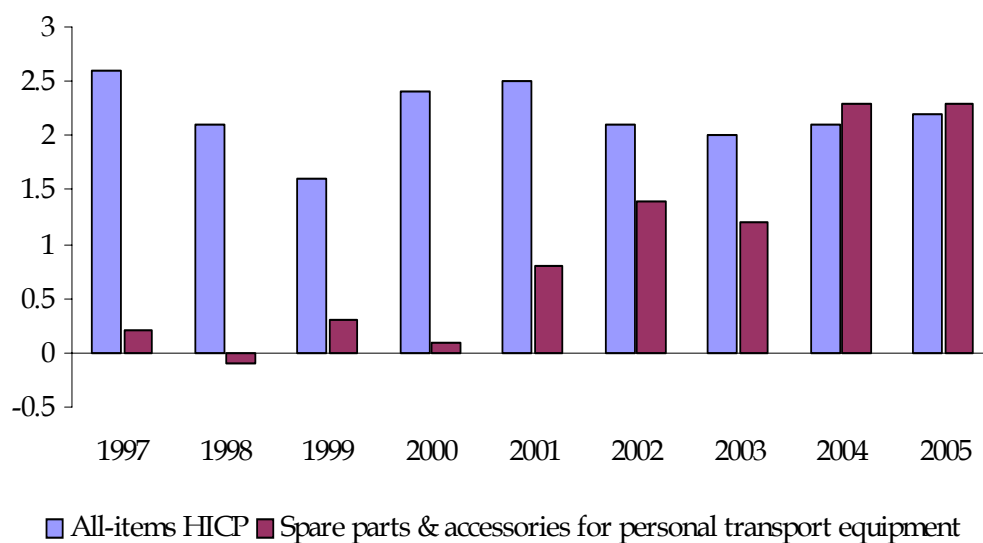
Note: Index =100 in 1996.

Source: Eurostat.

Real prices for vehicle parts and accessories have fallen steadily in the EU over the period 1996-2003 (Figure 162). There has been a constant decrease up to 2001, but this trend has flattened out since. In the last two years of our period, there was even a small rise in real prices for vehicle parts.

As Figure 163 shows, there was a substantial hike in the nominal price of vehicle parts between 2003 and 2004. Figure 163 also illustrates the high volatility of prices of vehicle parts compared with the general price level.

Figure 163: Prices for parts & accessories for personal transport equipment compared with the general price level, EU25 (1997-2005).

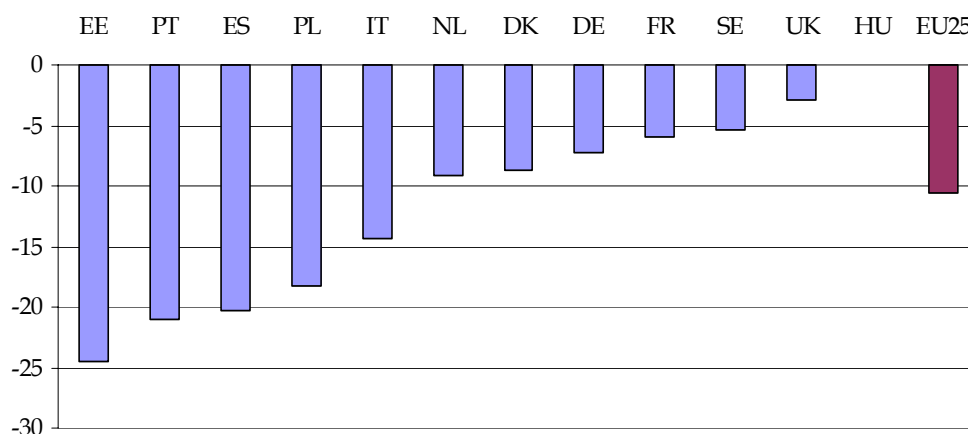


Source: Eurostat.

The country-by-country breakdown of the evolution of real prices for vehicle parts is shown in Figure 164, which shows that real prices fell since 1997 in all the countries we investigated.

The steepest decline in real prices for parts and accessories over the period 1996-2005 occurred in Estonia, Portugal, Spain and Poland. Prices in these countries fell by more than 15% over the period. In other countries, prices remained comparatively stable. The UK, Sweden, France and Germany recorded the lowest decrease, but only in the UK was the decrease smaller than 5%. Across the EU as a whole, real prices for parts and accessories declined by more than 10% (Figure 164).

Figure 164: Evolution of real prices for parts & accessories for personal transport equipment 1996-2004.



Source: Eurostat.

In reviewing the data in Figure 164, it is important, however, to recall from Figure 162 that the price of spare parts declined in real terms only until 2001 and has been very marginally trending upwards since then.

At issue is whether the new BER contributed to break the trend of declining real prices for spare parts.

At first glance, this appears to be surprising, since the BER has introduced more competition in the spare parts market, creating conditions for the independent distribution channel to compete with the authorised network in a more level playing field.

Reports on parts prices comparing the authorised network and the independents continue to report huge price differences, so it does not appear that a significant increase in competition between the two segments of the market has occurred.

That being said, the downward trend in real parts prices may have reversed because of the *type* of parts that are included in the index.

As an increasing percentage of parts appears to be now sold through the VMs and their networks, this could also account for some of the reversal, since such parts are generally retailed at higher prices than those available from independent wholesalers.

Another potential reason is that the number of highly complex electronic parts in a car has increased very rapidly in recent years according to industry experts. As a result, cars and car parts are becoming increasingly complex.

For example, a car seat can have up to eight motors to regulate position plus a number of heating panels at different locations. The price of the seat may be higher now than a number of years ago but today's car seat is not comparable to one of say five or ten years ago.

Another factor is the very rapid increase in the number of parts. This hampers competition in parts because there are necessarily fewer suppliers for each particular part. Also, parts change more rapidly as car models' turnover increases, contributing to the same effect.

There is yet another explanation to the increase in parts prices. The level of service that is currently offered together with parts distribution has increased dramatically. Not only are deliveries much more rapid and frequent, there is also a larger number of support services on offer. This high level of service must ultimately be reflected in final prices.

4.9 Conclusion: overall impact of Regulation 1400/2002 on the spare parts sector

In this section we collect our conclusions from the preceding analysis. We start with a short overview of the main market players' evolving positions. Next, we discuss the impact that the changes have had on each of these groups. Then we assess the impact of the BER on the spare parts market and finally discuss the relevance of on-going changes to final consumers.

4.9.1 The evolving position of the main market players in the supply chain

Vehicle manufacturers

VMs are experiencing declining profit margins from new car sales and as a result are increasingly dependent on the aftermarket as a source of corporate profit.

In order to support dealer networks to grow aftermarket revenue and profit, VMs' strategies include extended warranties, an aggressive pursuit of the non-warranty repair market, increase service on parts and accessories sales through technology investments and rationalisation of distribution activities.

As VMs seek revenue and profit growth opportunities, they also focus on increasing the efficiency and responsiveness of their supply chains.

In this report we have encountered some indications that competition is intensifying between the VM and independent supply chains. This conclusion is mainly based on the circumstantial evidence about developments in the sector, as we do not have firm statistics on the evolution of the market share and profitability of the independent channel.

Finally, for VMs, more revenue and profit can be obtained from a range of strategies including focusing on dealers, making it easier to conduct business, leveraging business intelligence tools to more effectively mine data to trigger service and sales opportunities, and employment of intelligent pricing: with hundreds of thousands of parts to price, and years of inattention, most pricing strategies are cost based and sub-optimised.

In this regard, it is important to note that VMs also have a number of inherent advantages:

- First, they hold all of the brand-specific technical information;
- Secondly, they are the only players to be able to offer captive parts.

Parts suppliers

Parts suppliers are facing the challenge of continued price and delivery pressure from VMs and large parts distributors/retailers, as well as higher performance requirements in terms of delivery times and auxiliary services on parts.

In some cases, there is evidence that parts suppliers are shipping more parts directly, outside the authorised network. That being said, even the independent distribution channel, to remain competitive with the authorised distribution channel, is focusing on increased performance at reduced costs.

Independent parts distributors

Further consolidation among independent parts distributors is likely. This process is driven by the need to provide wider inventory breadth and better service in terms of response times to customers. Parts distributors' sophistication is increasing as they invest in advanced supply chain technology to provide integrated customer fulfilment and web-based ordering. As they get bigger, parts distributors are beginning to leverage their buying power and as a result are placing increased pressure on supplier margins, in order to compete with the VM distribution channels. Parts distributors are turning to increasingly sophisticated technology that allows for greater efficiency and reduced response time as a means to compete with the authorised network.

4.9.2 Impact of changes on competitive positions of various market players

As a result of the various changes going on in the market place, the general view of market players is that competition in the automotive aftermarket has increased,¹³⁹ but that this increase has been small.

A recently issued ICDP report on the evolution of the car aftermarket sector in the sequence of the new BER, points out that it is early days to truly see the impact of the new rules on the market. However, the direction seems to be the right one, in the sense that there is probably a bit more competition, even if the effects at this stage are probably of a very small order of magnitude. Below we review some of the areas where competition is deemed to have increased.

Access of independents to the authorised network for selling

Supplying independent aftermarket replacement parts to the vehicle manufacturer's authorised network has become slightly easier. According to FIGIEFA and its members, it seems that, since the new BER, authorised

¹³⁹ FIGIEFA and its members support this view.

dealers have become more aware of alternative supply possibilities and that there is greater acceptance of the independent parts distributors as partners of the authorised repairers. Authorised dealers however do not yet buy significantly increased quantities from independent parts distributors.

Access of independents to the authorised network for buying

Authorised dealers increasingly promote spare parts of the respective VM brand to independent repairers, and increasingly become competitors for independent parts distributors (see Section 4.6.5 for example). Authorised parts dealers of different brands have created common Internet portals for the sale of their parts. In addition, some of these trends are, to some extent, supported by VMs.

Yet, independent garages' access to parts, training and technical information seems to continue to be less open than what the BER attempts to ensure

Parts pricing

The view¹⁴⁰ is that there may indeed be greater pressure in terms of parts pricing but, at the same time, there is no hard evidence of significantly decreasing prices, especially in recent years (see Section 4.8). In fact, when compared to headline inflation, parts prices were decreasing up to 2003 but started edging up in the last two years for which data is available (see Figure 163).

Market position of car manufacturers

Overall, car manufacturers appear to be still very much in control of this market. There has not been a significant switch on the part of authorised repairers towards new supply channels for parts.

Some reports of much larger price increases in "captive parts" than in parts that are open to competition support the view that VMs are trying to leverage their market power with respect to captive parts to induce authorised dealers to also buy a substantial percentage of non-captive parts from them.

The market power of vehicle manufacturers is very important and determines the shape of the relationships both between VMs and components suppliers and between VMs and authorised dealers/repairers. Neither of these two interlocutors wants to introduce changes in their business models that have the potential to result in some form of retaliation from the VMs.

Market position of parts suppliers

Various factors make it difficult for parts manufacturers to penetrate the aftermarket. Tooling arrangements, manufacturers' intellectual property rights, and logistics mean that there is often a symbiotic relationship between

¹⁴⁰ ICDP's view conveyed in the report on the market impact of the BER, May 2006

parts manufacturers and vehicle manufacturers. This can lead to state of dependency for parts manufacturers, in which VMs account for such a significant part of their business that they are reluctant to compete against them on downstream markets.

However, parts manufacturers are not necessarily the weaker party in the relationships, and some large parts manufacturers have entered the aftermarket and compete directly with VMs (e.g. Bosch, Hella).

Change in the market place

That being said, it is clear that there are noticeable changes taking place in the structure of the market for motor vehicle spare parts. We have alluded to some of these in this part of the report. The evidence, at this stage, is more anecdotal than factual. What we see are reports of market restructuring, including joint ventures by groups of market players, movement of some of these groups both upward and downward along parts supply chains. In addition, we have reported on situations where the vehicle manufacturers themselves are actively participating in this restructuring.

It is therefore quite difficult to estimate to what extent the changes taking place in the sector will constrain VMs' ability to earn significant profits on spare parts.

4.9.3 Main trends and the objectives of the BER

It is not entirely clear whether there has been a consistent lowering of the entry barriers for independents to gain authorised spare parts distributor status. In some countries (as is the case of the UK and Germany) there are clear indications that at least some car manufacturers have appointed or are willing to appoint independents as their authorised parts distributors. But in other countries, the experience is quite different. Through our survey of independent parts distributors, we have been told that most of the vehicle manufacturers, so far, have not yet provided the list of standards required to become an authorised distributor. The VMs would justify this by arguing that such standards do not yet exist or that no separate (from repairer contracts) spare parts distribution contracts are offered.

Not only is the lack of standards making it difficult for independents to gain the status of authorised spare parts distributors, but authorised dealers and repairers are also reported to not have made much use of the scope given to them by the new BER to source a greater share of the required parts from the independent sector, and they continue to buy from 97 and 85% from VMs (Figure 124).

A number of systemic factors explaining this situation has been put forward by independent part distributors, such as the incentive schemes used by VMs and the parts ordering systems used by VM. These features could indeed be significant barriers to entry for independents in the supply to the authorised dealers and repairers.

Another factor may be consumer apathy or ignorance about the relative quality of parts delivered through the VM network and those delivered through alternative channels. For dealers and authorised repairers, it may be difficult to explain to customers why they choose to use non-manufacturer branded spare parts.

However, offsetting this perhaps negative view of the impact so far of the new BER is the increase in the number of qualitatively-selected authorised repairers, many of whom can also sell VM-branded parts.

In conclusion, with respect to this particular objective, the jury is still out whether, overall, the BER will bring about a marked change in the market structure.

The second main objective of the BER for the spare parts market is to prevent foreclosure of parts manufacturers' selling outside the VM distribution channels.

Although the concern of possible foreclosure is mentioned by several sources within the automotive sector, we have failed to find evidence for this. OESs currently sell more than half of their spare parts turnover into the independent market. This situation, according to our survey of the largest parts manufacturers in Europe, has changed in recent years, with the share of sales to VMs increasing in the last 8 years (the years covered by our questionnaire). However, practically all the increase occurred before the new BER came into force. Moreover, the supply to independents (independent distributors and independent aftermarket) remains well above 50% of total spare parts turnover

As already referred, sourcing of spare parts is a complex business and repairers need to minimise the possibility of disruption. Having to source parts from different distribution systems is always a challenge and inevitably involves duplication of costs. This in itself puts the VM at a clear advantage for supplying the unrestricted 70%.

For some types of spare parts additional problems may arise. For example, in the case of lubricants, which only under the new BER began to be legally considered "spare parts"¹⁴¹ given the way in which oil is used in a repair shop, it is not practical to have oils from different suppliers. In effect, then, a restriction on 30% works exactly as a restriction on 100%, actually foreclosing the supply of oil for anyone but the VM.

One of the potentially most far-reaching novelties of BER 1400/2002 for the independent aftermarket was the new definition of "original spare parts". The term is no longer defined with respect to the vehicle manufacturer's distribution system, but instead in consideration of the quality and technical specifications of the component. This allows OEMs to market parts under their own brand name as "original spare parts" and facilitates repairers' need

¹⁴¹ Prior to the adoption of Regulation 1400/2002, Regulation 2790/99 applied to the distribution of lubricants, and that 100% non-compete obligations were exempted under that Regulation.

to convince motorists that non-VM parts can be of equivalent quality. The impact of this definition in the market has been limited by the considerations that we have described above.

4.9.4 Impact on final consumers

Consumer attitudes could to some extent determine the final impact of the new BER.

Yet, the individual customer does not, traditionally, make decisions about the type of parts to be used except when she/he is directly buying the parts for DIY maintenance and repairs. The consumer typically only selects the service provider. Key factors influencing that choice are: security and skills; habit; and proximity. In industry studies, price is only ranked 6th on the list in terms of importance (ICDP).

However, large customers like insurance and leasing companies show more and more interest in getting involved with the parts business. Their interest to source parts as cheaply as possible, aided by their considerable buyer power, is likely to mitigate the lack of price-sensitivity on the part of final consumers. Here, existing specialised logistics companies may help.

Final consumers do not appear to have benefited from on-going changes in the form of lower parts prices. However, even if some parts are more expensive, the overall level of consumer expenditures on parts has not increased over the last seven years. That is due to higher car quality, as, even though repairs are more costly when they happen, breakdowns and part replacements are occurring less frequently.

The new “branded” repairers and repairer chains stand a much better chance of capturing the new cars segment of the repair market and contribute to make consumers more proactive in the choice of repair and service outlets provided that their ability to get access to technical information and to cheaper parts is not unduly hindered by VMs.

References

- ACEA (2005), *European Automobile Industry Report*. [http://www.acea.be/ASB20/axidownloads20s.nsf/Category0ACEA/0ED967FB0DA32BECC125704B0035F273/\\$File/IndustryReport05.pdf](http://www.acea.be/ASB20/axidownloads20s.nsf/Category0ACEA/0ED967FB0DA32BECC125704B0035F273/$File/IndustryReport05.pdf).
- Auto Service Praxis*, "Systemalternativen". 5 September 2000.
- Auto Trader (2004), "Car Supermarkets". <http://www.autotrader.co.uk/CARS/sell/re/re-8.jsp>.
- Auto Trader (2005), "Trade advertising". <http://www.autotrader.co.uk/CARS/sell/re/re-8.jsp>.
- Automobilwoche, "Schlüssel zum Erfolg". Issue 19, 13 September 2004.
- Automobilwoche, "Service als Insolvenzverhinderer". Issue 5, 1 March 2004.
- Booz Allen Hamilton (2005), *Multi-branding strategies in the German automotive market*. http://www.boozallen.com/home/industries/industries_article/658766?lpid=827466.
- Bozon, L. et al. (2005), *Dealer Groups in Europe: their growth and strategies*. ICDP.
- Buzzavo, L. and Montagner, L. (2005), *Dealer Margin Structures for New Vehicles in Europe*. ICDP.
- Buzzavo, L. and Pizzi, C. (2005), "Trade Marketing and Vertical Restraints: the case of automotive distribution in Italy". Paper presented at the "European Marketing Trends" Congress, 21st -22nd January 2005, Paris.
- Capgemini (2005), "Cars Online 04/05: Driving growth through collaboration". http://www.capgemini.com/resources/thought_leadership/cars_online_0405/.
- Corporate Vehicle Observatory (2005), *Le baromètre 2005*, N°10.
- Datamonitor (2005), *European Fleet Leasing - Competitive Landscape*.
- Diez, W. and Reindl, S. (2005), *Service Studie für das Kfz-Gewerbe*.
- DTI (2002), *Car Servicing and Repairs, Mystery shopping research*. <http://www.dti.gov.uk/files/file28064.pdf>.
- Exido (2004), *Nordic Automotive Industry Survey*.
- Frost & Sullivan (2003), *European Handheld Diagnostics Equipment Markets*.
- GVA (2005), *Der Reparaturmarkt in Deutschland und die freien Werkstätten*, http://www.gva.de/3markt/werkstaetten_cont.html.
- Hanly, M., Dargay, J. and Goodwin, P. (2002), "Review of Income and Price Elasticities in the Demand for Road Traffic". *ESRC Transport Studies Unit publication*, 2002/13.
-

HWB International Limited, *GMAP Automotive Distribution Handbook*, issues 1998-2004.

Institut für Wirtschaftsforschung – ifo (2005), “Besseres Investitionsklima stärkt Leasingwachstum”. Sonderdruck aus *ifo Schnelldienst* Nr. 23/2005

Japan External Trade Organisation (2002), *The Survey on Actual Conditions Regarding Access to Japan Replacement Auto Parts*.

Jupiter Research (2002), *Jupiter Consumer Survey Report (Automotive 2001)*.

Kfz-Betrieb, *DAT-Veedol Report: Die Fahrzeugwartung und das Kundendienstverhalten*. Issues 2000-2005.

McKinsey & Company (2003), “Overhauling European Car Distribution”. *The McKinsey Quarterly*, January 2003.

OFT (2003), *New Car Warranties – Report of the Market Study*. OFT683.

PwC (2003), “Gentlemen’s dispute or bar room brawl? Part one: the impact of the new block exemption regulation on carmakers”.

PwC (2004), “Corporate Finance Insights – Automotive Sector 2003/04”. [http://www.pwcglobal.com/extweb/pwcpublications.nsf/4bd5f76b48e282738525662b00739e22/4734d7d02cffe13080256e7f00468270/\\$FILE/Automotive%20Insights%202003%20full%20year.pdf](http://www.pwcglobal.com/extweb/pwcpublications.nsf/4bd5f76b48e282738525662b00739e22/4734d7d02cffe13080256e7f00468270/$FILE/Automotive%20Insights%202003%20full%20year.pdf).

Stiftung Warentest (2001), *Berliner Autowerkstätten – Abgehakt*. Test, 9/2001.

Taylor, B. (2005), *CAT Parts Distribution Trend Index – Researching Motor Factors, Accessory Shops, Franchised Dealers, and Independent Garages*, Issue IX, Trendtracker Ltd.

Wade, P. (2002), “The Future of Car Dealerships”, *HWBI Management Briefing*, 5/05/02.

What Car, 04 July 2005. “Kia opens 12 new dealerships.” <http://www.whatcar.com/news-article.aspx?NA=216019>.

Annex: List of tables in confidential annexes (Volume II)

1 Annex to Part I: Market developments in European car distribution

No.	Title	Page
Table 1	New registrations - standard deviations, by country and brand (1997-2004).	1
Table 2	Proportion of cars aged 3 years or less - Denmark.	3
Table 3	Proportion of cars aged 3 years or less - Germany.	4
Table 4	Proportion of cars aged 3 years or less - Italy.	5
Table 5	Proportion of cars aged 3 years or less - Hungary.	6
Table 6	Proportion of cars aged 3 years or less - Netherlands.	7
Table 7	Proportion of cars aged 3 years or less - Portugal.	8
Table 8	Proportion of cars aged 3 years or less - Sweden.	9
Table 9	Proportion of cars aged 3 years or less - United Kingdom.	10
Table 10	Volume of new car sales - Denmark	11
Table 11	Volume of new car sales - Germany	12
Table 12	Volume of new car sales - Estonia	13
Table 13	Volume of new car sales - Spain	14
Table 14	Volume of new car sales - France	15
Table 15	Volume of new car sales - Italy	16
Table 16	Volume of new car sales - Hungary	17
Table 17	Volume of new car sales - Netherlands	18
Table 18	Volume of new car sales - Poland	19
Table 19	Volume of new car sales - Portugal	20
Table 20	Volume of new car sales - Sweden	21
Table 21	Volume of new car sales -United Kingdom	22
Table 22	Value of New Cars Sales, Denmark	23
Table 23	Value of New Cars Sales, Germany	24
Table 24	Value of New Cars Sales, Estonia	25

Table 25	Value of New Cars Sales, Spain	26
Table 26	Value of New Cars Sales, France	27
Table 27	Value of New Cars Sales, Italy	28
Table 28	Value of New Cars Sales, Hungary	29
Table 29	Value of New Cars Sales, The Netherlands	30
Table 30	Value of New Cars Sales, Poland	31
Table 31	Value of New Cars Sales, Portugal	32
Table 32	Value of New Cars Sales, Sweden	33
Table 33	Value of New Cars Sales, United Kingdom	34
Table 34	Turnover of car manufacturers' European operations (1997-2004).	35
Table 35	Percentage change in turnover of car manufacturers' European operations (1998-2004).	38
Table 36	Denmark - market share of car brands by turnover	42
Table 37	Germany - market share of car brands by turnover	43
Table 38	Estonia - market share of car brands by turnover	44
Table 39	Spain - market share of car brands by turnover	45
Table 40	France - market share of car brands by turnover	46
Table 41	Italy - market share of car brands by turnover	47
Table 42	Hungary - market share of car brands by turnover	48
Table 43	Netherlands - market share of car brands by turnover	49
Table 44	Poland - market share of car brands by turnover	50
Table 45	Portugal - market share of car brands by turnover	51
Table 46	Sweden - market share of car brands by turnover	52
Table 47	United Kingdom - market share of car brands by turnover	53
Table 48	Manufacturers' market shares, 12 countries (1997-2004).	54
Table 49	Denmark - market share of car manufacturers and C4 ratio, by turnover	55
Table 50	Germany - market share of car manufacturers and C4 ratio, by turnover	55
Table 51	Estonia - market share of car manufacturers and C4 ratio, by turnover	56
Table 52	Spain - market share of car manufacturers and C4 ratio, by turnover	56

Table 53	France - market share of car manufacturers and C4 ratio, by turnover	57
Table 54	Italy - market share of car manufacturers and C4 ratio, by turnover	57
Table 55	Hungary - market share of car manufacturers and C4 ratio, by turnover	58
Table 56	Netherlands - market share of car manufacturers and C4 ratio, by turnover	58
Table 57	Poland - market share of car manufacturers and C4 ratio, by turnover	59
Table 58	Portugal - market share of car manufacturers and C4 ratio, by turnover	59
Table 59	Sweden - market share of car manufacturers and C4 ratio, by turnover	60
Table 60	United Kingdom - market share of car manufacturers and C4 ratio, by turnover	60
Table 61	Number of Dealers, Denmark	62
Table 62	Number of Dealers, Germany	63
Table 63	Number of Dealers, Estonia	64
Table 64	Number of Dealers, Spain	65
Table 65	Number of Dealers, France	66
Table 66	Number of Dealers, Italy	67
Table 67	Number of Dealers, Hungary	68
Table 68	Number of Dealers, The Netherlands	69
Table 69	Number of Dealers, Poland	70
Table 70	Number of Dealers, Portugal	71
Table 71	Number of Dealers, Sweden	72
Table 72	Number of Dealers, United Kingdom	73
Table 73	Number of Dealer Outlets, Denmark	74
Table 74	Number of Dealer Outlets, Germany	75
Table 75	Number of Dealer Outlets, Estonia	76
Table 76	Number of Dealer Outlets, Spain	77
Table 77	Number of Dealer Outlets, France	78
Table 78	Number of Dealer Outlets, Italy	79
Table 79	Number of Dealer Outlets, Hungary	80

Table 80	Number of Dealer Outlets, The Netherlands	81
Table 81	Number of Dealer Outlets, Poland	82
Table 82	Number of Dealer Outlets, Portugal	83
Table 83	Number of Dealer Outlets, Sweden	84
Table 84	Number of Dealer Outlets, United Kingdom	85
Table 85	Total Turnover of Dealers, Denmark	86
Table 86	Total Turnover of Dealers, Germany	87
Table 87	Total Turnover of Dealers, Estonia	88
Table 88	Total Turnover of Dealers, Spain	89
Table 89	Total Turnover of Dealers, France	90
Table 90	Total Turnover of Dealers, Italy	91
Table 91	Total Turnover of Dealers, Hungary	92
Table 92	Total Turnover of Dealers, The Netherlands	93
Table 93	Total Turnover of Dealers, Poland	94
Table 94	Total Turnover of Dealers, Portugal	95
Table 95	Total Turnover of Dealers, Sweden	96
Table 96	Total Turnover of Dealers, United Kingdom	97
Table 97	Number of outlets per number of dealers, by brand	98
Table 98	Number of outlets per number of dealers, by country	99
Table 99	Number of contracts per number of dealers, by brand	100
Table 100	Number of contracts per number of dealers, by country	101
Table 101	Top 20 dealers' share of total sales, GERMANY, 1997-2004.	102
Table 102	Top 20 dealers' share of total sales, SPAIN, 1997-2004.	103
Table 103	Top 20 dealers' share of total sales, FRANCE, 1997-2004.	103
Table 104	Top 20 dealers' share of total sales, ITALY, 1997-2004.	104
Table 105	Top 20 dealers' share of total sales, NETHERLANDS, 1997-2004.	105
Table 106	Top 20 dealers' share of total sales, POLAND, 1997-2004.	107
Table 107	Top 20 dealers' share of total sales, UNITED KINGDOM, 1997-2004.	108
Table 108	Manufacturers' shares of total dealer network, Denmark	109
Table 109	Manufacturers' shares of total dealer network, Estonia	110
Table 110	Manufacturers' shares of total dealer network, Germany	111

Table 111	Manufacturers' shares of total dealer network, Spain	112
Table 112	Manufacturers' shares of total dealer network, Italy	113
Table 113	Manufacturers' shares of total dealer network, Hungary	114
Table 114	Manufacturers' shares of total dealer network, The Netherlands	115
Table 115	Manufacturers' shares of total dealer network, Poland	116
Table 116	Manufacturers' shares of total dealer network, Portugal	117
Table 117	Manufacturers' shares of total dealer network, Sweden	118
Table 118	Manufacturers' shares of total dealer network, United Kingdom	119
Table 119	Evolution of turnover per dealer (1997-2004).	120
Table 120	Dealer network distribution system - BMW	121
Table 121	Dealer network distribution system - MINI	122
Table 122	Dealer network distribution system - Citroen	122
Table 123	Dealer network distribution system - Peugeot	123
Table 124	Dealer network distribution system - Chevrolet	123
Table 125	Dealer network distribution system - Opel	124
Table 126	Dealer network distribution system - Saab	124
Table 127	Dealer network distribution system - Ford	125
Table 128	Dealer network distribution system - Jaguar	125
Table 129	Dealer network distribution system - Land Rover	126
Table 130	Dealer network distribution system - Mazda	126
Table 131	Dealer network distribution system -VOLVO	127
Table 132	Dealer network distribution system -Honda	127
Table 133	Dealer network distribution system -Hyundai	128
Table 134	Dealer network distribution system -Alfa Romeo	128
Table 135	Dealer network distribution system - FIAT	129
Table 136	Dealer network distribution system -Lancia	129
Table 137	Dealer network distribution system -Mercedes	130
Table 138	Dealer network distribution system -Nissan	130
Table 139	Dealer network distribution system -Renault	131
Table 140	Dealer network distribution system -Toyota	131
Table 141	Dealer network distribution system -Lexus	132

Table 142	Dealer network distribution system -Audi	133
Table 143	Dealer network distribution system -Skoda	134
Table 144	Dealer network distribution system -Seat	135
Table 145	Dealer network distribution system -VW	136
Table 146	National distributor status - DENMARK, by brand	137
Table 147	National distributor status - GERMANY, by brand	138
Table 148	National distributor status - ESTONIA, by brand	139
Table 149	National distributor status - SPAIN, by brand	140
Table 150	National distributor status - FRANCE, by brand	141
Table 151	National distributor status - ITALY, by brand	142
Table 152	National distributor status - HUNGARY, by brand	143
Table 153	National distributor status - THE NETHERLANDS, by brand	144
Table 154	National distributor status - POLAND, by brand	145
Table 155	National distributor status - PORTUGAL, by brand	146
Table 156	National distributor status - SWEDEN, by brand	147
Table 157	National distributor status - UNITED KINGDOM, by brand	148
Table 158	Marketing investments regressed over time	149
Table 159	Technological investments regressed over time	150
Table 160	Non-technological investments regressed over time	151
Table 161	Evolution of the percentage of dealers selling brands of different manufacturers by brand (1977-2004).	152
Table 162	Financial indicators: EBIT (1997-2004).	152
Table 163	Financial indicators: Gross assets / turnover (1997-2004).	153
Table 164	Financial indicators:Balance sheet assets / turnover (1997-2004).	154
Table 165	Financial indicators: EBIT da (1997-2004).	155
Table 166	Average return on capital employed for vehicle manufacturers' European operations	156
Table 167	Average value of assets by turnover for vehicle manufacturers' European operations	157
Table 168	Average return on capital employed for car dealerships	158
Table 169	Average number of employees per car dealership	159
Table 170	Average value of assets divided by turnover for car	160

	dealerships	
Table 171	Average value of stocks divided by turnover for car dealerships	160
Table 172	Financial indicators (1997-2004): LE Dealer Survey results. (€)	161
Table 173	Change in real car prices, (1997-2004).	162
Table 174	Small Cars Segment, Price Differential across Europe	163
Table 175	Medium Cars Segment, Price Differential across Europe	164
Table 176	Large Cars Segment, Price Differential across Europe	164
Table 177	Stock of cars under different leasing options in the United Kingdom (1997-2004).	165
Table 178	Stock of cars under different leasing options, % of total car parc, United Kingdom (1997-2004).	165
Figure 1	Average fixed and variable margins per brand, 1997-2002 and 2003-2004.	162
Figure 2	The market for leased cars: fleet size in France (2000-2004).	166
Figure 3	The market for leased cars: fleet size in Portugal (2000-2004).	167
Figure 4	The market for leased cars: fleet size in the UK (1997-2004).	167

2 Annex to Part II: Developments in the European market for repair and maintenance of motor vehicles

No.	Title	Page
Table 179	Number of authorised repairer contracts, 1997-2004 - DENMARK.	168
Table 180	Number of authorised repairer contracts, 1997-2004 - GERMANY.	169
Table 181	Number of authorised repairer contracts, 1997-2004 - ESTONIA.	170
Table 182	Number of authorised repairer contracts, 1997-2004 - SPAIN.	171

Table 183	Number of authorised repairer contracts, 1997-2004 - FRANCE.	171
Table 184	Number of authorised repairer contracts, 1997-2004 - ITALY.	172
Table 185	Number of authorised repairer contracts, 1997-2004 - HUNGARY.	173
Table 186	Number of authorised repairer contracts, 1997-2004 - NETHERLANDS.	175
Table 187	Number of authorised repairer contracts, 1997-2004 - POLAND.	175
Table 188	Number of authorised repairer contracts, 1997-2004 - PORTUGAL.	176
Table 189	Number of authorised repairer contracts, 1997-2004 - SWEDEN.	178
Table 190	Number of authorised repairer contracts, 1997-2004 - UNITED KINGDOM.	178
Table 191	Total turnover of authorised repairers (€ '000), 1997-2004 - DENMARK.	180
Table 192	Total turnover of authorised repairers (€ '000), 1997-2004 - GERMANY.	181
Table 193	Total turnover of authorised repairers (€ '000), 1997-2004 - ESTONIA.	182
Table 194	Total turnover of authorised repairers (€ '000), 1997-2004 - SPAIN.	183
Table 195	Total turnover of authorised repairers (€ '000), 1997-2004 - FRANCE.	184
Table 196	Total turnover of authorised repairers (€ '000), 1997-2004 - ITALY.	185
Table 197	Total turnover of authorised repairers (€ '000), 1997-2004 - HUNGARY.	186
Table 198	Total turnover of authorised repairers (€ '000), 1997-2004 - NETHERLANDS.	187
Table 199	Total turnover of authorised repairers (€ '000), 1997-2004 - POLAND.	188
Table 200	Total turnover of authorised repairers (€ '000), 1997-2004 - PORTUGAL.	189
Table 201	Total turnover of authorised repairers (€ '000), 1997-2004 - SWEDEN.	190
Table 202	Total turnover of authorised repairers (€ '000), 1997-2004	191

	- UNITED KINGDOM.	
Table 203	Average annual growth in turnover of authorised repairers in selected Member States.	192
Table 204	Number of authorised repairer outlets, 1997-2004 - DENMARK.	193
Table 205	Number of authorised repairer outlets, 1997-2004 - GERMANY.	194
Table 206	Number of authorised repairer outlets, 1997-2004 - ESTONIA.	195
Table 207	Number of authorised repairer outlets, 1997-2004 - SPAIN.	196
Table 208	Number of authorised repairer outlets, 1997-2004 - FRANCE.	197
Table 209	Number of authorised repairer outlets, 1997-2004 - ITALY.	198
Table 210	Number of authorised repairer outlets, 1997-2004 - HUNGARY.	199
Table 211	Number of authorised repairer outlets, 1997-2004 - NETHERLANDS.	200
Table 212	Number of authorised repairer outlets, 1997-2004 - POLAND.	201
Table 213	Number of authorised repairer outlets, 1997-2004 - PORTUGAL.	202
Table 214	Number of authorised repairer outlets, 1997-2004 - SWEDEN.	203
Table 215	Number of authorised repairer outlets, 1997-2004 - UNITED KINGDOM.	204
Table 216	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - DENMARK.	205
Table 217	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - GERMANY.	206
Table 218	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - ESTONIA.	207
Table 219	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - SPAIN.	208
Table 220	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - FRANCE.	209
Table 221	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - ITALY.	210

Table 222	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - HUNGARY.	211
Table 223	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - NETHERLANDS.	212
Table 224	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - POLAND.	213
Table 225	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - PORTUGAL.	214
Table 226	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004 - SWEDEN.	215
Table 227	Number of Authorised Repairers offering service/repair only (no sales), 1997-2004- UNITED KINGDOM.	216
Table 228	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - DENMARK.	217
Table 229	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - GERMANY.	218
Table 230	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - ESTONIA.	219
Table 231	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - SPAIN.	220
Table 232	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - FRANCE.	221
Table 233	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - ITALY.	222
Table 234	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - HUNGARY.	223
Table 235	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - NETHERLANDS.	224
Table 236	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - POLAND.	225
Table 237	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 -	226

	PORTUGAL.	
Table 238	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - SWEDEN.	227
Table 239	Number of Authorized repairers providing service/repairs from different manufacturers, 1997-2004 - UNITED KINGDOM.	228
Table 240	Number of manufacturer-owned repairers, 1997-2004 - DENMARK.	229
Table 241	Number of manufacturer-owned repairers, 1997-2004 - GERMANY.	230
Table 242	Number of manufacturer-owned repairers, 1997-2004 - SPAIN.	231
Table 243	Number of manufacturer-owned repairers, 1997-2004 - FRANCE.	232
Table 244	Number of manufacturer-owned repairers, 1997-2004 - ITALY.	233
Table 245	Number of manufacturer-owned repairers, 1997-2004 - HUNGARY.	234
Table 246	Number of manufacturer-owned repairers, 1997-2004 - NETHERLANDS.	235
Table 247	Number of manufacturer-owned repairers, 1997-2004 - POLAND.	236
Table 248	Number of manufacturer-owned repairers, 1997-2004 - PORTUGAL.	237
Table 249	Number of manufacturer-owned repairers, 1997-2004 - SWEDEN.	238
Table 250	Number of manufacturer-owned repairers, 1997-2004 - UNITED KINGDOM.	239
Table 251	Respective Turnovers, 1997-2004 - DENMARK.	240
Table 252	Respective Turnovers, 1997-2004 - GERMANY.	241
Table 253	Respective Turnovers, 1997-2004 - SPAIN.	242
Table 254	Respective Turnovers, 1997-2004 - FRANCE.	243
Table 255	Respective Turnovers, 1997-2004 - ITALY.	244
Table 256	Respective Turnovers, 1997-2004 - HUNGARY.	245
Table 257	Respective Turnovers, 1997-2004 - NETHERLANDS.	246
Table 258	Respective Turnovers, 1997-2004 - POLAND.	247

Table 259	Respective Turnovers, 1997-2004 - PORTUGAL	248
Table 260	Respective Turnovers, 1997-2004 - SWEDEN.	249
Table 261	Respective Turnovers, 1997-2004 - UNITED KINGDOM.	250
Table 262	Number of Sub-repairers, 1997-2004 - DENMARK.	251
Table 263	Number of Sub-repairers, 1997-2004 - GERMANY.	252
Table 264	Number of Sub-repairers, 1997-2004 - ESTONIA.	253
Table 265	Number of Sub-repairers, 1997-2004 - SPAIN.	254
Table 266	Number of Sub-repairers, 1997-2004 - FRANCE.	255
Table 267	Number of Sub-repairers, 1997-2004 - ITALY.	256
Table 268	Number of Sub-repairers, 1997-2004 - HUNGARY.	257
Table 269	Number of Sub-repairers, 1997-2004 - NETHERLANDS.	258
Table 270	Number of Sub-repairers, 1997-2004 - POLAND.	259
Table 271	Number of Sub-repairers, 1997-2004 - PORTUGAL.	260
Table 272	Number of Sub-repairers, 1997-2004 - SWEDEN.	261
Table 273	Number of Sub-repairers, 1997-2004 - UNITED KINGDOM.	262
Table 274	Number of Sub-repairers outlets, 1997-2004 - DENMARK.	263
Table 275	Number of Sub-repairers outlets, 1997-2004 - GERMANY.	264
Table 276	Number of Sub-repairers outlets, 1997-2004 - ESTONIA.	265
Table 277	Number of Sub-repairers outlets, 1997-2004 - SPAIN.	266
Table 278	Number of Sub-repairers outlets, 1997-2004 - FRANCE.	267
Table 279	Number of Sub-repairers outlets, 1997-2004 - ITALY.	268
Table 280	Number of Sub-repairers outlets, 1997-2004 - HUNGARY.	269
Table 281	Number of Sub-repairers outlets, 1997-2004 - NETHERLANDS.	270
Table 282	Number of Sub-repairers outlets, 1997-2004 - POLAND.	271
Table 283	Number of Sub-repairers outlets, 1997-2004 - PORTUGAL.	272
Table 284	Number of Sub-repairers outlets, 1997-2004 - SWEDEN.	273
Table 285	Number of Sub-repairers outlets 1997-2004 - UNITED KINGDOM.	274
Table 286	Turnover of authorised sub-repairers, 1997-2004 -	275

	DENMARK.	
Table 287	Turnover of authorised sub-repairers, 1997-2004 - GERMANY.	276
Table 288	Turnover of authorised sub-repairers, 1997-2004 - SPAIN.	276
Table 289	Turnover of authorised sub-repairers, 1997-2004 - FRANCE.	278
Table 290	Turnover of authorised sub-repairers, 1997-2004 - ITALY.	279
Table 291	Turnover of authorised sub-repairers, 1997-2004 - HUNGARY.	280
Table 292	Turnover of authorised sub-repairers, 1997-2004 - NETHERLANDS.	281
Table 293	Turnover of authorised sub-repairers, 1997-2004 - POLAND.	282
Table 294	Turnover of authorised sub-repairers, 1997-2004 - PORTUGAL.	283
Table 295	Turnover of authorised sub-repairers, 1997-2004 - SWEDEN.	284
Table 296	Turnover of authorised sub-repairers, 1997-2004 - UNITED KINGDOM.	285
Table 297	Number of Auto-Centres / Fast Fit chains, 1997-2004 - GERMANY.	286
Table 298	Number of Auto-Centres / Fast Fit chains, 1997-2004 - FRANCE.	287
Table 299	Number of Auto-Centres / Fast Fit chains, 1997-2004 - ITALY.	288
Table 300	Number of Auto-Centres / Fast Fit chains, 1997-2004 - NETHERLANDS.	289
Table 301	Number of Auto-Centres / Fast Fit chains, 1997-2004 - POLAND.	290
Table 302	Number of Auto-Centres / Fast Fit chains, 1997-2004 - SWEDEN.	291
Table 303	Number of Auto-Centres / Fast Fit chains, 1997-2004 - UNITED KINGDOM.	292
Table 304	Number of Auto-Centres / Fast Fit outlets, 1997-2004 - GERMANY.	293
Table 305	Number of Auto-Centres / Fast Fit outlets, 1997-2004 - FRANCE.	294
Table 306	Number of Auto-Centres / Fast Fit outlets, 1997-2004 -	295

	ITALY.	
Table 307	Number of Auto-Centres / Fast Fit outlet, 1997-2004 - NETHERLANDS.	296
Table 308	Number of Auto-Centres / Fast Fit outlet, 1997-2004 - SWEDEN.	297
Table 309	Number of Auto-Centres / Fast Fit outlet, 1997-2004 - UNITED KINGDOM.	298
Table 310	Number of express service points, 1997-2004 - DENMARK.	299
Table 311	Number of express service points, 1997-2004 - GERMANY.	300
Table 312	Number of express service points, 1997-2004 - ESTONIA.	301
Table 313	Number of express service points, 1997-2004 - SPAIN.	302
Table 314	Number of express service points, 1997-2004 - FRANCE.	303
Table 315	Number of express service points, 1997-2004 - ITALY.	304
Table 316	Number of express service points, 1997-2004 - HUNGARY.	305
Table 317	Number of express service points, 1997-2004 - NETHERLANDS.	306
Table 318	Number of express service points, 1997-2004 - POLAND.	307
Table 319	Number of express service points, 1997-2004 - PORTUGAL.	308
Table 320	Number of express service points, 1997-2004 - SWEDEN.	309
Table 321	Number of express service points, 1997-2004 - UNITED KINGDOM.	310
Table 322	Number of generalist repairers, 1997-2004 - DENMARK.	311
Table 323	Number of generalist repairers, 1997-2004 - GERMANY.	312
Table 324	Number of generalist repairers, 1997-2004 - ESTONIA.	313
Table 325	Number of generalist repairers, 1997-2004 - SPAIN.	314
Table 326	Number of generalist repairers, 1997-2004 - FRANCE.	315
Table 327	Number of generalist repairers, 1997-2004 - ITALY.	316
Table 328	Number of generalist repairers, 1997-2004 - HUNGARY.	317
Table 329	Number of generalist repairers, 1997-2004 - NETHERLANDS.	318
Table 330	Number of generalist repairers, 1997-2004 - POLAND.	319
Table 331	Number of generalist repairers, 1997-2004 - PORTUGAL..	320

Table 332	Number of generalist repairers, 1997-2004 - SWEDEN.	321
Table 333	Number of generalist repairers, 1997-2004 - UNITED KINGDOM.	322
Table 334	Total of service only dealer locations / Total Main Dealer Service Outlets	323
Table 335	Total all Authorised Repairer contracts, by country	324
Table 336	Total all authorised repairer contracts, 1997-2004 - DENMARK	325
Table 337	Total all authorised repairer contracts, 1997-2004 - GERMANY	326
Table 338	Total all authorised repairer contracts, 1997-2004 - ESTONIA	327
Table 339	Total all authorised repairer contracts, 1997-2004 - SPAIN	328
Table 340	Total all authorised repairer contracts, 1997-2004 - FRANCE	329
Table 341	Total all authorised repairer contracts, 1997-2004 - ITALY	330
Table 342	Total all authorised repairer contracts, 1997-2004 - HUNGARY	331
Table 343	Total all authorised repairer contracts, 1997-2004 - NETHERLANDS	332
Table 344	Total all authorised repairer contracts, 1997-2004 - POLAND	333
Table 345	Total all authorised repairer contracts, 1997-2004 - PORTUGAL	334
Table 346	Total all authorised repairer contracts, 1997-2004 - SWEDEN	335
Table 347	Total all authorised repairer contracts, 1997-2004 - UNITED KINGDOM	336
Table 348	Total all Authorised Repairer outlets, by country	337
Table 349	Total all authorised repairer outlets, 1997-2004 - DENMARK	338
Table 350	Total all authorised repairer outlets, 1997-2004 - GERMANY	339
Table 351	Total all authorised repairer outlets, 1997-2004 - ESTONIA	340
Table 352	Total all authorised repairer outlets, 1997-2004 - SPAIN	341
Table 353	Total all authorised repairer outlets, 1997-2004 - FRANCE	342

Table 354	Total all authorised repairer outlets, 1997-2004 - ITALY	343
Table 355	Total all authorised repairer outlets, 1997-2004 - HUNGARY	344
Table 356	Total all authorised repairer outlets, 1997-2004 - NETHERLANDS	345
Table 357	Total all authorised repairer outlets, 1997-2004 - POLAND	346
Table 358	Total all authorised repairer outlets, 1997-2004 - PORTUGAL	347
Table 359	Total all authorised repairer outlets, 1997-2004 - SWEDEN	348
Table 360	Total all authorised repairer outlets, 1997-2004 - UNITED KINGDOM	349

3 Annex to Part III: Developments in the European market for automotive spare parts

No.	Title	Page
Table 361	Manufacturer sales of spare parts produced "in-house" - DENMARK (1997-2004.)	350
Table 362	Manufacturer sales of spare parts produced "in-house" - GERMANY (1997-2004.)	352
Table 363	Manufacturer sales of spare parts produced "in-house" - ESTONIA (1997-2004.)	353
Table 364	Manufacturer sales of spare parts produced "in-house" - SPAIN (1997-2004.)	354
Table 365	Manufacturer sales of spare parts produced "in-house" - FRANCE (1997-2004.)	355
Table 366	Manufacturer sales of spare parts produced "in-house" - ITALY (1997-2004.)	356
Table 367	Manufacturer sales of spare parts produced "in-house" - HUNGARY (1997-2004.)	357
Table 368	Manufacturer sales of spare parts produced "in-house" - NETHERLANDS (1997-2004.)	358
Table 369	Manufacturer sales of spare parts produced "in-house" - POLAND (1997-2004.)	359
Table 370	Manufacturer sales of spare parts produced "in-house" - PORTUGAL (1997-2004.)	360

Table 371	Manufacturer sales of spare parts produced "in-house" - SWEDEN (1997-2004.)	361
Table 372	Manufacturer sales of spare parts produced "in-house" - UNITED KINGDOM (1997-2004.)	362
Table 373	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - DENMARK (1997-2004.)	363
Table 374	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - GERMANY (1997-2004.)	364
Table 375	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - ESTONIA (1997-2004.)	365
Table 376	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - SPAIN (1997-2004.)	366
Table 377	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - FRANCE (1997-2004.)	367
Table 378	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - ITALY (1997-2004.)	368
Table 379	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - HUNGARY (1997-2004.)	369
Table 380	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - NETHERLANDS (1997-2004.)	370
Table 381	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - POLAND (1997-2004.)	371
Table 382	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - PORTUGAL (1997-2004.)	372
Table 383	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - SWEDEN (1997-2004.)	373
Table 384	Sales of spare parts manufactured by independent producers and supplied via vehicle manufacturer & authorised partners - UNITED KINGDOM (1997-2004.)	374
Table 385	Number of "Original spare parts" manufacturers -	375

	DENMARK (1997-2004.)	
Table 386	Number of "Original spare parts" manufacturers - GERMANY (1997-2004.)	376
Table 387	Number of "Original spare parts" manufacturers - ESTONIA (1997-2004.)	377
Table 388	Number of "Original spare parts" manufacturers - SPAIN (1997-2004.)	378
Table 389	Number of "Original spare parts" manufacturers - FRANCE (1997-2004.)	379
Table 390	Number of "Original spare parts" manufacturers - ITALY (1997-2004.)	380
Table 391	Number of "Original spare parts" manufacturers - HUNGARY (1997-2004.)	381
Table 392	Number of "Original spare parts" manufacturers - NETHERLANDS (1997-2004.)	382
Table 393	Number of "Original spare parts" manufacturers - POLAND (1997-2004.)	383
Table 394	Number of "Original spare parts" manufacturers - PORTUGAL (1997-2004.)	384
Table 395	Number of "Original spare parts" manufacturers - SWEDEN (1997-2004.)	385
Table 396	Number of "Original spare parts" manufacturers - UNITED KINGDOM (1997-2004.)	386
Table 397	Value of "Original Spare Parts" suppliers' sales to car manufacturers - DENMARK (1997-2004.)	387
Table 398	Value of "Original Spare Parts" suppliers' sales to car manufacturers - GERMANY (1997-2004.)	388
Table 399	Value of "Original Spare Parts" suppliers' sales to car manufacturers - ESTONIA (1997-2004.)	389
Table 400	Value of "Original Spare Parts" suppliers' sales to car manufacturers - SPAIN (1997-2004.)	390
Table 401	Value of "Original Spare Parts" suppliers' sales to car manufacturers - FRANCE (1997-2004.)	391
Table 402	Value of "Original Spare Parts" suppliers' sales to car manufacturers - ITALY (1997-2004.)	392
Table 403	Value of "Original Spare Parts" suppliers' sales to car manufacturers - HUNGARY (1997-2004.)	393
Table 404	Value of "Original Spare Parts" suppliers' sales to car manufacturers - NETHERLANDS (1997-2004.)	394

Table 405	Value of "Original Spare Parts" suppliers' sales to car manufacturers - POLAND (1997-2004.)	395
Table 406	Value of "Original Spare Parts" suppliers' sales to car manufacturers - PORTUGAL (1997-2004.)	396
Table 407	Value of "Original Spare Parts" suppliers' sales to car manufacturers - SWEDEN (1997-2004.)	397
Table 408	Value of "Original Spare Parts" suppliers' sales to car manufacturers - UNITED KINGDOM (1997-2004.)	398
Table 409	Number of authorised spare parts distributors - DENMARK (1997-2004.)	399
Table 410	Number of authorised spare parts distributors - GERMANY (1997-2004.)	400
Table 411	Number of authorised spare parts distributors - ESTONIA (1997-2004.)	401
Table 412	Number of authorised spare parts distributors - SPAIN (1997-2004.)	402
Table 413	Number of authorised spare parts distributors - FRANCE (1997-2004.)	403
Table 414	Number of authorised spare parts distributors - ITALY (1997-2004.)	404
Table 415	Number of authorised spare parts distributors - HUNGARY (1997-2004.)	405
Table 416	Number of authorised spare parts distributors - NETHERLANDS (1997-2004.)	406
Table 417	Number of authorised spare parts distributors - POLAND (1997-2004.)	407
Table 418	Number of authorised spare parts distributors - PORTUGAL (1997-2004.)	408
Table 419	Number of authorised spare parts distributors - SWEDEN (1997-2004.)	409
Table 420	Number of authorised spare parts distributors - UNITED KINGDOM (1997-2004.)	410
Table 421	Turnover of authorised spare parts distributors - DENMARK (1997-2004.)	411
Table 422	Turnover of authorised spare parts distributors - GERMANY (1997-2004.)	412
Table 423	Turnover of authorised spare parts distributors - ESTONIA (1997-2004.)	413
Table 424	Turnover of authorised spare parts distributors - SPAIN	414

	(1997-2004.)	
Table 425	Turnover of authorised spare parts distributors - FRANCE (1997-2004.)	415
Table 426	Turnover of authorised spare parts distributors - ITALY (1997-2004.)	416
Table 427	Turnover of authorised spare parts distributors - HUNGARY (1997-2004.)	417
Table 428	Turnover of authorised spare parts distributors - NETHERLANDS (1997-2004.)	418
Table 429	Turnover of authorised spare parts distributors - POLAND (1997-2004.)	419
Table 430	Turnover of authorised spare parts distributors - PORTUGAL (1997-2004.)	420
Table 431	Turnover of authorised spare parts distributors - SWEDEN (1997-2004.)	421
Table 432	Turnover of authorised spare parts distributors - UNITED KINGDOM (1997-2004.)	422
Table 433	Evolution of mean profit ratios for individual VMs' parts businesses	423
Table 434	Evolution of turnover for individual VMs' parts businesses	424
Table 435	Top independent parts distributors - DENMARK (2004).	425
Table 436	Top independent parts distributors - GERMANY (2004).	426
Table 437	Top independent parts distributors - ITALY (2004).	427
Table 438	Top independent parts distributors - NETHERLANDS (2004).	428
Table 439	Top independent parts distributors - Poland (2000-2004).	429
Table 440	No. of authorised spare parts distributors providing parts distribution only - DENMARK (1997-2004.)	430
Table 441	No. of authorised spare parts distributors providing parts distribution only - GERMANY (1997-2004.)	431
Table 442	No. of authorised spare parts distributors providing parts distribution only - ESTONIA (1997-2004.)	432
Table 443	No. of authorised spare parts distributors providing parts distribution only - SPAIN (1997-2004.)	433
Table 444	No. of authorised spare parts distributors providing parts distribution only - FRANCE (1997-2004.)	434
Table 445	No. of authorised spare parts distributors providing	435

	parts distribution only - ITALY (1997-2004.)	
Table 446	No. of authorised spare parts distributors providing parts distribution only - HUNGARY (1997-2004.)	436
Table 447	No. of authorised spare parts distributors providing parts distribution only - NETHERLANDS (1997-2004.)	437
Table 448	No. of authorised spare parts distributors providing parts distribution only - POLAND (1997-2004.)	438
Table 449	No. of authorised spare parts distributors providing parts distribution only - PORTUGAL (1997-2004.)	439
Table 450	No. of authorised spare parts distributors providing parts distribution only - SWEDEN (1997-2004.)	440
Table 451	No. of authorised spare parts distributors providing parts distribution only - UNITED KINGDOM (1997-2004.)	441
Table 452	No. of manufacturer-owned parts distributors - DENMARK (1997-2004.)	442
Table 453	No. of manufacturer-owned parts distributors - GERMANY (1997-2004.)	443
Table 454	No. of manufacturer-owned parts distributors - ESTONIA (1997-2004.)	444
Table 455	No. of manufacturer-owned parts distributors - SPAIN (1997-2004.)	445
Table 456	No. of manufacturer-owned parts distributors - FRANCE (1997-2004.)	446
Table 457	No. of manufacturer-owned parts distributors - ITALY (1997-2004.)	447
Table 458	No. of manufacturer-owned parts distributors - HUNGARY (1997-2004.)	448
Table 459	No. of manufacturer-owned parts distributors - NETHERLANDS (1997-2004.)	449
Table 460	No. of manufacturer-owned parts distributors - POLAND (1997-2004.)	450
Table 461	No. of manufacturer-owned parts distributors - PORTUGAL (1997-2004.)	451
Table 462	No. of manufacturer-owned parts distributors - SWEDEN (1997-2004.)	452
Table 463	No. of manufacturer-owned parts distributors - UNITED KINGDOM (1997-2004.)	453
Table 464	Parts produced/sold by VMs as a percentage of car sales	454

	- DENMARK (1997-2004.)	
Table 465	Parts produced/sold by VMs as a percentage of car sales - GERMANY (1997-2004.)	455
Table 466	Parts produced/sold by VMs as a percentage of car sales - ESTONIA (1997-2004.)	456
Table 467	Parts produced/sold by VMs as a percentage of car sales - SPAIN (1997-2004.)	457
Table 468	Parts produced/sold by VMs as a percentage of car sales - FRANCE (1997-2004.)	458
Table 469	Parts produced/sold by VMs as a percentage of car sales - ITALY (1997-2004.)	459
Table 470	Parts produced/sold by VMs as a percentage of car sales - HUNGARY (1997-2004.)	460
Table 471	Parts produced/sold by VMs as a percentage of car sales - NETHERLANDS (1997-2004.)	461
Table 472	Parts produced/sold by VMs as a percentage of car sales - POLAND (1997-2004.)	462
Table 473	Parts produced/sold by VMs as a percentage of car sales - PORTUGAL (1997-2004.)	463
Table 474	Parts produced/sold by VMs as a percentage of car sales - SWEDEN (1997-2004.)	464
Table 475	Parts produced/sold by VMs as a percentage of car sales - UNITED KINGDOM (1997-2004.)	465
Table 476	Parts produced by VMs as a percentage of car sales - DENMARK (1997-2004.)	466
Table 477	Parts produced by VMs as a percentage of car sales - GERMANY (1997-2004.)	467
Table 478	Parts produced by VMs as a percentage of car sales - ESTONIA (1997-2004.)	468
Table 479	Parts produced by VMs as a percentage of car sales - SPAIN (1997-2004.)	469
Table 480	Parts produced by VMs as a percentage of car sales - FRANCE (1997-2004.)	470
Table 481	Parts produced by VMs as a percentage of car sales - ITALY (1997-2004.)	471
Table 482	Parts produced by VMs as a percentage of car sales - HUNGARY (1997-2004.)	472
Table 483	Parts produced by VMs as a percentage of car sales - NETHERLANDS (1997-2004.)	473

Table 484	Parts produced by VMs as a percentage of car sales - POLAND (1997-2004.)	474
Table 485	Parts produced by VMs as a percentage of car sales - PORTUGAL (1997-2004.)	475
Table 486	Parts produced by VMs as a percentage of car sales - SWEDEN (1997-2004.)	476
Table 487	Parts produced by VMs as a percentage of car sales - UNITED KINGDOM (1997-2004.)	477
Table 488	Parts sold by VMs as a percentage of car sales - DENMARK (1997-2004.)	478
Table 489	Parts sold by VMs as a percentage of car sales - GERMANY (1997-2004.)	479
Table 490	Parts sold by VMs as a percentage of car sales - ESTONIA (1997-2004.)	480
Table 491	Parts sold by VMs as a percentage of car sales - SPAIN (1997-2004.)	481
Table 492	Parts sold by VMs as a percentage of car sales - FRANCE (1997-2004.)	482
Table 493	Parts sold by VMs as a percentage of car sales - ITALY (1997-2004.)	483
Table 494	Parts sold by VMs as a percentage of car sales - HUNGARY (1997-2004.)	484
Table 495	Parts sold by VMs as a percentage of car sales - NETHERLANDS (1997-2004.)	485
Table 496	Parts sold by VMs as a percentage of car sales - POLAND (1997-2004.)	486
Table 497	Parts sold by VMs as a percentage of car sales - PORTUGAL (1997-2004.)	487
Table 498	Parts sold by VMs as a percentage of car sales - SWEDEN (1997-2004.)	488
Table 499	Parts sold by VMs as a percentage of car sales - UNITED KINGDOM (1997-2004.)	489
Table 500	Average costs of repair, by brand and type of part, UK (2006).	490
