Market developments in the distribution of new motor vehicles and spare parts and the provision of after-sales services under Regulation 461/ 2010 of 27 May 2010

Final Report

## European Commission

Market developments in the distribution of new motor vehicles and spare parts and the provision of after-sales services under Regulation 461/ 2010 of 27 May 2010

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## Abbreviations

| ACEA | Association des Constructeurs Européens d'Automobiles (European <br> Automobile Manufacturers' Association) |
| :--- | :--- |
| AECDR | Alliance for European Car Dealers and Repairers |
| CECRA | Conseil Européen du Commerce. et de la Réparation Automobiles <br> (European Council for Motor Trades and Repairs) |
| CLEPA | Comité de liaison européen des fabricants d'équipements et de pièces <br> automobiles (European Association of Automotive Suppliers) |
| CR | Concentration ratio |
| Cvar | Coefficient of variation |
| EU | European Union |
| EUR | Euro |
| FIGIEFA | Fédération Internationale des Grossistes, Importateurs \& Exportateurs en <br> Fournitures Automobiles (International Federation of the automotive <br> aftermarket distributors) |
| HHI | Herfindahl-Hirschman index |
| ICDP | International Car Distribution Programme |
| IP | Intellectual property rights |
| LCV | Light Commercial Vehicle |
| M | Million |
| M\&A | Mergers and acquisitions |
| MS | Member state |
| NACE | Nomenclature des Activités dans Ia Communauté Européenne <br> (Classification of Economic Activities in the European Community) |
| OEM | Original equipment manufacturer |
| OES | Original equipment supplier |
| R\&D | Research and development |
| StdDev | Standard deviation |
| SPD | Spare parts distributors |
| SPM | Spare parts manufacturers |
| SUV | Sport utility vehicle |
| UEIL | Union Indépendante de I' Industrie Européenne des Lubrifiants (Union of <br> the European Lubricants Industry) |
| VC | Vehicle category |
| VM | Vehicle manufacturer |
| YOY | Year-Over-Year |

## Abbreviations for countries

| AT | Austria |
| :--- | :--- |
| BE | Belgium |
| CY | Cyprus |
| FR | France |
| DE | Germany |
| GR | Greece |
| IE | Ireland |
| IT | Italy |
| NL | Netherlands |
| PL | Poland |
| ES | Spain |
| UK | United Kingdom |

## Executive summary

This study was commissioned by the DG Competition of the European Commission within the framework of Commission Regulation (EU) No. 461/2010 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of vertical agreements and concerted practices in the motor vehicle sector. The aim of this report is to support the Commission in its task of monitoring the operation of the Regulation, by providing an overview of market developments in automotive distribution and aftersales services from 2007 to 2017 across the European Union. More specifically, the study is divided in three main parts in order to represent historical trends in the market for:

1. New motor vehicles and their distribution,
2. Provision of repair and maintenances services, and
3. Distribution of spare parts.

The study comprised substantial data collection efforts, relying to some degree on secondary data sources, and to a greater extent on a large scale survey of all types of relevant industry stakeholders, including trade associations.
Data were collected and analysed, both at aggregate and at country level, for a representative sample of 12 EU Member States and of 4 vehicle categories (passenger cars, light commercial vehicles, trucks and buses). The Covid-19 pandemic affected the ability of a large number of companies to actively contribute to the survey. More information is available in the methodology section of this study.

## 1. New motor vehicles and their distribution

Evolution of the market for new passenger cars over the 2007-2017 period in the countries in scope

- Sales of passenger cars were impacted by the financial and economic crisis of 2008, resulting in low sales levels between 2010 and 2015. Sales levels in 2017 still remain 7\% lower than the pre-crisis 2007 levels.
- Volkswagen Group experienced a $12 \%$ increase in sales volume from 2007 to 2017, surpassing PSA Group in 2011 to become the overall market leader. Renault-Nissan-Mitsubishi increased its sales by 28\%, but remained the thirdlargest firm behind PSA Group. Fiat Chrysler Automobiles and Ford Group remained among the top-5 manufacturers in the market despite seeing their sales contract to about half those of Renault-Nissan-Mitsubishi. The top-3 vehicle manufacturers controlled 55\% of the market in 2017.
- Germany remained the largest market for passenger cars, while Italy dropped from second to fourth in 2017. France moved up from the fourth to the third position while the United Kingdom became the second-largest market from 2012 onwards. Sales contracted overall, due to double digit percentage decreases in the number of units sold in Greece, Spain, Italy and the Netherlands among others, and despite a $66 \%$ increase in the sales of passenger cars in Poland. Volkswagen Group is the market leader in 7 out of 12 countries. Fiat Chrysler Automobiles remains the market leader in Italy, whereas PSA Group remains the market leader in Belgium, the United Kingdom and France.
- Important M\&A deals took place between 2007 and 2017. The largest in value was the acquisition of Porsche by Volkswagen Group. Other notable deals included the takeover of Jaguar \& Land Rover by Tata Motors, Dongfeng Motor
and the French State's entries into the capital of PSA Group, the merger of Fiat with Chrysler and the acquisition of Opel/Vauxhall by PSA Group.
- As a result of the M\&A activity described above, market concentration levels increased from 2007, peaking in 2014 before declining, by 2017, back to levels approximately similar to those observed in 2007. At country level, the market remained highly concentrated in France, where the two French vehicle manufacturers have a joint $60 \%$ market share. The market remained fairly concentrated in Germany and Austria as well over the study period.
- In terms of customer offerings, vehicle manufacturers exited many segments and in 2017 most of them are offering segment $C$ (compact) models instead of $B$ (sub-compact), reflecting a trend towards larger size models.
Evolution of the market for new light commercial vehicles over the 2007-2017 period in the countries in scope
- Sales of light commercial vehicles were severely impacted by the financial and economic crisis of 2008 with a low level of sales between 2009 and 2015 in particular. Sales levels in 2017 still remained 10.5\% lower than the pre-crisis 2007 levels.
- PSA Group and Renault-Nissan-Mitsubishi respectively ranked first and second in terms of sales throughout the period analysed, jointly holding $47 \%$ of the aggregated market share. Ford Group managed to increase its sales, and since 2014 is the third largest firm in the market with a 12,9\% aggregated market share. In contrast, Fiat Chrysler Automobiles lost ground and moved from the fourth position in 2007 to the sixth in 2017.
- France and the United Kingdom remained by far the first and the second largest markets by sales volume, respectively, throughout the study period, with the exception of 2015, when their positions were briefly inverted. France accounted for approximately $28 \%$ of total sales, while the United Kingdom accounted for approximately $20 \%$ across the entire period. Germany stabilised as the third largest market with $15 \%$ of total sales while Italy, despite the drop in Fiat Chrysler Automobiles' sales, remained the fifth market behind Spain. In terms of brands, PSA Group is the market leader in Belgium, France, Poland and Spain. Renault-Mitsubishi is the leader in Greece, and retains a very significant market share in France, Spain, Belgium and Ireland where it is the second largest firm. Ford Group is the market leader in the United Kingdom and I reland, while holding important market shares in most of the other countries as well. Fiat Chrysler Automobiles is the market leader in Italy, and is second in Poland.
- Industry concentration was determined mostly by sales trends, as the M\&A deals that occurred did not significantly influence the light commercial vehicle market during the time period analysed. The market concentration had a fluctuating trend but the industry remained at a medium level of concentration overall throughout the period analysed. At country level, however, the market remained highly concentrated in France and Spain, as well as in the United Kingdom, whose market concentration grew to reach high levels in 2017. Italy's market remained highly concentrated apart from 2017, while market concentration in Belgium remained at a medium level as of 2015.
- In terms of customer offerings, a number of vehicle manufacturers entered new segments with a significant number of net entries in the C (Compact) and pickup segments. In 2017, the Van segment had 10 active vehicle manufacturers, as did the pickup segment. At country level, the biggest effort in entering local markets with new models across segments was done by small and medium players such as Volkswagen Group, Mahindra Group, Hyundai Group, Toyota and

Daimler Group. In contrast, Fiat Chrysler Automobiles was the manufacturer exiting the most segments or countries over the period analysed.

Evolution of the market for new trucks over the 2007-2017 period in the countries in scope

- Sales of trucks were very severely impacted by the financial and economic crisis of 2008 with a significant drop in sales in 2009, driven by a decline in trade and construction projects. The introduction of the Euro VI emissions standard played a role to increase sales in 2013. Despite showing signs of recovery during the following years, sales levels in 2017 remained 13\% lower than the pre-crisis 2007 levels.
- The ranking of top manufacturers by units sold remained unchanged, with TRATON Group leading throughout the study period. For the purpose of this study, the data for TRATON Group includes data for its predecessors Scania AB and MAN SE, prior to takeovers by Volkswagen Group in 2008 and 2011. Daimler Group, Volvo Group, Paccar and CNH Industrial complete the group of top five truck manufacturers. Germany is the largest market for trucks, while France and the United Kingdom alternated at second and third place throughout the time period. Poland noticeably became the fourth largest market in 2011, well ahead of Italy and Spain where sales declined respectively by 34\% and 45\% over the 2007-2017 period. Daimler is the market leader in Germany, followed by TRATON Group. The two manufacturers control $70 \%$ of what is by far the largest market for trucks. Volvo Group hold a $42 \%$ market share in France due to the historical strength of the Renault Trucks brand, whereas Paccar is the market leader in the United Kingdom.
- The industry concentration was impacted by the Volkswagen's Group acquisition of MAN. Since 2018, the combined entity is renamed TRATON Group and comprises the VW, MAN and Scania brands. Industry concentration remained high overall between 2007 and 2017, as five vehicle manufacturers controlled over $97 \%$ of the market. Austria is the country with the highest market concentration over the period analysed. Other countries with a constant high concentration were France, Germany, Greece, and Italy. Remarkably, Ireland, and to some extent the United Kingdom were initially marked by a more competitive market, however the concentration levels increased by 2017, with a particularly steep growth in the case of Ireland.
- In terms of customer offerings, most manufacturers exited segments, resulting in fewer truck models on offer, particularly for medium trucks. The largest decrease in customer offerings were experienced in the Netherlands and Ireland.

Evolution of the market for new buses over the 2007-2017 period in the countries in scope

- Sales of buses contracted slightly overall, despite the enduring performance of the market leader, Daimler Group, whose sales increased by $15 \%$ over the 20072017 period. Bus sales saw a marked decrease in 2010, followed by a significant rebound as of 2014, spurred by the liberalisation of the intercity bus market in France and especially in Germany. Three vehicle manufacturers, namely Daimler Group, CNH Industrial and TRATON Group, jointly account for $67.3 \%$ of the overall market for buses. Within the remainder, a number of small national manufacturers jointly account for a significant share, i.e. approximately $20 \%$, of the overall market for buses.
- France remained the largest market by units sold over the 2007-2017 period, followed by Germany and the United Kingdom. The industry is highly concentrated, with an overall increase in market concentration over the period. The highest concentration was registered in Austria, Poland, Germany and France. Market concentration in the United Kingdom in 2007 was the lowest of all the 12 countries analysed, but it grew to reach high levels by the end of the study period, driven by a slight contraction of the market size coupled with the increasing performance of the leading manufacturer, Scotland's Alexander Dennis. A major acquisition was the purchase of MAN by Volkswagen Group, now TRATON Group.

Following a general analysis of the market in terms of evolution of vehicle sales and of vehicle manufacturers performance, the study focussed on the three key sub-segments of the automotive industry: distribution of new vehicles, repair and maintenance services, distribution of spare parts.

Distribution of new vehicles over the 2007-2017 period in the countries in scope

- Despite a growth from 2007 to 2011, the market presence of passenger car dealers decreased over the 2007-2017 time period. The overall network density of outlets for every 1000 inhabitants decreased from 0.17 in 2007 to 0.14 in 2017. The number of authorised car dealers declined due to consolidation through acquisitions and joint ventures, as well as a rationalisation of the authorised network operated by vehicle manufacturers in order to ensure profitability. Online and innovative sales channels through new types of player have also been emerging. At brand level, the French passenger car manufacturers kept the densest network of dealers. At country level, the Netherlands and Belgium had the highest density, while Greece had the lowest.
- Stand-alone dealers which only perform vehicle sales in the passenger car segment have a significant presence only in Greece, Cyprus, and as of 2013 in France. For light commercial vehicles, stand-alone dealers were also present in Germany, Cyprus and Spain. Over the 2007-2017 period, most passenger car and truck dealers operated under a quantitative selective distribution system where suppliers choose their authorised partners based on criteria that directly limit the number of distributors. In contrast, buses were mostly distributed through an exclusive distribution system where dealers enjoy protection from active sales by other authorised dealers in a given territory. Light commercial vehicles were distributed through both a qualitative and quantitative distribution system.
- The performance of dealers was assessed by the unit sales per outlet or per dealer group, the latter of which may control several outlets, usually within their country of main operations. At national level, the United Kingdom, Germany, Italy and France recorded the highest unit sales of passenger cars per dealer group or outlet. Poland, the United Kingdom and Spain (despite a substantial sales decline in 2009) recorded the highest unit sales per dealer group or outlet selling trucks.


## 2. Provision of repair and maintenances services

Provision of repair and maintenance services over the 2007-2017 period in the countries in scope

- The addressable market for repair and maintenance services is given by the number of vehicles circulating in each country. The vehicle parc breakdown by category remained stable over the 2007-2017 period, with a high share for passenger cars, at about $87 \%$, followed by light commercial vehicles for about $10 \%$, with trucks and buses accounting for the remainder. Even though Germany has the largest number of passenger cars in circulation out of all the 12 countries analysed, the motorisation rate, expressed as the number of cars per inhabitant, was highest in Italy throughout the time period with 0.6 cars per capita. Remarkably, Poland jumped from the lowest position with 0.38 cars per capita in 2007 to the second highest in 2017 with 0.59 cars. France's vehicle parc of light commercial vehicles remained the most numerous, followed by Spain, despite an $8 \%$ decrease in the latter's fleet. Italy held the third largest vehicle parc while Germany was only in the sixth position, notwithstanding a $40 \%$ increase in the fleet over the 2007-2017 period. Despite a contraction in Italy's truck vehicle parc of nearly $11 \%$, it remained the largest of all countries in scope. Poland held the largest share of the bus fleet.
- The providers of repair and maintenance services can either be independent firms, or a part of vehicle manufacturers' / spare parts manufacturers' authorised networks and are very often SMEs. The study findings provided a detailed picture for mostly just the passenger car authorised repairers, due to the lack of data for other categories.
- Over the 2007-2017 period, the average sales of repair and maintenance services grew by 35\%, driven by factors including an increase in the size of the passenger cars parc, from 197 million to 225 million, and a general increase of its average age The number of repairers per inhabitant increased, while the the number of repairers per car decreased.
- Repairers generally provide repairs under four different types of warranty, namely anti-corrosion, powertrain, overall and extended warranties by vehicle manufacturers. Over 2007-2017, the overall warranty period remained stable at 2 years of vehicle age and $100,000 \mathrm{~km}$ for all countries with the exception of France, which offered double the mileage. The powertrain warranty period also remained stable at 2 years, while mileage increased in some countries. The anticorrosion warranty period remained stable at 12 years, while the extended warranty that customers can purchase registered a minor increase in its average period, to 4.6 years, accompanied however by a significant decrease of the mileage offered by vehicle manufacturers.
- Authorised repairers remained, for the most part, compensated for the actual cost of labour and spare parts for works performed. However, some vehicle manufacturers reported an increased application of fixed rates to repairers for works under warranty.
- Authorised repairers were observed to have better access to vehicle data, relative to independent repairers. The access to vehicle information through documents was increasingly replaced by digital means and, especially for independent repairers, by the use of websites.
- The information collected about the contractual links of repairers with spare parts manufacturers was limited. Most spare parts manufacturers reported applying
price discounts based on the volume or aggregate value of spare parts purchased by their partners.


## 3. Distribution of spare parts

Distribution of spare parts over the 2007-2017 period in the countries in scope

- Spare parts are an important segment of the automotive industry, where they serve as inputs to VMs and to repairers. Businesses in the spare parts supply chain include primarily spare parts manufacturers (such as Michelin, Bosch or Continental), vehicle manufacturers and spare parts distributors. Over the 20072017 period, the market for spare parts by sales value expanded greatly.
- The business of spare parts manufacturers grew by about $30 \%$, reaching a total value of approximately 208 billion EUR. This excellent result was achieved despite a contraction of sales in 2013 and in 2009, when the financial and economic crisis of 2008 pushed tens of manufacturers into bankruptcy, especially in Germany. The country remained by far the most important manufacturing market with a $44 \%$ share of total sales, well ahead of France and Italy which hold a $12 \%$ share each as the second and third largest markets. Over the 20072017 period, spare parts manufacturers registered a stable operating margin, averaging around $6-7 \%$ despite a decrease in 2009. For the top 10 firms, the average margin was higher at around 11-15\%.
- The business of spare parts distributors grew by about $26 \%$, reaching a total sales value of about 31.3 billion EUR. Germany remained by far the largest market, holding a share of about $32 \%$, while the United Kingdom and France followed with a share of approximately $20 \%$ each, and other countries held less than half of the share of the top 3 markets.
- The distribution of spare parts is a complex supply chain, given that vehicle manufacturers themselves account for approximately half of the sales volume for spare parts manufacturers. Spare parts distributors, repairers and to a lesser extent the general public, account for the remainder of spare parts manufacturers' sales Vehicle manufacturers use parts in their production lines or supply them through their network of own or authorised outlets. With the exception of France and Italy, passenger car parts were distributed by vehicle manufacturers using mostly qualitative selective distribution, as well as by the authorised network. Sales of passenger car parts through vehicle manufacturers' own outlets remained an exception, and occurred mostly in Germany. Light commercial vehicles' parts were also mostly supplied through qualitative selective distribution but the share of sales through vehicle manufacturers' outlets reached about 20-30\% in Germany, France, Belgium and Italy. Parts for trucks and buses had also similar distribution patterns. Interestingly, the use of innovative distribution channels like e-commerce or third-party platforms was not widespread and was very limited or even decreased over 2007-2017 for all vehicle categories. Up to $40-50 \%$ of spare parts distributors did not use innovative channels at all, while those which did mostly focussed on using their own corporate website.
- The supply to vehicle manufacturers by spare parts manufacturers was based on contracts including often sharing of know-how, development costs or tools, while vehicle manufacturers offer rebates or bonus schemes to their partners. In the case of distributors, spare parts manufacturers mostly reported having no
agreements, but applied volume/value-based discounts instead. Few contracts of product/brand exclusivity were observed in Italy, Cyprus and Spain.


## Résumé

Cette étude a été commandée par la DG Concurrence de la Commission Européenne dans le cadre du règlement (UE) nº 461/2010 concernant l'application de l'article 101, paragraphe 3, du Traité sur le fonctionnement de l'Union européenne à des catégories d'accords verticaux et de pratiques concertées dans le secteur automobile. L'objectif de ce rapport est de soutenir la Commission dans sa tâche de surveillance du fonctionnement du règlement, en fournissant un aperçu de l'évolution du marché de la distribution et des services après-vente automobiles de 2007 à 2017 dans I'Union Européenne. Plus précisément, l'étude est divisée en trois parties principales afin de représenter les tendances historiques du marché des services après-vente :

1. Les véhicules automobiles neufs et leur distribution,
2. La fourniture de services de réparation et d'entretien, et
3. La distribution des pièces de rechange.

L'étude a nécessité un travail considérable de collecte de données, en s'appuyant sur des sources de données secondaires, et plus largement sur une enquête à grande échelle auprès de tous les types de parties prenantes du secteur, notamment les associations professionnelles.
Les données ont été collectées et analysées, tant au niveau agrégé qu'au niveau national, pour un échantillon représentatif de 12 États membres de l'UE et de 4 catégories de véhicules (voitures particulières, véhicules utilitaires légers, camions et bus). La pandémie de Covid-19 a affecté la capacité d'un grand nombre d'entreprises à contribuer activement à l'enquête. Plus informations sur cet aspect sont présentées dans la section méthodologie de l'étude.

## 1. Les véhicules automobiles neufs et leur distribution

Évolution du marché des voitures particulières neuves sur la période 2007-2017 dans les pays concernés

- Les ventes de voitures particulières ont été affectées par la crise financière et économique de 2008, ce qui a entraîné un faible niveau des ventes entre 2010 et 2015. En 2017, le niveau des ventes était $7 \%$ plus bas que celui d'avant crise (en 2007).
- Les ventes de Volkswagen ont augmenté de 12 \% sur la période 2007-2017, permettant au groupe de devenir leader du marché en 2011 devant le groupe PSA. Malgré une augmentation de ses ventes de $28 \%$, Renault-Nissan-Mitsubishi a occupé la place de troisième plus important constructeur du marché après le groupe PSA. Fiat Chrysler Automobiles et le groupe Ford sont restés parmi les cinq premiers constructeurs du marché, bien que leurs ventes ne représentent que la moitié de celles de Renault-Nissan-Mitsubishi. Les trois principaux constructeurs automobiles contrôlaient 55 \% du marché en 2017.
- L'Allemagne est restée le plus grand marché des voitures particulières, tandis que I'Italie est passée de la deuxième à la quatrième place en 2017. La France est passée de la quatrième à la troisième position, tandis que le Royaume-Uni a pris la place de deuxième marché à partir de 2012. Les ventes ont baissé au niveau mondial en raison d'une diminution importante des unités vendues en Grèce, en Espagne, en Italie et aux Pays-Bas, entre autres. La Pologne a en revanche enregistré une croissance des ventes record de 66\% sur la période. Le groupe Volkswagen est leader du marché dans 7 pays sur 12. Fiat Chrysler

Automobiles domine le marché en Italie et le groupe PSA reste leader du marché en Belgique, au Royaume-Uni et en France.

- D'importantes opérations de fusions-acquisitions ont eu lieu entre 2007 et 2017. La plus importante en valeur a été l'acquisition de Porsche par le groupe Volkswagen. Parmi les autres opérations notables, on peut citer le rachat de Jaguar \& Land Rover par Tata Motors, I'entrée de Dongfeng Motor et de l'État français au capital du groupe PSA, la fusion de Fiat avec Chrysler et l'acquisition d'Opel/Vauxhall par le groupe PSA.
- L'activité de fusions-acquisitions décrite ci-dessus a entrainé une augmentation du niveau de concentration du marché à partir de 2007. Ce niveau a atteint son plus haut point en 2014 avant de diminuer, en 2017, pour revenir à des niveaux approximativement similaires à ceux observés en 2007. Au niveau national, le marché est resté très concentré en France où les deux constructeurs automobiles français détiennent $60 \%$ du marché. Le marché est également resté concentré en Allemagne et en Autriche sur la période étudiée.
- S'agissant de l'offre, les constructeurs automobiles se sont retirés de nombreux segments. En 2017, la plupart d'entre eux proposaient des modèles du segment $C$ (compact) au lieu de modèles du segment $B$ (sous-compacts). Ceci reflète une tendance généralisée vers des modèles de plus grande taille.

Évolution du marché des nouveaux véhicules utilitaires légers sur la période 2007-2017 dans les pays concernés

- Les ventes de véhicules utilitaires légers ont été sévèrement touchées par la crise financière et économique de 2008, avec de faibles ventes enregistrées, particulièrement durant la période 2009-2015. En 2017, le niveau des ventes était $10,5 \%$ plus bas que celui d'avant-crise (en 2007).
- Les groupes PSA et Renault-Nissan-Mitsubishi étaient respectivement les premier et deuxième constructeurs du marché pendant la période analysée, détenant une part de marché de $47 \%$. Grâce à une augmentation de ses ventes, Ford occupe depuis 2014 la troisième place sur le marché avec une part de 12,9\%. L'entreprise Fiat Chrysler est, quant à elle, passée de la quatrième place en 2007 à la sixième place en 2017.
- Au niveau national, la France et le Royaume-Uni sont restés de loin les premier et deuxième marchés les plus importants au niveau du volume des ventes tout au long de la période étudiée, à l'exception de 2015 où leurs positions se sont inversées. La France représentait environ 28 \% des ventes totales, tandis que le Royaume-Uni en représentait environ $20 \%$ sur l'ensemble de la période. L'Allemagne s'est stabilisée en tant que troisième plus grand marché avec $15 \%$ des ventes, tandis que l'Italie, malgré la baisse des ventes de Fiat Chrysler Automobiles, est restée le cinquième marché derrière l'Espagne. En ce qui concerne les marques, le groupe PSA est le leader du marché en Belgique, en France, en Pologne et en Espagne. Renault-Mitsubishi est leader en Grèce et conserve une part de marché très importante en France, en Espagne, en Belgique et en Irlande où il est le deuxième acteur principal. Le groupe Ford est leader du marché au Royaume-Uni et en Irlande, tout en détenant des parts de marché importantes dans la plupart des autres pays étudiés. Fiat Chrysler Automobiles est leader du marché en Italie et second en Pologne.
- La concentration du secteur a été déterminée principalement par l'évolution des ventes, les opérations de fusion et acquisition n'ayant pas eu d'influence significative sur le marché des véhicules utilitaires légers au cours de la période analysée. La concentration du marché a connu une tendance fluctuante, mais l'industrie est dans l'ensemble restée à un niveau de concentration moyen tout au long de la période analysée. Le marché est toutefois resté très concentré en France et en Espagne, ainsi qu'au Royaume-Uni, où la concentration du marché a atteint des niveaux élevés en 2017. Le marché italien est resté très concentré à l'exception de 2017, tandis que la concentration du marché belge s'est maintenue à un niveau moyen à partir de 2015 .
- S'agissant de l'offre, un certain nombre de constructeurs automobiles ont pénétré de nouveaux segments, avec de nombreuses entrées enregistrées sur les segments C (Compact) et Pickup. En 2017, le segment des fourgonnettes comptait 10 constructeurs de véhicules actifs, tout comme le segment des pickup. Au niveau national, ce sont les petits et moyens acteurs tels que le groupe Volkswagen, le groupe Mahindra, le groupe Hyundai, Toyota et le groupe Daimler qui ont mis en œuvres des efforts importants pour pénétrer les marchés locaux avec de nouveaux modèles dans tous les segments. A l'inverse, l'entreprise Fiat Chrysler Automobiles s'est retirée de la plupart des segments ou des pays au cours de la période analysée.

Évolution du marché des camions neufs sur la période 2007-2017 dans les pays concernés

- Les ventes de camions ont été très sévèrement touchées par la crise financière et économique de 2008, avec une baisse significative des ventes en 2009, due à un déclin du commerce et des projets de construction. L'introduction de la norme d'émissions Euro VI a joué un rôle dans l'augmentation des ventes en 2013. Malgré des signes de reprise au cours des années suivantes, le niveau des ventes en 2017 était 13\% plus bas que le niveau d'avant-crise (en 2007).
- Le classement des principaux constructeurs par unités vendues est resté inchangé, le groupe TRATON est en tête tout au long de la période d'étude. Dans le cadre de cette étude, les données concernant le groupe TRATON comprennent les données relatives à ses prédécesseurs Scania AB et MAN SE, avant leur rachat par le groupe Volkswagen en 2008 et 2011. Le groupe Daimler, le groupe Volvo, Paccar et CNH Industrial complètent le groupe des cinq premiers constructeurs de camions. L'Allemagne est le plus grand marché pour les camions, tandis que la France et le Royaume-Uni ont occupé alternativement la deuxième et la troisième place tout au long de la période étudiée. La Pologne est devenue le quatrième marché le plus important en 2011, bien devant l'Italie et l'Espagne où les ventes ont diminué respectivement de $34 \%$ et $45 \%$ sur la période 20072017. Daimler est le leader du marché en Allemagne, suivi par le groupe TRATON. Ces deux constructeurs contrôlent $70 \%$ de ce marché, de loin le plus important pour les camions. Le groupe Volvo détient une part de marché de 42 \% en France grâce à la force historique de la marque Renault Trucks, tandis que Paccar est le leader du marché au Royaume-Uni.
- La concentration de l'industrie a été impactée par l'acquisition majeure de MAN par le groupe Volkswagen. Depuis 2018, l'entité est rebaptisée TRATON Group et comprend les marques VW, MAN et Scania. La concentration de l'industrie est restée globalement élevée entre 2007 et 2017, puisque cinq constructeurs automobiles contrôlaient plus de $97 \%$ du marché. L'Autriche est le pays où la
concentration du marché est la plus élevée sur la période analysée. Les autres pays connaissant une concentration élevée sont la France, l'Allemagne, la Grèce et I'Italie. L'Irlande, et dans une certaine mesure le Royaume-Uni, ont initialement connu un marché plus concurrentiel, mais la concentration s'est accrue pour atteindre un niveau élevé en 2017. Cette augmentation de la concentration a été particulièrement forte dans le cas de I'I rlande.
- S'agissant de l'offre, la plupart des fabricants se sont retirés de certains segments, ce qui a entraîné une diminution de l'offre de modèles de camions, en particulier pour les camions de taille moyenne. Les Pays-Bas et l'Irlande ont connu la plus importante diminution de l'offre proposée par les constructeurs.

Évolution du marché des nouveaux bus sur la période 2007-2017 dans les pays concernés

- Les ventes de bus ont légèrement diminué dans l'ensemble, malgré la performance durable du leader du marché, le groupe Daimler, dont les ventes ont augmenté de $15 \%$ sur la période 2007-2017. Les ventes de bus ont connu une forte baisse en 2010, suivie d'un rebond significatif à partir de 2014, sous I'effet de la libéralisation du marché des bus interurbains en France et surtout en Allemagne. Trois constructeurs automobiles, à savoir le groupe Daimler, CNH Industrial et le groupe TRATON, représentent ensemble 67,3 \% du marché des autobus. Plusieurs petits constructeurs nationaux détiennent également une part de marché conjointe de $20 \%$.
- La France est restée le plus grand marché en termes d'unités vendues sur la période 2007-2017, suivi par l'Allemagne et le Royaume-Uni. Le secteur est très concentré, avec une augmentation de son niveau de concentration sur la période étudiée. La plus forte concentration a été enregistrée en Autriche, en Pologne, en Allemagne et en France. En 2007, la concentration du marché au RoyaumeUni était la plus faible des 12 pays analysés, mais celle-ci a augmenté vers la fin de la période d'étude, en raison d'une légère diminution de la taille du marché et de la performance croissante d'un fabricant, l'écossais Alexander Dennis. Une acquisition majeure a été le rachat de MAN par le groupe Volkswagen, devenu depuis le groupe TRATON.
- S'agissant de l'offre, plus de modèles d'autobus ont été introduits sur le marché par rapport aux modèles retirés, d'où un choix de modèles plus important en 2017 qu'en 2007.

Après une analyse du marché en termes d'évolution des ventes de véhicules et des performances des constructeurs, l'étude s'est concentrée sur les trois soussegments clés de l'industrie automobile: la distribution de véhicules neufs, les services de réparation et d'entretien et la distribution de pièces détachées.

Distribution des véhicules neufs sur la période 2007-2017 dans les pays concernés

- La présence des concessionnaires de voitures particulières sur le marché a diminué au cours de la période 2007-2017, malgré une croissance entre 2007 et 2011. La densité globale du réseau de points de vente pour 1000 habitants est passée de 0,17 en 2007 à 0,14 en 2017. Le nombre de concessionnaires automobiles autorisés a diminué en raison de la consolidation du secteur, ainsi que de la rationalisation du réseau exploité par les constructeurs automobiles afin d'assurer de la rentabilité. Les réseaux de vente en ligne et innovants par le
biais de nouveaux acteurs sont également apparus. Au niveau des fabricants, les constructeurs français de voitures particulières ont conservé le réseau de concessionnaires le plus dense. Au niveau national, les Pays-Bas et la Belgique présentaient la densité la plus élevée, la Grèce la plus basse.
- Les concessionnaires indépendants ne vendant que des véhicules dans le segment des voitures particulières ont une présence importante en Grèce, à Chypre et, à partir de 2013, en France. Les concessionnaires indépendants pour les véhicules utilitaires légers sont présents en Allemagne, à Chypre et en Espagne. Au cours de la période 2007-2017, la plupart des concessionnaires de voitures particulières et de camions ont opéré dans le cadre d'un système de distribution sélective quantitative. Ce système permet aux fournisseurs de choisir leurs partenaires agréés sur la base de critères limitant directement le nombre de distributeurs présents. A l'inverse, les autobus étaient principalement distribués dans le cadre d'un système de distribution exclusive permettant aux concessionnaires de bénéficier d'une protection contre les ventes d'autres distributeurs autorisés sur un territoire donné. Les véhicules utilitaires légers étaient également distribués par le biais d'un système de distribution qualitative et quantitative.
- La performance des concessionnaires a été évaluée en fonction des ventes unitaires par point de vente ou par groupe de concessionnaires, ces derniers pouvant contrôler plusieurs points de vente, généralement dans leur pays d'activité principal. Au niveau national, le Royaume-Uni, I'Allemagne, I'Italie et la France ont enregistré les ventes unitaires de voitures particulières les plus élevées par groupe de concessionnaires ou par point de vente. La Pologne, le Royaume-Uni et l'Espagne (malgré une baisse substantielle des ventes en 2009) ont enregistré les ventes unitaires les plus élevées par groupe de concessionnaires ou par point de vente de camions.


## 2. Services de réparation et d'entretien

Fourniture de services de réparation et d'entretien sur la période 2007-2017 dans les pays concernés

- La taille du marché potentiel des services de réparation et d'entretien est déterminée par le nombre de véhicules circulant dans chaque pays. La répartition du parc automobile par catégorie est restée stable au cours de la période 20072017, avec une part élevée des voitures particulières à environ $87 \%$, suivie par les véhicules utilitaires légers à environ $10 \%$, les camions et les bus représentant le reste. Même si l'Allemagne est le pays qui compte le plus grand nombre de voitures particulières en circulation parmi les 12 pays analysés, le taux de motorisation (exprimé en nombre de voitures par habitant) était plus élevé en Italie tout au long de la période, avec 0,6 voiture par habitant. II est important de noter que la Pologne est passée de la position la plus basse avec 0,38 voiture par habitant en 2007 à la deuxième plus élevée en 2017 avec 0,59 voiture. La flotte de véhicules utilitaires légers en France est restée la plus importante, suivie par celle de l'Espagne, malgré une diminution de $8 \%$ de cette dernière. L'Italie occupait la troisième place, tandis que l'Allemagne n'occupait que la sixième place, nonobstant une augmentation de $40 \%$ de sa flotte sur la période 20072017. Malgré une réduction de près de $11 \%$, la flotte italienne est restée la plus importante de tous les pays concernés. La Pologne détenait la plus grande part de la flotte de bus.
- Les prestataires de services de réparation et d'entretien peuvent soit faire partie de réseaux de constructeurs automobiles / fabricants de pièces détachées, soit être des entreprises indépendantes, et sont très souvent des petites PME. Les résultats de l'étude ont fourni une image détaillée pour les réparateurs agréés de voitures particulières principalement, en raison d'un manque de données pour les autres catégories.
- Sur la période 2007-2017, en raison de l'augmentation du parc automobile de 197 millions à 225 millions de véhicules et d'une augmentation générale de l'âge moyen, les ventes moyennes des services de réparation et d'entretien ont augmenté de $35 \%$. Le nombre de réparateurs par habitant a augmenté, tandis que le nombre de réparateurs par voiture a diminué.
- Les réparateurs fournissent de manière générale des réparations dans le cadre de quatre types de garantie différentes, à savoir la garantie anticorrosion, la garantie du groupe motopropulseur, la garantie d'ensemble et l'extension de garantie de la part des constructeurs automobiles. De 2007 à 2017, la période de garantie d'ensemble est restée stable à 2 ans d'âge du véhicule et 100000 km pour tous les pays sauf la France, qui a offert un kilométrage double. La garantie du groupe motopropulseur est également restée stable à une période de 2 ans alors que le kilométrage a augmenté dans certains pays. La garantie anticorrosion est restée stable à une période de 12 ans, tandis que la garantie prolongée que les clients peuvent acheter en complément a enregistré une légère augmentation, à 4,6 ans, accompagnée toutefois d'une diminution spectaculaire du kilométrage offert par les constructeurs de véhicules.
- Les réparateurs agréés ont continué, pour la plupart, à compenser les coûts réels de main-d'œuvre et des pièces de rechange pour les travaux effectués. Toutefois,
certains constructeurs automobiles ont signalé une application accrue de tarifs fixes aux réparateurs pour les travaux sous garantie.
- Les réparateurs agréés semblent avoir un meilleur accès aux données relatives aux véhicules, par rapport aux réparateurs indépendants. L'accès aux informations sur les véhicules par le biais de documents papier a été de plus en plus réorienté vers des outils numériques et, en particulier pour les réparateurs indépendants, par l'utilisation de sites web.
- Les informations recueillies sur les liens contractuels entre les réparateurs et fabricants de pièces détachées étaient limitées. La plupart des constructeurs de pièces détachées ont déclaré appliquer des remises, basées sur le volume ou la valeur des pièces de rechange achetées par leurs partenaires.


## 3. Distribution de pièces de rechange

Distribution de pièces de rechange sur la période 2007-2017 dans les pays concernés

- Les pièces de rechange constituent un segment important de l'industrie, utilisées par les constructeurs automobiles et réparateurs. Les principaux acteurs sont les fabricants de pièces détachées (tels que Michelin, Bosch ou Continental), les constructeurs automobiles et les distributeurs de pièces détachées. Au cours de la période 2007-2017, le marché des pièces de rechange a connu une forte croissance au niveau des ventes.
- L'activité des "fabricants de pièces de rechange" a augmenté d'environ $30 \%$, atteignant une valeur totale d'environ 208 milliards d'euros. Cet excellent résultat a été obtenu malgré une diminution des ventes en 2013 et en 2009, lorsque la crise financière et économique de 2008 a mené à la faillite de dizaines de fabricants, notamment en Allemagne. Le pays est resté de loin le plus important marché de fabricants avec une part de $44 \%$ des ventes totales, bien devant la France et I'Italie qui détiennent chacune une part de $12 \%$ en tant que deuxième et troisième marchés les plus importants. Sur la période 2007-2017, les fabricants de pièces détachées ont enregistré une marge d'exploitation stable, de l'ordre de 6 à $7 \%$ en moyenne, malgré une baisse en 2009. Pour les dix premières entreprises, la marge moyenne était plus élevée, à environ 11-15 \%.
- L'activité des distributeurs de pièces détachées a augmenté d'environ $26 \%$ avec une valeur totale des ventes d'environ 31,3 milliards d'euros. Les distributeurs ont également fait preuve de résistance face à la crise de 2008. L'Allemagne est restée de loin le plus grand marché, avec une part d'environ $32 \%$, tandis que le Royaume-Uni et la France suivaient avec une part d'environ 20 \% chacun. Les autres pays détenaient moins de la moitié de la part des trois premiers marchés.
- La distribution des pièces de rechange constitue une chaîne d'approvisionnement complexe, puisque que les constructeurs automobiles à eux seuls représentent environ la moitié du volume des ventes de pièces détachées. Les distributeurs de pièces de rechange, les réparateurs et, dans une moindre mesure, le grand public, représentent le reste des ventes de pièces détachées. Les constructeurs automobiles utilisent les pièces dans leurs chaînes de production ou les fournissent par l'intermédiaire de leurs réseaux de points de vente propres ou agréés. À l'exception de la France et de l'Italie, les pièces détachées pour voitures
particulières sont distribuées par les constructeurs automobiles en recourant essentiellement à la distribution sélective qualitative, ainsi qu'à leurs réseaux agréés. La vente de pièces détachées pour voitures particulières par les points de vente des constructeurs automobiles reste une exception, et se fait principalement en Allemagne. Les pièces détachées pour véhicules utilitaires légers sont également principalement fournies par le biais de la distribution sélective qualitative. Néanmoins, la part des ventes réalisées par les points de vente des constructeurs automobiles a atteint environ 20 à $30 \%$ en Allemagne, en France, en Belgique et en Italie. Les pièces pour camions et autobus sont également passées par des schémas de distribution similaires. Il est intéressant de noter que l'utilisation de réseaux de distribution innovants, tels que le commerce électronique ou les plateformes tierces, était peu répandue et limitée, voire en baisse, sur la période 2007-2017 pour toutes les catégories de véhicules. Jusqu'à 40 à $50 \%$ des distributeurs de pièces détachées n'ont pas utilisé de réseaux innovants et, ceux ayant eu recours à de telles plateformes se sont principalement concentrés sur l'utilisation de leur propre site d'entreprise.
- Les accords contractuels entre les constructeurs de véhicules et les fabricants de pièces de rechange comprenaient principalement des mesures concernant le partage des coûts de développement des produits, la contribution du savoir-faire des constructeurs automobiles et la mise à disposition par les constructeurs automobiles des outils nécessaires à la production de pièces de rechange, tandis que les constructeurs automobiles offraient des rabais ou des primes à leurs partenaires. Dans le cas des distributeurs, les fabricants de pièces détachées ont pour la plupart déclaré n'avoir aucun accord, mais plutôt appliquer des remises basées sur le volume/la valeur. Quelques contrats d'exclusivité de produit ou de marque ont été observés en Italie, à Chypre et en Espagne.


## Zusammenfassung

Diese Studie wurde von der GD Wettbewerb der Europäischen Kommission im Rahmen der Verordnung (EU) Nr. 461/2010 der Kommission über die Anwendung von Artikel 101 Absatz 3 des Vertrags über die Arbeitsweise der Europäischen Union auf Gruppen von vertikalen Vereinbarungen und abgestimmten Verhaltensweisen im Kraftfahrzeugsektor beauftragt. Ziel dieses Berichts ist es, die Kommission bei ihrer Aufgabe zu unterstützen, das Funktionieren der Verordnung zu überwachen, durch Bereitstellung einer Übersicht der Marktentwicklungen im Automobilvertrieb und in der Erbringung von Kundendienstleistungen für Kraftfahrzeuge von 2007 bis 2017 in der gesamten Europäischen Union. Diese Studie ist in drei Hauptteile gegliedert, um historische Marktentwicklungen und Trends in folgenden Märkten zu präsentieren:

1. Neue Kraftfahrzeuge und deren Vertrieb,
2. Erbringung von Reparatur- und Wartungsdienstleistungen und
3. Vertrieb von Ersatzteilen.

Diese Studie umfasste umfangreiche Datenerhebungsbemühungen, die sich teilweise auf sekundäre Datenquellen und größtenteils auf eine groß angelegte Umfrage von allen relevanten Interessengruppen der Industrie, einschließlich Handelsverbänden, stützen. Die Covid-19-Pandemie beeinträchtigte die Fähigkeit vieler Unternehmen, sich aktiv an der Umfrage zu beteiligen. Weitere Informationen dazu finden Sie im "Methodik" Teil dieser Studie.

Die Daten wurden sowohl auf aggregierter als auch auf Länderebene für eine repräsentative Probe von 12 EU-Mitgliedstaaten und von 4 Fahrzeugkategorien (Personenkraftwagen, leichte Nutzfahrzeuge, Lastkraftwagen und Busse) erhoben und analysiert. Die Covid-19-Pandemie beeinträchtigte die Fähigkeit vieler Unternehmen, sich aktiv an der Umfrage zu beteiligen. Weitere Informationen dazu finden Sie im "Methodik" Teil dieser Studie.

## 1. Neue Kraftwagen und deren Vertrieb

Entwicklung des Marktes für neue Personenkraftwagen im Zeitraum von 2007 bis 2017 in den analysierten Ländern

- Der Verkauf von neuen Personenkraftwagen wurde durch die Finanz- und Wirtschaftskrise von 2008 beeinträchtigt und resultierte in einem geringeren Umsatzniveau im Zeitraum von 2010 bis 2015. Das Umsatzniveau im Jahr 2017 war immer noch um 7\% niedriger als im Jahr 2007 vor der Krise.
- Die Volkswagen Gruppe verzeichnete von 2007 bis 2017 einen Umsatzzuwachs von $12 \%$, dabei wurde die PSA Gruppe überholt und die Volkswagen Gruppe wurde ab 2011 zum Marktführer. Renault-Nissan-Mitsubishi steigerte seinen Umsatz um 28\%, blieb aber das drittgrößte Unternehmen nach der PSA Gruppe. Fiat Chrysler Automobiles und die Ford Gruppe blieben unter den Top-5Herstellern des Marktes, obwohl Umsätze beider Hersteller etwa die Hälfte von Renault-Nissan-Mitsubishi betrugen. Die drei größten Fahrzeughersteller kontrollierten 55\% des Marktes im Jahr 2017.
- Deutschland blieb der größte Markt für Personenkraftwagen, während Italien im Jahr 2017 von Platz zwei auf Platz vier abgefallen ist. Frankreich stieg von Platz vier auf Platz drei an, während das Vereinigte Königreich ab 2012 zum zweitgrößten Markt wurde. Insgesamt sanken die Umsätze aufgrund eines zweistelligen prozentualen Rückgangs der unter anderen in Griechenland,

Spanien, Italien und den Niederlanden verkauften Stücke, und obwohl Polen im analysierten Zeitraum ein Rekordwachstum von $66 \%$ verzeichnete. Die Volkswagen Gruppe ist Marktführer in 7 von 12 Ländern, Fiat Chrysler Automobiles bleibt Marktführer in Italien und die PSA Gruppe ist Marktführer in Belgien, dem Vereinigten Königreich und Frankreich.

- Wichtige Fusionen und Übernahmen haben im Zeitraum von 2007 bis 2017 stattgefunden. Die Übernahme mit dem größten Wert war jene von Porsche durch die Volkswagen Gruppe. Weitere nennenswerte Transaktionen waren die Übernahme von Jaguar \& Land Rover durch Tata Motors, der Eintritt der Dongfeng Motor und des französischen Staates ins Kapital der PSA Gruppe, die Fusion von Fiat mit Chrysler und die Übernahme von Opel/Vauxhall durch die PSA Gruppe.
- Aufgrund der oben beschriebenen Fusionen und Übernahmen stieg die Industriekonzentration von 2007 an, erreichte ihren Höhepunkt in 2014 und verringerte sich 2017 wieder auf ein vergleichbares Niveau beobachtet in 2007. Auf Länderebene blieb der Markt in Frankreich stark konzentriert, wo die beiden französischen Fahrzeughersteller einen gemeinsamen Marktanteil von 60\% hielten. Auch in Deutschland und Österreich blieb der Markt ziemlich konzentriert während des analysierten Zeitraums.
- Was das Kundenangebot betrifft, haben Fahrzeughersteller viele Segmente verlassen und die meisten von ihnen boten im Jahr 2017 Modelle des Segments C (Kompakt) anstelle von B (Subkompakt) an, was einen allgemeinen Trend zu größeren Modellen reflektierte.
Entwicklung des Marktes für neue leichte Nutzfahrzeuge im Zeitraum von 2007 bis 2017 in den analysierten Ländern
- Der Verkauf von neuen leichten Nutzfahrzeugen wurde durch die Finanz- und Wirtschaftskrise von 2008 stark beeinträchtigt und resultierte in einem geringeren Umsatzniveau vornehmlich im Zeitraum von 2009 bis 2015. Im Jahr 2017 war das Umsatzniveau immer noch um 10.5\% niedriger als im Jahr 2007 vor der Krise.
- Die PSA Gruppe und Renault-Nissan-Mitsubishi rangierten am ersten und zweiten Platz während des gesamten analysierten Zeitraums und hielten gemeinsam 47\% des aggregierten Marktanteils. Die Ford Gruppe steigerte ihre Umsätze und ist seit 2014 mit einem Gesamtmarktanteil von $12.9 \%$ das drittgrößte Unternehmen auf dem Markt. Im Gegensatz dazu verlor Fiat Chrysler Automobiles an Boden und wechselte vom vierten Platz im Jahr 2007 auf den sechsten Platz im Jahr 2017.
- Frankreich und das Vereinigte Königreich blieben während des gesamten analysierten Zeitraums mit ihrem Umsatzvolumen bei weitem der erst- und zweitgrößte Markt, mit Ausnahme vom Jahr 2015, als die beiden Länder die Reihenfolge des ersten und zweiten Platzes austauschten. Während des gesamten analysierten Zeitraums hatte Frankreich hatte einen Anteil von ungefähr $28 \%$ am Gesamtumsatzes und das Vereinigte Königreich hatte einen Anteil von ungefähr $20 \%$. Deutschland stabilisierte sich als drittgrößter Markt mit $15 \%$ des Gesamtumsatzes, während Italien trotz des Umsatzrückgangs bei Fiat Chrysler Automobiles der fünftgrößte Markt hinter Spanien blieb. Was die Marken betrifft ist die PSA Gruppe ist der Marktführer in Belgien, Frankreich, Polen und Spanien. Renault-Mitsubishi ist der Marktführer in Griechenland und behält einen sehr bedeutenden Marktanteil in Frankreich, Spanien, Belgien und Irland, wo es das zweitgrößte Unternehmen ist. Die Ford Gruppe ist der Marktführer im Vereinigten Königreich und Irland und erzielte auch in den meisten anderen

Ländern bedeutende Marktanteile. Fiat Chrysler Automobiles ist der Marktführer in Italien und ist auf Platz zwei in Polen.

- Die Industriekonzentration wurde primär durch Verkaufstrends bestimmt, da die durchgeführten Fusionen und Übernahmen den Markt für leichte Nutzfahrzeuge im analysierten Zeitraum nicht wesentlich beeinflussten. Die Marktkonzentration war schwankend, aber die Industrie blieb während des gesamten analysierten Zeitraums insgesamt auf einem mittleren Konzentrationsniveau. Auf Länderebene blieb der Markt jedoch in Frankreich und Spanien sowie im Vereinigten Königreich stark konzentriert, dessen Marktkonzentration 2017 auf ein hohes Niveau anstieg. Italiens Markt blieb bis 2017 stark konzentriert, während die Marktkonzentration in Belgien ab 2015 auf einem mittleren Niveau blieb.
- Was die Kundenangebote betrifft, trat eine Reihe von Fahrzeugherstellern in neue Segmente ein, mit einer signifikanten Anzahl an Nettoeintritten in C (Kompakt) und Pickup Segmenten. In 2017 gab es im Segment Lieferwagen 10 aktive Fahrzeughersteller, das gleiche gilt für das Pickup Segment. Auf Länderebene haben kleine und mittlere Marktteilnehmer wie die Volkswagen Gruppe, die Mahindra Gruppe, die Hyundai Gruppe, die Toyota und Daimler Gruppe die größten Anstrengungen unternommen, um mit neuen Modellen branchenübergreifend in lokale Märkte einzutreten. Im Gegensatz dazu, war Fiat Chrysler Automobiles der Hersteller, der im analysierten Zeitraum aus den meisten Marktsegmenten oder Ländern ausstieg.
Entwicklung des Marktes für neue Lastkraftwagen im Zeitraum von 2007 bis 2017 in den analysierten Ländern
- Der Verkauf von Lastkraftwagen wurde durch die Finanz- und Wirtschaftskrise von 2008 stark beeinträchtigt mit einem erheblichen Umsatzrückgang im Jahr 2009, der auf einen Rückgang der Handels- und Bauprojekte zurückzuführen ist. Die Einführung der Euro VI Emissionsnorm trug im Jahr 2013 zur Umsatzsteigerung bei. Trotz Anzeichen einer Erholung in den folgenden Jahren blieb das Umsatzniveau im J ahr 2017 immer noch um 13\% niedriger im Vergleich zum Umsatzniveau im Jahr 2007 vor der Krise.
- Die Rangliste der führenden Hersteller je nach verkauften Stückzahlen blieb unverändert, mit der TRATON Gruppe führend während des analysierten Zeitraums. Für den Zweck dieser Studie enthalten die Daten für die TRATON Gruppe, Daten von den Vorgängern Scania AB und MAN SE, vor der Übernahme durch die Volkswagen Gruppe in den Jahren 2008 und 2011.
- Die Daimler Gruppe, die Volvo Gruppe, Paccar und CNH Industrial vervollständigen die Gruppe der fünf führenden Hersteller für Lastkraftwagen. Deutschland ist der größte Markt für Lastkraftwagen, während sich Frankreich und das Vereinigte Königreich im analysierten Zeitraum auf den Plätzen zwei und drei abwechselten. Polen wurde 2011 deutlich zum viertgrößten Markt, weit vor Italien und Spanien, wo der Umsatz im Zeitraum von 2007 bis 2017 um 34\% bzw. 45\% zurückging. Daimler ist Marktführer in Deutschland, gefolgt von der TRATON Gruppe. Die beiden Hersteller kontrollieren 70\% des mit Abstand größten Markt für Lastkraftwagen. Die Volvo Gruppe hielt aufgrund der historischen Stärke der Marke Renault Trucks einen Marktanteil von 42\% in Frankreich, während Paccar Marktführer im Vereinigten Königreich ist.
- Die Industriekonzentration wurde durch die Übernahme von MAN durch die Volkswagen Gruppe beeinflusst. Seit 2018 wurde das fusionierte Unternehmen als TRATON Gruppe umbenannt und umfasst die Marken VW, MAN und Scania. Die Industriekonzentration blieb zwischen 2007 und 2017 insgesamt hoch, da
fünf Fahrzeughersteller über $97 \%$ des Marktes kontrollierten. Österreich ist das Land mit der höchsten Industriekonzentration im analysierten Zeitraum. Andere Länder mit einem konstant hohen Konzentrationsniveau waren Frankreich, Deutschland, Griechenland und Italien. Bemerkenswerterweise stellten Irland und teilweise das Vereinigte Königreich zunächst einen wettbewerbsintensiveren Markt dar. Nichtsdestoweniger, stieg auch dort das Konzentrationsniveau seit 2017, wobei im Falle Irlands ein besonders steigendes Wachstum zu verzeichnen war.
- Was die Kundenangebote betrifft, verließen die meisten Hersteller Segmente, was dazu führte, dass deutlich weniger Lastkraftwagen-Modelle angeboten wurden, dies trifft vor allem auf mittelgroße Lastkraftwagen zu. Der stärkste Angebotsrückgang war am stärksten in den Niederlanden und Irland zu verzeichnen.

Entwicklung des Marktes für neue Busse im Zeitraum von 2007 bis 2017 in den analysierten Ländern

- Der Absatz von Bussen ging trotz der anhaltenden Leistung des Marktführers, Daimler Gruppe, dessen Absatz im Zeitraum von 2007 bis 2017 um 15\% stieg, insgesamt leicht zurück. Der Absatz von Bussen erlebte einen Rückgang im Jahr 2010 gefolgt von einem signifikanten Aufschwung ab 2014, beflügelt durch die Liberalisierung des Intercity-Busmarktes in Frankreich und insbesondere in Deutschland. Drei Fahrzeughersteller, nämlich die Daimler Gruppe, CNH Industrial und die TRATON Gruppe, halten gemeinsam ungefähr 67,3\% des aggregierten durchschnittlichen Marktanteils des Gesamtmarktes für Busse. Im Übrigen halten einige kleine nationale Hersteller gemeinsam einen erheblichen Anteil, welcher ungefähr 20\%, am Gesamtmarkt für Busse beträgt.
- Frankreich blieb der größte Markt je nach verkauften Stückzahlen im Zeitraum von 2007 bis 2017, gefolgt von Deutschland und dem Vereinigten Königreich. Die Industrie ist stark konzentriert, wobei im analysierten Zeitraum insgesamt ein Anstieg der Industriekonzentration zu verzeichnen war. Die höchste Industriekonzentration wurde in Österreich, Polen, Deutschland und Frankreich verzeichnet. Die Marktkonzentration im Vereinigten Königreich war im Jahr 2007 die niedrigste von allen 12 untersuchten Ländern, erzielte jedoch bis zum Ende des analysierten Zeitraums ein hohes Niveau aufgrund der leichten Verkleinerung der Marktgröße und der zunehmenden Leistung des führenden schottischen Herstellers Alexander Dennis. Eine wichtige Akquisition war der Erwerb von MAN durch die Volkswagen Gruppe, heute TRATON Gruppe.
- In Bezug auf die Kundenangebote wurden mehr Busmodelle auf den Markt gebracht als zurückgezogen, was 2017 zu einer größ̉eren Auswahl an Modellen führte als 2007.

Nach einer allgemeinen Marktanalyse im Hinblick auf die Entwicklung des Fahrzeugabsatzes und der Leistung der Fahrzeughersteller konzentrierte sich die Studie auf die drei wichtigsten Teilsegmente der Automobilindustrie: Vertrieb von neuen Fahrzeugen, Reparatur- und Wartungsdienstleistungen, Vertrieb von Ersatzteilen.

Vertrieb von neuen Fahrzeugen im Zeitraum von 2007 bis 2017 in den analysierten Ländern

- Trotz eines Wachstums zwischen 2007 und 2011 nahm die Marktpräsenz von autorisierten Händlern von Personenkraftwagen im Zeitraum zwischen 2007 und 2017 ab. Die gesamte Netzdichte der Filialen pro 1000 Einwohner sank von 0.17 im Jahr 2007 auf 0.14 im Jahr 2017. Die Anzahl der autorisierten

Fahrzeughändler ging aufgrund der Konsolidierung durch Akquisitionen und Joint Ventures zurück sowie auch durch eine Konsolidierung der von Fahrzeugherstellern betrieben autorisierten Filialen-Netzwerke, die betrieben wurden, um die Rentabilität zu gewährleisten. Auch Online- und innovative Vertriebskanäle durch neue Arten von Vermittlern spielten eine immer wichtigere Rolle. Auf Markenebene behielten die französischen Hersteller von Personenkraftwagen das dichteste Händlernetzwerk. Auf Länderebene hatten die Niederlande und Belgien die höchste Dichte während Griechenland die niedrigste Händlerdichte hatte.

- Eigenständige Händler, die nur Fahrzeuge verkaufen, sind in nennenswertem Umfang nur in Griechenland und Zypern vertreten und seit 2013 in Frankreich bei Personenkraftwagen. Auch in Deutschland, Zypern und Spanien wurde eine Präsenz von eigenständigen Händlern von leichten Nutzfahrzeugen beobachtet. Im Zeitraum von 2007 bis 2017 operierten die meisten Händler von Personenkraftwagen und Lastkraftwagen im Rahmen eines quantitativen selektiven Vertriebssystems, bei dem die Lieferanten ihre autorisierten Partner auf Basis von Kriterien auswählten, die die Anzahl der Händler direkt begrenzen. Im Gegensatz dazu wurden Busse meistens über ein exklusives Vertriebssystem vertrieben, bei dem die Händler von aktiven Verkäufen der anderen autorisierten Händler in einem bestimmten Gebiet geschützt sind. Leichte Nutzfahrzeuge wurden durch ein quantitatives sowie qualitatives Vertriebssystem vertreiben.
- Die Leistung der Händler wurde anhand der verkauften Stückzahlen pro Filiale oder pro Händlergruppe bewertet, wobei eine Händlergruppe mehrere Filialen typischerweise innerhalb ihres Hauptgeschäftslandes kontrollieren kann. Auf Länderebene verzeichneten das Vereinigte Königreich, Deutschland, Italien und Frankreich den höchsten Absatz von Personenkraftwagen pro Händlergruppe oder Filiale. Polen, das Vereinigte Königreich und Spanien verzeichneten (trotz eines erheblichen Umsatzrückgangs im Jahr 2009) den höchsten Absatz von Lastkraftwagen pro Händlergruppe oder Filiale.


## 2. Reparatur- und Wartungsdienste

Erbringung der Reparatur- und Wartungsdienste im Zeitraum von 2007 bis 2017 in den analysierten Ländern

- Der adressierbare Markt für Reparatur- und Wartungsdienste ergibt sich aus der Anzahl der in jedem Land zirkulierenden Fahrzeuge. Die Aufteilung des Fuhrparks nach Kategorien blieb im Zeitraum von 2007 bis 2017 stabil, mit einem hohen Anteil an Personenkraftwagen von etwa $87 \%$, gefolgt von Leichtlastkraftwagen mit etwa 10\%, gefolgt von Lastkraftwagen und Bussen für den restlichen Prozentanteil. Obwohl in Deutschland von allen 12 untersuchten Ländern die meisten Personenkraftwagen im Umlauf waren, war die Motorisierungsrate, ausgedrückt in Personenkraftwagen pro Einwohner, in Italien im gesamten Zeitraum mit 0.6 Personenkraftwagen pro Kopf am höchsten. Erstaunlicherweise sprang Polen vom niedrigsten Platz mit 0.38 Autos pro Kopf im Jahr 2007 auf den zweiten Platz im Jahr 2017 mit 0.59 Autos pro Kopf. Frankreichs Fuhrpark von leichten Nutzfahrzeugen blieb der höchste, gefolgt von Spanien, obwohl der Fuhrpark des letzteren um 8\% zurückging. Italien hielt den drittgrößten Fuhrpark, während Deutschland nur den sechsten Platz einnahm, trotz eines starken Anstiegs des Fuhrparks um 40\% im Zeitraum von 2007 bis 2017. Trotz eines Rückgangs des italienischen Fuhrparks für Lastkraftwagen um fast 11\% blieb es das größte Land in Bezug auf den Marktumfang. Polen hielt den größten Anteil an der Busflotte.
- Die Anbieter von Reparatur- und Wartungsdiensten können entweder unabhängige Unternehmen sein oder sie können Teil des Netzwerks der Fahrzeughersteller / Ersatzteilhersteller sein, welche oft Klein- und Mittelbetriebe sind. Die Studienergebnisse lieferten ein detailliertes Bild über die zugelassenen Reparaturbetriebe für Personenkraftwagen, jedoch waren die Daten für andere Kategorien nicht verfügbar.
- Im Zeitraum von 2007 bis 2017 stieg der durchschnittliche Umsatz der Reparatur- und Wartungsdienste um 35\% zwischen 2007 und 2017, angetrieben durch Faktoren, welche eine Zunahme der Größe des Fuhrparks für Personenkraftwagen von 197 Millionen auf 225 Millionen und eine allgemeine Zunahme des Durchschnittsalters inkludierten. Die Anzahl der Reparaturbetriebe pro Einwohner nahm zu, während die Anzahl der Reparaturbetriebe pro Auto abnahm.
- Reparaturbetriebe bieten im allgemein Reparaturen unter vier verschiedenen Arten von Fahrzeughersteller-Garantien an, nämlich Korrosionsschutz-, Antriebsstrang-, Gesamt- und erweiterte Garantien. Von 2007 bis 2017 blieb die Gewährleistungsfrist bei einem Fahrzeugalter von 2 Jahren und 100,000 km für alle Länder stabil, mit Ausnahme von Frankreich, das die doppelte Kilometerleistung anbot. Die Gewährleistungsfrist für das Triebwerk blieb ebenfalls stabil bei 2 Jahren, während die Kilometerleistung in einigen Ländern zunahm. Die Gewährleistungsfrist für den Korrosionsschutz blieb mit 12 Jahren stabil, während die erweiterte Gewährleistungsfrist, die Kunden erwerben können, auf durchschnittlich 4.6 J ahre anstieg, welche jedoch mit einem starken Rückgang der von den Fahrzeugherstellern angebotenen Kilometerleistung einherging.
- Autorisierte Reparaturbetriebe haben die tatsächlichen Arbeitskosten und die Kosten für die Ersatzteile für die durchgeführten Arbeiten größtenteils kompensiert. Dennoch berichteten einige Fahrzeughersteller über eine erhöhte Anwendung fester Tarife bei Reparaturbetrieben für Arbeiten im Rahmen der Gewährleistung.
- Es wurde beobachtet, dass autorisierte Reparaturbetriebe einen besseren Zugang zu Fahrzeugdaten haben, im Gegensatz zu unabhängigen Reparaturbetrieben. Der Zugang zu Fahrzeuginformationen wurde zunehmend durch digitale Mittel und insbesondere für unabhängige Reparaturbetriebe durch die Nutzung von Websites ersetzt.
- Die gesammelten Informationen über die vertraglichen Verbindungen von Reparaturbetrieben mit Ersatzteilherstellern waren begrenzt. Die meisten Ersatzteilhersteller gaben an ihren Partnern Preisrabatte auf das Volumen oder den Gesamtwert der gekauften Ersatzteile zu gewähren.


## 3. Vertrieb von Ersatzteilen

Vertrieb von Ersatzteilen im Zeitraum von 2007 bis 2017 in den analysierten Ländern

- Ersatzteile sind ein wichtiges Segment der Automobilindustrie, welche der Herstellung von Fahrzeugen und der Durchführung von Reparaturarbeiten dienen. Unternehmen in der Wertschöpfungskette von Ersatzteilen sind vor allem Ersatzteilhersteller (wie Michelin, Bosch oder Continental), Fahrzeughersteller und Ersatzteilhändler. Im Zeitraum von 2007 bis 2017 ist der Markt für Ersatzteile nach Verkaufswert stark gewachsen.
- Die Branche der Ersatzteilhändler wuchs um rund 26\% und erreichte einen Gesamtumsatz von ungefähr 31.3 Milliarden EUR. Deutschland blieb mit einem Anteil von rund $32 \%$ der mit Abstand größte Markt, während das Vereinigte Königreich und Frankreich mit einem Anteil von jeweils ungefähr 20\% folgten, andere Länder hielten weniger als die Hälfte des Anteils der besten drei Märkte.
- Der Vertrieb von Ersatzteilen ist eine komplexe Wertschöpfungskette, da die Fahrzeughersteller selbst etwa die Hälfte des Umsatzvolumens der Ersatzteilhersteller ausmachen. Ersatzteilvertreiber, Reparaturbetriebe und in geringerem Maße die breite Öffentlichkeit machen den Rest des Umsatzes der Ersatzteilhersteller aus. Fahrzeughersteller verwendeten Ersatzteile in ihren Produktionslinien oder lieferten Ersatzteile über ihr eigenes Netzwerk oder an autorisierte Verkaufsstellen aus. Mit Ausnahme von Frankreich und Italien, wo Ersatzteile für Personenkraftwagen von Fahrzeugherstellern überwiegend unter Verwendung eines qualitativen selektiven Vertriebs, sowie vom zugelassenen Netzwerk vertrieben wurden. Der Verkauf von Ersatzteilen für Personenkraftwagen über die eigenen Verkaufsstellen der Fahrzeughersteller blieb eine Ausnahme und erfolgte hauptsächlich in Deutschland. Ersatzteile von leichten Nutzfahrzeugen wurden ebenfalls größtenteils durch qualitativen selektiven Vertrieb geliefert, aber der Anteil des Umsatzes über die Verkaufsstellen der Fahrzeughersteller erreichte in Deutschland, Frankreich, Belgien und Italien etwa 20 bis $30 \%$. Ersatzteile für Lastkraftwagen und Busse hatten ebenfalls ähnliche Vertriebsmuster. Interessanterweise war die Nutzung innovativer Vertriebskanäle wie E-Commerce oder Plattformen von Drittanbietern nicht weit verbreitet und war im Zeitraum von 2007 bis 2017 für alle Fahrzeugkategorien sehr begrenzt oder sogar rückläufig. 40 bis $50 \%$ der Ersatzteilhändler nutzten überhaupt keine innovativen Kanäle, während diejenigen die innovativ handelten sich hauptsächlich auf die Nutzung ihrer eigenen Unternehmenswebsite konzentrierten.
- Die Versorgung von Fahrzeugherstellern durch Ersatzteilherstellern, wurde durch vertragliche Beziehungen festgelegt, welche die Bereitstellung des Know-hows, Entwicklungskosten oder Werkzeuge beinhalteten, wobei Fahrzeughersteller Rabatte oder Bonussysteme für ihre Partner angeboten haben. Für

Ersatzteilvertreiber haben die Ersatzteilhersteller angegeben keine vertraglichen Vereinbarungen zu haben, außer die Anwendung von Rabatten auf Volumen und Verkaufsbetrag. Wenige Beobachtungen bezüglich Produkt- und Markenexklusivität wurden in Italien, Zypern und Spanien gemacht.

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## I. Methodology

The present study aims to provide a detailed analysis of market dynamics in the following three aspects of the motor vehicle sector:

- distribution of new motor vehicles;
- provision of repair and maintenance services for motor vehicles;
- distribution of spare parts for motor vehicles.


## 1. Scope of the study

This study analyses a set of qualitative and quantitative indicators (see Annex I - List of Indicators) with a view to capturing the trends and complexity of the motor vehicle sector in the EU. Wherever possible, the respective data are provided in disaggregated form, so as to cover market developments and key trends across:

- the three aspects above;
- four vehicle categories (passenger cars, light commercial vehicles (LCVs), trucks and buses);
- twelve Member States (Austria, Belgium, Cyprus, France, Germany, Greece, Ireland, Italy, the Netherlands, Poland, Spain and the United Kingdom), and
- a time frame of 11 years (from 2007 to 2017). As the last year in scope is 2017, the present study does not capture the unprecedented market circumstances triggered in 2020 by the COVID-19 pandemic and their implications for the motor vehicle sector.

These EU Member States (MS) were selected to ensure a balanced representation of the EU market, covering all EU regions, ranging from small to large, and including a broad range of economic characteristics. For the purpose of this study the United Kingdom is still treated as a MS given that over the time period in scope 2007-2017, the United Kingdom was still part of the EU.

The scope of this study is limited to the analysis and presentation of trends observed in the motor vehicle sector. Policy considerations and/or recommendations regarding the performance of, and potential future amendments to the Regulation are out of the scope of this study.

## 2. Data collection

The study required data on a wide set of indicators, broken down by sector and vehicle category, and covering 12 MS and 11 years. As a result, data collection proved to be a challenging task, necessitating the use of a wide array of both primary and secondary data sources in order to provide the most comprehensive and insightful overview of market developments possible. The challenges faced in collecting data, and steps taken to address them, are further discussed below. Information on key metrics, in particular with regard to smaller firms and the independent networks of dealers and repairers, was hardly available in existing databases. Moreover, these databases rarely provided the required granularity of data in terms of vehicle categories, countries and years in scope. Primary research was therefore required to complement secondary sources.

### 2.1. Secondary research

Multiple secondary sources were used to collect data. The following table provides an overview of the main sources consulted. Throughout the study, the source of each set of data are quoted either underneath the respective figures/graphs/tables or in footnotes.

| Source | Description |
| :---: | :---: |
| ACEA's Vehicle in use/Tax Guide | ACEA is the European Automobile Manufacturers Association and publishes information on, among others, the vehicles in use. This source has been used to collect information with respect to the vehicle parc. |
| Amadeus | Amadeus is a commercial database on European Business Information managed through Bureau van Dijk. This source has been used to collect information on turnover, operating margins and research \& development (R\&D) expenditure, notably with respect to the comparable industries. |
| Capital IQ | Capital IQ is a database/platform from Standard and Poor's containing financial information on public and private companies. This source has been used to collect businesses' financial information, including turnover and operating margin. |
| DAT Report, 2016 | Deutsche Automobil Treuhand GmbH (DAT) has been publishing regularly since 1974, providing information on consumer behaviour in the automotive market. |
| Eurostat | Eurostat is the European Statistical Office, a DirectorateGeneral of the European Commission. This source has been mainly used to collect information about the total size of the market per year per MS as well as about the number of companies active in each of the three aspects of the motor vehicle sector, based on the NACE codes classification. |
| Financial statements and annual reports of listed/main market players | Connected to Capital IQ and Amadeus, available annual reports have been used to extract detailed data on turnover, profitability and R\&D expenditure. |
| ICDP | ICDP is an international research organisation specialising in automotive retailing and after-sales. This source has been used to collect data on dealer networks and the authorised repair networks |
| LMC Automotive Ltd Database | LMC Automotive is a producer of market analysis and forecasts for the automotive industry. In particular, information about vehicle manufacturers' sales volumes per MS as well as the breakdown of these sales by vehicle segment has been obtained through this data source. |
| M\&A Mergermarket database | The M\&A Mergermarket database has been used to detect mergers and acquisitions among vehicles manufacturers and to collect the respective information. |
| Relevant $\quad$ market  <br> studies (non- <br> exhaustive list of  <br> literature consulted)  | - Changing Channels in the Automotive Industry, by Evan R. Hirsh, Louis F. Rodewig, Peter Soliman and Steven B. Wheele. <br> - Developments in car retailing and after-sales markets under Regulation $\mathrm{N}^{\circ}$ 1400/2002, London Economics, June 2006. |


|  | - Spare parts logistics of automobile enterprises in conditions of module production, e. Krykawski, N. Fihun. <br> - Study on the operation of the system of access to vehicle repair and maintenance information, RICARDO-AEA, 2014. <br> - Survey on Vertical Block Exemption Regulation 330/2010, CECRA, 2020. <br> - The changing aftermarket game - and how automotive suppliers can benefit from arising opportunities, McKinsey\&Company, 2017. <br> - Evolution of the motor vehicle markets since regulation 1400/2002 entered into force, Technical Annex 3, European Commission. |
| :---: | :---: |

### 2.2. Primary research

As indicated above, the study required significant primary research efforts, due to the limited coverage offered by secondary sources compared to the full set of indicators in scope. A analysis was carried out to identify data/information not covered by the secondary sources identified. A set of questions was prepared to fill the information gap, along with the respective list of entities / businesses (primary sources) to survey. Ahead of the survey launch, trade associations assisted in the preparatory process, by identifying key points of contact in surveyed businesses, and by helping refine the wording of the detailed survey questionnaire.
The following trade associations were consulted:

- ACEA
- AECDR
- CECRA
- CLEPA
- FIGIEFA
- UEIL

The generous cooperation of these trade associations contributed to the refinement and further expansion of a first extensive list of contact points ${ }^{1}$ already compiled based on information retrieved from the Amadeus database and supplemented by desk research. Moreover, ACEA and its members provided detailed information on their authorised networks of dealers, repairers and parts distributors. Specific questions (see Annex II Online questionnaire) were designed, refined, tailored and validated taking into account all potential respondents across the automotive value chain:

- vehicle manufacturers
- spare parts manufacturers
- dealers in new motor vehicles
- authorised and independent repairers and
- authorised and independent parts distributors

The online survey allowed for an automatic filtering of relevant questions based on the respondent's profile. Furthermore, with a view to overcoming possible language barriers and facilitating companies' participation across the 12 MS in scope, the survey, as well as a comprehensive glossary of key terms and definitions (see Annex III - Glossary), were made available in all official languages of these MS: Dutch, English, French, German, Greek, Italian, Polish and Spanish.

After the necessary hardcoding and stress-testing verifications, the survey was launched in mid-March 2020 and was initially planned to run for one month. However, due to the simultaneous escalation of the COVID-19 pandemic and the related lockdown measures, significantly affecting stakeholders' ability to respond, the timeframe for completing the survey was extended a number of times and finally closed on 15 June 2020. Below an overview of the response rate to the survey.

Table 1 - Response rate to the survey

| Total number contacted | 40,609 |
| :---: | :---: |
| Number of responses | - VMs: 9 completed <br> - SPMs: 8 completed <br> - Dealers, repairers and spare part distributors: <br> - 61 completed <br> - 562 started |

Stakeholder consultations were held in parallel with trade associations and their national members in order to anticipate possible data gaps. The consultations provided additional information regarding major trends and developments at MS level as well as qualitative insights.

### 2.3. Data handling and analysis

Despite repeated extensions to the survey deadline, the final response rate was still quite low, particularly with respect to businesses such as dealers, repairers and parts distributors. The final set of raw data was assessed with regards to the degree to which it covered the study scope, and its representativeness.

Statistical significance was considered to be met when the corresponding average marketshare of survey participation by vehicle manufacturers (VMs) achieved a 30\% threshold. Indicators for which the combined market share of all respondents was inferior to $30 \%$ of their respective market, by year and by country, were not considered in this report, unless otherwise specified. Applying a similar minimum threshold to the answers of spare parts manufacturers (SPMs) was not possible, as the total value of this market is unknown and therefore it was not possible to calculate an accurate market share of the respondents. Nevertheless, the representativeness of the responses provided by spare parts manufacturerswere indicated by providing their combined global revenue (in EUR 2019) as well as their combined number of employees.
This review resulted in an assessment of the reliability and completeness of the data set for each indicator, as well as specific data gaps and caveats that have been taken into account for their analysis. Compared to the initial list, not all qualitative and quantitative indicators foreseen at the outset could be covered.

As a consequence of these limitations, the results presented in this report are mainly based on information collected from VMs and SPMs, as the survey response rates from dealers, repairers and spare parts distributors were generally insufficient to present findings in a robust and statistically meaningful way.

Survey data were collected and stored in a single database, which was then queried by survey questions with the support of Alteryx, a data handling and analysis tool. For each of these questions, additional analyses and computations were carried out (e.g. sales per dealer, \% of respondents etc.) using the same tool. Additionally, the LMC database was used to computed vehicle sales groups and their corresponding market share in sales by volume by year, vehicle category and country, where relevant, to provide context and insight in the relevance of the survey's responses.

As these data have several different angles of analysis (by vehicle manufacturer, year, country and category etc.) the visualisations have been prepared using Spotfire. Where relevant for the corresponding paragraph, a broader description of the performed computations is provided.

## II. Distribution of new motor vehicles

## 1. Introduction

This section captures the evolution of the distribution of new motor vehicles, in order to provide insights into the competitive environment in terms of both the inter-brand competition between motor VMs and the intra-brand competition at dealer level.
Findings are based on qualitative and quantitative indicators (see Annex I) aimed at reflecting how market conditions and practices have evolved. This section of the report is structured as follows:

- Size and structure of the market for new vehicle sales
- Size of the market for new vehicle sales
- Breakdown of new vehicle sales by powertrain
- Overview of VMs' market presence
- Market concentration of VMs
- Distribution patterns and networks
- Distribution patterns for new vehicles
- Network density of passenger car dealers
- Market concentration of dealers (country level)
- Overview of dealer remuneration for vehicles (country level)
- Financial performance
- Operating margin of VMs
- R\&D expenditure of VMs
- Prices for new vehicles

Where relevant, each of the above sub-sections is further developed according to the four vehicle categories in scope. Finally, for each of these vehicle categories, information is provided in an aggregated form including all MS in scope, followed by specific data and insights on market trends at national level.

## 2. Description \& analysis

### 2.1. Size and structure of the market for new vehicle sales

### 2.1.1. Size of the market for new vehicle sales

### 2.1.1.1. Overview

This sub-section analyses the market for new vehicle sales in the MS in scope. Sales volumes are broken down by vehicle category and VM, while also considering individual brands. The indicators are based on VMs' total sales data during the period 2007-2017 obtained from the LMC database. It should be noted that a detailed breakdown of sales by VMs in Cyprus is not available in the aforementioned database.

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Passenger cars
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Virtually all major VMs are present in the European market. When analysing the sales trend during the period 2007-2017, we observe that the new passenger car market peaked in 2007 at $\pm 13.8$ million units but contracted thereafter until annual sales bottomed out to $\pm 10.7$ million units in 2013. This was due to the lasting impact of the global financial crisis of 2008, as European economies failed to bounce back rapidly and both households and commercial users remained reluctant to engage in big purchases like automobiles. A brief sales spike in 2009 did interrupt the overall downward trend for the period in scope, but this is attributable to economic stimulus programmes (scrappage schemes) established by many national governments at the time, which encouraged citizens to buy new cars. ${ }^{\text {i }}$ After 2013, passenger car sales showed signs of recovery, growing consistently until 2017 to reach 13.3 million units sold, nonetheless remaining around 4\% below the pre-crisis level.
Volkswagen Group, PSA Group, Renault-Nissan-Mitsubishi, Fiat Chrysler Automobiles and Ford Group are the top five passenger car manufacturers in terms of aggregated (for all countries in scope) passenger car sales over the study period. In 2011, Volkswagen Group surpassed PSA Group as the top selling passenger car manufacturer, while PSA Group and Renault-Nissan-Mitsubishi registered weaker sales. In 2013, Fiat Chrysler Automobiles slipped to the sixth position in terms of sales volume, due to decreased sales in the Italian and other Southern European markets.i However, Fiat Chrysler Automobiles' sales started recovering after 2013, returning it to the fourth position in 2017.

Many VMs recorded sales declines over the 2007-2017 period. PSA Group's sales volumes declined by $27 \%$ during the period, and the sales of other firms like Fiat Chrysler Automobiles, Ford Group and Toyota Group also showed an overall decline. As an exception, Volkswagen Group and Renault-Nissan-Mitsubishi recorded robust growths of $14.8 \%$ and $33.33 \%$ respectively during the same period.

The following figure presents the size of the market for sales of new passenger cars in terms of volume, as well as its breakdown by VM:

[^0]Figure 1 - Number of new passenger cars sold, per year, broken down by VM for 11 countries in scope, 2007 - $2017^{2}$


Light commercial vehicles
The analysis of sales trends of LCVs during the period 2007-2017 revealed that sales were highest in 2007, followed by an abrupt decline due to the global financial crisis, with 2009 featuring the lowest level of sales among all years in scope. The LCV market had a bumpy ride following the financial crisis. After a short recovery in 2010 and 2011, sales witnessed a new decline in 2012 and remained flat in 2013, partly due to the sovereign debt crisis affecting the Eurozone. However, the market has experienced a steady recovery since 2014 due to demand from an ageing fleet that faced delayed replacements after the crisis years. ${ }^{\text {.ii }}$ Sales reached 1.7 million units in 2017, which is still below the peak volume levels observed in 2007.

The major LCV VMs for the countries in scope are PSA Group, Renault-Nissan-Mitsubishi, Volkswagen Group, Ford, Fiat Chrysler Automobiles and Daimler Group. PSA Group and Renault-Nissan-Mitsubishi were able to maintain their leading market positions throughout the time period.

The overall LCV market contracted by $10.5 \%$ between 2007 to 2017, with the sales volume of two largest VMs - PSA Group and Renault-Nissan-Mitsubishi - likewise contracting by 7\% during the period. Ford Group recorded the strongest growth in LCV sales, of all VMs, thanks to the high demand for its models such as Ford Ranger and Ford Transit. ${ }^{\text {iv }}$

The following figure presents the size of the market for sales of new LCVs in terms of volume, as well as its breakdown by VM:

[^1]Figure 2 - Number of LCVs sold, per year, broken down by VM for 11 countries in scope, (2007-2017)³


Source: LMC database
Trucks
The analysis of sales trends of trucks in terms of volume during the period 20072017 for the countries in scope revealed that the highest sales for trucks were recorded in 2007, followed by a drastic fall of $45 \%$ YOY in 2009. The decline was even more dramatic for trucks than for the other vehicle categories, mainly due to the impact of the global financial crisis on construction and freight transportation activities. A further - albeit significantly lighter - decline in 2014 can be attributed to the high sales volumes witnessed in 2013 as a result of purchases influenced by the introduction of the Euro VI emission standards in the following year. Since 2014, the market has experienced continuous growth, reaching 0.3 million unit sold in 2017, which is, however, still $13 \%$ below the peak of 2007.
The key VMs in the market are: TRATON Group, Daimler Group, Volvo Group, Paccar and CNH Industrial. Sales of all major truck manufacturers contracted during the period in scope and are still lower than their 2007 peak, similar to trends observed in off-road vehicles such as construction equipment, oilfield and gas equipment, farm machinery and industrial equipment.
The following figure presents the size of the market for sales of new trucks in terms of volume, as well as its breakdown by VM:

Figure 3 - Number of trucks sold, per year, broken down by VM for 11 countries in scope, 2007-20174


Source: LMC database

## Buses

The analysis of bus sales by volume for the period 2007-2017 revealed that bus sales peaked in 2008 at 28,446 units sold across the countries in scope (no data available for Cyprus during 2007-2017 and Poland in 2007). After 2008, bus sales declined due to the impact of the global financial crisis and experienced a period of weak demand until 2014. Since 2014, bus sales have experienced continuous growth due to growth of intercity connections and liberalisation in France and Germany, reaching total sales volume of 24,826 units in 2017, up from the 2012 low of 19,728 but still below the precrisis level. The key VMs in the bus market are Daimler Group, CNH Industrial, TRATON Group, Volvo Group and VDL Group.
Overall, during 2007-2017, the sales of buses experienced a slight contraction. At the same time, Daimler Group increased its market leadership with a robust $15 \%$ growth in sales by capturing new demand for intercity buses in Europe.

[^2]The following figure presents the size of the market for sales of new buses in terms of volume, as well as its breakdown by VM:

Figure 4 - Number of buses sold, per year, broken down by VM for 11 countries in, 2007-2017 ${ }^{5}$


Source: LMC database

### 2.1.1.2. Country level

## Passenger cars

The analysis of passenger car sales by volume at country level revealed that Germany remained the largest market for passenger cars, accounting for approximately $25 \%$ of new passenger car sales across the 12 MS in scope. Sales in Germany demonstrated a stable market size compared to other MS, where sales fluctuated considerably over the 2007-2017 period:vi

- Italy moved from being the second largest market in 2007 to the fourth largest market in 2017;
- The UK moved from the third position in 2007 to the second in 2017;
- France moved from the fourth position in 2007 to the third in 2017;
- In Spain, Europe's fifth largest vehicle market, only 0.7 million new cars were registered in 2012, compared to 1.6 million in 2007 (though the country retained the fifth position throughout this period).

[^3]The figure below presents the same aggregate information as Figure 1 above but with the data broken down by country instead of VM:

Figure 5 - Number of new passenger cars sold, per year, broken down by country, 2007-2017


The overall market for passenger car sales contracted between 2007 and 2013 to then recover during 2014-2017 ending up just behind 2007 car sales value. However the resulting change in market size at country level differs significantly. Greece witnessed a decline by almost $70 \%$ during the period, due to the economic and sovereign debt crises and the concomitant deep economic recession. The table below shows the resulting decline in other countries, such as Cyprus, Ireland, Spain, Italy and the Netherlands. With an opposite trajectory, Poland witnessed the highest increase in sales $(+66 \%)$ during the same period, mainly due to the lower initial rate of car ownership in the country and a growing economy that proved to be very resilient to the financial crisis.

Table 2 - Percentage change in sales volume of passenger cars in the 12 MS in scope (2007-2017)

| Country | Sales volume change |
| :--- | :--- |
| Poland | $+66.2 \%$ |
| Austria | $+18.5 \%$ |
| Germany | $+9.3 \%$ |
| UK | $+5.7 \%$ |
| Belgium | $+4.2 \%$ |
| France | $+1.8 \%$ |
| Netherlands | $-17.6 \%$ |
| Italy | $-21.6 \%$ |
| Spain | $-23.1 \%$ |
| Ireland | $-29.6 \%$ |
| Cyprus | $-35.8 \%$ |
| Greece | $-68.6 \%$ |
| Total | $-3.8 \%$ |

Source: LMC database

According to data collected per VM, Volkswagen Group is consistently the market leader across most of the countries in scope, including in Austria, Germany, Greece, Ireland, the Netherlands, Poland and Spain. At the same time, PSA Group recorded the highest average sales volume in Belgium, France and the UK, whereas Italy showcased preference for the local brand of Fiat Chrysler Automobiles.

Figure 6 - Market share of the passenger car VMs per country (2007-2017)


## Light commercial vehicles

France remained the largest market for LCV by sales volume among the 12 countries throughout the period in scope, having been only temporarily dethroned by the UK in 2015. In the latter, the LCV sector has been the fastest growing sector on the back of a fundamental shift in consumer behaviour, with the growth of online shopping aiding a rise in the demand for goods delivery services. vii Top ranking positions three to five were changing between 2007 and 2017, as follows:

- Germany moved up from the fourth position in 2007 to the third position in 2017;
- Spain moved down from the third position in 2007 to the fourth position in 2017;
- Italy ended at the fifth position in 2017 in line with 2007.

The figure below presents the same aggregate information as Figure 2 above but with the data broken down by country instead of VM :

[^4]Figure 7 - Number of LCVs sold, per year, broken down by country, 2007-2017


Source: LMC database
The analysis of aggregate sales of LCVs over the period 2007-2017 revealed that PSA Group and Volkswagen Group led the market in most of the countries in scope:

- PSA Group is the market leader in Belgium, France, Poland and Spain;
- Volkswagen Group is the market leader in Austria, Germany and the Netherlands;
- Ford Group is the market leaders in Ireland and the UK;
- Renault-Nissan-Mitsubishi and Fiat Chrysler Automobiles are the market leaders in Greece and Italy respectively.

Figure 8 - Market share of the LCV VMs per country (2007-2017)


Source: LMC database

## Trucks

The analysis of truck sales by volume at country level revealed that Germany has been the largest market for trucks during the period 2007-2017. Other major markets for trucks such as France, the UK, Spain, Poland and Italy have exchanged positions during the period in scope, as follows:

- The UK moved up from the fourth position in 2007 to the third in 2017, registering a $17 \%$ sales growth during the period. The UK truck market outperformed France thanks to the strong popularity of luxury pickup trucks. The UK became Europe's largest market for midsized trucks in 2015viii;
- Poland jumped up from the sixth position in 2007 to the fourth position in 2017 thanks to a robust sales growth of 20\%;
- Spain dropped from the third position in 2007 to the fifth position in 2017 as sales contracted by $45 \%$ during the period. Demand in Spain rebounded since 2014 but did not fully recover to the pre-financial crisis level in the subsequent years. The construction bubble and high costs of financing have also impacted truck sales in the countryix;
- Truck sales in Italy declined by $34 \%$ during the period and the market fell to the sixth position in 2017.

The figure below presents the same aggregate information as

[^5]Figure 3 above but with the data broken down by country instead of VM:
Figure 9 - Number of trucks sold, per year, broken down by country (no data for Cyprus), 2007-2017


Source: LMC database
When analysing truck sales at an aggregate level across the countries in scope, the following observations can be made:

- Daimler Group is the market leader in Germany and Greece and constituted respectively $39 \%$ and $38 \%$ of the total trucks sold in the country during this period. Daimler Group and TRATON Group together accounted for $71 \%$ of trucks sold in Germany and 60\% in Greece;
- Volvo Group is the market leader in France and Spain with an aggregate market share of $42 \%$ and $27 \%$ respectively;
- Paccar recorded the highest truck sales in the Netherlands and the UK;
- CNH Industrial recorded the highest truck sales in Italy;
- TRATON Group was the market leader in Austria, Belgium, Ireland and Poland.

Figure 10 - Market share of the truck VMs per country (2007-2017)


Source: LMC database
Buses
At country level, France, Germany and the UK maintained the first, second and third positions respectively in terms of number of number of busses sold throughout the time period 2007-2017.

Sales volumes of buses in France and Germany expanded by 9\% and 18\% respectively between 2007-2017, which can be attributed to the growth of intercity buses following the liberalisation of the passenger transport by bus in the countries. In Germany alone, the number of bus passengers increased by $25 \%$ reaching 20 million in $2016 .{ }^{\times}$However, the bus market in the UK contracted by 3\% during the same period.

The figure below presents the same aggregate information as Figure 4 above but with the data broken down by country instead of VM:

[^6]Figure 11 - Number of buses sold, per year, broken down by country, 2007-2017 ${ }^{6}$


Source: LMC database
The following observations can be made based on the analysis of bus sales at an aggregate level across the countries in scope:

- CNH Industrial dominated the bus sales in France and Italy with a share of 47\% and 34\% respectively during the period 2007-2017;
- Daimler Group is the market leader in Austria, Germany and Greece with an average (over 2007-2017) share of respectively $55 \%$, $53 \%$ and $27 \%$;
- Volvo Group, VDL Group and TRATON Group are market leader in Ireland, the Netherlands and Spain respectively;
- The bus market in the UK, Poland and Belgium is much more scattered owing to the presence of small firms.

Figure 12 - Market share of the bus VMs per country (2007-2017) ${ }^{7}$


### 2.1.2. Breakdown of new vehicle sales by powertrain

This subsection, which leverages secondary data sources, analyses the innovation in manufacturing of new vehicles in passenger cars and trucks on the basis of powertrains installed in the vehicles in 11 MS in scope. Due to the relatively recent shift to alternative powertrains, the data in this paragraph reflects the findings from 2014 onwards.

### 2.1.2.1 Overview

The use of alternative powertrains in new vehicle sales has gradually gained traction with the proportion of fossil fuel-powered vehicles reducing slightly over the years. The introduction of Euro VI emission standards in 2014 reflects the EU efforts to promote vehicles with alternative powertrains. The implementation of stringent emission regulations and incentives such as free parking, access to high occupancy vehicle lanes etc for zero-emission vehicles is likely to further drive the electrification of vehicles in the MS. The total number of electric vehicles (EVs) across Europe reached about 1 million in 2017. ${ }^{\text {x }}$

The transition towards the use of alternate fuels for heavy duty commercial vehicles such as trucks has been slower compared to passenger cars due to multiple factors: limited economies of scale, long range requirements, payload mass and volume constraints, comparatively lower charging and refuelling infrastructure than for passenger cars. ${ }^{\text {xii }}$

### 2.1.2.2 Country Ievel

The 1 million EV milestone in 2017 was mostly driven by Nordic countries. Among the countries in scope, Germany, France, the UK and the Netherlands have been the primary contributors to the growth in EVs in total numbers. Favourable government incentives have been crucial in EV adoption levels.

The below table provides an overview of the total number of new alternative fuel vehicles (passenger cars) registrations per country compared to the total number of new passenger car registrations, which indicates that the largest share of new alternative fuel vehicles registrations were reported in Italy.
Table 3 - Overview of new alternative fuel vehicles registrations compared to the total new passenger car registrations (2014-2017) ${ }^{8}$


Source: ACEA Pocket Guide
German subsidy schemes introduced in 2016 and partly financed by the German car industry aided in the electrification efforts in the country. The German government's

[^7]plans to reduce tax burden on consumers and expand the supporting charging infrastructure is expected to boost EV adoption. ${ }^{\text {xii }}$

During 2010-2015, the Netherlands introduced various policies supporting electric vehicles such as reduced registration costs, subsidies for electrical charging, advantages on taxable income and local purchase subsidies that boosted the demand for electric vehicles in the country. The Netherlands held the second largest share of plug-in hybrid electric vehicles (PHEVs) in the EU in 2015 at $\pm 17 \%$, following the UK whose share stood at $\pm 20 \%$. The reduction in tax on natural gas as fuel, growth in diesel prices and the introduction of government subsidy programs during 2008-2010 have incentivised the growth of alternate fuel vehicles in the country over the years. . ${ }^{\text {iv }}$
The UK government has granted a $£ 5,000$ premium to buyers of new EVs since J anuary 2011, which has contributed to the growth of electric mobility in the country alongside subsidy schemes during 2015-2017, as well as infrastructural developments. ${ }^{\text {xv }}$

As of 2015, France was the second largest country in Europe for hybrid vehicles owing to the introduction of monetary incentives such as the bonus-malus scheme since 2007. The scheme rewarded buyers choosing vehicles with low CO2 emissions and imposed a higher tax on those who opted for vehicles with higher CO2 emissions. The development of supporting infrastructure via partnership between the government and car manufacturers has also enabled the penetration of EVs in the country. xvi

Buyers of vehicles with alternative powertrains in Italy have also benefitted from tax reductions and the introduction of government subsidy programs during 2008-2010. The use of gas-powered vehicles soared in the country alongside the growth of compressed natural gas (CNG) filling stations. However, the end of incentives in 2010 has slowed the penetration of these vehicles. Nevertheless, the gas-powered vehicles have positioned Italy as the largest European market for alternative fuel vehicles in 2015. xvii

An analysis of the percentage of new vehicle registrations by powertrain compared to the total number of new alternative fuel vehicle registrations, indicates that, within the alternative fuels the hybrid electric vehicles (HEV) ${ }^{9}$ have the highest share in the majority of the countries. In the Netherlands the electric chargeable vehicles (ECV) ${ }^{10}$ represent the highest share while in Italy the highest share is for the other alternative fuel vehicles (AFV) ${ }^{11}$.

[^8]Table 4 - Share of new alternative fuel vehicle registrations, split per powertrain, compared to new passenger car registrations (2014-2017) ${ }^{12}$


Source: ACEA Pocket Guide

### 2.1.3 Overview of vehicle manufacturers' market presence

This sub-section analyses the market presence of VMs in the MS in scope using data on market entries and exits (whereby a market entry is considered to be a VM bringing a new vehicle model to a new segment of the market) by VMs across vehicle segments during the period 2007-2017.
Furthermore, mergers and acquisitions (M\&A) activities within the countries in scope during the period 2007-2017 have been analysed. When references are made to 'all countries in scope' in this subchapter, Cyprus is not part of the analysis, unless otherwise specified.

### 2.1.3.1 Overview

## Passenger cars

The analysis of trends regarding VMs entering and exiting the passenger car market on an individual model level, during the period 2007-2017 revealed that market entries were fewer than exits, as a greater number of VMs exited from segments ${ }^{13}$ across the countries in scope. This indicates customers had a smaller model portfolio to choose from over the years. Only segment C (compact), G (sporty) and the van segments had a positive net entry by VMs over 2007-2017, while MPV segment, Segment E (large) and D (midsize) witnessed the highest net exits by VMs.
In terms of entries during the period 2007-2017, the greatest number of entries took place during the year 2016. The key vehicle segments which garnered the interest of VMs during this period were segment $G$ (sporty), the SUV segment, segment D (midsize) and the van segment. More than 40 sports models were introduced by VMs during this period, which reflects the increased preference of customers for premium vehicles. The strongest YOY growth in SUV sales occurred in 2017, bringing SUV sales to 4 million units.

When analysing exits, the data demonstrates that segment F (large plus) and the van segment witnessed the least number of exits, whereas segment D (midsize), the MPV segment, and segment G (sporty) faced the greatest number of exits owing to market shifts toward the SUV segment and diminishing popularity of sports car among customers as a status symbol. xviii Low capacity utilisation at car manufacturing plants in

[^9]Europe impacted the profitability of VMs , including for those operating in segment D (midsize), which also could have led to the exit of VMs in this segment. ${ }^{\text {xix }}$

In terms of entry at an aggregate level, Mahindra Group, Tesla Motors and Tata Group made the highest number of entries, while General Motors Group, PSA Group and Hyundai Group made the highest number of exits.
The following table presents the market entry/exit in the passenger car market with its breakdown by car segment:

Table 5 - Number of VM's entries / exits in the passenger car market, broken down by car segment, across 11 countries in scope, 2007-2017 ${ }^{14}$

| Segment | Entry | Exit | Net Entry | Net Exit |
| :--- | :---: | :---: | :---: | :---: |
| Segment A (basic) | 13 | 24 |  | 11 |
| Segment B (sub-compact) | 25 | 38 |  | 13 |
| Segment C (compact) | 25 | 23 | 2 |  |
| Segment D (midsize) | 31 | 46 |  | 15 |
| Segment E (large) | 18 | 35 |  | 17 |
| Segment F (large plus) | 2 | 5 |  | 3 |
| Segment G (sporty) | 41 | 40 |  | 19 |
| MPV | 26 | 45 |  | 11 |
| Pickup | 14 | 25 |  | 6 |
| SUV | 31 | 37 |  | $\mathbf{1 6}$ |
| Segment U (unclassified) | 25 | 47 | $\mathbf{1 9}$ | $\mathbf{9 8}$ |
| Van | 29 | $\mathbf{3 7 8}$ |  |  |
| Total | $\mathbf{2 8 0}$ |  |  |  |

Source: LMC database
An analysis of the dynamics of the automotive market with regards to the number of passenger car manufactures present in each segment ${ }^{15}$ reveals that on average for the countries in scope, most manufacturers are active in segment C (compact), which remained relatively stable over the years. In 2007, on average, most VMs were present in segment $D$ (midsize), but the number of VMs present in this segment decreased over the years. A very limited number of VMs is present in the pickup segment. In general, apart from segment $C$ (compact) and the van segment, there is a decreasing trend in the number of vehicle manufacturers per segment on an average basis.

[^10]Table 6 - Average number of passenger cars manufacturers in each segment for 11 countries in scope ${ }^{16}$, 2007-2017

| Seqments | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A - BASIC | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 10 | 10 | 9 |
| B - SUB-COMPACT | 15 | 15 | 15 | 14 | 14 | 13 | 13 | 14 | 14 | 13 | 13 |
| C - COMPACT | 16 | 16 | 16 | 16 | 17 | 17 | 18 | 17 | 17 | 17 | 16 |
| D - MI DSI ZE | 17 | 16 | 16 | 16 | 16 | 15 | 15 | 14 | 14 | 14 | 14 |
| E - LARGE | 12 | 12 | 11 | 11 | 10 | 9 | 10 | 9 | 9 | 9 | 9 |
| F - LARGE-PLUS | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| G - SPORTY | 15 | 15 | 15 | 16 | 14 | 14 | 14 | 14 | 14 | 14 | 14 |
| MPV | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 7 | 7 |
| PI CKUP | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 2 |
| SUV | 15 | 15 | 15 | 15 | 14 | 14 | 13 | 12 | 13 | 14 | 14 |
| U - UNCLASSI FIEE | 9 | 9 | 8 | 8 | 7 | 6 | 7 | 6 | 6 | 5 | 5 |
| VAN | 7 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 7 | 8 |

Light commercial vehicles
The analysis of trends regarding VMs entering and exiting the LCV market during the period 2007-2017 revealed that, in aggregate terms, the net entries were more numerous than the exits, led by segment C (compact) and the pickup segment. This indicates that customers in the LCV category had a larger portfolio of models to choose from, compared to customers in the passenger cars category.
In terms of market entries, the highest number took place by the end of the period, when VMs moved into the segment C (compact) and the pickup segment, following an increasing preference for these models in commercial operations.

The highest number of exits was related to segments SUV, C (compact) and A (basic).
At an aggregate level, Volkswagen Group, Mahindra Group and Hyundai Group made the highest number of entries, while Fiat Chrysler Automobiles, PSA Group and Hyundai Group made the highest number of exits, signifying a possible refresh in the product portfolio of the latter.

The following table presents the market entry/exit in the LCV market with its breakdown by LCV segment:
Table 7 - Number of VM's entries / exits in the LCV market, broken down by segment across 11 countries, 2007-2017 ${ }^{17}$

| Segment | Entry | Exit | Net Entry | Net Exit |
| :--- | :---: | :---: | :---: | :---: |
| Segment A (basic) | 24 | 27 |  | 3 |
| Segment B (sub-compact) | 34 | 25 | 9 |  |
| Segment C (compact) | 48 | 28 | 20 |  |
| Segment D (midsize) | 19 | 17 | 2 |  |
| Segment E (large) | 13 | 14 |  | 1 |
| Segment F (large plus) | 2 | 4 |  | 2 |
| Segment G (sporty) | 9 | 8 | 1 |  |
| MPV | 9 | 24 |  | 15 |
| Pickup | 45 | 23 | 22 | 6 |
| SUV | 26 | 32 |  | 11 |
| Segment U (unclassified) | 35 | 46 |  |  |
| Van | 16 | 16 |  |  |
| Total | $\mathbf{2 8 0}$ | $\mathbf{2 6 4}$ | $\mathbf{1 6}$ |  |

Source: LMC database
The van and pickup segments were the most popular with regards to the number of LCV manufacturers present in each. The number of LCV manufacturers active in the pickup segment increased between 2007 and 2017. Segment G (sporty) saw the fewest
number of active manufacturers. Apart from the increase in the number for the pickup segment, the number of manufacturers in the other segments remained relatively stable during the time period.
Table 8 - Average number of LCV manufacturers in each segment for 11 countries in scope, 2007-201718

| Seqments | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A - BASIC | 3 | 3 | 2 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 2 |
| B - SUB-COMPACT | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 7 |
| C - COMPACT | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 7 |
| D - MI DSI ZE | 2 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| E - LARGE | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 | 1 |
| G - SPORTY | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| MPV | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 |
| PICKUP | 8 | 8 | 9 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 |
| SUV | 8 | 7 | 8 | 7 | 7 | 7 | 6 | 6 | 6 | 6 | 7 |
| U - UNCLASSI FIED | 8 | 7 | 7 | 8 | 7 | 7 | 8 | 8 | 7 | 7 | 6 |
| VAN | 11 | 11 | 11 | 11 | 11 | 11 | 10 | 11 | 10 | 10 | 10 |

Source: LMC database

## Trucks

The analysis of trends regarding VMs entering and exiting the truck market during the period 2007-2017 at an aggregate level revealed that the total number of exits was higher than the total number of entries, as more than 10 VMs were reported to have withdrawn a model from multiple segments, whereas VMs introducing new models were comparatively lower. Thus, customers had a smaller model portfolio to choose from in the truck category.

In terms of entry at an aggregate level, Isuzu Motors, Toyota Group and other smaller VMs introduced new models in the heavy and medium truck segment during this period. Renault-Nissan Group, Isuzu Motors and Ford Group made the greatest number of exits, signifying a possible refresh in their product portfolio.

The following table presents market entries and exits in the truck market broken down by truck segment:

Table 9 - Number of VM's entries / exits in the trucks market, broken down by segment, across 11 countries, 2007-2017 ${ }^{19}$

| Segment | Entry | Exit | Net Exit |
| :--- | :---: | :---: | :---: |
| Heavy truck | 8 | 9 | $\mathbf{1}$ |
| Medium truck | 13 | 23 | 10 |
| Total | $\mathbf{2 1}$ | $\mathbf{3 2}$ | $\mathbf{1 1}$ |

When capturing the dynamics of the automotive market on an aggregate level, with regards to the number of truck manufacturers present in the different segments ${ }^{20}$, most of the manufacturers are active in the segment of medium trucks. When analysing the number of manufacturers present in each segment on an aggregate level over the period from 2007 to 2017 , there are only some minor changes in both segments.

Table 10 - Average number of truck manufacturers in each segment for 11 countries in scope, 2007-2017 ${ }^{21}$

| Segments | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Heavy truck | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 6 | 6 | 7 | 6 |
| Medium truck | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 7 |

## Buses

The analysis of VMs entering and exiting the bus market during the period 20072017 at an aggregate level revealed that a large number of VMs launched new models during this period, whereas very few bus models were withdrawn from the market, with 14 net entries. Despite data limitations (no data available for Cyprus, Germany and Italy), it can be deduced that bus customers had a larger portfolio to choose from compared to truck customers. The bus manufacturers featuring the highest number of entries during this period were King Long Group, Volvo Group, VDL Group, Yutong Group and CNH Industrial.

Table 11 - Number of VM's entries / exits in the bus market, broken down by segment, across 9 of 12 countries, 2007-2017 ${ }^{22}$

|  | Entry | Exit | Net Exit |
| :---: | :---: | :---: | :---: |
| Total | $\mathbf{2 4}$ | $\mathbf{1 1}$ | $\mathbf{1 3}$ |

### 2.1.3.2 Country level

## Passenger cars

The analysis of trends regarding VMs' market entries and exits at country level revealed that Indian VMs, Mahindra Group and Tata Group, made inroads in the market by introducing models in segment C (compact), segment B (sub-compact) and segment D (midsize), with Mahindra Group recording the highest number of model entries across all countries in scope. Tesla Motors made the second highest number of entries during the period as it introduced three models (model S, model 3 and model Y ) across all countries except Greece. Other VMs that were active during the period in terms of entering new countries and segments were Ford Group ( 22 models), General Motors Group (21 models), Daimler Group (19 models) and Toyota Group (17 models).
The table below presents the same aggregate information as Table 5 above but with the data broken down for entries by country instead of segment:

Table 12 - Entries made by VMs in the passenger car market, broken down by country, across all segments, (top 10), 2007-201723

|  | Mahindra Group | Tesla Motors | Tata Group | Ford Group | General Motors Group | Daimler Group | Toyota Group | Fiat Chrysler Automobiles | Subaru Corporation | BMW Group | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 4 | 3 | 1 | 2 | 3 | 2 | 1 | 1 | 1 | 2 | 20 |
| Belgium | 2 | 3 | 2 | 2 | 1 | 1 | 1 |  | 1 | 1 | 14 |
| France | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 15 |
| Germany | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 2 | 1 |  | 16 |
| Greece | 2 |  | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 1 | 15 |
| I reland | 4 | 2 | 2 | 3 | 1 |  | 1 | 1 | 1 |  | 15 |
| Italy | 2 | 3 | 2 | 2 | 1 | 2 | 2 | 1 | 1 | 1 | 17 |
| Netherlands | 1 | 3 | 2 |  | 3 | 2 | 2 | 1 |  | 1 | 15 |
| Poland | 4 | 2 | 5 | 3 | 4 | 3 | 3 | 2 | 2 | 1 | 29 |
| Spain | 2 | 2 |  | 2 | 3 | 4 | 2 | 1 | 1 |  | 17 |
| UK | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 1 | 1 | 21 |

Source: LMC database
In terms of exits made by passenger car manufacturers during the period in scope, General Motors Group plaid a strong role by selling Opel and Vauxhall brands to PSA Group in 2017.×x The General Motors - PSA alliance, active since 2012, and the

[^11]subsequent acquisition of General Motors Group's European business by PSA Group resulted in exists in segments where both the VMs operated, mainly segments A to D. The highest number of exits during the period was recorded in Poland, followed by those of Greece and I reland.

The table below presents the same aggregate information as Table 5 above but with the data broken down for exits by country instead of segment:

Table 13 - Exits made by VMs in the passenger car market, broken down by country, across all segments, 2007-2017 ${ }^{24}$

| VM <br> Country | General <br> Motors Group | PSA Group | Hyundai Group | Honda Group | Toyota Group | Fiat Chrysler Automobiles | Renault-Nissan Mitsubishi | Mahindra Group | Tata Group | Ford Group | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 4 | 2 | 2 | 3 | 2 | 2 | 2 |  | 3 | 1 | 21 |
| Belgium | 2 | 2 | 3 | 1 | 2 | 2 |  |  |  | 2 | 14 |
| France | 4 | 3 | 3 | 2 | 1 | 3 | 1 | 2 |  | 1 | 20 |
| Germany | 1 | 2 | 2 | 3 | 2 |  |  | 2 | 2 |  | 14 |
| Greece | 6 | 4 | 4 | 2 |  | 2 | 4 | 2 | 2 | 2 | 28 |
| I reland | 4 | 2 | 2 | 3 | 2 | 4 | 5 | 3 | 1 | 2 | 28 |
| Italy | 3 | 1 | 2 | 2 | 3 | 1 | 1 | 3 | 3 | 1 | 20 |
| Netherlands | 5 | 3 | 3 | 3 | 4 | 2 | 2 | 3 |  | 1 | 26 |
| Poland | 8 | 5 | 4 | 4 | 2 | 1 | 1 | 2 | 3 | 2 | 32 |
| Spain | 3 |  | 1 | 1 | 1 | 1 |  |  | 2 | 2 | 11 |
| UK | 5 | 4 | 2 | 2 | 2 | 3 | 2 | 1 | 1 | 2 | 24 |

Source: LMC database
When going into detail at country level in 2007, it becomes clear that the number of VMs present in the different segments in the different countries are relatively aligned, with the exception of Poland where the number of vehicle manufacturers is slightly lower than the average. Not taking into consideration the segment U (unclassified), in 2007 the majority of the countries had the highest number of manufacturers in the segments G (sporty), D (midsize), C (compact) and B (sub-compact). Only Germany and Italy had a higher number of vehicle manufacturers present in the pickup segment.

Figure 13 - Number of VMs for passenger cars present in each segment in each country, 2007 and $2017^{25}$


Data for 2017 show a different picture, where the highest number of VMs was found in segment C (compact) in all countries. The number of VMs present in the different
segments has increased in Poland, where the biggest increase is in the segment G (sporty). Apart from Germany and Spain, in the other countries the overall number of VMs present in the segments dropped significantly over the years. Especially the number of VMs in segments B (sub-compact) and D (midsize) decreased in several countries. In Greece especially the number of VMs present in segment G (sporty) and the SUV segment increased drastically over the timeframe.

## Light commercial vehicles

The analysis of the number of entries made by VMs in the LCV market during the period 2007-2017 at country level revealed that Volkswagen Group made the highest number of new entries (33), followed by Mahindra Group (26), Hyundai Group (23), Toyota and Daimler Group (20 each). Key VMs such as Volkswagen Group, Toyota Group, Renault-Nissan-Mitsubishi and Mahindra Group introduced the greatest number of new LCV models in Italy to boost their sales.

The table below presents the same aggregate information as Table 7 above but with the data broken down for entries by country instead of segment:

Table 14 - Entries made by VMs in the LCV market, broken down by country, across all segments, 2007 $2017^{26}$

| Country | Volkswagen Group | Mahindra Group | Hyundai Group | Toyota Group | Daimler Group | Renault- <br> Nissan- <br> Mitsubishi | PSA Group | BMW Group | Fiat Chrysler Automobiles | Ford Group | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 33 | 26 | 23 | 20 | 20 | 18 | 14 | 14 | 13 | 13 | 194 |
| Austria | 3 |  | 2 | 1 | 1 |  | 1 | 2 | 2 |  | 12 |
| Belgium | 1 | 2 | 2 |  | 1 | 1 |  | 3 |  | 1 | 11 |
| France | 2 | 4 | 2 |  | 3 |  | 1 | 4 | 1 | 2 | 19 |
| Germany | 5 |  | 2 | 3 | 5 | 1 | 1 | 1 | 1 | 2 | 21 |
| Greece | 2 | 3 |  | 2 | 1 | 1 | 2 |  | 1 |  | 12 |
| I reland | 3 | 4 | 3 |  |  | 1 | 2 | 2 | 1 |  | 16 |
| Italy | 4 | 4 | 2 | 6 | 3 | 6 | 2 |  | 2 | 4 | 33 |
| Netherlands | 3 | 3 | 1 |  | 1 | 1 | 1 |  | 1 | 1 | 12 |
| Poland | 6 | 2 | 6 | 5 | 2 | 2 | 2 | 1 | 1 | 3 | 30 |
| Spain | 3 | 2 | 1 | 2 | 2 | 3 | 1 |  | 2 |  | 16 |
| UK | 1 | 2 | 2 | 1 | 1 | 2 | 1 | 1 | 1 |  | 12 |

Source: LMC database
The analysis of the number of exits made by VMs in the LCV market during the period 2007-2017 at country level reveals that Fiat Chrysler Automobiles made the largest number of exits across segments across all countries (except Cyprus). Other VMs including PSA Group and Hyundai Group also exited with their models from multiple markets during this period.

The table below presents the same aggregate information as Table 7 above but with data broken down for exits by country instead of segment:

Table 15 - Exits made by VMs in the LCV market, broken down by country, across all segments, 2007 $2017{ }^{27}$


Source: LMC database

A detailed overview of the number of vehicles manufacturers per segment on a country level for LCVs in 2007 provides a different trend than the aggregated view. In most countries the number of manufacturers in the van segment is higher than the other segments, except for Belgium, Germany and the Netherlands where the highest number is for the SUV segment. For France, the highest numbers of VMs are present in the segment C (compact) and B (sub-compact). The total number of VMs present in all segments differs significantly among the countries, with Greece, Poland and the UK having a fairly limited number of manufacturers present compared to e.g. France, Belgium and Germany.

Figure 14 - Number of VMs for LCVs present in each segment in each country, 2007 and $2017^{28}$


Source: LMC database
This picture drastically shifted over the years. In 2017 Belgium, France and Germany still had the largest number of VMs present in the segments of LCV, but the highest number in these countries was in segment C (compact) and the SUV segment. In several countries the pickup segment became the segment with the highest number of manufacturers, e.g. in Austria, Greece, Ireland and Spain.

## Trucks

The analysis of the number of entries made by VMs in the trucks market at country level reveals that the highest number of new truck models were introduced in countries where the truck market expanded during the period, such as Poland, the UK and Ireland. Despite a commercial vehicle market expansion in Germany, the data indicates there were fewer entries in the country compared to the aforementioned countries, signifying a lower model availability for customers in the latter.

The table below presents the same aggregate information as Table 9 above but with data broken down for entries by country instead of segment:

Table 16 - Entries made by VMs in the truck market, broken down by country, across all segments, 2007 $2017^{29}$

| Countries VM | Isuzu <br> Motors | Toyota Group | Hyundai Group | Renault- <br> Nissan <br> Group | CNHTC Group | Ashok Leyland Group | KamAZ Group | Other Group | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria |  |  |  |  |  |  |  | 2 | 2 |
| Belgium | 1 |  |  |  |  |  |  |  | 1 |
| Germany |  |  | 2 |  |  |  |  |  | 2 |
| Greece | 1 |  |  |  |  |  |  |  | 1 |
| I reland |  | 1 |  |  | 1 |  |  | 1 | 3 |
| Italy | 1 |  |  |  |  |  |  |  | 1 |
| Netherlands |  |  |  | 1 |  |  |  | 1 | 2 |
| Poland |  |  |  |  |  | 1 | 1 | 2 | 4 |
| Spain |  | 1 |  |  |  |  |  | 1 | 2 |
| UK | 2 | 1 |  |  |  |  |  |  | 3 |

Source: LMC database
In terms of exits by VMs at country level, the greatest number of exits were witnessed in the Netherlands and Ireland. Austria, Germany, Italy, Poland and the UK had similar truck VM exits (3).

The table below presents the same aggregate information as Table 9 above but with the data broken down for exits by country instead of segment:

Table 17 - Exits made by VMs in the truck market, broken down by country, across all segments, 2007 $2017^{30}$

| Countries | Renault- <br> Nissan <br> Group | Isuzu Motors | Ashok <br> Leyland <br> Group | Ford Group | Toyota Group | KamAZ Group | GAZ <br> Group | Fiat Group | General Motors Group | Hyundai Group | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 1 | 1 |  |  | 1 |  |  |  |  |  | 3 |
| Belgium | 1 |  |  |  |  |  |  |  |  |  | 1 |
| France | 1 |  |  |  |  |  |  |  |  |  | 1 |
| Germany | 1 |  |  | 1 |  |  |  | 1 |  |  | 3 |
| Greece |  | 1 |  |  |  |  |  |  |  |  | 1 |
| I reland | 1 |  |  | 1 | 2 |  |  |  |  |  | 4 |
| I taly |  | 1 | 1 | 1 |  |  |  |  |  |  | 3 |
| Netherlands | 2 | 1 |  | 1 |  |  |  |  | 1 |  | 5 |
| Poland |  |  | 1 |  |  | 1 | 1 |  |  |  | 3 |
| Spain |  |  | 1 |  |  |  |  |  |  | 1 | 2 |
| UK |  | 1 | 1 |  | 1 |  |  |  |  |  | 3 |

When analysing the truck segments in detail on a country level, only the Netherlands deviates from the average in 2007 with a higher number of heavy truck manufacturers than medium truck manufacturers. Austria had the lowest number of truck manufacturers present in its market, while the number of manufacturers in Germany were the highest.

By and large it can be observed that the heavy truck segment looks more stable than the medium truck one, where the number of active manufacturers in the countries have been more fluctuating over the 11 years.

Table 18 - Number of truck manufacturers in each segment per country, 2007-201731

| Year Heavy truck | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 5 | 5 | 6 | 6 | 6 | 6 | 7 | 6 | 7 | 7 | 6 |
| Belgium | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| France | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Germany | 8 | 7 | 8 | 7 | 7 | 7 | 8 | 8 | 7 | 7 | 7 |
| Greece | 7 | 7 | 7 | 7 | 6 | 5 | 6 | 6 | 6 | 7 | 6 |
| I reland | 6 | 6 | 6 | 6 | 9 | 8 | 7 | 7 | 7 | 7 | 7 |
| Italy | 6 | 6 | 7 | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Netherlands | 10 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| Poland | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 7 | 7 | 7 | 7 |
| Spain | 6 | 6 | 6 | 6 | 6 | 5 | 6 | 5 | 5 | 6 | 6 |
| UK | 7 | 7 | 7 | 8 | 8 | 8 | 7 | 7 | 7 | 7 | 6 |


| Year <br> Medium truck | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 6 | 5 | 8 | 8 | 8 | 8 | 10 | 8 | 9 | 9 | 5 |
| Belgium | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 |
| France | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 | 7 |
| Germany | 8 | 10 | 10 | 10 | 11 | 10 | 9 | 10 | 9 | 9 | 9 |
| Greece | 8 | 8 | 7 | 8 | 7 | 6 | 6 | 6 | 4 | 6 | 7 |
| I reland | 7 | 8 | 7 | 7 | 8 | 8 | 8 | 8 | 8 | 8 | 7 |
| Italy | 9 | 10 | 8 | 8 | 9 | 9 | 9 | 9 | 8 | 9 | 8 |
| Netherlands | 5 | 9 | 8 | 7 | 6 | 7 | 10 | 8 | 6 | 8 | 7 |
| Poland | 7 | 6 | 5 | 5 | 8 | 9 | 9 | 7 | 7 | 8 | 7 |
| Spain | 9 | 9 | 9 | 10 | 9 | 8 | 8 | 9 | 8 | 9 | 9 |
| UK | 7 | 8 | 7 | 8 | 8 | 8 | 8 | 8 | 7 | 8 | 7 |

Source: LMC database
The number of manufacturers in the segment of 'heavy trucks' declined the most in the Netherlands, with 10 manufacturers present in 2007, which dropped in 2008 to 6 manufacturers. Ireland on the other hand had a peak in number of manufactures in 2011, increasing from 6 to 9.

Throughout the time period, Germany, Italy and Spain kept a higher number of manufacturers in the 'medium' segment compared to the other analysed countries.

## Buses

At country level, the analysis of entries by VMs revealed that Poland recorded the greatest number of launches of new bus models as the country made significant investments from 2010 to 2013 to improve the quality of public transport, leveraging EU funds for the development of bus and trolley bus systems. ${ }^{\text {xxi }}$ Other key markets that witnessed new bus model introductions were Ireland and Belgium.

The table below presents the entries by VMs, broken down by country:

[^12]Table 19 - Entries made by VMs in the bus market, broken down by country, 2007-201732

| Countries VM | King Long Group | VDL Group | CNH <br> Industrial | Volvo Group | Yutong Group | Daimler Group | TRATON Group | Isuzu Motors | Other Group | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 1 | 1 |  |  |  |  |  |  |  | 2 |
| Belgium | 1 | 1 |  | 1 |  |  |  |  |  | 3 |
| France |  |  |  | 1 | 1 |  |  |  |  | 2 |
| Greece |  |  | 1 |  |  |  | 1 |  |  | 2 |
| I reland | 1 | 1 | 1 |  |  | 1 |  |  |  | 4 |
| Poland |  | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 7 |
| Spain | 1 |  |  |  | 1 |  |  |  |  | 2 |
| UK | 1 |  |  |  | 1 |  |  |  |  | 2 |

Source: LMC database
The table below represents that in terms of exits by VMs at country level, Austria, Poland and the UK witnessed the highest number of exits by bus manufacturers.

Table 20 - Exits made by VMs in the bus market, broken down by country, 2007-201733

| VM | Toyota <br> Group | King <br> Long <br> Group | Ashok <br> Leyland <br> Group | Isuzu <br> Motors | Yutong <br> Group | VDL <br> Group | CNH <br> Industrial | Total |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Countries |  | 1 |  | 1 |  |  |  | $\mathbf{2}$ |
| Austria |  |  |  |  |  | 1 |  | $\mathbf{1}$ |
| Belgium |  | 1 |  |  |  |  |  | $\mathbf{1}$ |
| France | 1 |  |  |  |  |  |  | $\mathbf{1}$ |
| Ireland |  |  | 1 |  |  |  |  | $\mathbf{1}$ |
| Netherlands |  |  | 1 | 1 |  |  |  | $\mathbf{2}$ |
| Poland |  |  |  |  | 1 |  | $\mathbf{1}$ |  |
| Spain | 1 |  |  |  |  |  | 1 | $\mathbf{2}$ |
| UK |  |  |  |  |  |  |  |  |

Source: LMC database
No segments have been specified for the bus category. An analysis of the number of manufacturers active in this category shows that Italy and the UK have the highest number of manufacturers present, with a slight decline over the time period in Italy.

Table 21 - Number of bus manufacturers per country, 2007-201734

|  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 7 | 7 | 6 | 6 | 7 | 6 | 6 | 6 | 7 | 7 | 6 |
| Belgium | 6 | 5 | 6 | 5 | 5 | 5 | 4 | 6 | 5 | 7 | 7 |
| France | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 7 | 7 |
| Germany | 6 | 6 | 6 | 6 | 7 | 6 | 6 | 6 | 6 | 6 | 6 |
| Greece | 9 | 7 | 8 | 7 | 7 | 5 | 5 | 5 | 6 | 5 | 5 |
| Ireland | 7 | 7 | 7 | 5 | 6 | 6 | 6 | 5 | 5 | 8 | 8 |
| Italy | 9 | 9 | 9 | 9 | 9 | 10 | 8 | 8 | 8 | 8 | 7 |
| Netherlands | 6 | 6 | 7 | 6 | 7 | 7 | 7 | 8 | 6 | 7 | 8 |
| Poland | - | 8 | 8 | 7 | 6 | 7 | 7 | 6 | 6 | 8 | 7 |
| Spain | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 7 | 8 | 9 | 7 |
| UK | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 9 | 8 | 8 | 8 |

### 2.1.3.3 Overview of mergers and acquisitions

For this analysis, which is based on data from Mergermarket, only M\&A deals where the bidder company or the deal dominant geography are located in one of the countries in scope have been considered. Deal dominant geography refers to the location where, post M\&A, the majority of the operations would be taking place. Only deals where both the bidder company and the target company were defined as manufacturers have been considered.

The analysis of top M\&A deals by deal value during 2007-2017 in the countries in scope revealed that the majority of the deals took place in Germany, followed by France, Italy and the UK. The trend in some of the largest deals was to create an integrated automotive group and strengthen the acquirer's market position. The acquisition of stakes by Volkswagen AG in MAN SE and Scania AB in the truck and bus category is an example.

In the passenger cars market, the acquisition of Dr. Ing. h.c. F. Porsche AG by Volkswagen AG was the largest deal where Volkswagen AG acquired a 49.9\% stake in Porsche AG in 2009 and purchased the remaining stake in 2012 for USD 14.2 billion. In another deal, Tata Motors Limited acquired Land Rover for a deal of USD 2.3 billion. The transaction helped Tata Motors enhance its automotive business and strengthen its market share.

In the heavy duty vehicles market, the largest acquisition was that of MAN SE by Volkswagen AG in 2011. Through a transaction of USD 7.6 billion, Volkswagen AG acquired $55.9 \%$ of the voting rights and $53.7 \%$ of the share capital in MAN SE and got closer to its aim of becoming an integrated commercial vehicles group. ${ }^{\text {xxii }}$
Technology and innovation were also a focus of the M\&A deals during 2007-2017. In 2010, Renault SA and Nissan Motor Co. Limited acquired a 3.1\% stake in Daimler AG to form a successful cooperation utilising skill of all three companies and their available resources to develop innovative technologies.

[^13]Table 22 - Overview of top deals by deal value, 2007-201735

| Year | I nvestor | Target | Target categoryarget category | Deal <br> Value <br> USD(m) | Deal dominant geography Deal dominant geography |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2012 | Volkswagen AG | Dr. Ing. h.c. F. Porsche AG (50.1\% Stake) | Passenger Cars | 14,237.8 | Germany |
| 2011 | Volkswagen AG | MAN SE (26\% Stake) | Buses; Trucks | 7,650.7 | Germany |
| 2009 | Volkswagen AG | Dr. Ing. h.c. F. Porsche AG (49.9\% Stake) | Passenger Cars | 5,796.2 | Germany |
| 2008 | Volkswagen AG | $\begin{aligned} & \text { Scania AB ( } 16.84 \% \\ & \text { Stake) } \end{aligned}$ | Buses; Trucks | 4,352.9 | Sweden |
| 2013 | Volkswagen AG | MAN SE (24.97\% Stake) | Buses; Trucks | 3,774.5 | Germany |
| 2008 | Tata Motors Limited | J aguar Limited; Land Rover Limited | Passenger Cars | 2,300 | UK |
| 2014 | Government of France; Dongfeng Motor Group Co., Ltd. | PSA Peugeot-Citroën SA <br> (28\% Stake) | Passenger Cars | 2,205.9 | France |
| 2016 | Nissan Motor Co., Ltd. | Mitsubishi Motors Corporation (34\% Stake) | Passenger Cars, Commercial vehicles, OEM and OES | 2,159.9 | Japan |
| 2009 | Fiat SpA; Government of Canada; US Department of the Treasury; <br> Voluntary Employees Beneficiary Association | Chrysler LLC (certain assets) | Passenger Cars | 2,000 | USA |
| 2008 | Zhejiang Geely Holding Group Co., Ltd. | Volvo Car Corporation Ltd. | Passenger Cars, parts and financial services | 1,800 | Sweden |
| 2017 | PSA Peugeot-Citroen SA | Opel Automobile GmbH; Vauxhall Motors Limited | Passenger Cars | 1,592.1 | Germany |
| 2010 | Renault SA; Nissan Motor Co., Ltd. | Daimler AG (3.1\% Stake) | Passenger Cars; LCVs; <br> Buses; Trucks | 1,558.3 | Germany |
| 2013 | Fiat Industrial S.p.A | CNH Global NV (12\% Stake) | Buses, Trucks | 1,450.6 | Netherlands |
| 2012 | General Motors Company | PSA Peugeot-Citroen SA (7\% Stake) | Passenger Cars | 405 | France |
| 2007 | GM Daewoo Auto \& Technology Company (formerly Daewoo Motor) | Fabryka Samochodow Osobowych SA (FSO) (40\% Stake) | Passenger Cars | 252.2 | Poland |
| 2010 | Fiat SpA | Ferrari SpA (5\% Stake) | Passenger Cars | 167 | Italy |
| 2014 | Volvo Construction Equipment | Terex Equipment Limited; Inner Mongolia North Hauler Joint Stock Co., Ltd. (25.2\% Stake) | Trucks | 160 | UK |
| 2013 | Polaris Industries Inc. | Groupe AIXAM-MEGA | Passenger Cars | 134.8 | France |
| 2016 | Mahindra \& Mahindra Ltd.; Tech Mahindra Limited | Pininfarina S.p.A. | Passenger Cars | 104.3 | Italy |
| 2007 | Alexander Dennis Limited | Plaxton Limited | Buses | 79.4 | UK |
| 2011 | DR Motor Company S.p.A. | Irisbus Italia S.p.a (plant in Flumeri) | Buses | 48.9 | Italy |
| 2017 | Faymonville Distribution AG | Industrie Cometto S.p.A. | Trucks | 38.4 | Italy |
| 2008 | Argentum Motors | Heuliez sas (60\% Stake) | Buses | 37.3 | France |
| 2017 | Erwin Hymer Group | The Explorer Group Limited | LCVs | 33.9 | UK |
| 2012 | China Youngman Automobile Group Co., Ltd. | Viseon Bus GmbH (75\% Stake) | Buses | 20.9 | Germany |
| 2007 | Adria Mobil, d.o.o. | Sun Roller S.A. (80\% Stake) | LCVs | 13.8 | Spain |
| 2017 | Wielton S.A. | Fruehauf SAS (34.69\% Stake) | Trucks | 13.1 | France |
| 2015 | Wielton S.A. | Fruehauf SAS (65.31\% Stake) | Trucks | 10.6 | France |
| 2017 | Wielton S.A. | Langendorf GmbH (80\% Stake) | Trucks | 5.9 | Germany |

Source: Mergermarket

### 2.1.4. Market concentration of vehicle manufacturers

### 2.1.4.1 Overview

In this section, when references are made to 'all countries in scope', Cyprus is not part of the analysis, unless otherwise specified.

## Passenger cars

The analysis of the passenger car manufacturers' average (over the years 2007-2017) aggregated ${ }^{36}$ (of the countries in scope) market shares in terms of volume reveals, as shown in the figure below, that the share of three vehicle manufacturers, Volkswagen Group, PSA group and Renault-Nissan-Mitsubishi, represent more than half ( $\pm 55 \%$ ) of the average aggregated market. ${ }^{37}$
Figure 15 - Average (from 2007-2017) aggregated (of 11 countries) market share (by volume) of VMs for passenger cars ${ }^{38}$

Color by: SALES GROUP


BMW Group
Daimler Group
Fiat Chrysler Automobiles
Ford Group
Hyundai Group
Other
PSA Group
Renault-Nissan-Mitsubishi
Toyota Group
Volkswagen Group

Source: LMC database
A relatively small group of vehicle manufacturers represent the majority of the market in volume, as the sales of 9 VMs account for approximately $95.5 \%$ of the volume in sales for the countries in scope.
The leading VMs are, in order: Volkswagen Group, PSA Group, Renault-NissanMitsubishi, Ford Group, Fiat Chrysler Automobiles, BMW Group, Daimler Group, Hyundai Group, Toyota Group.
When going into detail at an aggregate ${ }^{39}$ level per year, as is shown in the figure below, it is clear that the three VMs representing more than half of the sales in volume (Volkswagen Group, PSA group and Renault-Nissan-Mitsubishi) have maintained their position, with a shift between PSA Group and Volkswagen Group in 2011. However, their aggregated market share remained relatively stable, from approximately $52.8 \%$ in 2007 to $54.4 \%$ in 2017.

Figure 16- Aggregated (of 11 countries) market shares (by volume) of VMs for passenger cars, 2007 -


Source: LMC database
Throughout the time period, there were some shifts in the market shares of the significant manufacturers. Although the share of the $4^{\text {th }}$ to the $9^{\text {th }}$ largest VM remained relatively stable, the difference in market share between the $4^{\text {th }}$ and the $6^{\text {th }}$ decreased over time.

The market share of Fiat Chrysler Automobiles and Ford Group decreased over the years, but they both remained high in the ranking. The market share of Toyota Group dropped from $6 \%$ in 2007 to $4.4 \%$ in 2017 . Hyundai Group only represented $3.3 \%$ of the market share in 2007 but made a significant increase over the years resulting in a market share of $6.1 \%$ in 2017.

A way of measuring the market concentration within an industry is the HerfindahlHirshman Index ( HHI$)^{41}$ which is a measure of the size of the firms in relation to the industry. This index features the advantage of giving more weight to larger firms, providing insights on the market concentration. The HHI ranges from close to zero (in an atomistic market) to 10,000 (in the case of a pure monopoly). Empirical literature defines $\mathrm{HHI}<1,000$ as the threshold for low levels of concentration and $\mathrm{HHI}>1,800$ as an indication of highly concentrated markets. ${ }^{\times x i i i}$

The European Commission uses the HHI among other methods in the context of assessing mergers in order to measure the change in concentration brought by a mergerxxiv. An increase in the HHI generally indicates a decrease in competition and an increase of market power or a dominant position.

As is shown in the figure below, the market for passenger cars, aggregated over the countries in scope in terms of volume, featured a relatively stable HHI over the time

[^14]period 2007-2017, ranging from 1,270 in 2007 to a peak of 1,390 in 2014 . It would therefore be considered an industry of medium concentration.


The closeness of the competitors provides useful insights into the increase in market share a company would need to overtake its next biggest competitor. This method therefore captures the potential for a change in market rankings. The analysis of the market share of passenger car manufactures in terms of volume, as is shown in the figure below providing an aggregate view over the 11 MS in scope, indicates that the average percentage difference in the market share of the top-4 manufacturers at an aggregate level decreased from 5.91\% in 2007 to $5.47 \%$ in 2017. On the other hand, the percentage difference in the market share between the vehicle manufacturers ranked $4^{\text {th }}$ and $5^{\text {th }}$ is smaller, although it increased over the timeframe in scope, from $1.29 \%$ in 2007 to $2.09 \%$ in 2017.

Figure 18 - Average distance between top-4 passenger car manufacturers; average distance between 4th and 5th ranked passenger car manufacturer (aggregated view of 11 countries), 2007-2017 ${ }^{43}$


Source: LMC database
Light commercial vehicles
The analysis of the aggregated ${ }^{44}$ market shares in terms of volume of the LCV manufacturers for 2007-2017, as is shown in the figure below, reveals that three vehicle manufacturers, PSA Group, Renault-Nissan-Mitsubishi and Ford Group, represent more than half ( $\pm 60 \%$ ) of the market.

A relatively small group of VMs represent the majority of the market share in volume, as 8 vehicle manufacturers account for $\pm 96.6 \%$ of the volume in sales in the selected countries. This is also the case for passenger cars, where 9 VMs account for approximately $95.5 \%$ of the sales volume.

The leading VMs are PSA Group, Renault-Nissan-Mitsubishi, Ford Group, Volkswagen Group, Fiat Chrysler Automobiles, Daimler Group, CNH Industrial and Toyota Group. Compared to the passenger cars, where the market share of BMW Group and Hyundai Group represented respectively $6.2 \%$ and $4.9 \%$, their market share in the LCV category is very minor. CNH Industrial is not present in the passenger car category but has a market share of $3.4 \%$ in the LCV category.

Figure 19-Aggregated (of 11 countries) market share (by volume) of VMs for LCVs, 2007-201745


Source: LMC database
When going into detail on an aggregate level (considering the countries in scope as one market) per year, as is shown in Figure 20 below, PSA Group maintains a relatively stable market share between $25.78 \%$ in 2007 and $25.66 \%$ in 2017 , remaining the market leader in this category when analysing the sales in volume. Renault-NissanMitsubishi maintains its second position over the 2007-2017 period with a market share between 20.77\% in 2007 and 20.69\% in 2017.

For the other vehicle manufacturers, other than PSA Group and Renault-NissanMitsubishi, representing approximately $52.1 \%$ of the market, there were some significant shifts. Ford Group represented $12.5 \%$ of the market in 2007 , ranking $3^{\text {rd }}$, but it dropped to $4^{\text {th }}$ position in 2012 (taken over by Volkswagen Group) to return in 2014 as the $3^{\text {rd }}$ and increasing its market share up to $16.1 \%$ in 2017 . Volkswagen Group also slightly increased its market share from $9.6 \%$ to $10.9 \%$, while the market share of Fiat Chrysler Automobiles dropped sign ificantly from 11.6\% in 2007 to 8.8\% in 2017.
It is clear that the three biggest VMs have been the PSA Group, Renault-NissanMitsubishi and the Ford Group, with no switch among them (there has only been a shortlived switch between the $3^{\text {rd }}$ and $4^{\text {th }}$ position, with Volkswagen Group overtaking Ford in 2012 and 2013) and a slight increase of their aggregated market share, from 58.9\% in 2007 to 62.4\% in 2017.


An analysis of the market concentration using HHI of the LCV manufacturers shows a relatively stable, albeit high trend ranging from 1,590 in 2007 to 1,700 in 2009. As explained before, a relatively small group of VMs represent the majority of the market share in volume, as 8 vehicle manufacturers account for about $95 \%$ of the volume in sales in the selected 11 countries in scope.

Figure 21 - Aggregated ( of 11 countries) market concentration indices ( HHI ) in terms of volume for LCV manufacturers, 2007-201747


Source: LMC database
When analysing the closeness of the competitors for LCV, the average percentage difference in the market share between the top- 4 manufacturers on an aggregate level decreased from 6.19\% in 2007 to $4.97 \%$ in 2017. On the other hand, the percentage
difference in market share in volume between the vehicle manufacturers ranking 4th and 5th is smaller, ranging from 1.17\% in 2007 to $2.04 \%$ in 2017.

Figure 22 - Average (of 11 countries) distance between top-4 LCV manufacturers; average distance between 4th and 5th ranked LCV manufacturer, 2007-201748


Source: LMC database

## Trucks

A relatively small group of VMs represent the majority of the aggregated market share of the countries in scope by volume for trucks, as 5 VMs account for $\pm 97.4 \%$ of the volume in sales in the selected countries.

When analysing the truck manufacturers' average market share for 2007-2017, three manufacturers, TRATON Group (a subsidiary of Volkswagen Group), Daimler Group and Volvo Group represent approximately $70.4 \%$ of the market. The other manufacturers present in the countries in scope are Paccar and CNH Industrial.

Figure 23 - Aggregated (of 11 countries) market share (by volume) of VMs for trucks, 2007-201749


## Source: LMC database

When going into detail on an aggregate level, for the countries in scope, per year, the ranking of the top-5 truck manufacturers, as well as their market share remains relatively stable, with an exception of the switch in ranking between CNH Industrial and Paccar in 2008 from the 4th to the 5th position.


The analysis of the HHI measuring the market concentration within the industry for truck manufacturers, shows a highly concentrated market, with an HHI of 2,000 in 2007, increasing to 2050 in 2017.

This level of market concentration is high, as a relatively small group of VMs represent the majority of the market share in volume. In the selected countries, 5 VMs account for $\pm 97.4 \%$ of the volume in sales.


Source: LMC database
When analysing the closeness of the competitors for trucks, the average percentage difference in the market share in volume between the top-4 manufacturers at an aggregate level remains relatively stable, ranging from 7.07\% in 2007 to 7.36\% in 2017. Contrary to the closeness of the competitors for passenger cars and LCV, the percentage difference in the market share between the vehicle manufacturers ranked 4th and 5th is much more volatile and closer to the top-4, ranging from $3.58 \%$ in 2007 to $5.81 \%$ in 2017.

Figure 26 - Average (of 11 countries) distance between top-4 truck manufacturers; average distance between 4th and 5th ranked truck manufacturer, 2007-201752


Source: LMC database

## Buses

A relatively small group of VMs represent the majority of the market share in volume, as 4 vehicle manufacturers account for $\pm 74.7 \%$ of the volume in sales in the countries in scope ${ }^{53}$, as is shown in the figure below.

When analysing the bus manufacturers' aggregated (for all countries in scope) average market share for 2007 - 2017, three vehicle manufacturers, Daimler Group, CNH Industrial and TRATON Group ${ }^{54}$ represent approximately $67.3 \%$ of the aggregated average market share. A large portion of the market share ( $+19.84 \%$ ) is covered by a group of other undefined VMs each representing a very small market share at the aggregate level of the countries in scope. Another bus manufacturer representing a substantial portion of the market is Volvo Group.

Figure 27 - Aggregated market share (by volume) of VMs for buses for 11 countries in scope, 2007 $2017^{55}$


Source: LMC database
When going into detail on an aggregate level, for all countries in scope per year, as shown in the figure below, Daimler Group maintains its first market position, with some shifts in the market share between $24.4 \%$ and $33.7 \%$.
TRATON Group ${ }^{56}$ fell back from 3rd position in 2007 to 4th in 2017 with significant shifts in its market share, ranging from $23.5 \%$ in 2009 to $13.5 \%$ in 2013. The market share of CNH Industrial remained more stable, shifting between 2nd and 3rd position with a market share ranging between the $23.3 \%$ and $18.3 \%$.

The market share of the 'other' group, referring to an aggregated view of small manufacturers has increased over the years. In 2007, this group represented 14.9\% of the market share while in 2017 this increased to $20.69 \%$. This increase is largely due to the increase of the 'other' group in the UK, where manufacturer Alexander Dennis is one of the main bus manufacturers and increased its performance over the years.

Figure 28 - Market shares (by volume) of VMs for buses for 11 countries in scope, 2007-201757


The market for buses is a highly concentrated one, with an HHI strongly fluctuating during the given time period, ranging between 1,840 and 2,180 . Buses are a more niche business compared to the other vehicle categories, as explained, a relatively small group of VMs represent the majority of the market share in volume, although their market shares should be looked upon with care as the group 'other' represents the important share of a group of very small local manufacturers.

Figure 29 - Aggregated (of 11 countries) market concentration indices ( HHI ) in terms of volume for bus manufacturers, 2007-201758


Source: LMC database
When analysing the closeness of the competitors for buses, the aggregated average percentage difference in the market share in volume between the top- 4 manufacturers
at an aggregate level fluctuated significantly over the years, ranging from $10.08 \%$ to $14.45 \%$. As was the case for the closeness of competitors for passenger cars and LCV, the percentage difference in the market shares between the vehicle manufacturers ranked 4th and 5th is much smaller, ranging between 3.75\% to 5.18\%.

Figure 30 - Average (of 11 countries) distance between top- 4 bus manufacturers; average distance between 4th and 5th ranked bus manufacturer, 2007-201759


Source: LMC database

### 2.1.4.2 Country level

## Passenger cars

With the exception of the UK, France, Italy and Belgium, Volkswagen Group has the largest market share in volume for all the countries in scope (excluding Cyprus).
Except for Greece, the top-3 VMs in each country represent more than $50 \%$ of the average (2007-2017) market shares in terms of volume.

Figure 31 - Aggregated (2007-2017) market shares (by volume) of VMs for passenger cars, broken down per country ${ }^{60}$


In France, it appears that French vehicle manufacturers have the largest market shares with PSA Group and Renault-Nissan-Mitsubishi representing together approximately $60 \%$ of the market.
In Italy, the Italian-American vehicle manufacturer Fiat Chrysler Automobiles represents the largest share ( $30.1 \%$ ), while the company has a relatively small market share in the other countries. The market share of Toyota Group is Iarger in Greece and Ireland compared to the other countries. Daimler Group has considerable market presence in Germany ( $10.3 \%$ ) while less so in the other countries in scope (around or below 5\%). The market share of BMW Group is strong only in Germany ( $8.9 \%$ ), the UK ( $8.3 \%$ ) and Belgium ( $7.4 \%$ ), whereas in other countries its market share is around or less than $5 \%$. In general, Hyundai Group has a market share between 5\% and 10\%, except for Italy, France and Germany where the share is lower.

To measure market concentration, and therefore the extent to which market shares are captured by a small set of firms, the concentration ratio (CR) can be computed. The four-firm concentration ratio (CR4) refers to the aggregate market share of the four largest firms in an industry and can range from $0 \%$ to $100 \%$. The higher the concentration ratio, the more concentrated the industry. A concentration ratio that ranges between $0 \%$ and $50 \%$ is considered an indication of a highly competitive industry with a low concentration level.

The table below shows that, in 2007, the market share of the four largest passenger car manufacturers represented in all countries more than $\pm 50 \%$ of the volume sold, with
the highest concentration ratio in France and the lowest in Spain. In 2017, the CR4 in all countries was equal or above $56 \%$, with the main four vehicle manufacturers in France still representing $77 \%$ of the market share (in volume) but with the lowest CR4 in the UK, where it dropped from 63\% in 2007 to 56\% in 2017.

Table 23- The four-firm concentration ratio (CR4) in terms of volume for passenger car manufacturers, broken down per country, 2007-2017 ${ }^{61}$

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | $62.27 \%$ | $64.16 \%$ | $63.65 \%$ | $66.49 \%$ | $68.31 \%$ | $69.04 \%$ | $68.81 \%$ | $69.37 \%$ | $68.08 \%$ | $66.17 \%$ | $65.25 \%$ |
| Belgium | $66.89 \%$ | $67.12 \%$ | $68.27 \%$ | $69.19 \%$ | $69.92 \%$ | $68.86 \%$ | $67.45 \%$ | $66.92 \%$ | $67.10 \%$ | $66.53 \%$ | $65.99 \%$ |
| France | $77.38 \%$ | $78.79 \%$ | $79.93 \%$ | $82.08 \%$ | $81.85 \%$ | $79.04 \%$ | $78.50 \%$ | $80.30 \%$ | $78.99 \%$ | $77.65 \%$ | $77.15 \%$ |
| Germany | $68.17 \%$ | $68.86 \%$ | $66.52 \%$ | $68.68 \%$ | $68.54 \%$ | $68.73 \%$ | $69.41 \%$ | $69.25 \%$ | $68.94 \%$ | $67.81 \%$ | $66.87 \%$ |
| Greece | $56.23 \%$ | $55.00 \%$ | $53.94 \%$ | $58.89 \%$ | $62.98 \%$ | $62.94 \%$ | $60.23 \%$ | $61.24 \%$ | $61.49 \%$ | $62.57 \%$ | $60.60 \%$ |
| Ireland | $61.91 \%$ | $60.38 \%$ | $65.25 \%$ | $66.69 \%$ | $66.55 \%$ | $63.86 \%$ | $65.15 \%$ | $65.34 \%$ | $66.85 \%$ | $66.58 \%$ | $66.17 \%$ |
| Italy | $67.41 \%$ | $67.92 \%$ | $69.35 \%$ | $68.95 \%$ | $68.82 \%$ | $68.34 \%$ | $67.89 \%$ | $68.96 \%$ | $69.29 \%$ | $68.82 \%$ | $69.03 \%$ |
| Netherlands | $60.34 \%$ | $60.58 \%$ | $60.15 \%$ | $61.27 \%$ | $63.07 \%$ | $63.51 \%$ | $61.90 \%$ | $65.74 \%$ | $64.91 \%$ | $64.69 \%$ | $64.36 \%$ |
| Poland | $64.69 \%$ | $61.39 \%$ | $59.77 \%$ | $61.37 \%$ | $62.13 \%$ | $64.23 \%$ | $64.23 \%$ | $66.02 \%$ | $65.63 \%$ | $65.40 \%$ | $65.73 \%$ |
| Spain | $49.83 \%$ | $57.40 \%$ | $58.00 \%$ | $56.75 \%$ | $63.31 \%$ | $72.58 \%$ | $76.74 \%$ | $74.70 \%$ | $65.70 \%$ | $60.39 \%$ | $58.38 \%$ |
| UK | $63.22 \%$ | $63.19 \%$ | $60.52 \%$ | $62.27 \%$ | $62.88 \%$ | $62.38 \%$ | $62.14 \%$ | $62.25 \%$ | $60.92 \%$ | $57.91 \%$ | $56.12 \%$ |

Source: LMC database
However, the CR4 does not provide any information on the distribution of market shares among firms outside the four largest ones, for which the $\mathbf{H H I}{ }^{62}$, which is a measure of the size of the firms in relation to the industry and features, compared to the metrics presented above, the advantage of giving more weight to larger firms, can be an alternative.
The HHI ranges from close to zero (in an atomistic market) to 10,000 (in the case of a pure monopoly). Empirical literature defines $\mathrm{HHI}<1,000$ as the threshold for low levels of concentration and $\mathrm{HHI}>1,800$ as an indication of highly concentrated markets. ${ }^{\times \times v}$

The analysis of the HHI for passenger car manufacturers reveals a market with a 'medium concentration' range for all countries except France in 2007. Out of the 11 countries, France was the only country which had an HHI of 2,100 and was therefore above the threshold of 1,800 .

Table 24 - Market concentration indices ( HHI ) in terms of volume for passenger car manufacturers, broken down per country, 2007-201763

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 1,481 | 1,534 | 1,566 | 1,627 | 1,733 | 1,71 | 1,764 | 1,796 | 1,709 | 1,696 | 1,645 |
| Belgium | 1,542 | 1,498 | 1,492 | 1,508 | 1,520 | 1,472 | 1,414 | 1,395 | 1,370 | 1,343 | 1,325 |
| France | 2,104 | 2,164 | 2,221 | 2,393 | 2,305 | 2,118 | 2,124 | 2,228 | 2,162 | 2,094 | 2,078 |
| Germany | 1,672 | 1,720 | 1,728 | 1,799 | 1,842 | 1,920 | 1,979 | 2,030 | 1,998 | 1,892 | 1,815 |
| Greece | 1,063 | 1,041 | 1,051 | 1,182 | 1,271 | 1,346 | 1,255 | 1,190 | 1,186 | 1,241 | 1,204 |
| I reland | 1,206 | 1,183 | 1,313 | 1,397 | 1,413 | 1,411 | 1,478 | 1,448 | 1,459 | 1,403 | 1,409 |
| Italy | 1,630 | 1,652 | 1,691 | 1,596 | 1,535 | 1,524 | 1,475 | 1,474 | 1,507 | 1,512 | 1,500 |
| Netherlands | 1,205 | 1,189 | 1,175 | 1,240 | 1,308 | 1,296 | 1,251 | 1,376 | 1,361 | 1,307 | 1,275 |
| Poland | 1,355 | 1,259 | 1,242 | 1,256 | 1,241 | 1,273 | 1,298 | 1,430 | 1,420 | 1,429 | 1,434 |
| Spain | 1,466 | 1,485 | 1,548 | 1,556 | 1,551 | 1,527 | 1,517 | 1,516 | 1,474 | 1,420 | 1,408 |
| United Kingdom | 1,267 | 1,270 | 1,178 | 1,209 | 1,254 | 1,240 | 1,248 | 1,227 | 1,186 | 1,125 | 1,121 |

Source: LMC database
A comparison over the time period reveals that the evolutions (increases or decreases) vary across all countries. In general, the highest market concentrations were visible in

[^15]France, Germany and to some extent Austria, where all countries had an HHI above the threshold of 1,800 as of 2011.

The number of vehicle manufacturers for passenger cars ranked in the top-4 in terms of volume is on average between 5 and 6 for all countries. This indicates that the VMs with the largest market share remain, despite some changes, the same over the timeframe of 11 years, with only few manufacturers having been able to enter the top four for the first time between 2007 and 2017.

Table 25 - Average (2007-2017) number of passenger car manufacturers ranked in the top-4 in terms of volume, broken down per country ${ }^{64}$

| Country | Passenger cars |
| :--- | :---: |
| Austria | 6 |
| Belgium | 5 |
| France | 6 |
| Germany | 5 |
| Greece | 5 |
| Ireland | 6 |
| Italy | 5 |
| Netherlands | 5 |
| Poland | 6 |
| Spain | 5 |
| United Kingdom |  |

The volatility, or lack thereof, of VMs' market shares by volume reflects the stability of the overall market shares of VMs. An analysis of the volatility of the market shares of the biggest VMs active in the passenger car category has been performed per country over the time period 2007-2017.
Both the standard deviation as well as the coefficient of variation (CVar) is a measure of the volatility. The higher the value, the higher the volatility. For manufacturers of passenger cars, the standard deviation in market shares is between 0.001 and 0.038 , indicating that the market shares of the VMs are relatively stable across the countries. There is no unified picture with regards to the volatility of market shares of the VMs in terms of volume across countries, nor of several VMs active within the same country. The VMs active in Greece, Ireland and Poland have, compared to the other countries in scope, a relatively more volatile market share, while the VMs analysed in the French and German market, seem to have the most stable market share.

When looking at the volatility of the market shares of VMs per country based on the CVar the same trend is visible, with a CVar between 0.041 and 0.482 . The highest volatility in the market shares of VMs are visible in Greece, Ireland and Poland, while the lowest volatility is reported in France and Germany. However, it is important to note that not all VMs within those countries have a volitaly market share.

Table 26 - Volatility (StdDev \& CVar) of market shares of passenger car manufacturers in terms of volume, per country, 2007-2017 ${ }^{65}$

| StdDev Country | AT | BE | FR | DE | GR | IE | IT | $\mathbf{N L}$ | PL | ES | UK |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BMW Group | 0.008 | 0.010 | 0.005 | 0.007 | 0.015 | 0.006 | 0.004 | 0.011 | 0.008 | 0.003 | 0.009 |
| Daimler Group | 0.007 | 0.011 | 0.005 | 0.009 | 0.009 | 0.005 | 0.004 | 0.008 | 0.008 | 0.005 | 0.012 |
| Fiat Chrysler <br> Automobiles | 0.010 | 0.004 | 0.004 | 0.006 | 0.010 | 0.006 | 0.019 | 0.013 | 0.031 | 0.008 | 0.004 |
| Ford Group | 0.004 | 0.012 | 0.007 | 0.003 | 0.011 | 0.016 | 0.011 | 0.014 | 0.008 | 0.014 | 0.013 |
| Geely Group | 0.001 | 0.004 | 0.001 | 0.002 | 0.007 | 0.002 | 0.001 | 0.011 | 0.003 | 0.001 | 0.002 |
| Hyundai Group | 0.018 | 0.012 | 0.006 | 0.009 | 0.021 | 0.038 | 0.014 | 0.014 | 0.020 | 0.020 | 0.016 |
| PSA Group | 0.019 | 0.034 | 0.018 | 0.017 | 0.026 | 0.016 | 0.010 | 0.011 | 0.023 | 0.018 | 0.031 |
| Renault-Nissan- <br> Mitsubishi | 0.011 | 0.020 | 0.016 | 0.007 | 0.025 | 0.023 | 0.022 | 0.018 | 0.018 | 0.020 | 0.012 |
| Toyota Group | 0.010 | 0.007 | 0.006 | 0.008 | 0.010 | 0.022 | 0.008 | 0.020 | 0.017 | 0.003 | 0.006 |
| Volkswagen <br> Group | 0.019 | 0.009 | 0.009 | 0.022 | 0.021 | 0.026 | 0.013 | 0.020 | 0.026 | 0.012 | 0.019 |

Source: LMC database
An analysis of the market share of passenger car manufactures in terms of volume, as is shown in the table below, provides an insight in the closeness of the competition per country. This analysis reveals that the difference in market share is the highest in France, Germany and Austria, indicating that a high increase in market share of a company is needed to overtake its next biggest competitor, while the opposite is true for Greece, Ireland and the UK, as there the closeness of the competition is smaller. At the start of the time period, both Belgium and Italy indicated a relatively large difference between the market shares of the top-4, but this difference declined during the years.

Table 27 - Percentage difference in market share between top-4 passenger car manufacturers, by country,
2007-201766

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 7.84\% | 8.03\% | 8.32\% | 8.25\% | 8.76\% | 8.69\% | 8.71\% | 8.83\% | 8.28\% | 8.85\% | 8.51\% |
| Belgium | 7.29\% | 6.70\% | 6.39\% | 6.30\% | 5.72\% | 5.28\% | 4.97\% | 4.71\% | 4.29\% | 4.15\% | 3.94\% |
| France | 10.01\% | 9.93\% | 9.90\% | 10.49\% | 10.16\% | 9.67\% | 9.64\% | 9.69\% | 9.43\% | 8.97\% | 9.01\% |
| Germany | 8.08\% | 8.30\% | 8.74\% | 8.84\% | 9.04\% | 9.63\% | 9.98\% | 10.25\% | 10.07\% | 9.48\% | 9.07\% |
| Greece | 2.76\% | 3.04\% | 3.18\% | 3.39\% | 3.65\% | 5.04\% | 4.44\% | 2.63\% | 2.49\% | 2.66\% | 2.71\% |
| I reland | 2.54\% | 2.00\% | 2.43\% | 3.25\% | 3.94\% | 4.87\% | 5.16\% | 4.85\% | 4.64\% | 4.01\% | 4.73\% |
| Italy | 7.94\% | 8.18\% | 7.76\% | 6.85\% | 6.27\% | 6.46\% | 5.78\% | 4.90\% | 5.10\% | 5.38\% | 5.11\% |
| Netherlands | 4.02\% | 3.75\% | 2.90\% | 3.91\% | 4.36\% | 4.03\% | 4.33\% | 5.27\% | 5.09\% | 4.53\% | 3.78\% |
| Poland | 3.94\% | 3.56\% | 4.19\% | 4.37\% | 3.93\% | 3.90\% | 4.21\% | 5.66\% | 5.44\% | 5.73\% | 5.58\% |
| Spain | 5.57\% | 4.98\% | 5.34\% | 5.36\% | 5.64\% | 5.64\% | 5.61\% | 5.31\% | 4.66\% | 4.10\% | 4.12\% |
| UK | 5.03\% | 5.12\% | 4.36\% | 3.81\% | 3.83\% | 3.74\% | 3.90\% | 3.61\% | 3.13\% | 3.00\% | 3.55\% |

Source: LMC database
Light commercial vehicles
At an aggregate level, PSA Group has the biggest market shares in volume. However, at country level, there is no clear trend visible. Volkswagen Group has the largest market share in Austria, Germany and the Netherlands, while PSA Group represents the largest share in Belgium, France, Poland and Spain. The Italian vehicle manufacturer Fiat Chrysler Automobiles represents the biggest market share in Italy while Ford Group is leading in both Ireland and the UK. Greece is the only country where Renault-NissanMitsubishi has the biggest market share.
In all countries, the top- 3 VMs represent more than $50 \%$ of the market in volume. For Belgium, France, Italy, Spain and the UK this is the case for the top- 2 .

Figure 32 - Aggregated (2007-2017) market shares (by volume) of VMs for LCVs, broken down per country ${ }^{67}$


The four largest manufacturers of LCVs in 2007 represented at least $66 \%$ of the market share in all countries, with the highest share ( $84 \%$ ) in France and the lowest (66\%) in Austria.

As shown in the below table, over the years the market share of the four largest slightly increased to a minimum of $68 \%$ in all countries in 2017, with a noticeably increase in both Spain (from $75 \%$ to $81 \%$ ) and the UK (from $77 \%$ to $82 \%$ ), which represents the highest CR4 among the countries. Even though the overall number of LCVs sold declined, the top 4 were able to defend their market position.

Table 28 - The four-firm concentration ratio (CR4) in terms of volume for LCV manufacturers, broken down per country, 2007-201768

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | $66.17 \%$ | $67.48 \%$ | $65.30 \%$ | $64.52 \%$ | $68.60 \%$ | $70.46 \%$ | $72.37 \%$ | $68.12 \%$ | $66.39 \%$ | $68.38 \%$ | $68.53 \%$ |
| Belgium | $73.88 \%$ | $75.38 \%$ | $76.19 \%$ | $78.21 \%$ | $78.22 \%$ | $78.57 \%$ | $76.73 \%$ | $76.46 \%$ | $73.68 \%$ | $75.02 \%$ | $74.02 \%$ |
| France | $84.37 \%$ | $84.69 \%$ | $86.47 \%$ | $85.46 \%$ | $85.98 \%$ | $85.42 \%$ | $84.11 \%$ | $83.27 \%$ | $82.87 \%$ | $79.95 \%$ | $79.93 \%$ |
| Germany | $70.86 \%$ | $69.80 \%$ | $69.59 \%$ | $74.08 \%$ | $72.71 \%$ | $74.56 \%$ | $74.55 \%$ | $75.83 \%$ | $73.55 \%$ | $73.25 \%$ | $73.35 \%$ |
| Greece | $67.27 \%$ | $66.62 \%$ | $67.47 \%$ | $71.31 \%$ | $70.72 \%$ | $71.05 \%$ | $67.46 \%$ | $67.01 \%$ | $67.40 \%$ | $66.95 \%$ | $69.47 \%$ |
| Ireland | $68.38 \%$ | $66.48 \%$ | $70.20 \%$ | $64.28 \%$ | $75.29 \%$ | $76.21 \%$ | $74.48 \%$ | $74.67 \%$ | $76.24 \%$ | $79.23 \%$ | $80.48 \%$ |
| Italy | $78.36 \%$ | $79.60 \%$ | $78.83 \%$ | $81.86 \%$ | $83.52 \%$ | $82.45 \%$ | $81.99 \%$ | $81.52 \%$ | $77.73 \%$ | $74.70 \%$ | $77.54 \%$ |
| Netherlands | $77.08 \%$ | $76.42 \%$ | $77.42 \%$ | $77.37 \%$ | $79.01 \%$ | $81.26 \%$ | $80.54 \%$ | $78.28 \%$ | $76.08 \%$ | $76.23 \%$ | $75.50 \%$ |
| Poland | $72.55 \%$ | $75.24 \%$ | $75.27 \%$ | $74.27 \%$ | $73.73 \%$ | $73.67 \%$ | $73.11 \%$ | $72.83 \%$ | $73.75 \%$ | $70.15 \%$ | $69.59 \%$ |
| Spain | $74.65 \%$ | $76.09 \%$ | $79.16 \%$ | $79.82 \%$ | $79.14 \%$ | $78.80 \%$ | $79.56 \%$ | $79.69 \%$ | $80.60 \%$ | $80.15 \%$ | $80.92 \%$ |
| UK | $77.50 \%$ | $77.57 \%$ | $77.88 \%$ | $78.76 \%$ | $79.90 \%$ | $78.36 \%$ | $76.13 \%$ | $77.06 \%$ | $78.90 \%$ | $82.07 \%$ | $81.68 \%$ |

Source: LMC database
The HHI in terms of volume for light commercial vehicles shows that in 2007, 6 out of the 11 countries in scope had an HHI above the threshold of 1,800, indicating a high market concentration. Out of those 6, two (France and Italy) were above the threshold of 2,000 .

Table 29 - Market concentration indices ( HHI ) in terms of volume for LCV manufacturers, broken down per country, 2007-201769

| Year <br> Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 1,424 | 1,453 | 1,392 | 1,393 | 1,506 | 1,570 | 1,211 | 1,502 | 1,444 | 1,458 | 1,512 |
| Belgium | 1,916 | 2,076 | 2,091 | 2,085 | 2,033 | 1,967 | 1,967 | 1,900 | 1,788 | 1,824 | 1,806 |
| France | 2,684 | 2,690 | 2,759 | 2,741 | 2,763 | 2,710 | 2,614 | 2,592 | 2,529 | 2,467 | 2,470 |
| Germany | 1,580 | 1,551 | 1,556 | 1,696 | 1,640 | 1,740 | 1,721 | 1,766 | 1,637 | 1,607 | 1,615 |
| Greece | 1,464 | 1,405 | 1,532 | 1,668 | 1,557 | 1,652 | 1,415 | 1,472 | 1,475 | 1,435 | 1,533 |
| I reland | 1,444 | 1,408 | 1,500 | 1,329 | 1,600 | 1,620 | 1,544 | 1,590 | 1,667 | 1,729 | 1,746 |
| Italy | 2,399 | 2,569 | 2,312 | 2,551 | 2,664 | 2,473 | 2,410 | 2,519 | 2,044 | 2,055 | 1,769 |
| Netherlands | 1,821 | 1,744 | 1,806 | 1,756 | 1,824 | 1,917 | 1,901 | 1,801 | 1,708 | 1,728 | 1,693 |
| Poland | 1,521 | 1,644 | 1,635 | 1,623 | 1,670 | 1,590 | 1,585 | 1,621 | 1,628 | 1,544 | 1,521 |
| Spain | 1,861 | 2,002 | 2,198 | 2,215 | 2,180 | 2,137 | 2,206 | 2,193 | 2,078 | 2,069 | 2,136 |
| United Kingdom | 1,892 | 1,955 | 1,916 | 1,890 | 1,876 | 1,853 | 1,792 | 1,855 | 1,914 | 2,041 | 2,092 |

Source: LMC database
In 2017 four countries (Belgium, France, Spain and the UK) still had an HHI indicating a highly concentrated market, albeit very marginally for Belgium and with Italy just on the 1,800 thresholds.

In 2007, for more than half of the countries, the figures indicated a highly concentrated market, with the greatest concentration observed in France and Italy. In 2017, only four countries indicated a highly concentrated market, with France again showing the highest concentration.

The number of LCV VMs in the top-4 in terms of market share based on volumes sold differs within the countries in scope. For two countries, the Netherlands and the UK, the vehicle manufacturers with the largest share remained the same over the years, while for 6 countries (Austria, France, Germany, Ireland, Italy and Poland) there was
only one change in the composition of the top-4. Belgium and Spain reported 6 vehicle manufacturers, while the top-4 changed at least 3 times in Greece over the course of the 11 years.

Table 30 - Average (2007-2017) number of LCV manufacturers ranked in the top-4 in terms of volume, broken down per country ${ }^{70}$

| Country | Light commercial vehicles |
| :--- | :---: |
| Austria | 5 |
| Belgium | 6 |
| France | 5 |
| Germany | 5 |
| Greece | 7 |
| Ireland | 5 |
| Italy | 5 |
| The Netherlands | 4 |
| Poland |  |
| Spain | 5 |
| United Kingdom |  |
|  | Source: LMC database |

The volatility, or lack thereof, of market shares of the VMs in terms of volume reflects the stability of the overall market shares of VMs. An analysis of the volatility of the market shares of the biggest VMs active in the light commercial vehicle category has been performed per country over the time period 2007-2017.

In line with the observations made for passenger cars, the standard deviation in market shares for the VMs of LCVs is relatively low, indicating a relatively stable market share in the 11 countries, with a standard deviation of the market shares between 0.001 and 0.060 . The highest standard deviation of the market share of VMs is present in Greece for Renault-Nissan-Mitsubishi, while the lowest is also in Greece for CNH Industrial.

The volatility of the market share measured by the CVar ranges between 0.021 and 1.405 for Toyota Group across the different countries.

The VMs active in Greece and Italy have, on average, a higher volatility compared to the other countries analysed, while the market shares in France seem to be more stable compared to the other countries in scope.

Table 31 - Volatility (StdDev \& CVar) of market shares of LCV manufacturers in terms of volume, per country, 2007-2017 ${ }^{71}$

| Country <br> StdDev | AT | BE | FR | DE | GR | IE | IT | NL | PL | ES | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNH Industrial | 0.003 | 0.004 | 0.004 | 0.003 | 0.001 | 0.003 | 0.011 | 0.002 | 0.019 | 0.007 | 0.005 |
| Daimler Group | 0.007 | 0.005 | 0.002 | 0.008 | 0.029 | 0.012 | 0.004 | 0.010 | 0.008 | 0.008 | 0.008 |
| Fiat Chrysler Automobiles | 0.012 | 0.011 | 0.011 | 0.010 | 0.029 | 0.013 | 0.047 | 0.003 | 0.017 | 0.003 | 0.005 |
| Ford Group | 0.027 | 0.027 | 0.005 | 0.028 | 0.037 | 0.022 | 0.025 | 0.018 | 0.012 | 0.018 | 0.021 |
| PSA Group | 0.013 | 0.025 | 0.015 | 0.009 | 0.052 | 0.013 | 0.025 | 0.018 | 0.018 | 0.019 | 0.011 |
| Renault-NissanMitsubishi | 0.013 | 0.016 | 0.008 | 0.010 | 0.060 | 0.028 | 0.022 | 0.009 | 0.013 | 0.011 | 0.013 |
| Toyota Group | 0.009 | 0.004 | 0.002 | 0.001 | 0.035 | 0.024 | 0.004 | 0.005 | 0.007 | 0.003 | 0.004 |
| Volkswagen Group | 0.024 | 0.013 | 0.007 | 0.022 | 0.020 | 0.026 | 0.007 | 0.030 | 0.017 | 0.011 | 0.016 |
| Country <br> CVar | AT | BE | FR | DE | GR | IE | IT | NL | PL | ES | UK |
| CNH Industrial | 0.102 | 0.146 | 0.132 | 0.093 | 0.915 | 0.626 | 0.135 | 0.071 | 0.357 | 0.203 | 0.312 |
| Daimler Group | 0.072 | 0.045 | 0.046 | 0.036 | 0.579 | 0.237 | 0.086 | 0.069 | 0.097 | 0.122 | 0.083 |
| Fiat Chrysler Automobiles | 0.099 | 0.153 | 0.140 | 0.125 | 0.251 | 0.383 | 0.114 | 0.050 | 0.082 | 0.045 | 0.135 |
| Ford Group | 0.206 | 0.288 | 0.100 | 0.230 | 0.281 | 0.094 | 0.345 | 0.171 | 0.130 | 0.152 | 0.077 |
| PSA Group | 0.077 | 0.076 | 0.043 | 0.063 | 0.338 | 0.087 | 0.141 | 0.078 | 0.081 | 0.054 | 0.040 |
| Renault-NissanMitsubishi | 0.088 | 0.075 | 0.022 | 0.088 | 0.312 | 0.158 | 0.183 | 0.064 | 0.070 | 0.043 | 0.101 |
| Toyota Group | 0.271 | 0.161 | 0.165 | 0.126 | 0.184 | 0.261 | 1.405 | 0.366 | 0.313 | 0.145 | 0.126 |
| Volkswagen Group | 0.103 | 0.126 | 0.170 | 0.090 | 0.248 | 0.158 | 0.169 | 0.113 | 0.142 | 0.146 | 0.139 |
| CNH Industrial | 0.102 | 0.146 | 0.132 | 0.093 | 0.915 | 0.626 | 0.135 | 0.071 | 0.357 | 0.203 | 0.312 |
| Daimler Group | 0.072 | 0.045 | 0.046 | 0.036 | 0.579 | 0.237 | 0.086 | 0.069 | 0.097 | 0.122 | 0.083 |

An analysis of the percentage difference in market share between the top-4 manufacturers of LCVs on country level reveals that the percentage difference is the highest in Belgium, France, Italy and Spain over the time period. Austria, Ireland and Poland reported a smaller difference in market share compared to the other countries, albeit slightly more volatile.

Table 32 - Percentage difference in market share between top-4 LCV manufacturers, by country, 2007$2017^{72}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3.42\% | 3.28\% | 2.96\% | 2.91\% | 4.20\% | 5.01\% | 5.27\% | 3.08\% | 2.45\% | 1.66\% | 2.20\% |
| Belgium | 8.24\% | 9.56\% | 9.46\% | 8.80\% | 8.10\% | 7.53\% | 7.98\% | 6.93\% | 6.79\% | 6.81\% | 6.53\% |
| France | $\begin{aligned} & 10.06 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.70 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.69 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.38 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.48 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.37 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.04 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.00 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.01 \\ & \% \end{aligned}$ | 9.80\% | 9.41\% |
| Germany | 4.71\% | 4.39\% | 4.61\% | 4.88\% | 4.24\% | 5.29\% | 4.63\% | 4.75\% | 3.19\% | 3.02\% | 3.05\% |
| Greece | 5.12\% | 3.51\% | 5.51\% | 5.23\% | 4.33\% | 5.60\% | 1.76\% | 2.44\% | 3.40\% | 1.67\% | 3.11\% |
| Ireland | 2.99\% | 2.50\% | 3.89\% | 3.38\% | 2.56\% | 2.35\% | 2.69\% | 3.84\% | 4.24\% | 3.69\% | 2.04\% |
| Italy | $\begin{aligned} & 11.01 \\ & \% \end{aligned}$ | $\begin{aligned} & 12.06 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.59 \\ & \% \end{aligned}$ | $\begin{aligned} & 11.93 \\ & \% \end{aligned}$ | $\begin{aligned} & 12.44 \\ & \% \end{aligned}$ | $\begin{aligned} & 11.41 \\ & \% \end{aligned}$ | $\begin{aligned} & 10.82 \\ & \% \end{aligned}$ | $\begin{aligned} & 11.98 \\ & \% \end{aligned}$ | 8.95\% | 9.08\% | 6.05\% |
| Netherlands | 5.54\% | 4.68\% | 5.48\% | 4.52\% | 4.66\% | 4.52\% | 4.67\% | 3.65\% | 2.86\% | 2.65\% | 2.87\% |
| Poland | 2.65\% | 3.63\% | 2.96\% | 2.83\% | 5.13\% | 3.43\% | 3.60\% | 4.00\% | 3.79\% | 3.53\% | 3.61\% |
| Spain | 7.81\% | 8.50\% | 9.82\% | 9.62\% | 9.43\% | 8.94\% | 8.95\% | 8.79\% | 8.11\% | 8.09\% | 8.75\% |
| UK | 6.54\% | 6.77\% | 5.88\% | 5.27\% | 4.98\% | 4.88\% | 5.28\% | 5.70\% | 5.53\% | 6.29\% | 7.06\% |

Source: LMC database

## Trucks

On an aggregated geographical level (11 countries in scope), TRATON Group has the biggest market share by volume. However, when analysing the market share at national level, TRATON Group is the leader only in some MS. The top-2 VMs, which varies across countries, represent in all countries more than $50 \%$ of the market share.

TRATON Group has the largest market share in Austria, Belgium, Ireland and Poland, while Daimler Group is leading in Germany and Greece. Volvo Group has the largest market share in France and Spain while in the Netherlands and in the UK, Paccar is leading in terms of sales volume. CNH Industrial has the largest market share for sales of trucks in Italy. The manufacturers with the largest market share do represent at least a quarter of the market in each country.

For trucks the market concentration for all countries, except for Ireland, indicate a highly concentrated market in 2007 and this trend continues up to 2017 where all countries indicate an HHI well above the threshold of 1,800 . The UK, Austria and Ireland are the MS where the market concentrated the most over the period.

Table 33 - Market concentration indices ( HHI ) in terms of volume for truck manufacturers, broken down per country, 2007-2017 ${ }^{73}$

| Year <br> Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 2,866 | 2,922 | 3,075 | 2,888 | 3,103 | 2,924 | 3,490 | 2,992 | 3,200 | 3,172 | 3,282 |
| Belgium | 2,186 | 2,175 | 2,230 | 2,249 | 2,399 | 2,281 | 2,260 | 2,321 | 2,250 | 2,275 | 2,273 |
| France | 2,678 | 2,733 | 2,760 | 2,684 | 2,655 | 2,649 | 2,567 | 2,581 | 2,578 | 2,508 | 2,559 |
| Germany | 2,803 | 2,815 | 2,915 | 2,893 | 2,741 | 2,743 | 2,795 | 2,774 | 2,649 | 2,653 | 2,632 |
| Greece | 2,501 | 2,568 | 2,404 | 2,300 | 2,398 | 2,009 | 2,281 | 2,623 | 2,513 | 2,426 | 2,698 |
| Ireland | 1,664 | 1,930 | 1,935 | 1,795 | 1,729 | 2,195 | 1,974 | 2,142 | 2,257 | 2,356 | 2,547 |
| Italy | 2,507 | 2,473 | 2,532 | 2,516 | 2,340 | 2,600 | 2,688 | 2,356 | 2,426 | 2,438 | 2,430 |
| Netherlands | 2,140 | 2,437 | 2,380 | 2,458 | 2,495 | 2,430 | 2,333 | 2,366 | 2,345 | 2,418 | 2,384 |
| Poland | 2,315 | 2,320 | 2,264 | 2,308 | 2,276 | 2,215 | 2,214 | 2,226 | 2,320 | 2,382 | 2,257 |
| Spain | 2,084 | 2,130 | 1,985 | 2,077 | 2,133 | 2,211 | 2,082 | 2,164 | 2,140 | 2,146 | 2,192 |
| United Kingdom | 1,959 | 1,988 | 2,000 | 1,924 | 2,050 | 2,028 | 2,087 | 1,990 | 2,093 | 2,071 | 2,077 |

Source: LMC database
When analysing the number of VM s in the top four, and therefore the extent to which market shares are captured by a reduced set of firms, the market of trucks seems fairly concentrated. For 6 out of the 11 countries, the top- 4 truck manufacturers remained
the same from 2007 to 2017. For 4 countries there was only one shift registered, while for one country, Ireland, the top- 4 changed twice, resulting in 6 names, indicating that 2 new manufacturers were able to enter the top-4 for the first time between 2007 and 2017.

Table 34 - Average (2007-2017) number of truck manufacturers ranked in the top-4 in terms of volume, broken down per country ${ }^{74}$

| Country | Trucks |
| :--- | :---: |
| Austria | 4 |
| Belgium | 4 |
| France | 5 |
| Germany | 5 |
| Greece | 5 |
| I reland | 6 |
| Italy | 4 |
| Netherlands | 4 |
| Poland |  |
| Spain |  |
| United Kingdom |  |
|  |  |

An analysis of the volatility of the market shares of the biggest VMs active in the truck category per country over the time period 2007-2017 reveals that the standard deviation in market shares for the VMs ranges between 0.005 and 0.085 , while the CVar ranges between 0.033 and 0.358 .

The highest standard deviations of the market shares of the VMs are visible in Greece and Ireland, while the least volatile market shares of the VMs are in France and Germany, an analysis of the volatility measured by the Cvar of the market shares in volume provide the same results.

Table 35 - Volatility (StdDev \& CVar) of market shares of truck manufacturers in terms of volume, per country, 2007-2017 ${ }^{75}$

| Country <br> StdDev | AT | BE | FR | DE | GR | IE | IT | NL | PL | ES | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNH Industrial | 0.009 | 0.014 | 0.006 | 0.010 | 0.049 | 0.028 | 0.022 | 0.014 | 0.012 | 0.013 | 0.015 |
| Daimler Group | 0.018 | 0.013 | 0.010 | 0.022 | 0.085 | 0.057 | 0.009 | 0.024 | 0.016 | 0.011 | 0.020 |
| Paccar | 0.014 | 0.009 | 0.009 | 0.005 | 0.044 | 0.033 | 0.010 | 0.025 | 0.017 | 0.013 | 0.017 |
| TRATON Group | 0.028 | 0.016 | 0.022 | 0.010 | 0.054 | 0.043 | 0.011 | 0.020 | 0.014 | 0.024 | 0.010 |
| Volvo Group | 0.015 | 0.021 | 0.018 | 0.009 | 0.036 | 0.061 | 0.015 | 0.009 | 0.021 | 0.018 | 0.013 |
| $\qquad$ | AT | BE | FR | DE | GR | IE | IT | NL | PL | ES | UK |
| CNH Industrial | 0.107 | 0.166 | 0.058 | 0.112 | 0.297 | 0.580 | 0.055 | 0.328 | 0.117 | 0.056 | 0.168 |
| Daimler Group | 0.126 | 0.086 | 0.065 | 0.056 | 0.244 | 0.373 | 0.076 | 0.163 | 0.103 | 0.075 | 0.105 |
| Paccar | 0.106 | 0.046 | 0.074 | 0.060 | 0.400 | 0.218 | 0.107 | 0.081 | 0.092 | 0.122 | 0.062 |
| TRATON Group | 0.057 | 0.055 | 0.119 | 0.033 | 0.224 | 0.155 | 0.065 | 0.075 | 0.044 | 0.105 | 0.043 |
| Volvo Group | 0.104 | 0.076 | 0.043 | 0.114 | 0.385 | 0.247 | 0.079 | 0.041 | 0.094 | 0.065 | 0.074 |

Source: LMC database
An analysis of the percentage difference in market share between the top-4 manufacturers of trucks at country level reveals that the highest difference in market share between the top-4 over the entire time period is visible in Austria, France, Germany and Italy. The difference in Greece shifted drastically over the years, with the smallest difference in 2012 ( $4.0 \%$ ) and the highest in 2017 (11.0\%). The difference in market share in Belgium, Spain and the UK remained relatively small over the time period, although there is no consistent trend between countries.

Table 36 - Percentage difference in market share between top-4 truck manufacturers, by country, 2007 $2017^{76}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 11.0\% | 11.6\% | 12.4\% | 10.9\% | 12.5\% | 11.3\% | 14.5\% | 12.1\% | 13.4\% | 13.0\% | 13.2\% |
| Belgium | 4.9\% | 4.2\% | 4.9\% | 4.9\% | 6.1\% | 4.4\% | 3.6\% | 5.6\% | 4.4\% | 5.1\% | 5.1\% |
| France | 10.4\% | 10.8\% | 11.1\% | 10.0\% | 9.7\% | 9.8\% | 9.3\% | 9.8\% | 9.6\% | 8.9\% | 9.1\% |
| Germany | 10.7\% | 10.6\% | 11.1\% | 11.0\% | 9.6\% | 10.2\% | 10.68\% | 10.3\% | 9.0\% | 9.3\% | 9.0\% |
| Greece | 9.1\% | 9.6\% | 9.0\% | 7.8\% | 8.2\% | 4.0\% | 6.2\% | 9.7\% | 7.3\% | 9.3\% | 11.0\% |
| Ireland | 3.0\% | 5.2\% | 5.6\% | 2.5\% | 5.9\% | 6.7\% | 4.1\% | 4.5\% | 7.3\% | 6.5\% | 7.7\% |
| Italy | 9.1\% | 9.0\% | 9.2\% | 10.0\% | 8.1\% | 10.1\% | 10.8\% | 8.3\% | 9.0\% | 8.9\% | 8.8\% |
| Netherlands | 5.4\% | 7.6\% | 6.9\% | 7.1\% | 6.6\% | 5.8\% | 3.5\% | 3.7\% | 4.0\% | 5.0\% | 4.4\% |
| Poland | 6.5\% | 6.3\% | 7.7\% | 5.2\% | 5.9\% | 4.4\% | 5.3\% | 5.3\% | 6.2\% | 6.6\% | 4.9\% |
| Spain | 3.8\% | 4.3\% | 2.9\% | 4.7\% | 4.7\% | 5.3\% | 3.4\% | 3.9\% | 3.9\% | 4.0\% | 4.4\% |
| UK | 4.0\% | 3.9\% | 4.4\% | 1.5\% | 2.6\% | 3.0\% | 4.0\% | 2.4\% | 2.7\% | 2.9\% | 3.3\% |

Source: LMC database

## Buses ${ }^{77}$

At an aggregate level (all countries in scope excluding Cyprus), Daimler Group has the biggest market share. However, a more thorough analysis reveals that this is not the case at country level, as market shares variate strongly between the various countries. In all countries, the biggest VM represents at least $25 \%$ of the market shares in volume. The top-2 VMs represent at least 50\% of the market shares.

Daimler Group has the largest market share in Austria, Germany and Greece, while CNH Industrial is best represented in France and Italy. Volvo Group has the largest market share in Ireland while TRATON Group has the largest share in Spain. The Netherlands has VDL Group as its main manufacturer of buses. The buses in Belgium, Poland and the UK are coming from very niche bus manufacturers and are therefore represented in the group 'other'.
With regards to the market concentration, the same trend observed for trucks is true also for buses, where all countries show an HHI above the 1,800 threshold. However, there are strong deviations between the countries, with mainly Austria, France, Germany, Ireland, Poland, Spain and the UK showing a very high market concentration in 2017. As a trend over the 2007-2017 period, the market concentration decreased substantially in Belgium, Poland and the Netherlands while it increased in Ireland, Italy and the UK.

Table 37 - Market concentration indices (HHI) in terms of volume for bus manufacturers, broken down per country, 2007-2017 ${ }^{78}$

| Year <br> Countrv | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3,869 | 3,878 | 3,343 | 4,506 | 3,716 | 3,556 | 4,562 | 4,353 | 4,429 | 3,435 | 3,046 |
| Belgium | 2,677 | 2,656 | 2,769 | 4,687 | 4,610 | 3,725 | 3,577 | 2,698 | 2,440 | 2,568 | 1,911 |
| France | 3,389 | 3,474 | 3,185 | 3,058 | 3,165 | 3,550 | 3,366 | 3,608 | 2,991 | 3,301 | 2,981 |
| Germany | 3,842 | 4,090 | 4,126 | 3,831 | 3,550 | 3,381 | 3,348 | 3,777 | 3,411 | 3,338 | 3,397 |
| Greece | 2,333 | 3,105 | 3,286 | 5,472 | 2,050 | 6,047 | 2,978 | 3,049 | 2,561 | 3,094 | 2,465 |
| Ireland | 2,112 | 1,866 | 2,597 | 2,325 | 3,174 | 3,815 | 3,715 | 4,733 | 4,520 | 2,693 | 3,021 |
| Italy | 1,987 | 1,866 | 2,584 | 2,719 | 2,282 | 2,684 | 3,117 | 2,162 | 2,538 | 2,522 | 2,654 |
| Netherlands | 3,622 | 3,897 | 3,111 | 3,490 | 2,601 | 2,811 | 3,225 | 2,679 | 2,144 | 3,706 | 2,176 |
| Poland | 0,000 | 4,278 | 4,544 | 4,685 | 4,315 | 3,990 | 4,085 | 4,385 | 4,604 | 3,680 | 3,006 |
| Spain | 2,630 | 2,567 | 2,452 | 2,365 | 2,402 | 2,379 | 2,505 | 2,487 | 2,511 | 2,652 | 2,536 |
| United Kingdom | 1,922 | 1,953 | 2,073 | 2,095 | 2,762 | 2,852 | 3,024 | 3,292 | 3,541 | 3,898 | 3,068 |

Source: LMC database
When analysing the number of VMs in the top four, and therefore the extent to which market shares are captured by a reduced set of firms, the market for buses seems relatively volatile. In the vehicle category of buses, there were, compared to the other vehicle categories, more changes in the top-4 during the period from 2007 up to 2017. For only 2 countries, France and Spain, the top-4 remained the same while for 6 countries there was at least one change. For both Poland and Greece 7 bus manufacturers were registered in the top-4 in terms of volume. In this analysis, the remarkable presence of niche bus manufacturers labelled as 'other' has not been taken into considerations in order to ensure comparability across countries.

Table 38 - Average (2007-2017) number of bus manufacturers ranked in the top-4 in terms of volume, broken down per country, 2007-2017 ${ }^{79}$

| Country | Buses |
| :--- | :---: |
| Austria | 4 |
| Belgium | 5 |
| France | 5 |
| Germany | 5 |
| Greece | 7 |
| Ireland | 6 |
| Italy | 5 |
| Netherlands | 5 |
| Poland |  |
| Spain |  |
| United Kingdom |  |
|  |  |

An analysis of the volatility of the market shares of the biggest VMs active in the bus category per country over the time period 2007-2017, reveals that the standard deviation in market shares for the VMs ranges between 0 and 0.235 , while the CVar ranges between 0.033 and 3.317.

The highest standard deviations of the market shares of the VMs are visible in Greece, the Netherlands, Belgium and France, while the least volatile market shares of the VMs are in France, Germany, Spain and the UK. Among the reported VMs, the average standard deviation over the countries is the highest for TRATON Group, while the market share of Toyota Group remains the most stable.

More or less the same can be said for the volatility measured by the CVar of the market shares in volume, with Greece, the Netherlands and Poland the countries with, on average, the highest volatility of the market shares in volume of the VMs, while the market shares in Spain are reported to be the most stable over the time period. The market shares of Daimler Group are on an average the most stable compared to the
other reported VMs, while the market shares of Ashok Leyland Group are the most volatile.

Table 39 - Volatility (StdDev \& CVar) of market shares of bus manufacturers in terms of volume, per country, 2007-2017 ${ }^{80}$

| Country StdDev | AT | BE | FR | DE | GR | IE | IT | NL | PL | ES | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNH Industrial | 0.009 | 0.014 | 0.006 | 0.010 | 0.049 | 0.028 | 0.022 | 0.014 | 0.012 | 0.013 | 0.015 |
| Daimler Group | 0.018 | 0.013 | 0.010 | 0.022 | 0.085 | 0.057 | 0.009 | 0.024 | 0.016 | 0.011 | 0.020 |
| Paccar | 0.014 | 0.009 | 0.009 | 0.005 | 0.044 | 0.033 | 0.010 | 0.025 | 0.017 | 0.013 | 0.017 |
| TRATON Group | 0.028 | 0.016 | 0.022 | 0.010 | 0.054 | 0.043 | 0.011 | 0.020 | 0.014 | 0.024 | 0.010 |
| Volvo Group | 0.015 | 0.021 | 0.018 | 0.009 | 0.036 | 0.061 | 0.015 | 0.009 | 0.021 | 0.018 | 0.013 |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Country <br> CVar | AT | BE | FR | DE | GR | IE | IT | NL | PL | ES | UK |
| CNH Industrial | 0.107 | 0.166 | 0.058 | 0.112 | 0.297 | 0.580 | 0.055 | 0.328 | 0.117 | 0.056 | 0.168 |
| Daimler Group | 0.126 | 0.086 | 0.065 | 0.056 | 0.244 | 0.373 | 0.076 | 0.163 | 0.103 | 0.075 | 0.105 |
| Paccar | 0.106 | 0.046 | 0.074 | 0.060 | 0.400 | 0.218 | 0.107 | 0.081 | 0.092 | 0.122 | 0.062 |
| TRATON Group | 0.057 | 0.055 | 0.119 | 0.033 | 0.224 | 0.155 | 0.065 | 0.075 | 0.044 | 0.105 | 0.043 |
| Volvo Group | 0.104 | 0.076 | 0.043 | 0.114 | 0.385 | 0.247 | 0.079 | 0.041 | 0.094 | 0.065 | 0.074 |

Source: LMC database
An analysis of the percentage difference in market share between the top-4 manufacturers of buses at country level reveals a more scattered picture crosscountry compared to the other vehicle categories as there is a difference in the \% as well as the trends over time with differences ranging from $1.7 \%$ (Italy 2018) to $26.9 \%$ (Ireland 2015).

Table 40 - Percentage difference in market share between top-4 bus manufacturers, by country, 2007 -
$2017^{81}$

| Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Country | $16.0 \%$ | $16.5 \%$ | $13 . \%$ | $19.3 \%$ | $16.2 \%$ | $15.6 \%$ | $19.4 \%$ | $18.8 \%$ | $18.8 \%$ | 14.01 <br> $\%$ | $12.4 \%$ |
| Belgium | $9.1 \%$ | $8.7 \%$ | $10.3 \%$ | $19.6 \%$ | $19.0 \%$ | $14.1 \%$ | $13.8 \%$ | $10.6 \%$ | $8.2 \%$ | $9.10 \%$ | $5.2 \%$ |
| France | $14.0 \%$ | $14.3 \%$ | $11.7 \%$ | $11.1 \%$ | $12.1 \%$ | $14.4 \%$ | $13.6 \%$ | $13.8 \%$ | $11.1 \%$ | 13.67 <br> $\%$ | $12.4 \%$ |
| Germany | $17.2 \%$ | $18.3 \%$ | $18.2 \%$ | $16.6 \%$ | $15.2 \%$ | $14.2 \%$ | $14.4 \%$ | $16.8 \%$ | $14.5 \%$ | 13.37 <br> $\%$ | $14.4 \%$ |
| Greece | $7.6 \%$ | $11.6 \%$ | $13.9 \%$ | $22.9 \%$ | $5.0 \%$ | $25.8 \%$ | $17.5 \%$ | $14.7 \%$ | $8.8 \%$ | 11.10 <br> $\%$ | $5.6 \%$ |
| Ireland | $6.5 \%$ | $3.1 \%$ | $7.2 \%$ | $4.1 \%$ | $8.4 \%$ | $16.9 \%$ | $15.3 \%$ | $25.7 \%$ | $26.9 \%$ | 11.11 <br> $\%$ | $13.9 \%$ |
| Italy | $2.9 \%$ | $1.7 \%$ | $8.5 \%$ | $9.6 \%$ | $7.4 \%$ | $11.3 \%$ | $13.4 \%$ | $5.1 \%$ | $7.0 \%$ | $6.95 \%$ | $8.5 \%$ |
| Netherlan <br> ds | $15.4 \%$ | $17.5 \%$ | $12.6 \%$ | $14.7 \%$ | $11.4 \%$ | $10.3 \%$ | $12.1 \%$ | $12.8 \%$ | $6.0 \%$ | 15.10 <br> $\%$ | $5.0 \%$ |
| Poland |  | $17.6 \%$ | $19.5 \%$ | $20.1 \%$ | $19.1 \%$ | $17.6 \%$ | $18.2 \%$ | $19.5 \%$ | $19.9 \%$ | 15 <br> $\%$ |  |
| Spain | $7.3 \%$ | $7.0 \%$ | $6.0 \%$ | $5.1 \%$ | $6.5 \%$ | $6.0 \%$ | $5.7 \%$ | $6.8 \%$ | $7.5 \%$ | $9.68 \%$ | $9.2 \%$ |
| UK | $4.8 \%$ | $4.7 \%$ | $6.1 \%$ | $8.3 \%$ | $12.0 \%$ | $12.7 \%$ | $13.5 \%$ | $14.4 \%$ | $15.8 \%$ | $17.1 \%$ | $12.8 \%$ |

Source: LMC database

### 2.2 Distribution patterns and networks

### 2.2.1 Distribution patterns for new vehicles

This sub-section analyses the role of players in passenger car distribution, based on secondary reports including Roland Berger and past EY analyses.
Trends in the relative importance of distribution models, as well as innovation in sales and promotional channels are also presented, using the survey responses across the 12 MS in scope during 2007 - 2017. Note that, when references are made to the survey, the results report the survey and no major conclusions for the wider market should be drawn.
Three main types of distribution systems prevail in vehicle sales, namely qualitative selective distribution, quantitative selective distribution, and exclusive distribution. We also observed the growing importance of innovative channels such as e-commerce, direct sales via own websites or third-party platforms, experience centres, mobile/popup stores and supermarkets for promotions and actual sales of vehicles. ${ }^{82}$

However, given the relatively low rate of survey responses on distribution systems and innovative channels, insights on a country level have been provided without drawing observations on intertemporal comparisons. The share of stand-alone outlets and distribution models used by VMs is only presented in a country level overview as the distribution differs from country to country.

### 2.2.1.1 Overview

## Passenger cars

A vehicle intermediary can be defined as a person or an undertaking which purchases a new motor vehicle on behalf of a named consumer without being member of a distribution network. Intermediaries don't own the vehicle at any point of the sale process. The most prominent role of intermediaries in new passenger car distribution networks materialises between the vehicle dealer and the final customer.

Digital technologies have also started to emerge on the business playing field for automotive retail and distribution. New business models and types of player are emerging continuously through increased digitalisation in addition to the existing intermediary model.

Here are a few cases present in the countries in scope:

1. Aggregators with digital platforms ${ }^{\times x v i}$ : New business models are revolutionising online marketing and initiation of sales with aggregators targeting price sensitive customers and convenience seekers. These digital platforms are either specialised in specific sales activities such as browsing for the vehicle, test drives, finance and purchase or offer aggregated services.
a. Marketplaces: they provide customers with full transparency on offers available on the passenger cars with no additional support/advice in the sales process. Customers interact directly with the dealer. Marketplaces help in comparing prices of different dealers based on the required configuration and budget. These platforms are traffic-driven and have no role to play during the actual transaction of a vehicle sale. They generate revenue through insertion fees, cross-selling and advertising. Examples are: Auto Scout 24, Mobile.de, Carwow, Carsnip, Carmony, TrueCar.

[^16]b. Brokers: they provide best offers for customers along with online/ offline support for the sales processing. Brokers act as mediators between authorised dealers and the end customers by providing an integrated digital ordering and negotiating process. However, the final sale contract is finalised directly by the dealer. These aggregators are transactionsdriven, as brokers are involved in the sales process and generate revenue through sales commissions, cross-selling of financial products to customers and advertising. Examples include: Autohaus24.de; MeinAuto.de; Auto.de, Vehiculum.
c. End to end sales platform (complete purchase process including virtual test drives and financing) ${ }^{\times x v i i}$ : These companies provide the manufacturers and dealers with an omni-channel solution to enable sales of new cars including financial services and customer service via a new customer experience either in-store, online or both but without the necessity to speak to a salesperson at a dealership. For example, Rockar UK partnered with Hyundai in 2014 and Jaguar Land Rover in 2016 to provide an online platform enabling their customers to complete the entire purchasing process including searching, ordering and financing online. The company also has stores located in malls equipped with Rockar Angels (advisors) where customers can experience test drives before placing the order. Trive is an online platform founded in 2017 in Spain, covering various phases of acquiring a vehicle on a single platform. This allows buyers to purchase their vehicle by directing them to the dealers wherever they want in just fifteen days, including the process of searching, comparing, test driving, selecting a payment method and other services.
2. E-commerce giants expanding in automotive retail ${ }^{\text {xxviiii }}$ : Major e-commerce firms have been expanding the scope of their service and product offerings by tapping into the opportunities in automotive retail and listing new passenger cars and spare parts on their platforms in agreement with the OEMs. They help the customer select a vehicle of their choice and later connect them to the dealers to finalise the purchase. For example, Amazon in Italy started listing Fiat cars on its platform in 2016 and provides steep discounts when customers buy or rent Fiat cars. It also links the customer to a Fiat car dealer in order to initiate the actual buying/ renting process.

### 2.2.1.2 Country level

## Passenger cars

The table below presents the share of distribution models for passenger cars used by VMs on a country level during 2007-2017. The analysis of the distribution models revealed that no VMs used purely qualitative selective distribution in any of the countries, but preferred quantitative selective distribution. About $12.5 \%$ and $14.3 \%$ of VMs in France and Italy opted for exclusive distribution. Survey responses under 'others' indicated that VMs, in all countries except Cyprus, opted for a combination of qualitative and quantitative selective distribution. ${ }^{83}$

[^17]Table 41 - Share of types of passenger car distribution models used by VMs, by country, 2007-2017

| Distribution model | Quantitative selective distribution |  |  | Exclusive distribution |  |  | Others |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\qquad$ | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |
| Austria | 85.7\% | 85.7\% | 85.7\% |  |  |  | 14.3\% | 14.3\% | 14.3\% |
| Belgium | 83.3\% | 83.3\% | 83.3\% |  |  |  | 16.7\% | 16.7\% | 16.7\% |
| Cyprus | 80.0\% | 80.0\% | 80.0\% |  |  |  | 20.0\% | 20.0\% | 20.0\% |
| France | 75.0\% | 75.0\% | 75.0\% | 12.5\% | 12.5\% | 12.5\% | 12.5\% | 12.5\% | 12.5\% |
| Germany | 83.3\% | 83.3\% | 83.3\% |  |  |  | 16.7\% | 16.7\% | 16.7\% |
| Greece | 80.0\% | 80.0\% | 80.0\% |  |  |  | 20.0\% | 20.0\% | 20.0\% |
| Ireland | 66.7\% | 66.7\% | 66.7\% |  |  |  | 33.3\% | 33.3\% | 33.3\% |
| Italy | 83.3\% | 71.4\% | 71.4\% |  | 14.3\% | 14.3\% | 16.7\% | 14.3\% | 14.3\% |
| Netherlands | 85.7\% | 85.7\% | 85.7\% |  |  |  | 14.3\% | 14.3\% | 14.3\% |
| Poland | 80.0\% | 80.0\% | 80.0\% |  |  |  | 20.0\% | 20.0\% | 20.0\% |
| Spain | 85.7\% | 85.7\% | 85.7\% |  |  |  | 14.3\% | 14.3\% | 14.3\% |
| UK | 71.4\% | 71.4\% | 71.4\% |  |  |  | 28.6\% | 28.6\% | 28.6\% |

Source: EY calculations based on survey results ${ }^{84}$
Some innovative channels were used more widely for actual sales than promotion of passenger cars across 11 of 12 MS in scope (data for Cyprus is not available). Survey data ${ }^{85}$ indicate that, for actual sales, the use of mobile pop-up stores and supermarkets is prevalent in all countries except Greece, Ireland and Poland. The use of e-commerce and direct sales was occasionally observed in the UK and the Netherlands, while sales through third party platforms were observed in Italy.
Channels such as experience centres were prevalent for promotions in Belgium, Germany, Ireland, Italy and the UK. Mobile pop-up stores during promotions in Austria, Ireland, Italy, the Netherlands, Germany, Greece and Spain have also been observed over the years. These findings on the innovative channels are however based on a representativeness of the market share of responses well below the $30 \%$ threshold set out in the methodology statement of this study. These survey responses are provided as factual findings but should not be extrapolated to represent the wider market.

The table below presents the share of stand-alone outlets for passenger car sales on a country level (data for Belgium for years 2007-2014, the Netherlands for 2007-2013, Poland for 2007-2012 is not available). Results revealed that Cyprus and Greece held the largest share of stand-alone outlets compared to its peer countries during 2007 2013. While the share of outlets remained constant during 2010-2012 for Cyprus at $44 \%$, the share in Greece had continued to decline during 2007-2012, dropping to $23 \%$ in 2012. The conditions changed from 2012 - 2017, as France surpassed the aforementioned countries and maintained a share of approximately $20 \%$, up from previous levels of $\pm 5 \%$ during 2007-2011. The share in Cyprus and Greece fell during 2012-2017 towards the range of $13 \%-17 \%$ which can be attributed to the weak Greek economy that was still in the aftermath of the Eurozone crisis, and the devaluation of cars that adversely impacted profitability of the dealerships in the country. ${ }^{. x i x}$ The share of standalone outlets were relatively lower in Austria, Germany, Ireland and the

[^18]UK throughout the timeframe in scope, with less than 5\%. On the contrary, in Italy and Spain the share of standalone fell in the middle and fluctuated within a range of 9\% $13 \%$ during 2007 - 2012 with the exception of a slight increase to $14 \%$ for Spain during 2014 - 2017. The most notable trend is France which experienced a strong sudden increase of stand-alone outlets as of 2013 keeping a share of $20 \%$ till 2017.

Table 42 - Share of stand-alone outlets for passenger car sales, by country 2007-201786

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 1\% | 1\% | 2\% | 2\% | 2\% |
| Belgium |  |  |  |  |  |  |  |  | 21\% | 19\% | 19\% |
| Cyprus | 43\% | 38\% | 38\% | 44\% | 44\% | 44\% | 15\% | 15\% | 17\% | 17\% | 17\% |
| France | 3\% | 5\% | 5\% | 5\% | 5\% | 4\% | 23\% | 23\% | 20\% | 20\% | 20\% |
| Germany | 4\% | 4\% | 4\% | 4\% | 4\% | 4\% | 3\% | 3\% | 3\% | 4\% | 3\% |
| Greece | 32\% | 32\% | 31\% | 31\% | 25\% | 23\% | 14\% | 13\% | 13\% | 13\% | 13\% |
| Ireland | 4\% | 4\% | 4\% | 4\% | 4\% | 3\% | 4\% | 4\% | 3\% | 3\% | 3\% |
| Italy | 13\% | 13\% | 13\% | 11\% | 9\% | 9\% | 8\% | 9\% | 10\% | 10\% | 10\% |
| Netherlands |  |  |  |  |  |  |  | 0\% | 0\% | 0\% | 0\% |
| Poland |  |  |  |  |  |  | 0\% | 0\% | \%\% | 0\% | 0\% |
| Spain | 11\% | 9\% | 10\% | 10\% | 9\% | 13\% | 12\% | 14\% | 14\% | 14\% | 15\% |
| UK | 1\% | 2\% | 1\% | 1\% | 2\% | 2\% | 1\% | 1\% | 2\% | 2\% | 3\% |

Source: EY calculations based on survey results
Light commercial vehicles
The table below presents the share of distribution models used by VMs for LCV on a country level during 2007 - 2017. The analysis of the distribution models revealed, unlike passenger cars, that VMs in the LCVs category used qualitative selective distribution across countries, in Austria and Italy this distribution model represented about $50 \%$. However, like passenger cars, quantitative selective distribution was also the most preferred model of distribution for LCVs, particularly in Cyprus and in the UK. Approximately $20 \%$ and $25 \%$ of VMs in Spain and Germany respectively used exclusive distribution. Survey responses indicated about 33.3\% of VMs used private importers (company in charge of the import of the brand(s) to that particular country, e.g., D'leteren in Belgium for brands of the Volkswagen Group) in Greece and Ireland.

Table 43 - Share of types of LCV distribution models used by VMs, by country, 2007-2017

| Distribution model | Quantitative selective distribution |  |  | Qualitative selective distribution |  |  | Exclusive distribution |  |  | Others |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\qquad$ | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |
| Austria | 50.0\% | 50.0\% | 50.0\% | 50.0\% | 50.0\% | 50.0\% |  |  |  |  |  |  |
| Belgium | 50.0\% | 50.0\% | 50.0\% | 25.0\% | 25.0\% | 25.0\% |  |  |  | 25.0\% | 25.0\% | 25.0\% |
| Cyprus | 66.7\% | 66.7\% | 66.7\% | 33.3\% | 33.3\% | 33.3\% |  |  |  |  |  |  |
| France | 60.0\% | 60.0\% | 60.0\% | 40.0\% | 40.0\% | 40.0\% |  |  |  |  |  |  |
| Germany | 50.0\% | 50.0\% | 50.0\% | 25.0\% | 25.0\% | 25.0\% | 25.0\% | 25.0\% | 25.0\% |  |  |  |
| Greece | 33.3\% | 33.3\% | 33.3\% | 33.3\% | 33.3\% | 33.3\% |  |  |  | 33.3\% | 33.3\% | 33.3\% |
| I reland | 33.3\% | 33.3\% | 33.3\% | 33.3\% | 33.3\% | 33.3\% |  |  |  | 33.3\% | 33.3\% | 33.3\% |
| Italy | 50.0\% | 50.0\% | 50.0\% | 50.0\% | 50.0\% | 50.0\% |  |  |  |  |  |  |
| Netherlands | 40.0\% | 40.0\% | 50.0\% | 20.0\% | 20.0\% | 25.0\% |  |  |  | 40.0\% | 40.0\% | 25.0\% |
| Poland | 50.0\% | 50.0\% | 50.0\% | 25.0\% | 25.0\% | 25.0\% |  |  |  | 25.0\% | 25.0\% | 25.0\% |
| Spain | 60.0\% | 60.0\% | 80.0\% | 20.0\% | 20.0\% | 20.0\% | 20.0\% | 20.0\% |  |  |  |  |
| UK | 66.7\% | 66.7\% | 66.7\% | 33.3\% | 33.3\% | 33.3\% |  |  |  |  |  |  |
| Source: EY calculations based on survey results |  |  |  |  |  |  |  |  |  |  |  |  |

I nnovative channels were seldom used for actual sales and promotion of LCVs across 11 of 12 MS in scope (data for Cyprus is not available). According to survey data for promotions, there have been occasional mentions of the use of experience centres and supermarkets in Ireland and mobile pop-up stores in Austria. E-commerce and direct
sales through own website have been used in Austria, Belgium, Greece and Spain. These findings on the innovative channels are however based on a representativeness of the market share of responses well below the $30 \%$ threshold set out in the methodology statement of this study. These survey responses are provided as factual findings but should not be extrapolated to represent the wider market.
The table below presents the share of stand-alone outlets for LCV sales on a country level (data for Belgium, the Netherlands and Poland for years 2007-2014, and Ireland for 2013 - 2014 is not available). Results revealed that Spain, Cyprus and Germany maintained the largest share of outlets throughout the timeframe in scope. While the share in Spain declined over the years, in Cyprus and Germany it remained constant at $20 \%$ and $18 \%$ respectively during 2007 - 2014. The share of stand-alone outlets increased for Cyprus during 2015-2017 but decreased for Germany during the same period. The share of outlets was fairly low in Austria and the UK throughout the time frame ranging between $1 \%-6 \%$, with the share in Greece joining them from 2011. France also, contrary to passenger cars, had a very low share of stand-alone outlets for LCVs.

Table 44 - Share of stand-alone outlets for LCV sales, by country, 2007-2017 ${ }^{87}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 6\% | 6\% | 6\% |
| Belgium |  |  |  |  |  |  |  |  | 13\% | 12\% | 13\% |
| Cyprus | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 20\% | 23\% | 26\% | 26\% |
| France | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 2\% | 2\% | 2\% |
| Germany | 18\% | 18\% | 18\% | 18\% | 18\% | 18\% | 18\% | 18\% | 14\% | 14\% | 15\% |
| Greece | 10\% | 10\% | 10\% | 8\% | 5\% | 4\% | 3\% | 3\% | 4\% | 5\% | 5\% |
| I reland | 10\% | 10\% | 10\% | 10\% | 10\% | 10\% |  |  | 0\% | 0\% | 0\% |
| Italy | 14\% | 13\% | 10\% | 8\% | 9\% | 8\% | 7\% | 9\% | 12\% | 12\% | 12\% |
| Netherlands |  |  |  |  |  |  |  |  | 2\% | 0\% | 0\% |
| Poland |  |  |  |  |  |  |  |  | 2\% | 1\% | 1\% |
| Spain | 28\% | 28\% | 28\% | 27\% | 28\% | 15\% | 14\% | 14\% | 13\% | 16\% | 16\% |
| UK | 2\% | 3\% | 3\% | 3\% | 4\% | 4\% | 4\% | 3\% | 4\% | 3\% | 4\% |

Source: EY calculations based on survey results
Trucks
The table below presents the share of distribution models used by VMs for truck distribution on a country level during 2007-2017. The analysis of the distribution models revealed, as seen for passenger cars, that quantitative selective distribution was also the most preferred model of distribution for trucks across countries, particularly in Germany and the UK. Approximately 20\% of VMs in France, Italy and Spain used exclusive distribution. Survey responses indicated some VMs in all countries except Cyprus used direct sales formats, i.e., orders are directly placed with the vehicle manufacturer.

Table 45 - Share of types of truck distribution models used by VMs, by country, 2007-2017

| Distribution <br> model | Quantitative <br> selective distribution |  |  | Qualitative selective <br> distribution |  |  | Exclusive <br> distribution |  |  | Others |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Country | Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| Austria | $66.7 \%$ | $66.7 \%$ | $66.7 \%$ |  |  |  |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |
| Belgium | $66.7 \%$ | $66.7 \%$ | $66.7 \%$ |  |  |  |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |
| Cyprus | $66.7 \%$ | $66.7 \%$ | $66.7 \%$ |  |  |  |  |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |
| France | $60.0 \%$ | $60.0 \%$ | $60.0 \%$ | $20.0 \%$ | $20.0 \%$ | $20.0 \%$ |  |  |  | $20.0 \%$ | $20.0 \%$ | $20.0 \%$ |  |
| Germany | $80.0 \%$ | $80.0 \%$ | $80.0 \%$ |  |  |  |  |  |  | $20.0 \%$ | $20.0 \%$ | $20.0 \%$ |  |
| Greece | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |  |  |  |  | $66.7 \%$ | $66.7 \%$ | $66.7 \%$ |  |
| Ireland | $60.0 \%$ | $40.0 \%$ | $40.0 \%$ |  |  |  |  | $20.0 \%$ | $20.0 \%$ | $40.0 \%$ | $40.0 \%$ | $40.0 \%$ |  |
| Italy | $66.7 \%$ | $66.7 \%$ | $66.7 \%$ | $16.7 \%$ | $16.7 \%$ | $16.7 \%$ |  |  |  | $16.7 \%$ | $16.7 \%$ | $16.7 \%$ |  |
| Netherlands | $50.0 \%$ | $50.0 \%$ | $60.0 \%$ |  |  |  |  |  |  | $50.0 \%$ | $50.0 \%$ | $40.0 \%$ |  |
| Poland | $60.0 \%$ | $60.0 \%$ | $60.0 \%$ |  |  |  |  |  |  | $40.0 \%$ | $40.0 \%$ | $40.0 \%$ |  |
| Spain | $66.7 \%$ | $66.7 \%$ | $83.3 \%$ | $16.7 \%$ | $16.7 \%$ |  |  |  |  | $16.7 \%$ | $16.7 \%$ | $16.7 \%$ |  |
| UK | $80.0 \%$ | $80.0 \%$ | $80.0 \%$ |  |  |  |  |  |  | $20.0 \%$ | $20.0 \%$ | $20.0 \%$ |  |

Source: EY calculations based on survey results

## Buses

The table below presents the share of distribution models used by VMs for bus distribution on a country level during 2007-2017. The analysis of the distribution models revealed contrasting results to the other vehicle categories in terms of the most preferred distribution model: exclusive distribution was the most popular distribution across countries, except the UK. Few VMs in the UK were more inclined to quantitative selective distribution (the VM respondents for the UK are not indicative of the whole market as the market share of respondents is below 10\%). VMs in Poland and Germany also opted for quantitative selective distribution. Similar to trucks, survey responses indicated some VMs in all countries, except Cyprus and Greece, used direct sales formats with the vehicle manufacturer.

Table 46 - Share of types of bus distribution models used by VMs, by country, 2007-2017

| Distribution <br> model | Quantitative <br> selective distribution |  |  |  | Qualitative selective <br> distribution |  |  |  | Exclusive <br> distribution |  |  | Others |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Year | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |  |  |
| Country |  |  |  |  |  |  | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ |  |  |
| Austria |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Belgium |  |  |  |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $66.7 \%$ | $66.7 \%$ | $66.7 \%$ |  |  |
| Cyprus |  |  |  |  |  |  | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ |  |  |
| France |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |
| Germany | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |
| Greece |  |  |  |  |  |  | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ |  |  |
| Ireland |  |  |  |  |  |  | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ | $50.0 \%$ |  |  |
| Italy |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |
| Netherlands |  |  |  |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $66.7 \%$ | $66.7 \%$ | $66.7 \%$ |  |  |
| Poland | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |  | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |
| Spain |  |  | $33.3 \%$ |  |  |  | $66.7 \%$ | $66.7 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ | $33.3 \%$ |  |  |
| UK | $80.0 \%$ | $80.0 \%$ | $80.0 \%$ |  |  |  |  |  |  | $20.0 \%$ | $20.0 \%$ | $20.0 \%$ |  |  |

Source: EY calculations based on survey results

### 2.2.2 Network density of passenger car dealers ${ }^{88}$

This sub-section analyses the presence of passenger car dealer groups and their network density in the 12 MS in scope during 2007-2017. The scarcity of the data doesn't allow to perform this calculation for other VCs. The analysis of car dealer groups is based on VM data on the number of dealer sales contracts ${ }^{89}$. The network density for car dealers measures the total number of car dealer outlets in each country, broken down by car
brands, per 1,000 inhabitants of the country during the period 2007-2017. The car brands have been selected based on the top-10 dealer outlets, in terms of sales, in 2017 in order to analyse network density at brand level. Note that these are effectively franchise points that are counted, so several brands can be located at one physical outlet e.g., Dacia franchise points are counted separately from Renault franchise points. The analysis of network density on a country level relies on dealer legal entity data based on NACE code identification as the data per brand are not unique and run the risk of double counting. The data on total number of dealer groups and dealer sales outlets for LCVs, buses and trucks is not available. Hence, the dealer density for LCVs, buses and trucks cannot be calculated.

### 2.2.2.1 Overview by brand

The number of car dealer groups across all MS increased by 1,960 entities from 20072011 to 37,018. However, the total number of dealer groups gradually declined during 2011 - 2017, overall a decrease over the time period is observed. This result can be attributed to the trend of consolidation of dealer groups. For instance, Penske Automotive expanded its independent dealer group in Europe by acquiring multiple dealer groups such as Sytner Group in the UK, Jacobs Gruppe in Germany, several dealerships selling Porsche, Audi, Volvo and Land Rover in Italy and by forming a joint venture with Portuguese based Caetano Group to capture local BMW market. ${ }^{\text {.xx }}$ Volkswagen dealer groups fell by 1,787 groups YOY in 2017 as it aimed to reduce its dealer groups primarily in Germany to strengthen its efforts in e-mobility, digitalisation and consumer loyalty. Audi reduced the number of dealerships with 433 from 2007 to 2017 and introduced direct online sales for fleets in order to lower competition among traders and reduce price wars. Porsche Holding Salzburg's subsidiary PGA Motors sold 275 of its dealer outlets to Emil Frey Group and consolidated its French dealerships with Volkswagen brands to form a joint retail under Volkswagen Group Retail France ${ }^{\text {.xxi }}$

The aggregate network density declined from 0.17 in 2007 to 0.14 car outlets per 1,000 inhabitants in 2017. While the population of the MS has grown over the years, the number of dealer outlets fell to 57,304 outlets in 2017, 10,831 outlets less than in 2007. VMs reduced their dealer networks to maintain dealer profitability and recover from the Eurozone crisis. Rising real estate prices in inner cities can also be attributed among the impacts on the number of dealer outlets. Traditional dealer outlets have also been facing competition from independent fast fitters and Original Equipment Supplier (OES) workshop dealers who aim to provide both sales and aftersales services, and emerging retail trends such as online car sales, growing demand for used cars and fleet services and opportunities in immersive virtual retail experiences for customers. ${ }^{\text {.xxii }}$
xxx "Penske doubles up in Italy, buys 8 dealerships," Autonews, October 2016, https://www.autonews.com/article/20161004/RETAIL/161009956/penske-doubles-up-in-italy-buys-8dealerships, accessed on 2 September 2020; "Penske adds Spain to its overseas roster," Autonews, August 2014, https://www.autonews.com/article/20140804/RETAI L/308049930/penske-adds-spain-to-its-overseasroster, accessed on 2 September 2020
xxxi "VW Group's retail company to sell 275 dealerships," Autonews, March 2017, https://europe.autonews.com/article/20170323/ANE/170329928/vw-group-s-retail-company-to-sell-275dealerships, accessed on 2 September 2020; "Volkswagen to reorganise its dealer network to take advantage of future mobility," Autovista Group, January 2018, https://autovistagroup.com/news-and-insights/volkswagen-reorganise-its-dealer-network-take-advantage-future-mobility, accessed on 2 September 2020; "Volkswagen and Audi plan big dealership network changes," Autovista Group, May 2017, https://autovistagroup.com/news-and-insights/volkswagen-and-audi-plan-big-dealership-network-changes, accessed on 2 September 2020
xxxii EY analysis (Automotive Retail \& Distribution, October 2015); "The traditional car dealer is disappearing: flagship stores and virtual reality are the new trends," Business Insider, December 2016, https://www.businessinsider.nl/auto-dealer-bmw-audi-virtual-reality-flagshipstore/, accessed on 25 August 2020; "UK franchised dealer outlet numbers grow year on year," Motor Trader, https://www.motortrader.com/motor-trader-news/automotive-news/uk-franchised-dealer-outlet-numbers-

The analysis of network density broken down by car brands revealed that French brands Renault, Dacia, Peugeot and Citroen had a denser dealer network during 2007 2017 than Nissan and Toyota, which had the lowest density for dealer networks among the car brands in analysis. The network density for all the car brands in analysis declined over the years. During the Eurozone crisis, German and Asian brands managed to maintain better profitability compared to French brands because their franchised dealers survived the impact of the crisis better than independent and small dealers. ${ }^{\text {.xxiii }}$

The table below presents the dealer outlets by top-10 car brands across the 12 MS in scope: ${ }^{90}$

Table 47 - Aggregate passenger car dealer outlets, broken down by car brands across 12 MS in scope (top 10 brands), 2007-2017 ${ }^{91}$

| Year VM | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Renault | 8,587 | 8,970 | 8,729 | 8,832 | 8,609 | 8,289 | 8,066 | 7,356 | 7,244 | 6,757 | 6,536 |
| Dacia |  | 3,616 | 4,823 | 4,823 | 4,945 | 5,952 | 5,952 | 6,205 | 6,119 | 6,355 | 5,917 |
| Peugeot | 5,812 | 6,117 | 6,070 | 5,929 | 5,934 | 5,883 | 5,675 | 4,987 | 4,045 | 4,591 | 4,409 |
| Citroen | 5,861 | 5,890 | 5,825 | 5,825 | 5,621 | 5,616 | 4,978 | 4,801 | 4,736 | 4,495 | 4,060 |
| Ford | 5,124 | 4,995 | 4,989 | 4,967 | 4,971 | 4,860 | 4,527 | 4,597 | 4,092 | 3,981 | 3,833 |
| Opel/Vauxhall | 4,021 | 4,112 | 4,048 | 3,906 | 3,813 | 3,688 | 3,546 | 3,445 | 3,640 | 3,544 | 3,459 |
| olkswagen | 3,823 | 3,869 | 3,760 | 3,757 | 3,623 | 3,432 | 3,248 | 3,166 | 3,039 | 2,893 | 2,800 |
| Fiat | 2,961 | 2,981 | 2,948 | 2,909 | 2,805 | 2,639 | 2,504 | 2,187 | 1,998 | 1,954 | 1,777 |
| Nissan | 1,798 | 1,727 | 1,649 | 1,594 | 1,722 | 1,655 | 1,667 | 1,671 | 1,685 | 1,665 | 1,699 |
| Toyota | 2,033 | 2,054 | 1,993 | 1,980 | 1,975 | 1,957 | 1,845 | 1,811 | 1,782 | 1,716 | 1,594 |

Source: ICDP database

[^19]The table below presents the network density broken down by top 10 car brands across the 12 MS in scope:

Table 48 - Aggregate passenger car dealer network density, broken down by car brands across 12 MS in scope (top 10), 2007-2017 ${ }^{92}$

| VM | Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2017 |  |  |  |  |  |  |  |  |  |  |  |
| Renault | 0.021 | 0.022 | 0.022 | 0.022 | 0.021 | 0.020 | 0.020 | 0.018 | 0.018 | 0.016 | 0.016 |
| Dacia |  | 0.009 | 0.012 | 0.012 | 0.012 | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.014 |
| Peugeot | 0.015 | 0.015 | 0.015 | 0.015 | 0.015 | 0.014 | 0.014 | 0.012 | 0.010 | 0.011 | 0.011 |
| Citroen | 0.015 | 0.015 | 0.014 | 0.014 | 0.014 | 0.014 | 0.012 | 0.012 | 0.012 | 0.011 | 0.010 |
| Ford | 0.013 | 0.012 | 0.012 | 0.012 | 0.012 | 0.012 | 0.011 | 0.011 | 0.010 | 0.010 | 0.009 |
| Opel/Vauxhall | 0.010 | 0.010 | 0.010 | 0.010 | 0.009 | 0.009 | 0.009 | 0.008 | 0.009 | 0.009 | 0.008 |
| Volkswagen | 0.010 | 0.010 | 0.009 | 0.009 | 0.009 | 0.008 | 0.008 | 0.008 | 0.007 | 0.007 | 0.007 |
| Fiat | 0.007 | 0.007 | 0.007 | 0.007 | 0.007 | 0.006 | 0.006 | 0.005 | 0.005 | 0.005 | 0.004 |
| Nissan | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 | 0.004 |
| Toyota | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.005 | 0.004 | 0.004 | 0.004 | 0.004 |

Source: EY calculations based on ICDP and Eurostat

### 2.2.2.2 Country level

The data used in this section, is based on legal entities listed under NACE codes as having dealer activities with possible other activities. This is not broken down by vehicle category. The number of legal entities per 1000 inhabitants is discussed hereafter. The number of legal entities engaging in these activities have notably increased in Austria, France, Germany, the Netherlands and Poland in 2017 versus 2007, as a consequence has the dealer network increased. In Belgium, Ireland, Italy and Spain the growth of legal entities at most matched the population growth over the observed period and as such the dealer network remained by and large the same. In Cyprus, Greece and the UK, the dealer network has decreased. The Netherlands and Belgium reported the largest dealer network probably connected to the population density of these countries. Dealer intensity in Poland also increased strongly due to economic expansion and tied increase of the vehicle parc.

Table 49- Vehicle dealer legal entities per 1000 inhabitants as per NACE codes per country, 2008 - $2017^{93}$

| Year Country | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 0,40 | 0,41 | 0,43 | 0,44 | 0,44 | 0,45 | 0,46 | 0,46 | 0,46 | 0,46 |
| Belgium | 0,76 | 0,77 | 0,80 | 0,81 | 0,80 | 0,74 | 0,75 | 0,74 | 0,72 | 0,77 |
| Cyprus | 0,54 | 0,51 | 0,43 | 0,44 | 0,40 | 0,36 | 0,35 | 0,36 | 0,38 | 0,42 |
| France | 0,28 | 0,30 | 0,30 | 0,36 | 0,36 | 0,41 | 0,47 | 0,36 | 0,45 | 0,38 |
| Germany | 0,37 | 0,45 | 0,43 | 0,45 | 0,45 | 0,44 | 0,48 | 0,49 | 0,49 | 0,49 |
| Greece | 0,35 | 0,33 | 0,37 | 0,32 | 0,32 | 0,31 | 0,27 | 0,26 | 0,26 | 0,24 |
| I reland | 0,46 | 0,44 | 0,44 | 0,42 | 0,43 | 0,42 | 0,41 | 0,42 | 0,43 | 0,46 |
| Italy | 0,36 | 0,36 | 0,36 | 0,36 | 0,36 | 0,36 | 0,34 | 0,35 | 0,35 | 0,37 |
| Netherlands | 0,98 | 0,98 | 1,10 | 1,10 | 1,13 | 1,25 | 1,27 | 1,29 | 1,32 | 1,35 |
| Poland | 0,38 | 0,40 | 0,42 | 0,42 | 0,44 | 0,44 | 0,44 | 0,45 | 0,50 | 0,53 |
| Spain | 0,33 | 0,31 | 0,26 | 0,28 | 0,28 | 0,28 | 0,24 | 0,28 | 0,34 | 0,33 |
| UK | 0,37 | 0,34 | 0,33 | 0,33 | 0,33 | 0,32 | 0,31 | 0,31 | 0,31 | 0,31 |

[^20]
### 2.2.3 Market concentration of dealers (country level) ${ }^{94}$

This sub-section analyses the market concentration of dealers in 12 countries in scope during 2007 - 2017 using indicators on the average difference between the top-3 dealers' market shares and the average distance between top three and four dealers' market shares. Furthermore, the evolution of the size of the dealers in terms of number of groups and dealer outlets is discussed. Note that the average total market share of respondents for the whole period in scope and across all categories is approximately $13 \%$, as such the results hereafter report the survey and no major conclusions for the wider market should be drawn. The indicators are based on survey responses and sales per VM. As dealer operations would vary for each country, the analysis only provides a country-level view and no aggregate view for this subsection.
No data is available for the percentage difference in the average market shares of the top three, and their difference with the top fourth dealer for LCV, trucks and buses. Limited data are available for the average unit bus sales per dealer group, average unit bus sales per dealer outlet is only available for Greece.

## Passenger cars

The following table presents the average percentage difference between the top-3 passenger car dealers in terms of their market share (data for Cyprus has been excluded as there is only one legal importer in Cyprus, data for the UK in 2007 is also not available). The analysis revealed that Greece witnessed the highest increase from 2007 - 2017 at $16.8 \%$ in the average percentage difference between its top-3 dealers, while the UK witnessed the largest drop from 2008-2017 at -4.7\%. The gap among the top3 dealers across countries widened during 2013 and 2014 in 7 of the 12 MS in scope: Austria, France, Greece, Italy, Poland, Spain and the UK. ${ }^{95}$

Table 50 - Average percentage difference in market shares between top three passenger car dealers, by country, 2007-2017 ${ }^{96}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 20.9\% | 11.3\% | 16.3\% | 20.4\% | 18.4\% | 21.8\% | 30.3\% | 38.4\% | 36.6\% | 31.7\% | 21.2\% |
| Belgium | 7.8\% | 14.0\% | 10.7\% | 13.5\% | 9.9\% | 13.8\% | 10.2\% | 11.7\% | 12.6\% | 8.1\% | 7.9\% |
| France | 26.5\% | 23.7\% | 20.0\% | 14.9\% | 13.1\% | 12.8\% | 21.0\% | 24.8\% | 22.8\% | 23.6\% | 23.2\% |
| Germany | 17.2\% | 18.3\% | 6.6\% | 2.0\% | 5.3\% | 6.7\% | 20.1\% | 19.7\% | 21.8\% | 19.7\% | 15.0\% |
| Greece | 15.6\% | 25.8\% | 27.2\% | 19.6\% | 22.6\% | 18.2\% | 26.0\% | 27.3\% | 29.7\% | 29.5\% | 32.4\% |
| I reland | 17.1\% | 17.3\% | 24.5\% | 17.0\% | 16.0\% | 24.8\% | 20.1\% | 19.2\% | 20.0\% | 19.3\% | 23.6\% |
| Italy | 11.0\% | 11.7\% | 12.5\% | 10.8\% | 12.0\% | 10.4\% | 13.6\% | 16.9\% | 4.9\% | 7.4\% | 14.5\% |
| Netherlands | 4.4\% | 7.8\% | 4.5\% | 4.4\% | 6.7\% | 7.8\% | 11.4\% | 9.3\% | 13.4\% | 16.3\% | 11.4\% |
| Poland | 19.2\% | 17.1\% | 8.7\% | 5.9\% | 4.1\% | 16.5\% | 29.3\% | 34.9\% | 16.7\% | 18.7\% | 24.6\% |
| Spain | 23.1\% | 20.8\% | 26.2\% | 28.3\% | 25.4\% | 30.2\% | 27.6\% | 26.0\% | 25.0\% | 31.9\% | 18.6\% |
| UK | N/A | 23.2\% | 23.1\% | 20.7\% | 19.2\% | 19.7\% | 24.2\% | 22.1\% | 25.1\% | 25.7\% | 18.5\% |

Source: EY calculations based on survey results ${ }^{97}$
The table below provides an overview of the difference in market shares for the top three passenger car dealers and the top fourth dealer. The analysis revealed that Ireland, Germany and Austria witnessed the highest increase in average percentage difference in market shares at $18.7 \%, 18.5 \%$ and $16.9 \%$ respectively during 2007 - 2017. However, Germany's jump indicates the top four dealers held a similar level of market share in 2007, but the gap in market share between the top fourth and the top three dealers peaked in 2010 at 25.9\%. The gap narrowed down over the years in scope for just three countries - Belgium, Italy and France by $10.2 \%, 5.2 \%$ and $2.9 \%$ respectively.

These findings are however based on a representativeness of the market share of responses well below the $30 \%$ threshold set out in the methodology statement of this study. These survey responses are provided as factual findings but should not be extrapolated to represent the wider market.

Table 51 - Average percentage difference in market shares between top three passenger car dealers and the top fourth dealer, by country, 2007-201798

| Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | $5.3 \%$ | $28.6 \%$ | $13.3 \%$ | $2.2 \%$ | $9.1 \%$ | $6.5 \%$ | $4.6 \%$ | $11.1 \%$ | $11.4 \%$ | $1.6 \%$ | $22.2 \%$ |
| Austria | $5.3 \%$ |  |  |  |  |  |  |  |  |  |  |
| Belgium | $16.4 \%$ | $16.9 \%$ | $20.1 \%$ | $22.8 \%$ | $10.0 \%$ | $5.7 \%$ | $7.0 \%$ | $11.4 \%$ | $6.6 \%$ | $13.5 \%$ | $6.2 \%$ |
| France | $9.6 \%$ | $13.1 \%$ | $19.7 \%$ | $12.8 \%$ | $13.3 \%$ | $11.8 \%$ | $18.2 \%$ | $14.5 \%$ | $14.4 \%$ | $10.9 \%$ | $6.7 \%$ |
| Germany | $0.0 \%$ | $5.4 \%$ | $24.5 \%$ | $25.9 \%$ | $16.7 \%$ | $22.6 \%$ | $11.1 \%$ | $11.9 \%$ | $9.0 \%$ | $12.2 \%$ | $18.5 \%$ |
| Greece | $33.0 \%$ | $41.8 \%$ | $58.6 \%$ | $8.3 \%$ | $26.2 \%$ | $27.1 \%$ | $50.9 \%$ | $44.9 \%$ | $39.2 \%$ | $31.1 \%$ | $40.9 \%$ |
| Ireland | $3.3 \%$ | $4.7 \%$ | $19.2 \%$ | $16.9 \%$ | $14.4 \%$ | $9.9 \%$ | $20.3 \%$ | $15.9 \%$ | $18.7 \%$ | $22.4 \%$ | $22.1 \%$ |
| Italy | $13.3 \%$ | $8.0 \%$ | $7.4 \%$ | $9.7 \%$ | $7.5 \%$ | $7.9 \%$ | $11.0 \%$ | $4.6 \%$ | $16.0 \%$ | $17.7 \%$ | $8.1 \%$ |
| Netherlands | $3.7 \%$ | $2.4 \%$ | $7.4 \%$ | $15.4 \%$ | $9.8 \%$ | $16.0 \%$ | $12.4 \%$ | $19.4 \%$ | $12.6 \%$ | $6.4 \%$ | $9.1 \%$ |
| Poland | $1.9 \%$ | $8.7 \%$ | $5.4 \%$ | $0.7 \%$ | $5.7 \%$ | $1.6 \%$ | $1.5 \%$ | $7.7 \%$ | $23.6 \%$ | $17.5 \%$ | $12.8 \%$ |
| Spain | $0.4 \%$ | $11.3 \%$ | $6.1 \%$ | $1.2 \%$ | $11.1 \%$ | $7.9 \%$ | $9.5 \%$ | $3.5 \%$ | $5.4 \%$ | $15.0 \%$ | $10.4 \%$ |
| UK | N/A | $20.9 \%$ | $25.3 \%$ | $24.3 \%$ | $27.7 \%$ | $27.2 \%$ | $17.3 \%$ | $23.8 \%$ | $14.5 \%$ | $19.7 \%$ | $14.4 \%$ |

Source: EY calculations based on survey results ${ }^{99}$
The evolution of dealer size in terms of average passenger car unit sales per dealer group (legal entity dealer) during 2007-2017 (has been more prominent for the UK and Italy than other countries. Average unit sales at dealer groups grew by 962 and 719 units over the years in the UK and Italy respectively. The average sales per dealer group declined until 2012 for 8 countries - Austria, Belgium, France, Greece, Ireland, Italy, the Netherlands and Spain; possibly explaining the effects of the Eurozone crisis, decline in car sales, and decrease in number of dealer outlets in these countries. Average sales continued to decline in two countries- Greece and Ireland with a drop of 353 and 153 units respectively between 2007-2017. It is important to note the average car unit sales may be influenced by the mix of survey respondents that has fluctuated over the timeframe in scope, the responses are more representative of the market during 2013 - 2017 than in the earlier years and as a results any intertemporal comparison is of low value ${ }^{100}$

The table below provides a country level view of average passenger car unit sales per dealer group.

Table 52 - Average passenger car unit sales per dealer group, by country, 2007 - $2017^{101}$

| Year <br> Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 218 | 201 | 188 | 201 | 203 | 182 | 336 | 333 | 319 | 346 | 375 |
| Belgium | 628 | 636 | 575 | 674 | 731 | 669 | 971 | 991 | 1044 | 1053 | 1127 |
| France | 510 | 454 | 446 | 387 | 406 | 410 | 917 | 960 | 933 | 976 | 1044 |
| Germany | 1495 | 1550 | 1411 | 1419 | 1462 | 1530 | 1701 | 1692 | 1517 | 1493 | 1565 |
| Greece | 638 | 617 | 462 | 276 | 247 | 176 | 174 | 227 | 277 | 289 | 285 |
| Ireland | 393 | 307 | 103 | 158 | 175 | 163 | 150 | 156 | 212 | 252 | 240 |
| Italy | 839 | 901 | 761 | 683 | 578 | 507 | 688 | 814 | 1152 | 1399 | 1558 |
| Netherlands | 577 | 563 | 476 | 560 | 590 | 561 | 662 | 667 | 768 | 661 | 898 |
| Poland | 194 | 207 | 232 | 259 | 243 | 248 | 254 | 290 | 306 | 388 | 522 |
| Spain | 469 | 350 | 271 | 281 | 250 | 261 | 583 | 678 | 768 | 904 | 990 |
| UK | 1917 | 1555 | 1845 | 1901 | 1946 | 2150 | 2491 | 3194 | 2837 | 3074 | 2879 |

[^21]The analysis of average car unit sales per dealer outlet during 2007-2017 (no data is available for Cyprus as there is no breakdown available per dealer outlet) revealed a similar pattern compared to average unit sales per dealer group. Average sales per dealer outlet declined just for Greece and Ireland over the years. However, they fell in seven countries until 2012: Austria, France, Greece, Ireland, Italy, the Netherlands and Spain. Sales per outlet recovered in Spain after 2013, recording the second largest increase during 2007-2017 after the UK, with an increase by 327 and 471 units respectively. It is important to note the average car unit sales may be influenced by the mix of survey respondents that has fluctuated over the timeframe in scope, the responses are more representative of the market during 2015-2017 than in the earlier years and as a results any intertemporal comparison is of low value. ${ }^{102}$
The following table provides a view of average passenger car unit sales per dealer outlet. Unit sales were remarkably high for Italy and the UK. Also, France has, despite its high density of outlets, a high number of unit sales.

Table 53 - Average unit passenger car sales per dealer outlet, by country, 2007-2017103

| Year <br> Countrv | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 149 | 136 | 127 | 134 | 138 | 124 | 252 | 249 | 245 | 266 | 285 |
| Belgium | 344 | 352 | 307 | 353 | 369 | 380 | 424 | 422 | 452 | 451 | 472 |
| France | 322 | 285 | 274 | 243 | 251 | 251 | 475 | 529 | 528 | 556 | 590 |
| Germany | 382 | 389 | 363 | 366 | 391 | 388 | 415 | 425 | 401 | 457 | 501 |
| Greece | 309 | 313 | 236 | 157 | 141 | 95 | 113 | 158 | 192 | 209 | 209 |
| Ireland | 368 | 286 | 95 | 145 | 161 | 147 | 135 | 180 | 187 | 220 | 209 |
| Italy | 828 | 599 | 529 | 458 | 387 | 342 | 482 | 550 | 762 | 872 | 954 |
| Netherlands | 266 | 245 | 210 | 234 | 243 | 251 | 260 | 292 | 337 | 283 | 331 |
| Poland | 157 | 170 | 186 | 194 | 182 | 177 | 206 | 235 | 246 | 300 | 382 |
| Spain | 194 | 101 | 90 | 102 | 95 | 117 | 334 | 381 | 430 | 501 | 520 |
| UK | 503 | 527 | 508 | 554 | 567 | 612 | 1074 | 1163 | 1097 | 1122 | 974 |

Source: EY calculations based on survey results

## Light commercial vehicles

The analysis of the evolution of dealer size in terms of average LCV unit sales per dealer group during 2007-2017 (no data is available for Cyprus as there is no breakdown available per dealer group) revealed that average unit sales witnessed the largest increase at dealer groups in the Netherlands, followed by Italy with 421 and 217 units respectively. The average sales per dealer group declined for six countries during 2007 - 2017, Austria, France, Germany, Greece, Ireland, and the UK. It is important to note the average unit car sales may be influenced by the mix of survey respondents that has fluctuated over the timeframe in scope, the responses are more representative of the market during 2015-2017 than in the earlier years. ${ }^{104}$

The table below provides a country level view of average unit LCV sales per dealer group. To note are the relatively high units sales for the UK and the strong increase in the Netherlands which however can be attributed to the poor temporal availability of data in the survey responses.

Table 54 - Average unit LCV sales per dealer group, by country, 2007-2017105

| Year <br> Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 102 | 103 | 82 | 90 | 88 | 78 | 90 | 91 | 89 | 90 | 101 |
| Belgium | 345 | 357 | 271 | 293 | 344 | 340 | 298 | 333 | 295 | 291 | 358 |
| France | 341 | 302 | 223 | 251 | 261 | 238 | 225 | 218 | 215 | 200 | 201 |
| Germany | 535 | 545 | 431 | 481 | 542 | 553 | 588 | 624 | 344 | 322 | 335 |
| Greece | 83 | 82 | 52 | 45 | 24 | 12 | 19 | 29 | 38 | 39 | 36 |
| I reland | 119 | 93 | 31 | 32 | 30 | 27 | 27 | 55 | 68 | 73 | 67 |
| Italy | - | 159 | 90 | 97 | 96 | 91 | 79 | 93 | 160 | 247 | 217 |
| Netherlands | 28 | 453 | 297 | 329 | 365 | 329 | 394 | 384 | 355 | 424 | 449 |
| Poland | 200 | 207 | 153 | 166 | 156 | 181 | 190 | 217 | 206 | 227 | 240 |
| Spain | 14 | 8 | 6 | 5 | 6 | 53 | 51 | 74 | 117 | 127 | 144 |
| UK | 1.242 | 1.201 | 861 | 1.000 | 961 | 1.027 | 1.052 | 1.127 | 770 | 817 | 864 |

Source: EY calculations based on survey results
The analysis of average unit LCV sales per dealer outlet during 2007-2017 (no data is available for Cyprus as there is no breakdown available per dealer outlet, data for Spain is not available for 2007-2011) revealed that average sales per outlet witnessed the highest growth in Italy and the Netherlands at 128 and 102 units respectively over the years. Sales declined in seven countries over the years: Belgium, France, Germany, Greece, Ireland, Poland and the UK. It is important to note the average vehicle unit sales may be influenced by the mix of survey respondents that has fluctuated over the timeframe in scope, the responses are more representative of the market during 2015 - 2017 than in the earlier years. ${ }^{106}$

The following table provides a view of average unit LCV sales per dealer outlet:
Table 55 - Average unit LCV sales per dealer outlet, by country, 2007-2017107

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 58 | 59 | 47 | 51 | 51 | 45 | 52 | 54 | 65 | 66 | 74 |
| Belgium | 209 | 210 | 160 | 172 | 167 | 156 | 137 | 127 | 126 | 127 | 160 |
| France | 282 | 270 | 200 | 223 | 234 | 207 | 198 | 194 | 178 | 167 | 164 |
| Germany | 183 | 186 | 165 | 186 | 213 | 204 | 214 | 221 | 138 | 137 | 142 |
| Greece | 48 | 49 | 32 | 30 | 17 | 9 | 14 | 24 | 31 | 32 | 30 |
| I reland | 114 | 89 | 30 | 31 | 29 | 26 | 26 | 54 | 66 | 71 | 65 |
| Italy | - | 51 | 39 | 41 | 39 | 34 | 30 | 36 | 91 | 140 | 128 |
| Netherlands | 13 | 91 | 63 | 64 | 78 | 73 | 76 | 77 | 86 | 106 | 114 |
| Poland | 160 | 168 | 119 | 111 | 100 | 105 | 108 | 114 | 131 | 141 | 148 |
| Spain |  |  |  |  |  | 50 | 25 | 35 | 70 | 75 | 80 |
| UK | 369 | 352 | 259 | 272 | 246 | 318 | 412 | 454 | 325 | 342 | 358 |

Source: EY calculations based on survey results

## Trucks

The analysis of the evolution of dealer size in terms of average truck unit sales per dealer group during 2007-2017 (no data is available for Greece and Cyprus as there is no breakdown available per dealer group on Cyprus, data for Spain is not available for years 2007-2011, Italy and the Netherlands for 2007, and Germany for 20072008) revealed that average unit sales recorded the largest increase at dealer groups in Poland, followed by the UK with 259 and 234 units respectively. The average sales per dealer group declined for four countries during 2007-2017: Austria, Belgium, France, and Ireland. It is important to note that the average unit sales may be influenced by the mix of survey respondents that has fluctuated over the timeframe in scope. Data on Germany is more representative than the data on other countries. ${ }^{108}$

The table below provides a country level view of average unit truck sales per dealer group (data for Cyprus and Greece is not available, data for Spain is not available for years 2007 - 2011, Italy and the Netherlands for 2007, and Germany for 2007-2008):

Table 56 - Average truck unit sales per dealer group, by country, 2007-2017 ${ }^{109}$

| Year <br> Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 200 | 251 | 125 | 141 | 141 | 149 | 155 | 144 | 136 | 149 | 159 |
| Belgium | 160 | 162 | 88 | 68 | 78 | 87 | 89 | 69 | 79 | 123 | 119 |
| France | 149 | 149 | 84 | 81 | 109 | 110 | 118 | 90 | 94 | 107 | 110 |
| Germany |  |  | 280 | 346 | 400 | 373 | 390 | 378 | 348 | 314 | 305 |
| I reland | 116 | 87 | 35 | 32 | 8 | 21 | 41 | 52 | 48 | 61 | 47 |
| Italy |  | 101 | 61 | 55 | 73 | 62 | 51 | 64 | 81 | 134 | 146 |
| Netherlands |  | 148 | 113 | 104 | 122 | 157 | 227 | 176 | 223 | 241 | 222 |
| Poland | 336 | 319 | 134 | 174 | 202 | 247 | 310 | 322 | 360 | 435 | 595 |
| Spain |  |  |  |  |  | 69 | 73 | 100 | 129 | 137 | 131 |
| UK | 310 | 344 | 221 | 270 | 331 | 356 | 503 | 380 | 458 | 485 | 543 |

Source: EY calculations based on survey results
The analysis of average truck unit sales per dealer outlet during 2007-2017 (no data is available for Cyprus as there is no breakdown available per dealer outlet) revealed the average sales fell drastically in Spain by 725 units which can be attributed to the severe impact of the Eurozone crisis and limited accessibility to credit•xxxiv Average sales further declined in six other countries over the years: Belgium, France, Germany, Greece, Ireland and Italy. They also declined by about 46 units in both Poland and the UK between 2007-2017. ${ }^{110}$

The following table provides a view of average truck unit sales per dealer outlet:
Table 57 - Average truck unit sales per dealer outlet, by country, 2007-2017111

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 92 | 116 | 57 | 65 | 65 | 69 | 72 | 78 | 79 | 87 | 93 |
| Belgium | 120 | 127 | 76 | 63 | 82 | 79 | 76 | 71 | 72 | 95 | 94 |
| France | 124 | 135 | 76 | 72 | 99 | 98 | 107 | 83 | 86 | 97 | 97 |
| Germany | 678 | 652 | 199 | 303 | 416 | 374 | 366 | 308 | 341 | 340 | 304 |
| Greece | 230 | 297 | 165 | 138 | 43 | 12 | 16 | 23 | 16 | 32 | 14 |
| I reland | 149 | 119 | 35 | 27 | 18 | 36 | 48 | 61 | 57 | 84 | 73 |
| Italy | 282 | 168 | 78 | 81 | 91 | 61 | 56 | 62 | 77 | 124 | 127 |
| Netherlands | 83 | 76 | 47 | 42 | 53 | 55 | 81 | 66 | 87 | 95 | 96 |
| Poland | 252 | 205 | 90 | 119 | 135 | 160 | 182 | 190 | 212 | 230 | 297 |
| Spain | 1035 | 794 | 275 | 327 | 401 | 197 | 166 | 213 | 279 | 306 | 310 |
| UK | 142 | 162 | 90 | 107 | 143 | 144 | 179 | 134 | 169 | 174 | 189 |

Source: EY calculations based on survey results

[^22]
### 2.2.4 Overview of dealer remuneration for vehicles (country level) ${ }^{112}$

This subsection captures the elements of dealer remuneration for vehicle sales according to VMs and their correlation with sales targets for dealers, across 12 MS in scope during 2007-2017. The dealer remuneration comprises the following elements: factory-todealer incentives, fixed and increasing volume-based bonuses, vehicle financing share, special bonuses for specific vehicle model/ engine type. The analysis does not demonstrate an aggregated view or intertemporal comparison of dealer remuneration for the 12 MS in scope given that the limited information is sourced from 10 selfidentifying VM respondents for passenger cars and eight VM respondents for LCVs in our survey. However, a country level overview with additional inputs from the respondents has been provided as factual findings. Note that the average total market share of respondents for the whole period (2007, 2012 and 2017) and across all countries is approximately $24 \%$, as such the results hereafter report the survey and no major conclusions for the wider market should be drawn.

$$
\text { Passenger cars }{ }^{113}
$$

At country level, the analysis, based on survey responses from VMs, of dealer remuneration for passenger car sales revealed about $20 \%$ - $30 \%$ of the VMs offered factory-to-dealer incentives and a vehicle financing share across the 12 MS in scope. According to survey responses, some of the factory-to-dealer incentives may be a percentage on the invoice value. About 30\% - 40\% of VMs offered increasing volumebased bonuses, such as the stair-step programme ${ }^{114}$, in all countries except Cyprus and Greece, where $20 \%$ of them offered bonuses.

The table below shows the share of different elements of remuneration for passenger car dealers as per VM respondents:

Table 58 - Share (\%) of elements of remuneration for passenger car dealers, 2007-2017115

| Remuneration | Ye ar | AT | BE | CY | FR | DE | GR | IE | IT | PL | ES | NL | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Factory-to-dealer incentive | $\begin{aligned} & 20 \\ & 07 \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |
|  | $\begin{aligned} & 20 \\ & 12 \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ |
|  | $\begin{aligned} & 12 \\ & 20 \\ & 17 \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |
| Fixed volume-based bonus | $\begin{aligned} & 20 \\ & 07 \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |  |  | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |  | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  |
|  | $\begin{aligned} & 20 \\ & 12 \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |  |  | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |  | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  |
|  | $\begin{aligned} & 20 \\ & 17 \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  |  | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |  | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  | 10 $\%$ |  |
| I ncreasing volume-based bonus (e.g. stair-step programme) | $\begin{aligned} & 20 \\ & 07 \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ |
|  | $\begin{aligned} & 20 \\ & 12 \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ |
|  | $\begin{aligned} & 20 \\ & 17 \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 40 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |
| Special bonus for specific vehicle model/ engine type | $\begin{aligned} & 20 \\ & 07 \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & 20 \\ & \% \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 10 \\ & \% \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |
|  | $\begin{aligned} & 20 \\ & 12 \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |  |  |  |  |  |  | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |  | $\begin{aligned} & 10 \\ & \% \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ | $\begin{aligned} & 10 \\ & \% \end{aligned}$ |
|  | $\begin{aligned} & 20 \\ & 17 \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | 40 $\%$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ |
| Vehicle financing share | $\begin{aligned} & 20 \\ & 07 \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | 30 $\%$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | 20 $\%$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ |
|  | $\begin{aligned} & 20 \\ & 12 \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | 20 $\%$ | 30 $\%$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ | 20 $\%$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ |
|  | $\begin{aligned} & 20 \\ & 17 \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | $\begin{aligned} & 20 \\ & \% \end{aligned}$ | 20 | 30 $\%$ | $\begin{aligned} & 30 \\ & \% \end{aligned}$ | 30 $\%$ | 20 $\%$ | $\begin{aligned} & 30 \\ & \% \\ & \hline \end{aligned}$ |

Source: EY calculations based on survey results

Survey responses also indicated that the bonuses may be based on the level of sales target achieved quarterly or monthly or annually, or could be separate volume bonuses for fleet and personal car sales. Bonuses may further be dependent on improving customer satisfaction and market share. Approximately $20 \%$ of VMs offered fixed volume-based bonuses in Austria, France, Greece, Ireland and Italy, while 10\% of VMs offered these bonuses in Poland and the Netherlands. Such bonuses could be fixed on target compliance. About $10 \%$ of VMs in Austria, Spain and the UK offered special bonuses for specific vehicle model/ engine type, which reached $30 \%$ in 2017, including bonuses on EVs, stock clearances, aged stock or special trim levels. VMs responded that other forms of remuneration, such as quality annual bonuses. According to the survey results also other forms of remuneration were offered by VMs, such as annual quality bonuses as a proportion to the sales turnover.
An analysis of the sales targets for dealers revealed, according to survey responses ${ }^{116}$ of the VMs, that the majority of the targets were set by the VMs themselves and volume based. In most of the countries, the VMs responded that, with an acceptation of the United Kingdom, the majority of the targets were aggregated. The timeframe on which those targets were set (monthly, quarterly, annual or other) varied strongly between the countries and over the years. The majority of those targets were, according to the VMs, adjustable during the year in most of the countries in scope, with an exception of Austria and the Netherland where the majority of the targets were reported to be unchangeable. The methodology and the main parameters used for the calculation of these targets were in most cases a combination of several options such as past market performance, forecast market performance etc. Not meeting the sales targets had, in most cases, an impact on the dealer bonusses.

## Light commercial vehicles

Approximately $13 \%$ of VMs in LCV offered each form of dealer remuneration in Austria, France and Italy: factory-to-dealer incentives, increasing and fixed volume-based bonuses, special bonuses for specific vehicle model/ engine type (not in France) and vehicle financing $13 \%$ of VMs offered fixed volume based bonuses in Greece and the Netherlands, while the share of VMs was higher in Ireland at $25 \%$. About $13 \%$ of VMs offered factory-to-dealer incentives in Belgium and the Netherlands as well. It is important to note that the share of respondents was relatively more representative of LCV markets in Italy and Greece than other MS.

The table below shows the share of different elements of remuneration for LCV dealers as per VM respondents:

Table 59 - Share (\%) of elements of remuneration for LCV dealers, 2007-2017 ${ }^{117}$

| Remuneration | Year | AT | BE | CY | FR | DE | GR | IE | IT | PL | ES | NL | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Factory-todealer incentive | 2007 | 13\% | 13\% |  |  |  |  |  | 13\% |  |  | 13\% |  |
|  | 2012 | 13\% | 13\% |  | 13\% |  |  |  | 13\% |  |  | 13\% |  |
|  | 2017 | 13\% | 13\% |  | 13\% |  |  |  | 13\% |  |  | 13\% |  |
| Fixed volumebased bonus | 2007 | 13\% |  |  | 13\% |  | 13\% | 25\% | 13\% |  |  | 13\% |  |
|  | 2012 | 13\% |  |  | 13\% |  | 13\% | 25\% | 13\% |  |  | 13\% |  |
|  | 2017 | 13\% |  |  | 13\% |  | 13\% | 25\% | 13\% |  |  | 13\% |  |
| I ncreasing volume-based bonus (e.g. stair-step programme) | 2007 | 13\% | 13\% |  | 13\% |  |  |  | 13\% | 13\% |  |  |  |
|  | 2012 | 13\% | 13\% |  | 13\% |  |  |  | 13\% | 13\% |  |  |  |
|  | 2017 | 13\% | 13\% |  | 13\% |  |  |  | 13\% | 13\% |  |  |  |
| Special bonus for specific vehicle model/ engine type | 2007 | 13\% |  |  |  |  |  |  | 13\% |  |  | 13\% |  |
|  | 2012 | 13\% |  |  |  |  |  |  | 13\% |  |  | 13\% |  |
|  | 2017 | 13\% |  |  |  |  |  |  | 13\% |  |  | 13\% |  |
| Vehicle financing share | 2007 | 13\% |  |  | 13\% |  |  |  | 13\% |  |  |  |  |
|  | 2012 | 13\% |  |  | 13\% |  |  |  | 13\% |  |  |  |  |
|  | 2017 | 13\% |  |  | 13\% |  |  |  | 13\% |  |  |  |  |

Source: EY calculations based on survey results

### 2.3 Financial performance

This section provides an overview of the financial health of VMs by analysing two specific aspects impacting both the current and future financial performance:

- The operating margin;
- The R\&D expenditure.

The financial performance of VMs has also been compared with the following industries:

- Computers and peripheral equipment;
- Communication equipment;
- Consumer electronics.

These other industries were selected as they present similar aspects to the automotive one, they trade consumer products, have a large network of dealers and/or provide repair services and spare parts distribution in the aftersales market.
The data for calculating those indicators was collected from the annual reports of a number of manufacturers across all categories. However, since the VMs report on group level without providing granularity of the data at country level, the data relating to financial performance presented in the following subsections/paragraphs refers to the entire geographical scope of activities of the respective companies. A country-level analysis is not available.
In the following paragraphs we present manufacturers' financial performance based on four indicators: (i) the profitability of VMs based on operating margin, (ii) the profitability of comparable industries based on operating margin, (iii) R\&D expenditure as percentage of revenue for VMs and (iv) R\&D expenditure as percentage of revenue in the comparable industries.

### 2.3.1 Operating margin of vehicle manufacturers

In order to analyse the profitability of vehicle manufacturers, the operating margins of several vehicle manufacturers are presented hereafter. Data was obtained by analysing annual accounts. Company names cited in this section reflect the name of the entity published in the annual account.

### 2.3.1.1 Passenger cars and light commercial vehicles

Most passenger car VMs are also manufacturers of LCVs, and they rarely provide their financial data broken down by vehicle category. Therefore, in this section, passenger cars and LCV are treated together.
Annual reports from 9 VMs (representing more than $90 \%$ of the market share in passenger car and LCV sales by volume) active in the passenger car and LCV category were analysed to provide insights into their operating margins.

The average operating margin of the VMs analysed increased from 4.9\% to 6.9\% between 2007 and 2017. The increase was, however, not a constant trend. Besides some small decreases in 2012, 2013, 2015 and 2016, a significant drop due to the financial crisis was observed, resulting in operating margin levels of $1.5 \%$ in 2008.
The change in operating margin throughout the years is very different for each VM. BMW Group and Daimler Group (Mercedes-Benz Cars and Vans) experienced a quick recovery after the financial crisis, reporting operating margins of $8.4 \%$ and $8.3 \%$ respectively in 2010, and of $8.9 \%$ and $9.6 \%$ respectively in 2017. The resilience of BMW Group and Daimler Group to the downturn in European economies could potentially be explained by the firms' focus on luxury vehicles, which were more impervious to the economic crisis of 2008.

Table 60-Operating margin per VM per year at group level, 2007-2017

| VM Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| BMW Group | $7.5 \%$ | $1.7 \%$ | $0.6 \%$ | $8.4 \%$ | $11.7 \%$ | $10.8 \%$ | $9.4 \%$ | $9.6 \%$ | $9.2 \%$ | $8.9 \%$ | $8.9 \%$ |
| Daimler <br> Group <br> (Mercedes- <br> Benz Cars <br> and Vans) | $8.6 \%$ | $5.1 \%$ | $-1.0 \%$ | $8.3 \%$ | $9.1 \%$ | $7.0 \%$ | $6.3 \%$ | $7.8 \%$ | $9.2 \%$ | $9.1 \%$ | $9.6 \%$ |
| Fiat Chrysler <br> Automobiles | $5.4 \%$ | $5.0 \%$ | $0.7 \%$ | $3.6 \%$ | $5.6 \%$ | $4.4 \%$ | $3.4 \%$ | $3.4 \%$ | $2.4 \%$ | $4.6 \%$ | $6.9 \%$ |
| Ford Motor <br> Group | $2.2 \%$ | $-3.6 \%$ | $3.4 \%$ | $11.3 \%$ | $8.9 \%$ | $7.5 \%$ | $6.2 \%$ | $4.8 \%$ | $6.8 \%$ | $6.2 \%$ | $5.9 \%$ |
| Hyundai <br> Motor <br> Company | $4.1 \%$ | $3.9 \%$ | $6.1 \%$ | $8.1 \%$ | $10.3 \%$ | $10.0 \%$ | $9.5 \%$ | $8.5 \%$ | $6.9 \%$ | $5.5 \%$ | $4.7 \%$ |
| PSA Group | $2.0 \%$ | $-.5 \%$ | $-3.3 \%$ | $1.5 \%$ | $-0.2 \%$ | $-3.9 \%$ | $-2.9 \%$ | $0.2 \%$ | $5.0 \%$ | - | - |
| Renault <br> Group | $3.3 \%$ | $0.6 \%$ | $-1.2 \%$ | $2.8 \%$ | $2.6 \%$ | $1.8 \%$ | $3.0 \%$ | $3.9 \%$ | $5.2 \%$ | $6.4 \%$ | $6.8 \%$ |
| Toyota Group | $8.6 \%$ | $-2.2 \%$ | $0.8 \%$ | $2.5 \%$ | $1.9 \%$ | $6.0 \%$ | $8.9 \%$ | $10.1 \%$ | $10.0 \%$ | $7.2 \%$ | $8.2 \%$ |
| Volkswagen <br> AG | $2.6 \%$ | $3.7 \%$ | $0.9 \%$ | $2.7 \%$ | $4.0 \%$ | $3.5 \%$ | $2.9 \%$ | $2.5 \%$ | $2.0 \%$ | $1.8 \%$ | $4.1 \%$ |
| Average | $\mathbf{4 . 9 \%}$ | $\mathbf{1 . 5 \%}$ | $\mathbf{0 . 8 \%}$ | $\mathbf{5 . 5 \%}$ | $\mathbf{6 . 0 \%}$ | $\mathbf{5 . 2 \%}$ | $\mathbf{5 . 2 \%}$ | $\mathbf{5 . 6 \%}$ | $\mathbf{6 . 3 \%}$ | $\mathbf{6 . 2 \%}$ | $\mathbf{6 . 9 \%}$ |

Source: Annual reports of the selected vehicle manufacturers
Ford Motor Group also experienced a quick recovery of the financial crisis, with an operating margin of $11.3 \%$ in 2010. Hyundai Motor Company seems to have been little impacted by the financial crisis with an operating margin in 2008 only 0.2 percentage points lower than the operating margin of $4.1 \%$ in 2007. Hyundai Motor Company further increased its operating margin to $10.3 \%$ in 2011. However, neither Ford Motor Group nor Hyundai Motor company were able to stabilise these peak-operating margins and experienced a steady decrease from 2015 onwards to an operating margin in 2017 of $5.9 \%$ for Ford Motor Group and one of $4.7 \%$ for Hyundai Motor Company.

Renault Group, Volkswagen Group and Fiat Chrysler Automobiles, experienced a slow improvement of operating margins throughout the years in scope. Remarkably, Volkswagen Group and Fiat Chrysler Automobiles didn't suffer directly from the financial crisis in 2008, but only experienced a serious drop in 2009. The three companies improved their operating margin to $6.8 \%, 4.1 \%$ and $6.9 \%$ respectively in 2017.
PSA Group only significantly improved its operating margin from 2015 onwards reporting $6.1 \%$ in 2017. After a limited recovery in 2010, the company underwent a second downturn between 2011 and 2013.
Toyota Group endured a volatile period with margins varying between - $2.2 \%$ and $10.1 \%$, and reported a slightly lower operating margin in 2017, 8.2\% compared to 8.6\% in 2007.

Generally speaking, a slightly increasing profitability for passenger car and LCV manufacturers over the years is observed for the manufacturers considered.

### 2.3.1.2 Trucks and buses

Similar to passenger car manufacturers and LCV manufacturers, several truck manufacturers also produce buses, without reporting financial data about profitability relating to each vehicle category. Therefore, in this section, trucks and buses are threated together.
We collected yearly operating margins from 4 trucks118 and bus VMs, although it should be noted that data concerning CNH Industrial is missing for the period 2007-2012, since the company was founded in 2012 after an integration of multiple brands/entities and the first available annual report relates to 2013.

Table 61- Operating margin per VM per year at group level, 2007-2017119

| VM Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNH Industrial | - | - | - | - | - | - | $7.2 \%$ | $6.6 \%$ | $5.4 \%$ | $2.5 \%$ | $4.6 \%$ |
| Daimler Group <br> (Daimler Trucks <br> and Buses) | $9.6 \%$ | $0.8 \%$ | $-3.6 \%$ | $5.4 \%$ | $6.1 \%$ | $4.2 \%$ | $4.9 \%$ | $5.7 \%$ | $6.7 \%$ | $5.9 \%$ | $6.5 \%$ |
| Paccar | 15.8 <br> $\%$ | 11.8 <br> $\%$ | $6.0 \%$ | $8.4 \%$ | 10.2 <br> $\%$ | 10.3 <br> $\%$ | 10.7 <br> $\%$ | 11.2 <br> $\%$ | 12.8 <br> $\%$ | $7.3 \%$ | 11.8 <br> $\%$ |
| Volvo Group | $7.8 \%$ | $5.2 \%$ | $-7.8 \%$ | $6.8 \%$ | $8.7 \%$ | $5.8 \%$ | $2.6 \%$ | $2.1 \%$ | $7.5 \%$ | $6.9 \%$ | $9.1 \%$ |
| Average | $\mathbf{1 1 . 1}$ <br> $\%$ | $\mathbf{6 . 0 \%}$ | $\mathbf{1 . 8 \%}$ | $\mathbf{6 . 9 \%}$ | $\mathbf{8 . 3 \%}$ | $\mathbf{6 . 8 \%}$ | $\mathbf{6 . 4 \%}$ | $\mathbf{6 . 4 \%}$ | $\mathbf{8 . 1 \%}$ | $\mathbf{5 . 2 \%}$ | $\mathbf{7 . 7 \%}$ |

Source: Annual reports of the selected vehicle manufacturers
On average the selected VMs of trucks and buses experienced a decrease in operating margin going down from 11.1\% in 2007 to $7.7 \%$ in 2017.
Paccar reported the highest operating margins throughout the years in scope, varying between $6 \%$ and $15.8 \%$. While Daimler Group Trucks and Buses and Paccar continued to grow after 2012, Volvo Group experienced a limited decline in 2013 and 2014 before it recovered to a level of $9.1 \%$ in 2017.
CNH Industrial's operating margin decreased from 2014 till 2016, but seems to retake in 2017, with a reported value of $4.6 \%$.

### 2.3.1.3 Profitability in comparable industries

To provide a better insight in the profitability in the automotive industry a comparison has been made with the three aforementioned comparable industries.

A consultation of the annual reports of manufacturers active in the different comparable industries reveals no consistent picture with regards with regards to the level of average operating margin, no to the increase/decrease of the operating margin over time between the different industries.

The operating margin for the manufacturers of computers and peripheral equipment, consumer electronics and of trucks and buses reported a decline in their operating margin from 2007 to 2017. However, the level of operating margin for manufacturers of consumer electronics was lower compared to the beforementioned industries.
Both the average operating margin of the manufacturers of communication equipment and of passenger cars and LCVs saw an increase in operating margin throughout the years, although the operating margin of the communication equipment manufacturers is higher than the VMs of passenger cars and LCVs.

Based on the findings from the annual reports, no clear conclusions can be drawn from the comparison between the different industries.

Table 62- Average operating margin per industry per year (based on selected companies), 2007-2017 ${ }^{120}$

| Average operating margin from: | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | ---: | ---: | ---: |
| Manufacturers of computers and peripheral equipment | $11.9 \%$ | $7.3 \%$ | $8.5 \%$ |
| Manufacturers of communication equipment | $13.9 \%$ | $16.5 \%$ | $16.1 \%$ |
| Manufacturers of consumer electronics | $6.0 \%$ | $3.6 \%$ | $5.1 \%$ |
| Manufacturers of passenger cars and LCVs | $4.9 \%$ | $5.2 \%$ | $6.9 \%$ |
| Manufacturers of trucks and buses | $11.1 \%$ | $8.3 \%$ | $7.7 \%$ |

Source: Annual reports of the selected companies in comparable industries

### 2.3.2 R\&D expenditure of vehicle manufacturers

R\&D expenditure has been chosen as a financial metrics as a proxy for future financial performance. A declining R\&D expenditure may indicate an industry that does not believe in its future by innovating further its products or an industry that simply reached a stagnating level of technological development and it is on course for decline over the future years. When financial performance of companies is under pressure, the resources available to invest in R\&D are often jeopardised and consequently a temporary situation of financial stress can impact the overall future financial performance of key firms.

Data was obtained by analysing annual accounts. The names of the company reflect the entity from which the annual account was looked into. These results are subsequently compared with results from three other industries.

### 2.3.2.1 Passenger cars and light commercial vehicles

Most passenger car VMs are also manufacturers of LCVs and they rarely make publicly available financial data by vehicle category separately. Therefore, in this section, passenger cars and LCV are threated together.
On average R\&D expenditure as percentage of revenue from the selected passenger car and LCV VMs remained rather stable throughout the years, despite the serious economic crisis that affected dramatically the sector in 2008/2009. A slight increase from $4.3 \%$ in 2007 to $4.7 \%$ in 2017 is noted.
BMW Group, Volkswagen Group and Daimler Group (Mercedes-Benz Cars and Vans) report the highest R\&D expenditures as percentage of revenue over the period in scope, varying between $4.8 \%$ and $7.3 \%$. Fiat Chrysler Automobiles and Hyundai Motor Company in contrast seem to invest the least in R\&D, with R\&D expenditures as percentage of revenue fluctuating between $1.9 \%$ and $3.2 \%$.

Table 63- Average R\&D Expenditure as percentage of revenue per VM per year, 2007-2017

| Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VM | $5.6 \%$ | $5.4 \%$ | $4.8 \%$ | $4.6 \%$ | $4.9 \%$ | $5.1 \%$ | $6.3 \%$ | $5.7 \%$ | $5.6 \%$ | $5.5 \%$ | $6.2 \%$ |
| BMW Group | $4.8 \%$ | $5.6 \%$ | $6.1 \%$ | $5.5 \%$ | $5.9 \%$ | $6.0 \%$ | $5.6 \%$ | $5.2 \%$ | $5.6 \%$ | $6.0 \%$ | $6.7 \%$ |
| Daimler Group <br> (Mercedes-Benz <br> Cars and Vans) |  |  |  |  |  |  |  |  |  |  |  |
| Fiat Chrysler <br> Automobiles | $2.6 \%$ | $2.5 \%$ | $2.8 \%$ | $2.5 \%$ | $2.3 \%$ | $2.2 \%$ | $2.6 \%$ | $2.6 \%$ | $2.6 \%$ | $2.9 \%$ | $2.9 \%$ |
| Ford Motor Group | $4.4 \%$ | $4.9 \%$ | $4.0 \%$ | $3.9 \%$ | $3.9 \%$ | $4.1 \%$ | $4.4 \%$ | $4.8 \%$ | $4.5 \%$ | $4.8 \%$ | $5.1 \%$ |
| Hyundai Motor <br> Company | $3.2 \%$ | $2.7 \%$ | $2.4 \%$ | $2.1 \%$ | $1.9 \%$ | $1.9 \%$ | $2.1 \%$ | $2.5 \%$ | $2.4 \%$ | $2.5 \%$ | $2.6 \%$ |
| PSA Group | $4.8 \%$ | $3.8 \%$ | $4.0 \%$ | $3.7 \%$ | $3.6 \%$ | $3.7 \%$ | $3.5 \%$ | $3.9 \%$ | $3.4 \%$ | $3.5 \%$ | $3.4 \%$ |
| Renault Group | $4.5 \%$ | $4.9 \%$ | $4.5 \%$ | $4.0 \%$ | $4.8 \%$ | $4.6 \%$ | $4.4 \%$ | $4.2 \%$ | $4.6 \%$ | - | - |
| Toyota Group | $3.6 \%$ | $4.4 \%$ | $3.8 \%$ | $3.8 \%$ | $4.2 \%$ | $3.7 \%$ | $3.5 \%$ | $3.7 \%$ | $3.7 \%$ | $3.8 \%$ | $3.6 \%$ |
| Volkswagen AG | $5.4 \%$ | $5.0 \%$ | $5.8 \%$ | $6.1 \%$ | $5.1 \%$ | $5.1 \%$ | $5.8 \%$ | $6.5 \%$ | $7.4 \%$ | $\mathbf{7 . 3 \%}$ | $6.7 \%$ |
| Average | $\mathbf{4 . 3 \%}$ | $\mathbf{4 . 4 \%}$ | $\mathbf{4 . 2 \%}$ | $\mathbf{4 . 0} \%$ | $\mathbf{4 . 1 \%}$ | $\mathbf{4 . 0 \%}$ | $\mathbf{4 . 2 \%}$ | $\mathbf{4 . 3 \%}$ | $\mathbf{4 . 4 \%}$ | $\mathbf{4 . 6 \%}$ | $\mathbf{4 . 7 \%}$ |

Source: Annual reports of the selected vehicle manufacturers

### 2.3.2.2 Trucks and buses

Truck and bus manufacturers are being discussed together in the following paragraphs. The annual reports of 5 VMs were used to collect data about R\&D expenditure. However, it should be noted that data concerning CNH Industrial is missing for the period 20072012, since the company was founded in 2012 after an integration of multiple brands/entities and the first available annual report relates to 2013.

The average R\&D expenditure as percentage of revenue from the selected VMs of trucks and buses increased over the 2007-2017 period, from $3.1 \%$ to $4.1 \%$ in 2017 , which is in contrast with the overall decrease in operating margin.
Daimler Group (Daimler Trucks and Buses), Volvo Group and Paccar, followed more or less the same course over the years. The R\&D expenditure was increased from 20072012, decreased between 2013 and 2014 and increased again from 2015 onwards. CNH Industrial's R\&D expenditure percentage remained rather stable between 2013 and 2017, evolving from a $3.6 \%$ to a $3.5 \%$ level.

Table 64- Average R\&D Expenditure as percentage of revenue per VM per year, 2007-2017 ${ }^{121}$

| Year <br> VM | $\begin{gathered} 200 \\ 7 \end{gathered}$ | $\begin{gathered} 200 \\ 8 \end{gathered}$ | $\begin{gathered} 200 \\ 9 \end{gathered}$ | $\begin{gathered} 201 \\ 0 \end{gathered}$ | $\begin{gathered} 201 \\ 1 \end{gathered}$ | $\begin{gathered} 201 \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 201 \\ 3 \end{gathered}$ | $\begin{gathered} 201 \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} 201 \\ 5 \end{gathered}$ | $\begin{gathered} 201 \\ 6 \end{gathered}$ | $\begin{gathered} 201 \\ 7 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CNH Industrial | - | - | - | - | - | - | $\begin{gathered} 3.6 \\ \% \end{gathered}$ | $\begin{array}{r} 3.4 \\ \% \end{array}$ | $\begin{gathered} 3.3 \\ \% \end{gathered}$ | $\begin{array}{r} 3.5 \\ \% \end{array}$ | $\begin{array}{r} 3.5 \\ \% \end{array}$ |
| Daimler Group (Daimler Trucks and Buses) | $\begin{gathered} 3.6 \\ \% \end{gathered}$ | $\begin{array}{r} 3.7 \\ \% \end{array}$ | $\begin{array}{r} 5.9 \\ \% \end{array}$ | $\begin{gathered} 5.3 \\ \% \end{gathered}$ | $\begin{array}{r} 4.7 \\ \% \end{array}$ | $\begin{gathered} 4.0 \\ \% \end{gathered}$ | $\begin{gathered} 3.8 \\ \% \end{gathered}$ | $\begin{array}{r} 3.7 \\ \% \end{array}$ | $\begin{array}{r} 3.5 \\ \% \end{array}$ | 3.9 $\%$ | $\begin{gathered} 3.8 \\ \% \end{gathered}$ |
| Paccar | $\begin{array}{r} 1.7 \\ \% \end{array}$ | $\begin{gathered} 2.3 \\ \% \end{gathered}$ | $\begin{array}{r} 2.5 \\ \% \end{array}$ | $\begin{gathered} 2.3 \\ \% \end{gathered}$ | $\begin{gathered} 1.8 \\ \% \end{gathered}$ | $\begin{gathered} 1.6 \\ \% \end{gathered}$ | $\begin{gathered} 1.5 \\ \% \end{gathered}$ | $\begin{gathered} 1.1 \\ \% \end{gathered}$ | $\begin{gathered} 1.3 \\ \% \end{gathered}$ | 1.5 $\%$ | $\begin{gathered} 1.4 \\ \% \end{gathered}$ |
| TRATON Group | - | - | - | - | - | - | - | - | - | 7.1 $\%$ | $\begin{gathered} 6.8 \\ \% \end{gathered}$ |
| Volvo Group | $\begin{gathered} 4.0 \\ \% \end{gathered}$ | $\begin{array}{r} 4.9 \\ \% \end{array}$ | $\begin{gathered} 6.3 \\ \% \end{gathered}$ | $\begin{gathered} 5.0 \\ \% \end{gathered}$ | $\begin{gathered} 4.4 \\ \% \end{gathered}$ | $\begin{array}{r} 5.0 \\ \% \end{array}$ | $\begin{array}{r} 5.7 \\ \% \end{array}$ | $\begin{gathered} 6.0 \\ \% \end{gathered}$ | $\begin{array}{r} 5.1 \\ \% \end{array}$ | 5.0 $\%$ | $\begin{gathered} 5.0 \\ \% \end{gathered}$ |
| Average | $\begin{gathered} 3.1 \\ \% \end{gathered}$ | $\begin{gathered} 3.6 \\ \% \end{gathered}$ | $\begin{gathered} 4.9 \\ \% \\ \hline \end{gathered}$ | $\begin{gathered} 4.2 \\ \% \end{gathered}$ | $\begin{gathered} 3.6 \\ \% \end{gathered}$ | $\begin{gathered} 3.6 \\ \% \end{gathered}$ | $\begin{gathered} 3.7 \\ \% \end{gathered}$ | $\begin{gathered} 3.6 \\ \% \end{gathered}$ | $\begin{gathered} 3.3 \\ \% \end{gathered}$ | 4.2 $\%$ | 4.1 $\%$ |

Source: Annual reports of the selected vehicle manufacturers

### 2.3.2.3 R\&D expenditure in comparable industries

When looking at the R\&D expenditure as percentage of revenue, the range of values reported and evolution over the years, for all categories in the automotive industry are in line with the range of values and evolution in the industry of computers and peripheral equipment manufacturers. Compared to the other industries, both consumer electronics manufacturers and communication equipment manufacturers experienced a dissimilar trend over the years in scope, as they witnessed a stronger increase in operating margin between 2007 and 2012, while remaining at a stable level between 2012 and 2017. Manufacturers of communication equipment tend to expense a significantly higher percentage of revenue for R\&D compared to the other comparable industries as also their operating margin illustrated a more profitable market. In addition, the lifetime of communication equipment is much shorter than with vehicles hence requiring a larger R\&D investment. Overall, it is interesting to note that all comparable industries kept a rather constant share of R\&D expenditure over the 2007-2017 period.

Table 65- Average R\&D expenditure as percentage of revenue per industry per year, 2007-2017

| Average R\&D expenditure as \% of Revenue: | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | ---: | ---: | ---: |
| Manufacturers of computers and peripheral equipment | $4.0 \%$ | $4.1 \%$ | $4.7 \%$ |
| Manufacturers of communication equipment | $12.5 \%$ | $15.8 \%$ | $15.8 \%$ |
| Manufacturers of consumer electronics | $5.5 \%$ | $6.2 \%$ | $6.2 \%$ |
| Manufacturers of passenger cars and LCVs | $4.3 \%$ | $4.0 \%$ | $4.7 \%$ |
| Manufacturers of trucks and Buses | $3.1 \%$ | $3.6 \%$ | $4.1 \%$ |

Source: Annual reports of the selected companies in comparable industries ${ }^{122}$

## 3. Conclusions

From 2009 to 2014, vehicle sales were affected by the 2008 economic crisis and the subsequent downturn in European economies. By 2014, sales had returned to growth across all vehicle categories. Nonetheless, they had not recovered to pre-crisis levels across all vehicle categories by 2017. Germany was the largest market for passenger cars and trucks during 2007-2017, while France was the largest market for LCVs. The largest passenger car and LCV manufacturers included Volkswagen Group, Renault-Nissan-Mitsubishi and PSA Group. The largest truck and bus manufacturers included Daimler Group, TRATON Group and Volvo Group. VMs in passenger cars and trucks decreased their model portfolio with 98 and 11 net exits respectively across their segments. Meanwhile, VMs in LCV and buses launched more models with 16 and 14 net entries respectively across their different segments. The transition to Euro VI emission norms for trucks in 2014 led to increased sales in 2013 as a result of pre-obligation purchases.

The markets for trucks and buses are highly concentrated, at both aggregated and on country level, with the HHI exceeding the threshold of 1800 . The top 3 VMs representing more than $50 \%$ of the market for trucks and buses as well as for the passenger car and LCV markets. Nevertheless, the HHI indicates medium concentration in the passenger car and LCV markets on an aggregated geographical level. When looking on country level, the HHI indicates medium concentration in the passenger car market for VMs, in all countries in scope (excluding Cyprus), except for France where the HHI is 2,100 and Germany in certain years. The concentration in the LCV market for VMs varies between countries, with 6 out of 11 countries reporting an HHI above 1,800.

The development of digital technologies has also started making inroads into automotive retail and distribution, and some firms involved in new passenger car distribution are transforming their businesses to meet customer needs. ] In the European market, such firms include aggregators with digital platforms - including marketplace (Mobile.de, Carwow), brokers (Autohaus24.de, Vehiculum) and end-to-end sales platform providers (Rockar, Trive), as well as e-commerce firms (Amazon). Cyprus and Greece held the largest share of stand-alone sales outlets. Nevertheless, Greek outlets were severely impacted from 2012 as they struggled to recover from the Eurozone crisis and devaluation of cars.

The number of authorised car dealer groups gradually declined across all MS, primarily due to the consolidation of dealer groups. French brands Renault, Dacia, Peugeot and Citroen had denser networks compared to their peers. The aggregated average dealer density declined from 0.17 in 2007 to 0.14 car outlets per 1,000 inhabitants in 2017. VMs reduced their dealer networks to maintain dealer profitability and recover from the financial and economic crisis. At a country level, Austria had the highest passenger car dealer network density at an average of 0.34 outlets per 1,000 inhabitants. The market concentration of dealers may have changed due to increasing competition driven by emerging retail trends, widening the gap between the market shares of the top three car dealers. The dealer remuneration breakdown was fairly similar across multiple countries for passenger cars and LCVs.

The average operating margins of the selected passenger car and LCV VMs increased slightly between 2007 and 2017, whereas the margins of selected truck and bus VMs decreased slightly. The observed increase in R\&D expenditures as a percentage of revenue confirms the suggested slight improvement in profitability of passenger cars and LCVs VMs. For truck and bus VMs, however, the slight decrease in R\&D expenditure percentage did not confirm an improved profitability as suggested by the evolution of operating margins.

## III. Provision of repair and maintenance services

## 1. I ntroduction

This section captures the evolution of repair and maintenance services for motor vehicles, the competitive interplay between repairers, VMs and spare parts providers.
Insights are provided according to a pre-defined set of qualitative and quantitative indicators including:

- Size and structure of the market for repair and maintenance services
- Size and age of the vehicle parc in use across MS
- Network density of repairers
- Typology of services and service providers


## 2. Description \& analysis

### 2.1. Size and structure of the market for repair and maintenance services

### 2.1.1 Size and age of the vehicle parc

A detailed analysis of the vehicle parc, including its size and age, is key to appreciate the actual market base for repair and maintenance services, as well as the competitive interplay between service providers (authorised and independent). These dynamics of the automotive after-market are analysed for the countries in scope, with the exception of Cyprus, over the period 2007-2017. ${ }^{123}$ When references are made to 'all countries in scope' in this subchapter, Cyprus is not part of the analysis, unless otherwise specified.
The size and average age of the vehicle parc per category were described based on data provided by ACEA. Additional data was collected from Eurostat to calculate the number of cars per inhabitant.

The total turnover generated by the maintenance and repair of motor vehicles, for all categories in all countries in scope, including Cyprus, increased over the years from EUR 106,065 M in 2008 to EUR 145,608M in 2017. France, Germany, Italy and the UK account for the greatest share of the market. ${ }^{124}$
Compared to 2008, the market for maintenance and repair experienced significant increases by 2017, particularly in the United Kingdom (+211\% by 2017), Germany ( $+161 \%$ ) and France ( $+148 \%$ ).

Out of all the countries in scope, 5 reported a decline in the total value of the market for repair and maintenance services, with the biggest decline in Greece (-69\% in 2017 compared to 2008). This is confirmed by Table 66, which represents the size of the market for repair and maintenance services in terms of value for all years and countries in scope, including Cyprus.

Table 66- Size of the market for repair and maintenance services in terms of value (MEUR), 2007-2017

| Year | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | 3,808 | 3,84 | 3,854 | 4,113 | 4,073 | 4,183 | 3,956 | 4,043 | 4,264 | 4,643 |
| Austria | 3,611 | 3,59 | 4,475 | 5,646 | 5,215 | 4,139 | 4,038 | 4,499 | 4,6 | 4,321 |
| Belgium | 0,225 | 0,225 | 0,225 | 0,206 | 0,182 | 0,152 | 0,152 | 0,159 | 0,176 | 0,197 |
| Cyprus | 19,18 | 20,269 | 19,099 | 20,327 | 20,352 | 19,875 | 19,979 | 20,127 | 20,774 | 28,357 |
| France | 17,394 | 25,709 | 26,424 | 27,02 | 26,445 | 25,986 | 27,02 | 27,66 | 28,331 | 27,976 |
| Germany | 3,211 | 2,697 | 1,796 | 1,468 | 1,059 | 1,006 | 0,769 | 0,811 | 0,934 | 1,015 |
| Greece | 5,573 | 3,83 | 3,427 | 3,546 | 3,737 | 4,061 | 4,234 | 5,332 | 4,342 | 4,12 |
| Ireland | 15,635 | 13,398 | 14,173 | 14,498 | 13,954 | 13,404 | 13,457 | 13,308 | 13,719 | 14,046 |
| Italy | 2,666 | 2,634 | 2,895 | 2,835 | 2,62 | 2,601 | 2,626 | 2,816 | 3,084 | 3,203 |
| Netherlands | 2,786 | 2,02 | 2,469 | 2,6 | 2,47 | 2,734 | 2,82 | 3,738 | 3,42 | 3,613 |
| Poland | 11,108 | 9,903 | 10,437 | 9,565 | 8,816 | 8,476 | 8,281 | 9,029 | 9,453 | 10,033 |
| Spain | 20,87 | 18,914 | 19,977 | 24,358 | 24,964 | 25,002 | 27,973 | 32,82 | 51,378 | 44,084 |
| United Kingdom | $\mathbf{1 0 6 , 0 6 5}$ | $\mathbf{1 0 7 , 0 3}$ | $\mathbf{1 0 9 , 2 4 9}$ | $\mathbf{1 1 6 , 1 8 2}$ | $\mathbf{1 1 3 , 8 8 6}$ | $\mathbf{1 1 1 , 6 1 7}$ | $\mathbf{1 1 5 , 3 0 5}$ | $\mathbf{1 2 4 , 3 4 2}$ | $\mathbf{1 4 4 , 4 7 4}$ | $\mathbf{1 4 5 , 6 0 8}$ |
| Total |  |  | Source: Eurostat |  |  |  |  |  |  |  |

As presented in Figure 33, the total size of the vehicle parc for all categories in all countries in scope increased by $13.7 \%$, from 227M in 2007 to 258M in 2017. Passenger cars represent by far the highest portion of the vehicle parc and increased from 197M in 2007 to 225 M in 2017. The number of LCVs grew from 24.1 M to 27.5 M , while the truck fleet was almost flat at 5 M on average. Buses have the lowest share in the total parc, with units increasing from 565,881 to 606,998 over the 2007-2017 period.

Figure 33 - Overall size of vehicle parc by category for 11 countries in scope, 2007 - $2017^{125}$


Source: ACEA Tax Guide
At an aggregate level, across all countries and years in scope, the number of passenger cars represents approximately $87.1 \%$ of the size of vehicle parc. LCVs represent $10.6 \%$, while trucks and buses are limited to $2.08 \%$ and $0.24 \%$ respectively. Over the period from 2007 to 2017, there was no significant change in terms of their respective shares within the entire vehicle parc, as shown in Figure 34.

Figure 34 - Overall share of vehicle parc by category for 11 countries in scope, 2007-2017 ${ }^{126}$


## Passenger cars

The overall size of the passenger car parc for all countries in scope ranged between 197 M and 225 M , with an increase of approximately $14.2 \%$ over the 11 years.

Figure 35 represents the average share per country in the size of the vehicle parc for passenger cars. Germany ranks highest with regards to its share of passenger cars relative to all passengers cars in all the countries in scope, which stands at 20.7\%, average across all years in scope. Italy is second, with $17.6 \%$, while both the United Kingdom and France have an average share of approximately 15\%. Ireland's average share of the passenger car parc is the smallest out of all countries in scope, at 0.9\%.

Figure 35 - Average (over 2007-2017) share per country in the size of the vehicle parc for passenger cars ${ }^{127}$


Color by:
Country
Austria

- Belgium

France
Germany

- Greece

Ireland
Italy
Netherlands

- Poland

Spain
United Kingdom

Source: ACEA Tax Guide

The size of the passenger car parc increased in all countries in scope, though at different rates, as illustrated in Figure 36. Poland had the largest increase compared to the other countries, reaching the size of 22.5 M in 2017 ( $+54 \%$ ), followed by the United Kingdom ( $+12.9 \%$ ) and Germany ( $+12.85 \%$ ).

Figure 36 - Size of the vehicle parc for passenger cars per country ${ }^{128}$


Source: ACEA Tax Guide
The number of passenger cars per inhabitant provides further information on the growth of the passenger car parc relative to population growth. As shown in the table below, the average number of passenger cars per inhabitant increased slightly over the time period 2007 - 2017.
Italy has the highest number of cars per inhabitant (over 0.6), followed by Austria and Germany. In 2007, Poland ranked last with regards to the number of cars per inhabitant, at 0.38 , but the fleet significantly increased over the years, resulting in the second highest number in 2017 ( 0.59 cars per inhabitant). A potential reason for the growth of the passenger car parc could be the $36.8 \%$ increase in Poland's gross domestic product over the same timeframe.

Table 67 - Number of passenger cars per inhabitant from 2007-2017, per country ${ }^{129}$

| Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | 0.51 | 0.52 | 0.52 | 0.53 | 0.54 | 0.55 | 0.55 | 0.55 | 0.55 | 0.55 | 0.56 |
| Austria | 0.47 | 0.48 | 0.48 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.5 | 0.5 | 0.51 |
| Belgium | 0.48 | 0.48 | 0.48 | 0.48 | 0.49 | 0.48 | 0.48 | 0.48 | 0.48 | 0.49 | 0.49 |
| France | 0.5 | 0.5 | 0.51 | 0.52 | 0.54 | 0.54 | 0.54 | 0.55 | 0.56 | 0.56 | 0.56 |
| Germany | 0.38 | 0.46 | 0.46 | 0.47 | 0.46 | 0.46 | 0.46 | 0.47 | 0.47 | 0.48 | 0.48 |
| Greece | 0.43 | 0.43 | 0.42 | 0.41 | 0.41 | 0.41 | 0.41 | 0.43 | 0.43 | 0.44 | 0.43 |
| Ireland | 0.61 | 0.62 | 0.62 | 0.62 | 0.63 | 0.62 | 0.62 | 0.61 | 0.61 | 0.62 | 0.64 |
| Italy | 0.46 | 0.47 | 0.47 | 0.48 | 0.49 | 0.49 | 0.49 | 0.49 | 0.49 | 0.5 | 0.5 |
| Netherlands | 0.38 | 0.42 | 0.43 | 0.45 | 0.47 | 0.49 | 0.51 | 0.53 | 0.55 | 0.57 | 0.59 |
| Poland | 0.49 | 0.48 | 0.48 | 0.48 | 0.48 | 0.48 | 0.47 | 0.47 | 0.48 | 0.49 | 0.51 |
| Spain | 0.49 | 0.49 | 0.48 | 0.48 | 0.5 | 0.5 | 0.5 | 0.51 | 0.52 | 0.53 | 0.53 |
| United Kingdom | 0.49 | $\mathbf{0 . 5 3}$ |  |  |  |  |  |  |  |  |  |
| Average | $\mathbf{0 . 4 8}$ | $\mathbf{0 . 4 9}$ | $\mathbf{0 . 4 9}$ | $\mathbf{0 . 4 9}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 5}$ | $\mathbf{0 . 5 1}$ | $\mathbf{0 . 5 1}$ | $\mathbf{0 . 5 2}$ | $\mathbf{0 . 5 3}$ |

Source: EY calculations based on Eurostat and ACEA Tax Guide

When analysing the average age of the passenger cars' parc ${ }^{130}$, there is a clear deviation among the countries, although collected data are rather scarce as shown in the table below. Poland has, on average, the oldest parc (16.4 years), followed by Greece (12.3 years) and Spain (12 years), while the UK has the youngest vehicle parc (7.6 years), which is more or less in line with the average age in Austria and Ireland.

Table 68 - Average age (in years) of the passenger car parc from 2007-2017, per country ${ }^{131}$

| Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | 7.6 | 7.7 | 7.7 | 7.5 | 7.7 |  |  | 7.9 | 8.9 | 8.2 | 8.9 |
| Austria | 7.9 | 7.9 | 8.0 | 8.0 | 8.0 |  |  | 8.5 | 7.7 | 8.9 | 8.8 |
| Belgium | 8.2 | 8.3 | 8.2 | 8.2 | 8.2 |  |  |  | 9 | 8.8 | 9.0 |
| France | 8.0 | 8.2 | 8.1 | 8.3 | 8.5 |  |  | 9.0 | 8.9 | 9.3 | 8.9 |
| Germany |  | 10.5 | 10.7 | 10.7 |  |  | 12.3 |  | 13.5 | 15 | 13.5 |
| Greece |  | 6.3 | 6.3 |  |  |  |  | 9 | 8.8 | 9.0 |  |
| Ireland |  |  |  |  |  |  | 9.9 | 10.7 | 10.8 | 10.7 |  |
| Italy |  |  |  |  |  |  |  | 9.5 | 10.4 | 9.5 |  |
| Netherlands |  |  |  |  |  |  | 17.5 | 17.2 | 13.6 | 17.2 |  |
| Poland |  |  |  |  |  | 13.2 | 11.4 | 11.9 | 11.4 |  |  |
| Spain |  |  |  |  |  |  | 7.8 | 8.5 | 7.8 | 8.5 |  |
| United Kingdom | 6.8 | 6.9 | 7.1 | 7.3 |  |  |  |  |  |  |  |

The average age of the parc has increased over the years, with an exception for Poland and Spain. ${ }^{132}$ Taking into account the caveats in the data, the average age of the parc of Italy increased more than in other countries (from 7 to 10.7 years).
Figure 37 shows how the age of the passenger car fleet is spread across countries. This illustration allows to distinguish among the following age ranges:

- less than 1 year;
- less than 5 years;
- less than 10 years;
- and more than 10 years old.

The analysis shows that the majority of Poland's vehicle parc is over 10 years old, as is the case for Cyprus ${ }^{133}$. Both countries have the smallest share of vehicles under 2 years of age within their fleet. The share of passenger cars younger than 2 years, compared to the other countries in scope, was highest in Belgium and Ireland, while the share of passenger cars above 10 years old was smallest in Ireland.

For half of the countries in scope, the majority of the parc consists of passenger cars of above 10 years old, while the other half of the countries reports that the majority of the parc has an age between 5-10 years.

Figure 37 - Age of the vehicle parc from 2007-2017, per country ${ }^{134}$


Light commercial vehicles
The overall size of the LCVs parc for all countries in scope, ranged between 24.1 and 27.5 M , with an approximate increase of $14.3 \%$ over the 11 years. This increase was mainly driven by the growth of e-commerce, increasing the demand for shipping services often carried out by LCVs. ${ }^{\mathrm{xxxv}}$

As shown Figure 38, France ranks highest with regards to its share of LCVs relative to all the countries in scope, which stands at $23 \%$, averaged across all years in scope. Spain is second, with $18.3 \%$, while Italy has a share of approximately $15 \%$ followed by the United Kingdom at $14.6 \%$. Ireland's average share of LCVs is the smallest out of all countries in scope, at 1.2\%.

[^23]Figure 38 - Average (2007-2017) share per country in the size of the vehicle parc for LCVs ${ }^{135}$


Source: ACEA Tax Guide
With the exception of Spain, where the LCV parc decreased by approximately 8\% (from 4.86M in 2007 to 4.47 M in 2017), all the other countries showed a consistent increase of the LCV parc. Poland showed the biggest increase $(+41 \%)$, followed by Germany $(+40 \%)$, Belgium and Austria (both at $+25 \%$ ), while the Netherlands only showed a very light increase in its LCV parc ( $+4 \%$ ).

However, when looking at the average number of LCVs per inhabitant in Table 69, the overall increase appears to be more modest. The highest LCVs per inhabitant are reported in Spain, followed by France, Greece, Ireland and Italy, while Germany was reported to have a significantly lower number of LCVs per inhabitant relative to the other countries in scope. As explained further below, these differences are partly due to the difference in age of the respective LCV parcs.

Table 69 - Number of LCVs per inhabitant from 2007-2017, per country (excluding Cyprus)

| Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.05 |
| Austria | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 |
| Belgium | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 |
| France | 0.02 | 0.02 | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| Germany | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Greece | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 0.08 |
| Ireland | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 |
| Italy | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 |
| Netherlands | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 |
| Poland | 0.11 | 0.11 | 0.11 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Spain | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 |
| United Kingdom | 0.06 |  |  |  |  |  |  |  |  |  |  |
| Average | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 6}$ | $\mathbf{0 . 0 7}$ | $\mathbf{0 . 0 7}$ |

Source: EY calculations based on Eurostat and ACEA Tax Guide
When analysing the age of the LCV parc ${ }^{136}$, there is a clear deviation among the countries, as represented in the table below. Greece (15.4 years) and Poland (16.1 years) have the oldest vehicle parc in 2017, while the average age of LCVs in Austria, Belgium and the UK is around 7.5-8 years over the period.

Table 70 - Average age (in years) of the LCVs parc from 2007-2017, per country ${ }^{137}$

| Year <br> Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria |  |  |  |  |  |  |  |  | 8.1 | 8.1 | 8.1 |
| Belgium | 6.7 | 7.5 |  | 7.8 |  |  |  | 8.5 | 8.2 | 8.2 | 8.2 |
| France |  |  |  |  |  |  |  |  | 8.3 | 8.6 | 8.3 |
| Germany |  |  |  |  |  |  |  |  | 7.3 | 7.4 | 7.3 |
| Greece |  | 12.0 |  |  |  |  | 14.4 |  | 16.8 | 17.1 | 16.8 |
| Ireland |  |  |  |  |  |  |  |  | 8.8 | 9.0 | 8.8 |
| Italy |  |  |  |  |  |  |  |  | 11.9 | 12.3 | 11.9 |
| Netherlands |  |  |  |  |  |  |  |  | 8.8 | 8.9 | 8.8 |
| Poland |  |  |  |  |  |  |  |  | 16 | 16.2 | 16.0 |
| Spain |  |  |  |  |  |  |  |  | 12.1 | 12.5 | 12.1 |
| United Kingdom | 6.4 | 6.6 |  | 7.1 |  |  |  | 7.6 | 8.5 | 8.6 | 8.5 |

Source: ACEA Tax Guide

## Trucks

The overall size of the truck parc for all countries in scope ranged between 4.92 M and 5.26M, an increase of approximately $7 \%$ over the 11 years. However, this increase was not consistently observed throughout the period, as there was a drop of $1.5 \%$ from 2008 to 2009 and $1.1 \%$ from 2011 to 2013. As of 2015, the total size increased from 5.09 M to 5.26 M in 2017. The biggest annual increase occurred between 2010 and 2011, when the total size of the truck parc increased by approximately $3.6 \%$.

An analysis of the average (over 2007-2017) share of the vehicle parc of trucks reveals that Italy has the largest vehicle parc for trucks among the countries in scope. Ranks, representing a share of $18.9 \%$, as is shown in Figure 35 . Germany is second, with $17.8 \%$, while Poland has a share of approximately $17.5 \%$ followed by both the United Kingdom and France at approximately 11\%. Ireland's average share of trucks is the smallest out of all countries in scope, at $0.8 \%$.

Figure 39 - Average (2007-2017) share per country in the size of the vehicle parc for trucks ${ }^{138}$


Source: ACEA Tax Guide

There is no general trend visible among countries, as five of them (Austria, Belgium, France, Greece and Italy) show a decrease in the total number of trucks over the years, while the remaining six had the opposite trend. Poland showed the biggest increase ( $+53 \%$ ) while Italy marked the biggest decrease ( $-10.8 \%$ ).
The analysis of the average age of the truck parc ${ }^{139}$, represented in the table below, cannot rely on a complete set of data for countries and years in scope, as only data from 2015-2017 is available for all countries. Based on these more recent data, only clear differences can be observed. Greece, with an average age of 17.5 years shows the oldest value, which is more than double the one in Germany ( 7.6 years). In general, the average age differs significantly among all countries.

Table 71 - Average age (in years) of the truck vehicle parc from 2007-2017, per country ${ }^{140}$

| Year <br> Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria |  |  |  |  |  |  |  |  | 8.4 | 8.1 | 8.4 |
| Belgium | 9.5 |  |  | 14.4 |  |  |  |  | 8.2 | 8.2 | 9.8 |
| France |  |  |  |  |  |  |  |  | 8.3 | 8.6 | 7.5 |
| Germany |  |  |  |  |  |  |  |  | 7.3 | 7.4 | 8.0 |
| Greece |  | 17.2 |  |  |  |  |  |  | 16.8 | 17.1 | 18.7 |
| Ireland |  |  |  |  |  |  |  |  | 8.8 | 9.0 | 9.8 |
| Italy |  |  |  |  |  |  |  |  | 11.9 | 12.3 | 13.2 |
| Netherlands |  |  |  |  |  |  |  |  | 8.8 | 8.9 | 7.9 |
| Poland |  |  |  |  |  |  |  |  | 16 | 16.2 | 16.7 |
| Spain |  |  |  |  |  |  |  |  | 12.1 | 12.5 | 12.6 |
| United Kingdom | 6.7 | 6.6 |  | 7.1 |  |  |  |  | 8.5 | 8.6 | 8.8 |
| Source: ACEA Tax Guide |  |  |  |  |  |  |  |  |  |  |  |

The overall size of the bus parc for all countries in scope ranged between 566,000 and 607,000; with an increase of approximately $7.3 \%$ over the 11 years. Similarly, to the truck parc, this increase is not consistently observed throughout the 11 years, as a slight decrease is reported in 2009, 2012 and 2014.
As shown in the figure below, Poland ranks highest with regards to its share of buses relative to all the countries in scope, which stands at $17.2 \%$, averaged across all years in scope. Poland has a very comprehensive bus network, serving urban and interurban connections. ${ }^{\text {xxxvi }}$ Italy is second, with $16.7 \%$, while the United Kingdom has a share of approximately $15.2 \%$, followed by France at $14.8 \%$. Ireland's average share of buses is the smallest out of all countries in scope, at 1.4\%.

[^24]Figure 40 - Average (2007-2017) share per country in the size of the vehicle parc for buses, 2007-2017 ${ }^{141}$


Source: ACEA Tax Guide
There is no general trend visible among the different countries, as four of them (Greece, I reland, the Netherlands and the United Kingdom) show a decrease in the total number, contrary to the other six countries. The biggest increase is observed in Poland ( $+32.5 \%$ ), largely due to investments in public transportxxxvii (again driven by the strong economic growth over 2007 - 2017), while the biggest decrease was for Ireland (39.9\%).

An analysis of the average age of the bus parc ${ }^{142}$, reveals that, similar to all other vehicle categories, the oldest vehicle parc is in Greece (14.2 years in 2013). Austria had the youngest fleet ( 6.37 years), however the average age between the countries deviates strongly, as illustrated in the table below.

Table 72 - Average age (in years) of the buses' parc from 2007 - 2017, per country

| Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Coustria | 6.6 | 6.2 |  | 6.5 | 6.7 |  |  | 6.8 |  |  |  |
| Belgium |  | 10.3 |  | 10.4 | 10.6 |  |  | 10.9 |  |  |  |
| France |  |  |  |  |  |  |  |  |  |  |  |
| Germany | 8.7 | 8.8 |  | 8.8 | 8.8 |  |  | 8.9 |  |  |  |
| Greece |  | 13.5 |  |  |  |  | 14.2 |  |  |  |  |
| Ireland |  |  |  |  |  |  |  |  |  |  |  |
| Italy |  |  |  |  |  |  |  |  |  |  |  |
| Netherlands |  |  |  |  |  |  |  |  |  |  |  |
| Poland |  |  |  |  |  |  |  |  |  |  |  |
| Spain |  |  |  |  |  |  | 14.1 |  |  |  |  |
| United Kingdom | 6.7 | 8.3 |  | 8.5 |  |  |  | 9.1 |  |  |  |

[^25]
### 2.1.2. Network density of repairers for passenger cars

The network density of repairers could only be covered for the passenger car category. Own calculations based on Eurostat data to get insights on the amount of authorised and independent repairers per 1000 inhabitants and per 1000 passenger cars are provided.
Other measures addressed in this section are:

- Total number of contracts
- Total number of contracts at brand level
- Total number of authorised repairer outlets
- Percentage of stand-alone repairer outlets
- Number of authorised repairer outlets per 1000 inhabitants
- Authorised repair outlets at brand level
- Number of repair outlets owned by vehicle manufacturers

In order to provide a detailed understanding of the network density of repairers, a clear distinction needs to be made between the different types of repairers. Businesses engaged in the provision of repair and maintenance services can be split between:

- Authorised repairers: operating within the distribution system set up by a supplier of motor vehicles.
- I ndependent repairers: not operating within the distribution system set up by the supplier of the motor vehicles for which it provides repair or maintenance services or an authorised repairer within the distribution system of a given supplier to the extent that it provides repair or maintenance services for motor vehicles in respect of which it is not a member of the respective supplier's distribution system.

Note that data on the independent repairers is scarcer, and information is often limited or not available compared to the data for the authorised repairers. Consultations with trade associations and their national members confirmed that actual numbers on the network density of both types of repairers are, even today, very difficult to measure, especially since a search on legal entity does not provide information on the breakdown of their function nor VC.

In light of the existing data limitations, this section only covers passenger cars. However, it is possible that information regarding LCVs is included in the data presented in the sections below, as it is not always possible to disaggregate such data.

Full network
When analysing the total number of repairers, including both the authorised and independent repairers, based on their legal entities, it appears that the number of legal entities increased in most countries over the time period from 2008 to 2017. Exceptions are Greece and Italy, where the number decreased, and Cyprus where the number of legal entities decreased over the time period but returned to levels observed in 2008 by 2017. This is visualised in the Table 73. Note that the source data is Eurostat and data is provided from 2008 to 2017 for all entities that have a NACE code registered for the repair activity. It cannot be excluded that these numbers include repairers with multiple activities, or for which the repair business is not their main activity.

Table 73 - Authorised and independent repairers (legal entities), 2008-2017143

| Year Country | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3,974 | 4,044 | 4,261 | 4,348 | 4,479 | 4,593 | 4,754 | 4,782 | 4,754 | 5,365 |
| Belgium | 7,469 | 7,631 | 7,937 | 8,078 | 8,727 | 7,737 | 7,857 | 8,281 | 7,742 | 7,806 |
| Cyprus | 2,129 | 2,125 | 1,986 | 1,921 | 1,941 | 1,994 | 2,009 | 2,048 | 2,068 | 2,129 |
| France | 41,600 | 41,241 | 47,658 | 45,331 | 49,981 | 52,878 | 54,510 | 50,854 | 51,302 | 51,718 |
| Germany | 35,786 | 43,630 | 44,561 | 44,541 | 45,646 | 43,828 | 47,852 | 49,236 | 49,491 | 50,277 |
| Greece | 16,265 | 16,072 | 15,674 | 14,421 | 14,422 | 14,255 | 15,635 | 15,026 | 15,020 | 14,615 |
| Ireland | 4,561 | 4,592 | 4,762 | 4,881 | 5,098 | 5,182 | 5,156 | 5,445 | 5,562 | 5,950 |
| Italy | 83,824 | 77,976 | 76,258 | 75,638 | 75,622 | 73,853 | 71,714 | 69,052 | 69,517 | 70,064 |
| Netherlands | 4,150 | 4,328 | 4,932 | 5,072 | 5,392 | 6,227 | 6,280 | 6,562 | 6,763 | 6,902 |
| Poland | 46,933 | 44,042 | 48,907 | 52,357 | 51,461 | 54,408 | 54,288 | 55,268 | 56,423 | 57,345 |
| Spain | 46,349 | 45,089 | 46,862 | 44,334 | 44,330 | 43,955 | 42,333 | 45,921 | 51,792 | 50,310 |
| UK | 34,224 | 34,533 | 34,924 | 35,727 | 36,107 | 36,966 | 37,746 | 40,079 | 43,848 | 44,745 |
| Total | 327,264 | 325,303 | 338,722 | 336,649 | 343,206 | 345,876 | 350,134 | 352,554 | 364,282 | 367,226 |

Source: Eurostat
The density of the network measured by the number of legal entities per 1,000 inhabitants reveals large differences between the countries and is represented in the table below. The overall average for the countries from 2008 to 2017, is 1 legal entity per 1,000 inhabitants. However, Cyprus, Greece, Ireland, Italy, Poland and Spain have a denser network compared to the other countries. As shown in the table below, the Netherlands has the lowest network density ranging from 0.25 legal entities in 2008 to 0.40 per 1,000 inhabitants in 2017.

As shown in
Figure 41, for five out of the 12 countries, the network density decreased over the years, while for the others the density increased.

Table 74 - Authorised and independent repairers (legal entities) per 1,000 inhabitants ${ }^{144}$

| $\begin{array}{\|c} \text { Year } \\ \text { Country } \end{array}$ | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 0.48 | 0.49 | 0.51 | 0.52 | 0.53 | 0.54 | 0.56 | 0.56 | 0.55 | 0.61 |
| Belgium | 0.7 | 0.71 | 0.73 | 0.73 | 0.79 | 0.69 | 0.7 | 0.74 | 0.68 | 0.69 |
| Cyprus | 2.74 | 2.67 | 2.42 | 2.29 | 2.25 | 2.3 | 2.34 | 2.42 | 2.44 | 2.49 |
| France | 0.65 | 0.64 | 0.74 | 0.7 | 0.77 | 0.81 | 0.82 | 0.77 | 0.77 | 0.77 |
| Germany | 0.44 | 0.53 | 0.54 | 0.56 | 0.57 | 0.54 | 0.59 | 0.61 | 0.6 | 0.61 |
| Greece | 1.47 | 1.45 | 1.41 | 1.3 | 1.3 | 1.3 | 1.43 | 1.38 | 1.39 | 1.36 |
| Ireland | 1.02 | 1.02 | 1.05 | 1.07 | 1.11 | 1.12 | 1.11 | 1.16 | 1.18 | 1.24 |
| Italy | 1.43 | 1.32 | 1.29 | 1.27 | 1.27 | 1.24 | 1.18 | 1.14 | 1.15 | 1.16 |
| Netherlands | 0.25 | 0.26 | 0.3 | 0.3 | 0.32 | 0.37 | 0.37 | 0.39 | 0.4 | 0.4 |
| Poland | 1.23 | 1.15 | 1.29 | 1.38 | 1.35 | 1.43 | 1.43 | 1.45 | 1.49 | 1.51 |
| Spain | 1.01 | 0.98 | 1.01 | 0.95 | 0.95 | 0.94 | 0.91 | 0.99 | 1.12 | 1.08 |
| UK | 0.56 | 0.56 | 0.56 | 0.57 | 0.57 | 0.58 | 0.59 | 0.62 | 0.67 | 0.68 |
| Average | 0.998 | 0.982 | 0.988 | 0.970 | 0.982 | 0.988 | 1.003 | 1.019 | 1.037 | 1.050 |

Source: EY calculations based on Eurostat

Figure 41 - Repairers (authorised and independent, legal entities) per 1,000 inhabitants, 2008 versus $2017^{145}$


Source: EY calculations based on Eurostat
The competitive interplay between repairers also depends on the number of repair and maintenance service providers compared to the overall size of the vehicle parc, which is represented in Table 75. Overall, the number of legal entities per 1,000 passenger cars appears to decrease over time, as the increase in the size of the vehicle parc is larger ( $+14 \%$ ) than the increase in legal entities ( $+12 \%$ ) performing repair and maintenance services for passenger cars.
Given that cars are only serviced approximately once a year on average, with repairs even less frequent, each repairer can service a large number of vehicles. ${ }^{x x v v i i i}$ Only Austria, Germany and the Netherlands reported more than one repairer per 1,000 cars in 2008, while in 2017 this was only the case for the Netherlands.

Table 75 - Authorised and independent repairers (legal entities) per 1,000 passenger cars ${ }^{146}$

| Year Country | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 1.08 | 1.08 | 1.04 | 1.04 | 1.02 | 1.01 | 0.99 | 0.99 | 1.01 | 0.91 |
| Belgium | 0.68 | 0.68 | 0.67 | 0.66 | 0.62 | 0.7 | 0.7 | 0.67 | 0.73 | 0.73 |
| France | 0.74 | 0.75 | 0.65 | 0.69 | 0.63 | 0.6 | 0.58 | 0.63 | 0.62 | 0.63 |
| Germany | 1.15 | 0.95 | 0.94 | 0.95 | 0.94 | 0.99 | 0.92 | 0.9 | 0.91 | 0.91 |
| Greece | 0.26 | 0.32 | 0.33 | 0.37 | 0.36 | 0.36 | 0.33 | 0.34 | 0.34 | 0.35 |
| Ireland | 0.41 | 0.42 | 0.4 | 0.38 | 0.37 | 0.36 | 0.37 | 0.37 | 0.37 | 0.35 |
| Italy | 0.43 | 0.46 | 0.48 | 0.49 | 0.49 | 0.5 | 0.52 | 0.54 | 0.54 | 0.54 |
| Netherlands | 1.83 | 1.79 | 1.58 | 1.58 | 1.51 | 1.31 | 1.3 | 1.25 | 1.23 | 1.22 |
| Poland | 0.31 | 0.37 | 0.34 | 0.33 | 0.35 | 0.34 | 0.36 | 0.36 | 0.37 | 0.38 |
| Spain | 0.47 | 0.49 | 0.47 | 0.5 | 0.5 | 0.51 | 0.52 | 0.48 | 0.43 | 0.45 |
| UK | 0.88 | 0.88 | 0.86 | 0.85 | 0.87 | 0.85 | 0.85 | 0.81 | 0.76 | 0.77 |
| Average | 0.75 | 0.74 | 0.70 | 0.71 | 0.70 | 0.69 | 0.67 | 0.67 | 0.67 | 0.66 |

Source: EY calculations based on Eurostat and ACEA Tax Guide

[^26]
## Authorised repairers

This section provides more insights in the network density of the authorised network based on the number of contracts signed, repair agreements, within the distribution system set up by a supplier of motor vehicles and on the total amount of outlets.
As represented in the table below, the total number of contracts remained relatively stable in most countries throughout the years, with an exception in Germany, Italy and Spain where the number of contracts declined slightly. The total number of contracts decreased over the years from more than 60,000 in 2007 to approximately 53,000 in 2016.

Table 76- Authorised repairers: total no. of contracts (2007-2016)

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3,155 | 3,385 | 3,286 | 3,219 | 3,449 | 3,320 | 3,303 | 3,204 | 3,106 | 3,155 |
| Bel/Lux | 2,837 | 3,059 | 2,906 | 2,780 | 2,977 | 2,728 | 2,714 | 2,585 | 2,502 | 2,394 |
| Cyprus | 70 | 89 | 71 | 75 | 73 | 77 | 87 | 79 | 82 | 75 |
| France | 7,736 | 10,700 | 8,354 | 8,306 | 11,655 | 8,203 | 8,103 | 7,706 | 7,777 | 7,794 |
| Germany | 21,254 | 22,160 | 21,956 | 21,770 | 20,705 | 20,425 | 20,460 | 19,920 | 19,547 | 19,175 |
| Greece | 1,438 | 1,446 | 1,430 | 1,357 | 1,460 | 1,221 | 1,144 | 1,126 | 1,044 | 940 |
| Ireland | 885 | 921 | 873 | 810 | 765 | 735 | 771 | 699 | 704 | 706 |
| Italy | 7,927 | 8,175 | 8,153 | 7,987 | 8,857 | 7,375 | 7,065 | 5,985 | 5,900 | 5,819 |
| Netherlands | 2,702 | 2,949 | 2,607 | 2,529 | 2,531 | 2,452 | 2,366 | 2,192 | 2,149 | 2,065 |
| Poland | 1,205 | 1,379 | 1,395 | 1,483 | 1,596 | 1,592 | 1,541 | 1,499 | 1,462 | 1,437 |
| Spain | 5,974 | 6,227 | 6,168 | 6,001 | 6,068 | 5,688 | 5,437 | 4,981 | 4,798 | 4,551 |
| UK | 5,285 | 5,290 | 5,216 | 5,169 | 5,222 | 5,357 | 5,310 | 5,162 | 5,196 | 5,252 |
| Total | 60,468 | 65,780 | 62,415 | 61,486 | 65,358 | 59,173 | 58,301 | 55,138 | 54,267 | 53,363 |

Source: ICDP database ${ }^{147}$
An examination of the distribution of total number of contracts at brand level, as in the table below, reveals that that most contracts are signed for the Citroen, Volkswagen and Ford brands. However, this is not the case for all countries as France has the highest numbers of contracts for the Citroen brand, while Germany has the highest number for the Volkswagen brand. With the exception of some brands, such as BMW, Hyundai and Mini, the general trend is a decline in the number of contracts for authorised repairers at brand level over the time period.

Table 77- Authorised repairers: total no. of contracts per brand (2007-2016)

| $\qquad$ Brand | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | Year Avg. per brand |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alfa Romeo | 1,174 | 1,194 | 1,171 | 1,066 | 1,082 | 936 | 922 | 884 | 864 | 851 | 1,014 |
| Audi | 4,252 | 4,131 | 3,577 | 3,477 | 2,843 | 2,930 | 2,753 | 2,646 | 2,642 | 2,585 | 3,184 |
| BMW | 1,236 | 1,644 | 1,670 | 1,642 | 1,639 | 1,630 | 1,719 | 1,704 | 1,708 | 1,695 | 1,629 |
| Chevrolet | 1,362 | 1,375 | 1,377 | 1,377 | 1,354 | 1,322 | 1,281 |  |  |  | 1,350 |
| Chrysler | 677 | 663 | 647 | 662 | 700 | 731 | 670 | 664 | 693 | 654 | 676 |
| Citroen | 5,879 | 5,927 | 5,818 | 5,818 | 5,679 | 5,513 | 5,276 | 5,166 | 5,065 | 4,800 | 5,494 |
| Dacia |  | 3,454 | 943 | 943 | 5,566 | 717 | 717 | 699 | 684 | 953 | 1,631 |
| Dodge | 611 | 663 | 647 | 662 | 700 | 731 | 672 | 664 | 693 | 654 | 670 |
| Fiat | 1,641 | 1,982 | 2,036 | 2,085 | 2,083 | 1,923 | 1,842 | 1,725 | 1,626 | 1,718 | 1,866 |
| Ford | 5,122 | 4,911 | 4,977 | 4,839 | 4,191 | 4,084 | 4,530 | 4,439 | 4,237 | 4,185 | 4,552 |
| Honda | 1,157 | 1,074 | 1,115 | 1,156 | 1,133 | 1,099 | 1,070 | 1,027 | 1,008 | 993 | 1,083 |
| Hyundai | 1,544 | 1,598 | 1,598 | 1,598 | 1,673 | 1,629 | 1,484 | 1,640 | 1,610 | 1,601 | 1,598 |
| Infiniti |  |  |  |  |  | 43 | 43 | 51 | 51 | 87 | 55 |
| Jaguar | 395 | 403 | 404 | 404 | 398 | 413 | 421 | 415 | 426 | 436 | 412 |
| Jeep | 677 | 663 | 647 | 662 | 700 | 731 | 777 | 811 | 844 | 854 | 737 |
| Kia | 1,586 | 1,402 | 1,522 | 1,526 | 1,301 | 1,489 | 1,455 | 1,418 | 1,364 | 1,350 | 1,441 |
| Lancia | 719 | 822 | 837 | 849 | 1,694 | 825 | 812 | 784 | 764 | 739 | 885 |
| Land Rover | 798 | 767 | 812 | 812 | 769 | 764 | 745 | 705 | 705 | 701 | 758 |
| Lexus | 298 | 322 | 306 | 300 | 307 | 313 | 317 | 312 | 327 | 319 | 312 |
| Mazda | 1,773 | 1,790 | 1,788 | 1,768 | 1,734 | 1,709 | 1,631 | 1,548 | 1,503 | 1,450 | 1,669 |
| Mercedes-Benz | 1,311 | 1,347 | 1,380 | 1,338 | 1,339 | 1,313 | 1,290 | 1,255 | 1,383 | 1,159 | 1,312 |
| MG |  |  |  |  |  | 47 | 45 | 46 | 66 | 76 | 56 |
| Mini | 919 | 1,267 | 1,278 | 1,208 | 1,205 | 1,202 | 1,352 | 1,370 | 1,359 | 1,373 | 1,253 |
| Mitsubishi | 1,603 | 1,604 | 1,551 | 1,522 | 1,513 | 1,483 | 1,491 | 1,460 | 1,429 | 1,425 | 1,508 |
| Nissan | 1,460 | 1,473 | 1,378 | 1,298 | 1,539 | 1,321 | 1,338 | 1,415 | 1,407 | 1,367 | 1,400 |
| Opel/Vauxhall | 4,096 | 4,273 | 4,006 | 3,936 | 3,874 | 3,815 | 3,715 | 2,718 | 2,539 | 2,402 | 3,537 |
| Peugeot | 2,703 | 2,960 | 2,946 | 2,901 | 2,901 | 3,197 | 3,109 | 3,090 | 3,030 | 3,030 | 2,987 |
| Porsche | 176 | 179 | 166 | 150 | 173 | 192 | 194 | 197 | 190 | 198 | 182 |
| Renault | 1,418 | 1,233 | 1,198 | 1,222 | 1,165 | 1,081 | 1,071 | 1,045 | 1,039 | 982 | 1,145 |
| Seat | 2,156 | 2,188 | 2,176 | 2,132 | 2,121 | 2,113 | 2,073 | 2,037 | 2,031 | 2,013 | 2,104 |
| Skoda | 2,629 | 2,778 | 2,827 | 2,843 | 2,850 | 2,803 | 2,751 | 2,726 | 2,706 | 2,622 | 2,754 |
| Smart | 544 | 575 | 620 | 619 | 635 | - 648 | 646 | 640 | 642 | 563 | 613 |
| Subaru | 990 | 1,019 | 958 | 863 | 898 | 913 | 767 | 924 | 894 | 935 | 916 |
| Suzuki | 1,531 | 1,636 | 1,636 | 1,636 | 1,502 | 1,532 | 1,510 | 1,463 | 1,457 | 1,503 | 1,541 |
| Toyota | 1,841 | 2,241 | 2,214 | 2,216 | 2,222 | 2,183 | 2,001 | 1,773 | 1,746 | 1,705 | 2,014 |
| Volkswagen | 5,319 | 5,313 | 5,267 | 5,043 | 4,976 | 4,904 | 4,926 | 4,801 | 4,668 | 4,533 | 4,975 |
| Volvo | 871 | 909 | 922 | 913 | 899 | 894 | 885 | 876 | 867 | 852 | 889 |

Apart from a decrease in the total number of authorised repairer outlets in Germany, Italy and Spain, and an increase in France, the number of outlets fluctuated over the time period with a tendency to a reduction since 2013. This is represented in the table below. The decrease in the number of authorised repairer outlets could potentially be linked to the decrease in the total number of agreements set up by supplier of motor vehicles.

For France and Italy, the number of outlets is significantly higher than the number of legal entities, indicating that multiple outlets operate under the same contract. The number of authorised repair outlets in Ireland is only 5\% higher than the number of contracts signed, indicating that most of the contracts are used for one outlet.

Table 78- Number of authorised repairer outlets for passenger cars ${ }^{149}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3,846 | 3,910 | 4,018 | 4,078 | 3,942 | 3,966 | 3,950 | 3,916 | 3,862 | 3,822 | 3,833 |
| Belgium | 3,754 | 3,939 | 3,980 | 3,814 | 3,756 | 3,696 | 3,594 | 3,405 | 3,349 | 3,216 | 3,149 |
| Cyprus | 97 | 104 | 104 | 120 | 113 | 115 | 122 | 108 | 110 | 106 | 105 |
| France | 16,992 | 20,038 | 20,820 | 20,816 | 20,735 | 20,600 | 20,425 | 19,613 | 19,519 | 19,407 | 18,922 |
| Germany | 24,887 | 25,323 | 25,118 | 25,009 | 24,641 | 24,714 | 24,059 | 23,170 | 22,702 | 22,421 | 21,499 |
| Greece | 1,668 | 1,674 | 1,661 | 1,727 | 1,656 | 1,567 | 1,468 | 1,303 | 1,210 | 1,218 | 1,127 |
| Ireland | 912 | 950 | 906 | 847 | 797 \| | 766 | 805 \| | 785 | 766 \| | 749 \| | 750 |
| Italy | 15,244 | 15,408 | 15,234 | 15,164 | 14,804 | 14,550 | 14,079 | 12,404 | 11,870 | 11,576 | 10,966 |
| Netherlands | 3,456 | 3,702 | 3,693 | 3,616 | 3,440 | 3,322 | 3,160 | 2,963 | 2,887 | 2,810 | 2,803 |
| Poland | 1,626 | 1,752 | 1,754 | 1,774 | 1,787 | 1,854 | 1,823 | 1,760 | 1,712 | 1,696 | 1,706 |
| Spain | 8,412 | 8,538 | 8,590 | 8,660 | 8,413 | 8,118 | 7,897 | 7,502 | 7,199 | 6,586 | 6,685 |
| UK | 6,122 | 5,875 | 5,852 | 5,744 | 5,733 | 5,846 | 5,773 | 5,657 | 5,691 | 5,581 | 5,504 |
| Total | 87,016 | 91,213 | 91,730 | 91,369 | 89,817 | 89,114 | 87,155 | 82,586 | 80,877 | 79,188 | 77,049 |

Source: ICDP database
An analysis of the percentage of stand-alone repairer outlets (service only dealer locations) for passenger cars does not provide a clear picture as the percentage ranges between $7 \%$ and $62 \%$. Table 79 provides an overview of the percentage of standalone repairer outlets per country over the time period, which indicates an increase in the number of authorised stand-alone repairers over time. Italy has the highest percentage while France had the lowest number of stand-alone authorised repairers.

Table 79- Percentage of stand-alone repairer outlets for passenger cars ${ }^{150}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 25\% | 28\% | 30\% | 32\% | 33\% | 34\% | 32\% | 31\% | 32\% | 30\% | 31\% |
| Belgium | 14\% | 17\% | 15\% | 15\% | 22\% | 16\% | 14\% | 13\% | 14\% | 13\% | 14\% |
| Cyprus | 29\% | 38\% | 51\% | 53\% | 47\% | 35\% | 36\% | 42\% | 38\% | 42\% | 40\% |
| France | 11\% | 7\% | 8\% | 8\% | 9\% | 10\% | 11\% | 12\% | 12\% | 9\% | 9\% |
| Germany | 28\% | 29\% | 29\% | 30\% | 32\% | 33\% | 33\% | 33\% | 35\% | 36\% | 37\% |
| Greece | 20\% | 24\% | 26\% | 27\% | 29\% | 29\% | 30\% | 33\% | 34\% | 36\% | 34\% |
| I reland | 7\% | 8\% | 8\% | 12\% | 15\% | 16\% | 18\% | 20\% | 19\% | 17\% | 19\% |
| I taly | 36\% | 38\% | 45\% | 62\% | 62\% | 58\% | 57\% | 58\% | 58\% | 58\% | 61\% |
| Netherlands | 16\% | 21\% | 20\% | 21\% | 21\% | 21\% | 21\% | 22\% | 24\% | 28\% | 30\% |
| Poland | 10\% | 14\% | 14\% | 18\% | 18\% | 21\% | 18\% | 20\% | 21\% | 22\% | 21\% |
| Spain | 14\% | 16\% | 14\% | 16\% | 18\% | 21\% | 26\% | 31\% | 34\% | 33\% | 32\% |
| UK | 14\% | 13\% | 15\% | 16\% | 15\% | 18\% | 18\% | 17\% | 16\% | 15\% | 16\% |

The authorised repairers' network density measured by the number of outlets per 1,000 inhabitants is represented in

Table 80 and reveals large differences between the countries. While the average (across countries) number of outlets per 1,000 inhabitants is 0.22 , in 2007 more than half of the countries had a network density at least this high, while in 2017 this was only the case for 4 countries. Austria has the highest network density, more than double the average, while Poland has the lowest one, between 0.04 and 0.05 authorised repairer outlets per 1,000 inhabitants.

Table 80 - Number of authorised repairer outlets per 1,000 people for passenger cars ${ }^{151}$

|  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 0.46 | 0.47 | 0.48 | 0.49 | 0.47 | 0.47 | 0.47 | 0.46 | 0.45 | 0.44 | 0.44 |
| Bel/ Lux | 0.34 | 0.35 | 0.35 | 0.34 | 0.33 | 0.32 | 0.31 | 0.29 | 0.28 | 0.27 | 0.26 |
| Cyprus | 0.13 | 0.13 | 0.13 | 0.15 | 0.13 | 0.13 | 0.14 | 0.13 | 0.13 | 0.12 | 0.12 |
| France | 0.27 | 0.31 | 0.32 | 0.32 | 0.32 | 0.32 | 0.31 | 0.30 | 0.29 | 0.29 | 0.28 |
| Germany | 0.30 | 0.31 | 0.31 | 0.31 | 0.31 | 0.31 | 0.30 | 0.29 | 0.28 | 0.27 | 0.26 |
| Greece | 0.15 | 0.15 | 0.15 | 0.16 | 0.15 | 0.14 | 0.13 | 0.12 | 0.11 | 0.11 | 0.10 |
| Ireland | 0.21 | 0.21 | 0.20 | 0.19 | 0.17 | 0.17 | 0.17 | 0.17 | 0.16 | 0.16 | 0.16 |
| Italy | 0.26 | 0.26 | 0.26 | 0.26 | 0.25 | 0.24 | 0.24 | 0.20 | 0.20 | 0.19 | 0.18 |
| Netherlands | 0.21 | 0.23 | 0.22 | 0.22 | 0.21 | 0.20 | 0.19 | 0.18 | 0.17 | 0.17 | 0.16 |
| Poland | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 |
| Spain | 0.19 | 0.19 | 0.19 | 0.19 | 0.18 | 0.17 | 0.17 | 0.16 | 0.15 | 0.14 | 0.14 |
| UK | 0.10 | 0.10 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.09 | 0.08 |
| Average | 0.22 | 0.23 | 0.23 | 0.23 | 0.22 | 0.22 | 0.21 | 0.20 | 0.20 | 0.19 | 0.19 |

Source: EY Calculations based on Eurostat and ICDP database
Over the years, the density of the authorised repairers' network decreased in all countries, with an exception for France and Poland, as illustrated in Figure 42 below.

Figure 42 - Number of authorised repairer outlets per 1,000 people per country, 2007 versus $2017^{152}$


Source: EY Calculations based on Eurostat and ICDP database
An examination of the distribution of authorised repair outlets at the brand level, in Table 81, reveals that the brands under the top-5 VM brands (Renault, Fiat, Ford, Peugeot, Citroen, Opel/Vauxhall, Volkswagen and Audi) have approximately $50 \%$ of the total number of service points. With an exception of some brands, such as Smart, Mini and Jaguar, the total number of outlets at brand level have decreased over the time period and in almost all countries.

Compared to the total number of authorised repair outlets, the number of repair outlets owned by VMs, represented in Table 82 is fairly high, indicating that the majority of the authorised repair outlets are VM-owned.
When looking at brand-level, the share of VM-owned authorised repairer outlets compared to the total number of authorised repairer outlets is well above $50 \%$ for
almost all brands, except for Hyundai, Mitsubishi and Subaru. For some brands, such as Opel/Vauxhall, the authorised repairer outlets are (almost) fully VM -owned.

Table 81 - Share of VM-owned authorised repairer outlets (aggregated view for all countries in scope) per brand ${ }^{153}$

| Year <br> Brand | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Year Avg. per brand |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Alfa Romeo | 92\% | 88\% | 89\% | 88\% | 92\% | 93\% | 93\% | 88\% | 94\% | 93\% | 95\% | 91\% |
| Audi | 74\% | 73\% | 71\% | 73\% | 72\% | 83\% | 82\% | 83\% | 82\% | 83\% | 84\% | 78\% |
| BMW | 96\% | 98\% | 98\% | 98\% | 98\% | 98\% | 98\% | 97\% | 97\% | 97\% | 97\% | 97\% |
| Chevrolet | 91\% | 92\% | 93\% | 93\% | 93\% | 93\% | 93\% |  |  |  |  | 92\% |
| Chrysler | 87\% | 86\% | 86\% | 85\% | 86\% | 87\% | 83\% | 83\% | 88\% | 86\% | 95\% | 87\% |
| Citroen | 95\% | 96\% | 96\% | 96\% | 96\% | 96\% | 96\% | 96\% | 96\% | 95\% | 88\% | 95\% |
| Dacia |  | 100\% | 96\% | 98\% | 98\% | 98\% | 98\% | 98\% | 100\% | 97\% | 97\% | 98\% |
| Dodge | 89\% | 86\% | 86\% | 83\% | 84\% | 88\% | 83\% | 83\% | 88\% | 86\% | 96\% | 87\% |
| Fiat | 95\% | 93\% | 93\% | 93\% | 93\% | 94\% | 93\% | 92\% | 94\% | 94\% | 95\% | 94\% |
| Ford | 96\% | 96\% | 96\% | 96\% | 96\% | 95\% | 94\% | 94\% | 94\% | 94\% | 94\% | 95\% |
| Honda | 93\% | 93\% | 93\% | 93\% | 91\% | 93\% | 93\% | 93\% | 93\% | 93\% | 93\% | 93\% |
| Hyundai | 13\% | 12\% | 14\% | 12\% | 17\% | 62\% | 61\% | 61\% | 63\% | 68\% | 67\% | 41\% |
| Infiniti |  |  |  |  |  | 73\% | 79\% | 82\% | 82\% | 86\% | 95\% | 83\% |
| Jaguar | 87\% | 79\% | 83\% | 83\% | 81\% | 82\% | 80\% | 83\% | 82\% | 81\% | 81\% | 82\% |
| Jeep | 85\% | 86\% | 86\% | 85\% | 86\% | 87\% | 85\% | 85\% | 86\% | 86\% | 92\% | 86\% |
| Kia | 69\% | 67\% | 76\% | 75\% | 68\% | 74\% | 72\% | 69\% | 80\% | 81\% | 79\% | 74\% |
| Lancia | 99\% | 97\% | 96\% | 94\% | 93\% | 93\% | 94\% | 94\% | 94\% | 95\% | 96\% | 95\% |
| Land Rover | 89\% | 84\% | 84\% | 84\% | 80\% | 83\% | 81\% | 83\% | 81\% | 84\% | 83\% | 83\% |
| Lexus | 71\% | 71\% | 69\% | 68\% | 67\% | 68\% | 67\% | 68\% | 78\% | 69\% | 67\% | 69\% |
| Mazda | 89\% | 90\% | 95\% | 95\% | 95\% | 95\% | 95\% | 96\% | 98\% | 98\% | 98\% | 95\% |
| Mercedes-Benz | 90\% | 94\% | 94\% | 94\% | 94\% | 93\% | 93\% | 93\% | 90\% | 93\% | 93\% | 93\% |
| MG |  |  |  |  |  | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |
| Mini | 96\% | 98\% | 98\% | 99\% | 99\% | 99\% | 97\% | 98\% | 97\% | 97\% | 96\% | 98\% |
| Mitsubishi | 45\% | 51\% | 57\% | 48\% | 47\% | 38\% | 37\% | 36\% | 35\% | 36\% | 4\% | 39\% |
| Nissan | 85\% | 91\% | 90\% | 89\% | 90\% | 90\% | 91\% | 91\% | 92\% | 92\% | 93\% | 90\% |
| Opel/Vauxhall | 100\% | 98\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% | 100\% |
| Peugeot | 94\% | 93\% | 93\% | 90\% | 91\% | 90\% | 90\% | 89\% | 93\% | 89\% | 89\% | 91\% |
| Porsche | 72\% | 73\% | 73\% | 74\% | 73\% | 77\% | 77\% | 78\% | 81\% | 82\% | 82\% | 77\% |
| Renault | 98\% | 97\% | 96\% | 97\% | 97\% | 97\% | 97\% | 97\% | 96\% | 97\% | 97\% | 97\% |
| Seat | 69\% | 68\% | 67\% | 68\% | 67\% | 79\% | 79\% | 80\% | 82\% | 81\% | 83\% | 75\% |
| Skoda | 69\% | 69\% | 70\% | 70\% | 70\% | 77\% | 77\% | 81\% | 81\% | 81\% | 82\% | 75\% |
| Smart | 91\% | 98\% | 98\% | 98\% | 98\% | 98\% | 98\% | 98\% | 92\% | 98\% | 98\% | 97\% |
| Subaru | 4\% | 5\% | 6\% | 22\% | 16\% | 19\% | 18\% | 18\% | 18\% | 18\% | 20\% | 15\% |
| Suzuki | 60\% | 62\% | 64\% | 65\% | 64\% | 64\% | 64\% | 66\% | 68\% | 65\% | 65\% | 64\% |
| Toyota | 65\% | 64\% | 69\% | 70\% | 70\% | 68\% | 68\% | 67\% | 68\% | 67\% | 69\% | 68\% |
| Volkswagen | 72\% | 73\% | 73\% | 72\% | 72\% | 81\% | 82\% | 83\% | 82\% | 83\% | 83\% | 78\% |
| Volvo | 97\% | 98\% | 98\% | 97\% | 97\% | 98\% | 98\% | 98\% | 98\% | 97\% | 97\% | 97\% |
| Average per year | 80\% | 85\% | 85\% | 85\% | 85\% | 87\% | 87\% | 87\% | 88\% | 87\% | 86\% | 86\% |

A country level assessment of the share of repair outlets owned by VMs, as represented in Table 82 reveals similar results. Based on the dataset, a majority of the countries indicate that the share of VM-owned authorised repairer outlets covers more than $50 \%$, with a slight increase over the years. However, the average share of VM-owned authorised repairer outlets in Cyprus and Greece is much lower compared to the other countries in scope.

Table 82 - Share of VM-owned authorised repairer outlets (average across VMs per country) ${ }^{154}$

| $\mathrm{Brand}^{\text {Year }}$ | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | Year Avg. per brand |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 67\% | 68\% | 69\% | 69\% | 69\% | 90\% | 89\% | 89\% | 89\% | 89\% | 89\% | 80\% |
| Bel/Lux | 70\% | 75\% | 76\% | 78\% | 79\% | 76\% | 76\% | 76\% | 75\% | 75\% | 75\% | 75\% |
| Cyprus | 4\% | 1\% | 3\% | 0\% | 0\% | 0\% | 0\% | 0\% | 8\% | 3\% | 0\% | 2\% |
| France | 99\% | 99\% | 99\% | 99\% | 99\% | 99\% | 99\% | 99\% | 99\% | 99\% | 99\% | 99\% |
| Germany | 96\% | 96\% | 96\% | 96\% | 96\% | 98\% | 98\% | 98\% | 98\% | 98\% | 95\% | 97\% |
| Greece | 36\% | 34\% | 34\% | 32\% | 32\% | 29\% | 28\% | 20\% | 26\% | 31\% | 35\% | 31\% |
| I reland | 35\% | 42\% | 45\% | 50\% | 54\% | 57\% | 58\% | 60\% | 69\% | 61\% | 59\% | 54\% |
| Italy | 96\% | 96\% | 96\% | 97\% | 97\% | 98\% | 98\% | 98\% | 99\% | 99\% | 99\% | 98\% |
| Netherlands | 60\% | 62\% | 69\% | 65\% | 68\% | 68\% | 67\% | 65\% | 67\% | 68\% | 74\% | 67\% |
| Poland | 78\% | 80\% | 80\% | 79\% | 79\% | 92\% | 92\% | 95\% | 92\% | 94\% | 95\% | 87\% |
| Spain | 96\% | 97\% | 97\% | 97\% | 97\% | 97\% | 97\% | 98\% | 98\% | 97\% | 98\% | 97\% |
| UK | 96\% | 96\% | 98\% | 96\% | 96\% | 96\% | 96\% | 97\% | 99\% | 99\% | 96\% | 97\% |

Source: ICDP Database
Unfortunately, there is no solid methodology to provide a reasonable overview of independent repairers, since the combination of several sources (Eurostat and International Car Distribution Program (ICDP)) would result in a potential underestimation of the independent network. Eurostat provides data on the legal entities, while ICDP provides data on the number of contracts signed, which is not necessarily a one-to-one relation.

### 2.2. Typology of services and service providers

### 2.2.1 Typology of repair and maintenance services and warranty schemes

The typology is analysed based on responses to queries in the survey relating to the nature of repair activities required by brand standards. Furthermore, different types of warranty schemes and the type of compensation for works under warranty are presented.
The table below reflects the responses to the survey pertaining to the nature of repair activities required by brand standards for authorised repairers. VMs (representing a minimum of $20 \%$ of the market share for all vehicle categories) ${ }^{155}$, indicate that $70 \%$ of the authorised repairers are required to perform a full-range repairs, compared to body repairs (2\%), fast fitters (2\%) and other ranges of repair services (26\%). The share of the different categories of repair services remains stable over the period 20072017. VMs indicate a stable $26 \%$ in the category 'other' while body repair and fast fitters remain almost negligible. The category 'other' contains various possibilities such as: no formal requirements, a requirement for accessory assembly in addition to full-range repair, and full-range repairers allowing the option for subcontracting body repair.

Table 83 - Range of repair activities according to $\mathrm{VMs}^{156}$

|  | VMs' view |  |  |
| :--- | :---: | :---: | :---: |
| Range of repair services: | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| Body repair (e.g. chassis works, <br> painting) | $1.6 \%$ | $1.6 \%$ | $\mathbf{1 . 7 \%}$ |
| Fast fitters / basis repairs (e.g. <br> oil, filter change, glasses, breaks, <br> shock absorbers) | $2.3 \%$ | $2.4 \%$ | $2.3 \%$ |
| Full-range repairers | $70.0 \%$ | $69.8 \%$ | $69.7 \%$ |
| Other | $26.1 \%$ | $26.2 \%$ | $26.2 \%$ |

Source: EY Survey results
When making the analysis on a country level, the same conclusion can be drawn as the VMs responding to the survey indicate that the majority (more than $60 \%$, with an
exception of Greece and Cyprus) of the repair activities required by their brand standards is the option of full-range repair.

The table below provides a detailed view per country and reveals no major differences form the aggregated view. According to the VMs, the full-range repair remains the most used option with regards to the required brand standards.

Table 84 - Range of repair activities according to VMs per country ${ }^{157}$

| 2007 | AT | BE | CY | FR | DE | GR | I E | IT | PL | ES | NL | UK |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Body repair | 5\% | 1\% | 4\% | 1\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 3\% | 1\% |
| Fast fitters / basis repairs | 3\% |  | 11\% |  |  |  |  | 5\% | 4\% |  | 7\% |  |
| Full-range repairers | 67\% | 74\% | 45\% | 77\% | 74\% | 56\% | 74\% | 72\% | 67\% | 77\% | 68\% | 74\% |
| Other | 24\% | 25\% | 40\% | 22\% | 25\% | 43\% | 25\% | 22\% | 27\% | 22\% | 22\% | 25\% |
| 2012 | AT | BE | CY | FR | DE | GR | I R | IT | PL | ES | NL | UK |
| Body repair | 6\% | 1\% | 3\% | 1\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 4\% | 1\% |
| Fast fitters / basis repairs | 3\% |  | 12\% |  |  |  |  | 6\% | 5\% |  | 6\% |  |
| Full-range repairers | 68\% | 74\% | 45\% | 77\% | 74\% | 56\% | 74\% | 71\% | 65\% | 77\% | 68\% | 74\% |
| Other | 24\% | 25\% | 40\% | 22\% | 25\% | 43\% | 25\% | 22\% | 28\% | 22\% | 22\% | 25\% |
| 2017 | AT | BE | CY | FR | DE | GR | I R | IT | PL | ES | NL | UK |
| Body repair | 5\% | 1\% | 3\% | 1\% | 1\% | 1\% | 1\% | 1\% | 2\% | 1\% | 4\% | 1\% |
| Fast fitters / basis repairs | 3\% |  | 13\% |  |  |  |  | 5\% | 6\% |  | 6\% |  |
| Full-range repairers | 68\% | 74\% | 44\% | 77\% | 74\% | 56\% | 74\% | 72\% | 64\% | 77\% | 68\% | 74\% |
| Other | 24\% | 25\% | 40\% | 22\% | 25\% | 43\% | 25\% | 22\% | 28\% | 22\% | 22\% | 25\% |

Source: EY Survey results
To provide insights into the warranty schemes in terms of duration, coverage and dealers' reimbursement, VMs were queried on the type of warranties offered and the compensation for the repairers performing those services. Note that the results hereafter report the survey and no major conclusions for the wider market should be drawn. ${ }^{158}$

VMs indicated approximately four types of warranties offered throughout the years:

- anti-corrosion warranty;
- powertrain warranty;
- overall warranty;
- extended warranty.

Information on these types was gathered in terms of duration, in years or mileage (km) and coverage. Besides these standard coverages, VMs report a broad range of different options for warranty schemes. Battery warranties for electric vehicles were frequently reported by VMs. Anti-corrosion warranties were, in some cases, specified to be limited to paint for 3 years and rust for 12 years. The range of options provided by the respondents with respect to other warranty schemes range from 1-12 years and from 40,000 to 1 M km .

According to the survey respondents the overall warranty, specified by the respondents to cover any defect attributable to manufacturing or assembly fault and usually expressed both in mileage ( km ) and years, stayed stable throughout the years and did not vary significantly among countries. Based on the insights provided by the VMs participating in the survey, the overall warranty covers, on average, $100,000 \mathrm{~km}$ and 2 years in all countries, except for France where it is reported to cover 200,000 km.

The VMs reported that, for all countries in scope, the anti-corrosion warranty (covering repair or replacement of corroded parts of the vehicle's bodywork and sub-frame subject to them being a result of a manufacturer defect, material fault or the application of anticorrosion products recommended by the manufacturer) is expressed in years, and stayed stable ranging between 11.4 and 13 years over the time period.
The extended warranty scheme, a warranty scheme in addition to the standard factory warranty (sometimes covering the battery), has seen a serious drop from 2007 to 2017 in covered mileage, even though the average number of years has slowly increased from 4.7 to 5.0 in 2017. This is usually offered as additional service and requires additional payment by the client e.g., service contracts. An overview of mileage and years under extended warranty scheme per country is provided in Table 85.

Table 85 - Extended warranty scheme and coverage by mileage and/or years for the MSs in scope ${ }^{159}$

| Extended warranty <br> scheme | 2007 |  | $\mathbf{2 0 1 2}$ |  | 2017 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mileage | Year | Mileage | Year | Mileage | Year |
| Belgium | 600,000 | 4.50 | 130,000 | 4.50 | 130,000 | 5.00 |
| Cyprus | 750,000 | 5.00 | 100,000 | 5.00 | 100,000 | 5.00 |
| France | - | 5.00 | 100,000 | 5.00 | 100,000 | 5.00 |
| Germany | 200,000 | 5.00 | 100,000 | 5.00 | 100,000 | 5.00 |
| Greece | - | 5.00 | 100,000 | 5.00 | 100,000 | 5.00 |
| Ireland | 80,000 | 4.00 | 100,000 | 5.00 | 100,000 | 5.00 |
| Italy | - | 5.00 | 100,000 | 5.00 | 100,000 | 5.00 |
| Poland | 315,000 | 4.00 | 100,000 | 4.50 | 100,000 | 4.50 |
| Spain | - | 5.00 | 100,000 | 5.00 | 100,000 | 5.00 |
| The Netherlands | - | 3.50 | 100,000 | 5.00 | 100,000 | 5.00 |
| United Kingdom | - | 5.00 | 100,000 | 5.00 | 100,000 | 5.00 |

Source: EY Survey results
The VMs reported that, for all countries in scope, the power train warranty (the warranty that covers the systems and components that make a car run including the engine, transmission and drivetrain) stayed stable at 2 years within the time frame. However, when measured in mileage ( km ), there is a variation between the different countries and the years in scope, as it is shown in the table below. The power train warranty has increased in the covered mileage from $180,000 \mathrm{~km}$ to $214,000 \mathrm{~km}$ with a small increase in the average number of years presented.

Table 86 - Power train warranty scheme and coverage by mileage and/or years for the MSs in scope ${ }^{160}$

| Power train warranty <br> scheme | $\mathbf{2 0 0 7}$ |  | $\mathbf{2 0 1 2}$ |
| :--- | :---: | :---: | :---: | | $\mathbf{2 0 1 7}$ |
| :---: |
| Mileage | Mileage | Mileage |
| :---: |
| Austria |
| Belgium |
| Cyprus |
| France |
| Germany |
| Greece |
| Ireland |
| Italy |
| Poland |
| Spain |
| The Netherlands |
| United Kingdom |

Source: EY Survey results
When asked how the authorised repairers were compensated for repairs and maintenance under warranty, the majority of the respondents (more than 50\%) indicated that the actual cost of spare parts and labour costs was reimbursed, with no drastic shifts over the time frame. A detailed overview per country is presented in the table below. Note that the results hereafter report the survey and no major conclusions for the wider market should be drawn. ${ }^{161}$

Table 87 - Compensation of the repairs and maintenance of the authorised repairers for works under warranty ${ }^{162}$

| Compensation <br> of actual costs | $\mathbf{2 0 0 7}$ |  | $\mathbf{2 0 1 2}$ |  | $\mathbf{2 0 1 7}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spare parts | Labour <br> costs | Spare parts | Labour <br> costs | Spare parts | Labour <br> costs |
| Austria | $57 \%$ | $57 \%$ | $57 \%$ | $57 \%$ | $57 \%$ | $57 \%$ |
| Belgium | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ |
| Cyprus | $60 \%$ | $60 \%$ | $60 \%$ | $60 \%$ | $60 \%$ | $60 \%$ |
| France | $63 \%$ | $63 \%$ | $63 \%$ | $63 \%$ | $63 \%$ | $75 \%$ |
| Germany | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ |
| Greece | $50 \%$ | $33 \%$ | $50 \%$ | $33 \%$ | $50 \%$ | $50 \%$ |
| Ireland | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ |
| Italy | $71 \%$ | $57 \%$ | $71 \%$ | $57 \%$ | $71 \%$ | $43 \%$ |
| Poland | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ | $50 \%$ |
| Spain | $71 \%$ | $71 \%$ | $71 \%$ | $71 \%$ | $71 \%$ | $71 \%$ |
| The Netherlands | $71 \%$ | $71 \%$ | $71 \%$ | $71 \%$ | $71 \%$ | $71 \%$ |
| United Kingdom | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ | $67 \%$ |

Source: EY Survey results

Several VMs responding to the survey also indicated the options of a fixed amount of compensation for repairs and maintenance under warranty, albeit less compared to the actual costs. As shown in

Table 88, some VMs reported to reimburse the actual cost of the spare parts with a mark-up and the actual labour cost as per the work hours in the vehicle specific job, with the possibility to be compensated extra time if claimed according to the warranty procedures and the labour rate according to the yearly agreed rates.

Table 88 - Compensation of the repairs and maintenance of the authorised repairers for works under warranty ${ }^{163}$

| Fixed amount of compensation for | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Spare parts by service type | Labour cost by service type | Spare parts by service type | Labour cost by service type | Spare parts by service type | Labour cost by service type |
| Austria | 29\% | 43\% | 29\% | 43\% | 29\% | 43\% |
| Belgium | 17\% | 33\% | 17\% | 33\% | 17\% | 33\% |
| Cyprus | 0\% | 20\% | 0\% | 20\% | 0\% | 20\% |
| France | 13\% | 25\% | 13\% | 25\% | 13\% | 25\% |
| Germany | 17\% | 33\% | 17\% | 33\% | 17\% | 33\% |
| Greece | 17\% | 67\% | 17\% | 67\% | 17\% | 50\% |
| I reland | 33\% | 50\% | 33\% | 50\% | 33\% | 50\% |
| Italy | 14\% | 43\% | 14\% | 43\% | 14\% | 43\% |
| Poland | 17\% | 50\% | 17\% | 50\% | 17\% | 50\% |
| Spain | 14\% | 29\% | 14\% | 29\% | 14\% | 29\% |
| The Netherlands | 14\% | 29\% | 14\% | 29\% | 14\% | 29\% |
| United Kingdom | 33\% | 50\% | 33\% | 50\% | 33\% | 50\% |

Source: EY Survey results

### 2.2.2 Typology of repairers

In this section the contractual ties between spare parts manufacturers and independent repairers are considered, to get insights into the typology of repairers. The data to enable this analysis was collected through the survey.

In order to obtain insights into the typology of independent repairers in terms of their contractual ties (or lack thereof) to SPMs, both parties were asked to select the types of contractual relations/agreements they may have had over the years. Unfortunately, the number of independent repairers replying to this specific question in the survey was too limited to be of statistical significance. Therefore, only the view of the SPMs has been taken into consideration. A total of 15 self-identifying SPMs responded to the survey. They jointly represent EUR224 billion in global sales (among which spare parts manufacturing) and employ 1.083M people based on their most recent financial data (2019).

The table below captures the contractual ties between SPMs and independent repairers, from the SPMs point of view. SPMs responding to the survey mainly indicated having contractual ties in the form of volume/value-based discounts (ranging from 29\% - $50 \%$ among the countries in scope), or no contractual relationships at all ( $14 \%-57 \%$ of the respondents). In the category other, SPMs consider financial and/or framework contracts or loyalty programs.

Table 89 - Contractual ties between SPMs and independent repairers according to the SPMs ${ }^{164}$


Consultations with various trade associations provided additional insight into the relationship between SPMs and independent repairers. Such consultations reveal that over the years, the efficiency of the spare part distribution within the wholesale level has been optimised, evolving from a three-layered distribution to a two-layered distribution system, shifting towards more direct distribution models and partnerships. More recently, more and more parts wholesalers are introducing services to assist the repairers with marketing and communication, education and training, process automation and business intelligence linked to volume-based parts turnover. ${ }^{165}$

### 2.2.3 Typology of technical information and vehicle data

In order to provide a description of the types of vehicle-generated data that are provided by VMs to authorised repairers and the extent and conditions of independent repairers' access to these data, both VMs and repairers were queried. However, given the lack of statistically significant coverage of repairers (both authorised and independent) only the view of the VMs participating to the survey has been analysed. Note that the results hereafter report the survey and no major conclusions for the wider market should be drawn.

An analysis of the aggregated (over all countries) average (over all types of data) data sources used in 2007 versus 2017 reveals that, according to the VMs responding to the survey, in 2007, for both authorised and independent repairers, the majority of the information was passed on through documents. The importance of documents as a means of accessing vehicle-generated information in 2017 appears to have decreased relative to 2007, as can be expected from the impact of increased digitisation, as is shown in the table below where an increase in the use of websites has been reported. 166

Apart from documents, authorised repairers frequently used plug-in devices as a source to access different types of data in 2007, while this is less the case for independent repairers whom seem to rely more on websites. In 2017 for both the authorised and independent repairers the websites became, after documents, the most frequently used source. The use of plug-in devices slightly decreased for authorised repairers in 2017 compared to 2007, while the opposite was true for the independent repairers. For both the use of servers as a source to access different types of data increased over the years.

Table 90 - Aggregated (over all countries) average (over all types of data) of the data sources used in 2007-2017 according to VMs responses ${ }^{167}$

| Data source used | 2007 |  |  |  | 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Documents | Plug-in devices | Server | Website | Documents | Plug-in devices | Server | Website |
| Authorised repairers | 68.48\% | 17.39\% | 7.23\% | 6.90\% | 38.83\% | 16.73\% | 18.16\% | 26.28\% |
| Independent repairers | 67.04\% | 9.07\% | 6.88\% | 17.01\% | 39.47\% | 11.23\% | 18.83\% | 30.47\% |

Source: EY Survey results
A more detailed overview of repairers' access to vehicle-generated data is presented in the table below, identifying the means through which authorised and independent repairers may access these data. The means to access these data included in the survey included: documents, plug-in devices, server-hosted databases and websites. The data presented in the table below is based on the responses from the VMs participating to the survey. ${ }^{168}$

Table 91 - Types of data and sources used by authorised and independent repairers according to VMs, aggregated view over all countries ${ }^{169}$


Source: EY Survey results
According to the VMs responding to the survey, a number of types of data were accessed mainly through documents in 2007, in particular aggregated driver data, driver-specific data, other data and traffic/road data are, for both authorised and independent repairers.
For aggregated data from many vehicles, the VMs indicate a nearly even split between the four sources for authorised repairers, as well as a nearly even split between documents, server access and website access for independent repairers. The VMs reported no access by independent repairers to aggregated data from many vehicles through plug-in devices. The sources used for aggregated data from many vehicles did not change over the time period, neither for independent nor for authorised repairers, and all four sources are equally used in 2017.
The use of documents as the source to access aggregated driver data and driver-specific data decreased over the years for both independent and authorised repairers. For both independent and authorized repairers. The main source to access aggregated driver data was still documents in 2017, but for both the authorised as well as the independent
repairers the server and website became an important source of access. For driverspecific data, the main source became the server instead of the use of documents, and the website became an important source for the repairers (both authorised and independent).
According to the VMs responding to the survey authorised repairers were fully relying on documents as a source for this information in 2007, while independent repairers also, although for a very limited amount, made use of websites. Compared to 2007 traffic road data is still mainly sourced from documents for both types of repairers in 2017, although less frequently so as websites increased in importance as a source used for these data.
For vehicle-specific technical data and vehicle-specific use, similar percentages are observed for documents and server use between independent and authorised repairers. However authorised repairers seem to have had much more access to plug-in devices according to the VMs. In contrast, independent repairers used more website information for the same data.
Data in the category 'other'170 is reported to be accessed through websites in $50 \%$ of cases, for both types of repairers, whereas the share was $100 \%$ in 2007.

## 3. Conclusions

The total size of the vehicle parc for all categories in all countries (excluding Cyprus) increased by approximately $13.7 \%$ between 2007 and 2017. For passenger cars and LCVs, a constant, slightly increasing trend was observed over the period, which is in contrast to the trucks and buses categories, where several periods of decline were observed. The main driver of the $14.3 \%$ increase in the size of the LCV vehicle parc seems to be increased demand from the growing logistics sector, driven by online retail and e-commerce.
Passenger cars comprise the largest share of the vehicle parc. With 197M vehicles in 2007 and 225 M vehicles in 2017, passenger cars hold a steady share of approximately $81.7 \%$ of the total vehicle parc, while buses hold only approximately $0.2 \%$. Besides holding the largest share, passenger cars tend to have the lowest average age, with the passenger car vehicle parc being slightly younger than LCVs, while trucks and buses are, on average, substantially older.
Poland reported the largest increase in its vehicle parc, across all categories. This trend is mainly explained by its strong economic growth over 2007-2017. The average age of the vehicle parc differs significantly across the different countries in scope. However, for the passenger car and LCV categories we observed that Poland has the oldest parc, while Greece has the oldest parc for buses and truck while Austria has the youngest parc for all vehicle categories ${ }^{171}$.
Besides the size and age of the vehicle parc, we analysed changes in the network density of repairers. However, information on network density is very limited and consultations with trade associations confirmed that actual numbers on the network density are very difficult to capture. The network density for repairers (authorized and independent), defined as the number of repairers per 1,000 inhabitants, decreased in Belgium, Cyprus, Greece, Italy and the UK. The decreasing trend in network density is apparent for a second indicator as well, namely the number of repair and maintenance service providers compared to the overall size of the vehicle parc.
For authorized repairers, the total number of contracts showed a declining trend at brand level with exception of BMW, Hyundai and Mini. The number of authorized repairer outlets remained rather stable in most countries, except for Germany, Italy and Spain
where it declined and France where it increased. However, the network density for authorised repairers decreased in all countries, with the exceptions of France and Poland. An additional decreasing trend is observed in almost all countries in authorised repair outlets at brand level. The majority of these authorised repair outlets are VMowned. The latter is also observed on a country level.
$70 \%$ of the authorised repairers are required to perform a full-range repair, according to conditions set by VMs. The analysis on country level confirms that the ability to carry out a full-range of repairs is the norm in all countries, with the exception of Greece and Cyprus. ${ }^{172}$
VMs report 4 types of warranties: (I) anti-corrosion warranty, (II) powertrain warranty, (III) overall warranty, and (IV) extended warranties. Although a broad range of warranty schemes exist for electric and plug-in vehicles, a 6 -years battery warranty up to $160,000 \mathrm{~km}$ was commonly reported for this category. ${ }^{173}$

Terms of anti-corrosion and overall warranties stayed stable throughout the years and countries, with the average duration for anti-corrosion warranties remaining stable around 12 years. The average duration reported for overall warranties was 2 years and $100,000 \mathrm{~km}$ (with the exception of France covering up to $200,000 \mathrm{~km}$ ). The average duration of powertrain warranty remained stable at 2 years, with a minor increase in covered mileage (from $180,000 \mathrm{~km}$ to $214,000 \mathrm{~km}$ ) nonetheless. The extended warranty scheme underwent a serious drop in mileage from 2007-2012 and 2017, while the number of years slowly increased from 4.3 to 4.6 years (usually offered as service contracts). According to more than half of the respondents, the actual cost of spare parts and labour costs are reimbursed to authorized repairers for repairs and maintenance under warranty (without drastic shifts over the time frame in scope). However, several VMs reported paying a fixed compensation per repair task. ${ }^{174}$

Due to the limited response rate from repairers, only the responses of SPMs were analysed for questions on contractual ties with the authorised network. Arrangements for volume/value-based discounts are the most common form of contractual relationship, with the second most common arrangement consisting of lack of a contractual relationship. Other types of contractual relationships, including financial and/or framework contracts or loyalty programs, are less common. ${ }^{175}$

Queries related to the typology of technical information and access to vehicle data saw similarly low response rates from repairers. As a result, the analysis was restricted to SPMs' views as well.
We conclude that authorised repairers seem to have had more access to plug-in devices, whereas independent repairers made greater use of website information in 2007. As a consequence of digitalisation, the use of physical documents by repairers declined for both independent and authorised repairers. ${ }^{176}$

## IV. Distribution of spare parts

## 1. I ntroduction

The section examines the evolution of distribution of spare parts for motor vehicles, in order to provide insights into competition on the market. This is done by analysing the market structure of spare parts sales and the supply chain between SPMs and VMs for first assembly. VMs don't produce many parts in-house, but rather tend to outsource them, entirely or partially, to their supply chain. ${ }^{\text {xxxix }}$ They are then distributed through authorised repairers and parts distributors.
This section also considers the direct supply of spare parts by SPMs to both authorised and independent parts repairers/distributors, without passing through the VMs.
Insights are provided through qualitative and quantitative indicators to help obtain a thorough understanding of how market conditions and practices have evolved. Since the competitive interplay may depend on various factors, this section reports on:

- Size and structure of the market for sales of spare parts
- Distribution patterns and networks
- Distribution patterns
- Contractual arrangements

Some of the above sub-sections are further divided, where relevant, into the four vehicle categories identified in the scope of the study. Finally, for each of those categories, aggregated information is provided for all MS in scope, followed by data and insights in the respective market trends at national level.

## 2. Description \& analysis

### 2.1 Size and structure of the market for sales of spare parts

This subsection analyses the market size for spare parts sales in the 12 MS in scope using data on sales values for SPMs and SPDs during the period 2008-2017.177 These analyses are based on data sourced from Eurostat's annual detailed enterprise statistics for industry under NACE C293 (Manufacture of parts and accessories for motor vehicles) and NACE 45.32 (Retail trade of motor vehicle parts and accessories). However, the study is focused on motor vehicle parts; accessories for motor vehicles do not qualify for the purpose of this study.

### 2.1.1 Size of the market for spare parts supply and retail

## Overview

The market size for spare parts supply (sales of SPMs) for the 12 MS in scope ${ }^{178}$ increased by $29.8 \%$ in terms of sales value, from EUR 160.5 billion in 2008 to EUR 208.4 billion in 2017. However, this increase was not continuous over the years in scope, as the market size decreased by $25.4 \%$ and $11.6 \%$ YOY in 2009 and 2013 respectively. The 2008 economic crisis significantly impacted SPMs, as auto sales declined sharply. The automotive market stagnated in 2009, causing the market size for spare parts supply to fall to EUR 119.7 billion.
The market size for spare parts distribution (sales of SPDs) increased by $26.3 \%$, from EUR 24.8 billion in 2008 to EUR 31.3 billion in 2017 for the 12 MS in scope. ${ }^{179}$

[^27]Given the limited availability of data on Spain, the Netherlands, Ireland, France, and Belgium, the figure for market sizes for 2008 and 2017 may be smaller than what we report. ${ }^{180}$ The automotive spare parts distribution market has been thriving despite the 2008 economic crisis, due to the increase the average age of vehicle parcs, increased use of electronics in vehicles and the complexity of devices. ${ }^{\times 1}$

## Country level

At country level, Germany represented the largest market for automotive SPMs among the MS in scope, with $43.7 \%$ of total sales (in value) in the country, followed by France ( $12.4 \%$ ) and Italy ( $11.8 \%$ ). The trend in all countries was very volatile throughout the years in scope. More than 70 SPMs filed for bankruptcy in Germany alone due to the crisis as of September 2009. The market recovered in 2010 on the back of government stimulus programmes for the automotive industry introduced in 2009 in key markets such as France, Italy and Germany. xii

The figure below presents a country level ${ }^{181}$ overview of the market size for SPMs by value:

Figure 43 - Market size for spare parts supply (total sales of SPMs), in EUR million, 2008-2017 ${ }^{182}$


Source: Eurostat
The figure below represents the country-level overview of the market size for SPDs ${ }^{183}$ by value. It is based on the sales reported by legal entities whose primary economic activity comprises the retail trade of motor vehicle parts and accessories (NACE 45.32).

[^28]We observed that Germany represents the largest market for automotive SPDs with $31.7 \%$ of total sales, followed by the UK (21.5\%) and France (18.8\%). The trend in all countries was very volatile throughout the years in scope.

Figure 44 - Market size for spare parts distribution (total sales of parts distributors), in EUR million, 2007$2017^{184}$


### 2.2 Distribution patterns and networks

### 2.2.1 Distribution patterns

This sub-section analyses the spare parts supply chain. More specifically, we examined the prevalence of particular types of distribution systems and innovative channels used by VMs and SPMs both in promotions and actual sales, the number of distribution outlets owned by the VMs and the percentage of spare parts sales through these outlets. Finally, customer segments of SPMs and the evolution of online sales by SPMs to their final customers were analysed. All results in this subsection are based on the survey responses across the 12 MS in scope during 2007-2017. Any reference to the VM or SPM group as a whole only indicates to the survey respondents and not all the VMs or SPMs in the market. As such the results hereafter report the survey and no major conclusions for the wider market should be drawn. The data for SPDs is not meaningful due to limited response, and therefore not analysed in this sub-section.

The main distribution systems used can be split into three types: purely qualitative selective, quantitative selective and exclusive distribution. Innovative channels for both promotional and actual sales activities uncovered in the study survey included: ecommerce, direct sales via own third-party platforms, experience centres, mobile/popup stores and supermarkets. The types of customers for SPMs include: VMs, part wholesalers, repairers/part repairers and final customers.

### 2.2.1.1 Vehicle manufacturers

### 2.2.1.1.1 Overview

The analysis of distribution models for spare parts sales revealed that, between 2007 and 2017, qualitative selective distribution systems were the primary choice of VMs. Quantitative selection and exclusive distribution were also used by respondents for the sales of spare parts in the LCV, truck and bus segments. ${ }^{185}$

During this period, innovative channels were seldom used for spare parts sales. Survey data indicated the occasional use of e-commerce websites owned by respondents for passenger car spare parts sales in 2017. ${ }^{186}$ The responses also revealed that VM-owned distribution outlets constituted only 10\% - 30\% of the total sales in all VCs during 2007 - 2017.

### 2.2.1.1.2 Country level

Passenger cars
At country level, the analysis of survey responses indicated that qualitative selective distribution was the chosen model for all survey respondents for passenger car spare parts distribution across the 12 MS in scope during 2007 - 2017, except for $17 \%$ of VMs in Italy and $12 \%$ of VMs in France, which opted for quantitative selective distribution and exclusive distribution models respectively.

The use of innovative distribution channels was not very popular for actual sales of passenger car spare parts during 2007 - 2017. 33\% of the survey respondents in Poland and $40 \%$ of the respondents in the UK conducted e-commerce through their own website in 2017. It was also observed that $40 \%$ of respondents in the UK opted for e-commerce via third party platforms for sale of passenger car spare parts in 2012. Respondents in the remaining 10 MS in scope did not use any innovative distribution channel for spare parts sales. It should be noted that respondents to the innovative distribution channels' section of the survey represented only $20 \%$ of the market.

The table below presents the country level overview of the average number of passenger car spare parts distribution outlets owned by VMs. According to six survey responses, the average number of $V M$-owned outlets in 9 of 12 countries in scope ${ }^{187}$ either decreased or remained constant over the period in scope. Germany had the largest average number of outlets owned by VMs during the entire timeframe, however these declined from 50 in 2007 to 39 in 2017. For the remaining countries, the average number of outlets was less than 10 during 2007-2017.
Table 92 - Average number of passenger car spare parts distribution outlets owned by VMs per country, 2007-2017 ${ }^{188}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Belgium | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 7 | 7 |
| Cyprus | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| France | 8 | 9 | 9 | 9 | 8 | 8 | 7 | 7 | 7 | 5 | 4 |
| Germany | 50 | 47 | 47 | 46 | 48 | 52 | 53 | 53 | 50 | 40 | 39 |
| Greece | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| I reland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Netherlands | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| Poland | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| UK | 10 | 10 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 6 | 6 |

VM-owned distribution outlets accounted for less than 10\% of all passenger car spare parts sales in 10 of 12 MS in scope ${ }^{189}$ during 2007 - 2017. As per survey responses, in Cyprus, the VM-owned outlets constituted 70\% - 97\% of spare parts sales between 2007 and 2014. However, the share decreased significantly to ~30\% in 2015. Authorised outlets made more than $80 \%$ of passenger car spare parts sales in 11 of 12

MS in scope (data on Austria for 2007-2010, on the UK for 2007-2011 is not available) during 2007-2017.

Light commercial vehicles
The table below presents the LCV spare parts distribution models used by survey respondents in 12 MS in scope during 2007-2017. According to survey responses, $50 \%-80 \%$ of the respondents preferred qualitative selective distribution. $25 \%-33 \%$ of respondents in all MS followed other models, such as the exclusive distribution model. $25 \%$ of respondents in Italy opted for quantitative selective distribution models.

Table 93 - Share of types of LCV spare parts distribution models used by VMs per country, 2007-2017


Source: EY Survey results
The table below presents an overview of the average number of LCV spare parts distribution outlets owned by VMs in 10 of 12 countries in scope (data on Austria and the Netherlands is not available) during 2007-2017. According to the survey results, Germany had the highest average number of VM-owned spare parts outlets, with a peak of 67 outlets in 2014. However, this fell to 44 outlets in 2017. Belgium and France had the second- and third-highest average number of outlets owned by VMs (11 - 20) during the entire timeframe. In each remaining country, the average number of VM-owned outlets was less than five during 2007-2017.

Table 94 - number of LCV parts distribution outlets owned by VMs per country per country, 2007-2017190

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Belgium | 11 | 11 | 11 | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Cyprus | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| France | 13 | 14 | 14 | 16 | 18 | 19 | 19 | 19 | 16 | 16 | 14 |
| Germany | 60 | 60 | 60 | 60 | 61 | 64 | 66 | 67 | 61 | 45 | 44 |
| Greece | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Italy | 4 | 6 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1 reland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Poland | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| Spain | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| UK | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 |

VM-owned outlets accounted for less than $10 \%$ of total LCV spare parts sales in 8 of 12 MS in scope ${ }^{191}$ during 2014-2017. It should be noted that data for Cyprus and I reland is not available for the period 2007-2014, whereas data on Poland is lacking for the period 2007-2009. In France and Italy, these outlets accounted for 20\%-30\% of LCV spare parts sales between 2007-2014, which declined to 9\% - 15\% during 2015 - 2017. In Germany, outlets owned by VMs accounted for $50 \%$ of total LCV spare parts sales between 2007 and 2013. However, the share decreased to $\sim 20 \%$ in 2015 and stayed in the same range for the next two years.

## Trucks

The table below presents the truck spare parts distribution models used by VMs in 12 MS in scope during 2007-2017. In 2007, qualitative selective distribution was the most popular model for truck spare parts distribution, as $40 \%-60 \%$ of VMs in all MS, except Cyprus, opted for this model. However, distribution models in 10 MS evolved in 2012. In these MS, 20\% - $25 \%$ of VMs reported the use of other distribution models ${ }^{192}$. Cyprus and Greece did not report any evolution over the years.

Table 95-Share of types of truck spare parts distribution models used by VMs per country, 2007-2017

| Country | Distribution model |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qualitative selective distribution |  |  | Quantitative selective distribution |  |  | Others |  |  |
|  | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |
| Austria | 50\% | 25\% | 25\% |  |  |  | 50\% | 75\% | 75\% |
| Belgium | 60\% | 40\% | 40\% |  |  |  | 40\% | 60\% | 60\% |
| Cyprus | 33\% | 33\% | 33\% |  |  |  | 67\% | 67\% | 67\% |
| France | 60\% | 40\% | 40\% |  |  |  | 40\% | 60\% | 60\% |
| Germany | 60\% | 40\% | 40\% |  |  |  | 40\% | 60\% | 60\% |
| Greece | 50\% | 50\% | 50\% |  |  |  | 50\% | 50\% | 50\% |
| I taly | 40\% | 20\% | 20\% | 20\% | 20\% | 20\% | 40\% | 60\% | 60\% |
| I reland | 50\% | 25\% | 25\% |  |  |  | 50\% | 75\% | 75\% |
| Netherlands | 60\% | 40\% | 40\% |  |  |  | 40\% | 60\% | 60\% |
| Poland | 60\% | 40\% | 40\% |  |  |  | 40\% | 60\% | 60\% |
| Spain | 60\% | 40\% | 40\% |  |  |  | 40\% | 60\% | 60\% |
| UK | 60\% | 40\% | 40\% |  |  |  | 40\% | 60\% | 60\% |

Source: EY survey results
The table below presents an overview of the average number of truck spare parts distribution outlets owned by VMs in 11 of 12 countries in scope (data on Greece for 2007-2017 is not available) during 2007-2017. The average number of truck spare parts distribution outlets owned by VMs was highest for the UK, amounting to $\sim 20$ during 2007-2017. According to survey responses, France, Germany and the Netherlands had on average 10-20 VM-owned distribution outlets during the entire timeframe. In each remaining country, the average number of such outlets was less than 10 during 2007-2017.

Table 96 - Average number of truck parts distribution outlets owned by VMs per country per country, 2007 $2017^{193}$

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 5 | 5 | 5 |
| Belgium | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 8 |
| Cyprus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| France | 16 | 16 | 16 | 17 | 18 | 18 | 18 | 17 | 16 | 16 | 16 |
| Germany | 12 | 12 | 12 | 12 | 12 | 13 | 13 | 13 | 13 | 13 | 12 |
| I taly | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 4 | 4 | 4 | 4 |
| I reland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Netherlands | 10 | 10 | 10 | 10 | 10 | 10 | 15 | 13 | 12 | 12 | 12 |
| Poland | 3 | 3 | 4 | 4 | 4 | 6 | 8 | 9 | 9 | 7 | 6 |
| Spain | 4 | 2 | 2 | 2 | 2 | 2 | 6 | 6 | 6 | 6 | 6 |
| UK | 21 | 21 | 19 | 19 | 19 | 20 | 19 | 19 | 19 | 19 | 20 |

Source: EY Survey results
The VM owned distribution outlets accounted for 10\% - 30\% of the truck spare parts sales in France, Austria, Germany, Italy, Spain and Poland during 2014-2017, with a share of $30 \%$ in Austria. As per survey responses, we observe that during 2007 - 2013, authorised outlets accounted for $100 \%$ of truck spare parts sales in 11 of 12 MS in scope during 2007-2013. Data regarding Greece and Cyprus was not available for 2007-2013 and 2007-2017 respectively.

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Buses }\mp@subsup{}{}{194
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The table below presents the bus spare parts distribution models used by VMs in the 12 MS in scope during 2007-2017. About $50 \%-70 \%$ of the respondents in all MS, except France and Italy, opted for qualitative selective distribution during 2007-2017. According to survey responses, in France and Italy qualitative and quantitative selective distribution were equally popular. It was also observed that $33 \%-50 \%$ of respondents in all MS used other distribution models during the entire timeframe.

Table 97 - Share of types of spare parts distribution models for bus by VMs per country, 2007-2017


Source: EY Survey results
The table below presents an overview of the average number of bus spare parts distribution outlets owned by VMs in all MS in scope during 2007-2017. Among the countries in scope, the highest average number of VM-owned distribution outlets over the period 2007-2017 was recorded in Germany, however it declined from 36 in 2007 to 26 in 2017. France and the UK had the second- and third-highest number of outlets owned by VMs with approximately 20 outlets during this entire timeframe. For the remaining countries, the average number of VM-owned outlets was less than 10 during 2007-2017.

Table 98 - Average number of bus parts distribution outlets owned by VMs per country per country, 20072017

| Year Country | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Belgium | 1 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| Cyprus | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| France | 18 | 18 | 18 | 19 | 21 | 21 | 22 | 22 | 21 | 21 | 20 |
| Germany | 36 | 34 | 34 | 34 | 34 | 34 | 35 | 35 | 31 | 26 | 26 |
| Greece | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| I taly | 3 | 3 | 3 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| I reland | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Netherlands | 4 | 4 | 4 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 6 |
| Poland | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Spain | 6 | 6 | 6 | 7 | 7 | 7 | 8 | 8 | 8 | 8 | 8 |
| UK | 17 | 17 | 17 | 17 | 17 | 18 | 17 | 18 | 18 | 18 | 20 |

Source: EY Survey results

### 2.2.1.2 Spare parts manufacturers

2.2.1.2.1 Overview

SPMs' distribution patterns were analysed in all MS during 2007-2017 and depending on the type of customer. The analysis is based on survey responses collected from eight SPMs, jointly representing EUR 104 billion in global sales and 445,000 employees, according to their most recent financial data (2019). At an aggregate level, we see that SPMs primarily supplied spare parts to part wholesalers and VMs for all VCs during 2007 - 2017. We also observed that a small proportion of SPMs (5\% - 30\%) supplied spare parts to final customers for all VCs.
The use of innovative distribution channels for spare parts sales, for all VCs in all MS in scope during 2007-2017, was analysed based on the responses of ten SPMs, jointly representing EUR 168 billion in global sales and 817,000 employees, according to their most recent financial data (2019). During this period, innovative channels were only used for actual sales and not for the promotion of spare parts. $20 \%-40 \%$ of survey respondents across all VCs did not use any innovative distribution channel for spare parts sales during 2007-2017. The use of survey respondents' own website for ecommerce and direct sales of spare parts increased in 2012 for all VCs. We observed that the share of third-party platforms in e-commerce and direct sales of spare parts either remained constant or decreased for all VCs during 2007-2017. Supermarkets were used by respondents in countries such as France, Italy and the UK for passenger cars and LCV spare parts distribution during this timeframe.
When analysing online spare parts sales based on the responses of nine selfidentifying SPMs,a small proportion reported selling through their own website or a third-party website. These SPMs jointly represent EUR 49 billion in global sales and employ 249,000 people based on their most recent financial data (2019). These limited survey responses indicate that online sales were practically non-existent during 2007 2011. However, the share of spare parts sold online increased slightly from $0.45 \%$ in 2012 to 1.65\% in 2017.
The table below presents the aggregate share of online spare parts sales by SPMs to the final customers during 2007-2017:

Table 99 - Aggregate percentage share of online spare parts sales by SPMs to final customers, 2007 $2017^{195}$

| Sales Year | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Online <br> sales | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0 \%$ | $0.45 \%$ | $0.46 \%$ | $0.72 \%$ | $0.75 \%$ | $1.13 \%$ | $1.65 \%$ |
| Source: EY Survey results |  |  |  |  |  |  |  |  |  |  |  |

### 2.2.1.2.2 Country level

An analysis of the share of online sales of spare parts by SPMs for all VCs in 12 MS in scope during 2007-2017 was performed. As per the nine survey responses, online platforms for spare parts sales appear to have been popular only in 5 of the 12 MS in scope during 2007-2017. Respondents in the Netherlands had the highest share of spare parts sold online to their final customers among all MS in scope. Their share increased from 5\% in 2007 to $15 \%$ in 2017. We also see that the evolution of online platforms for spare parts sales in Germany, France and the UK contributed to a steady increase in online sales by respondents during 2014-2017.

Table 100 - Share of online spare parts sales (for all VCs) by SPMs per country, 2007-2017196

| $\begin{array}{r} \text { Year } \\ \text { Country } \end{array}$ | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Bel/ Lux | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Cyprus | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| France | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0.25\% | 0.25\% | 0.38\% | 0.38\% |
| Germany | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0.17\% | 0.33\% | 0.67\% | 1\% | 1.33\% |
| Greece | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Ireland | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0.17\% |
| Italy | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Netherlands | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 5\% | 6.67\% | 6.67\% | 10\% | 15\% |
| Poland | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Spain | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| UK | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0.83\% | 0.83\% | 1.33\% | 1.67\% |

Source: EY Survey results

## Passenger cars

The table below presents the share attributable to each type of customer for passenger car spare parts sales by SPMs in 12 MS in scope during 2007-2017. At country level, it was observed that part wholesalers and VMs were the top customers for survey respondents in all MS during 2007-2017. More specifically 60\% - 70\% of respondents in Cyprus, Greece, Ireland and the Netherlands sold spare parts to part wholesalers, $50 \%-70 \%$ of respondents in Austria, Germany, Poland and Spain sold to VMs during the entire timeframe. Sales to repairers were prevalent in Belgium, France, Germany, Ireland, Italy and Spain during 2007-2017. We also see that 8\%-25\% of respondents in Italy and Greece supplied directly to final customers.

Table 101 - Share of customer segments for passenger car spare parts sales by SPMs per country, 2007 $2017{ }^{197}$


The table below presents a country-level overview of the share of innovative distribution channels for actual sales of passenger car spare parts by SPMs during 2007-2017. It was observed that $25 \%$ - $50 \%$ of respondents in all MS did not use any innovative channel for actual sales during 2007-2017. Use of their own website for e-commerce increased in 2012 in all MS except Cyprus and the UK compared to 2007. In 2017, the share of e-commerce on respondent websites was $25 \%-40 \%$ for all MS. We also observed that the usage of third-party platforms for e-commerce by respondents either remained constant or decreased for all MS except Germany and Italy during 2007 2017. Supermarkets were not a popular channel for spare parts distribution and were opted for by only 17\% of respondents in France, Italy and the UK during 2007-2017. $30 \%-50 \%$ of respondents in all MS in scope used other distribution channels such as specialized distributors for turbocharger or engine parts and components in magazines.

Table 102 - Share of innovative distribution channels for actual sale of passenger car spare parts by SPMs per country, 2007-2017 ${ }^{198}$

| Country | Year | E- commerce, direct sales through their own website | E-commerce, sales through third party platforms | No such channels | Supermarkets | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| Belgium | 2007 | 17\% | 17\% | 50\% |  | 50\% |
|  | 2012 | 33\% | 17\% | 50\% |  | 50\% |
|  | 2017 | 33\% | 17\% | 50\% |  | 50\% |
| Cyprus | 2007 | 25\% | 25\% | 25\% |  | 50\% |
|  | 2012 | 25\% | 25\% | 25\% |  | 50\% |
|  | 2017 | 25\% | 25\% | 25\% |  | 50\% |
| France | 2007 | 17\% | 17\% | 33\% | 17\% | 33\% |
|  | 2012 | 33\% | 17\% | 33\% | 17\% | 33\% |
|  | 2017 | 50\% | 17\% | 17\% | 17\% | 33\% |
| Germany | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 33\% | 33\% | 33\% |  | 33\% |
| Greece | 2007 | 17\% | 17\% | 50\% |  | 33\% |
|  | 2012 | 17\% | 17\% | 50\% |  | 33\% |
|  | 2017 | 33\% | 17\% | 50\% |  | 33\% |
| Italy | 2007 | 17\% | 17\% | 33\% | 17\% | 33\% |
|  | 2012 | 33\% | 17\% | 33\% | 17\% | 33\% |
|  | 2017 | 33\% | 33\% | 33\% | 17\% | 33\% |
| Ireland | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| Netherlands | 2007 | 17\% | 17\% | 50\% |  | 33\% |
|  | 2012 | 33\% | 17\% | 50\% |  | 33\% |
|  | 2017 | 33\% | 17\% | 50\% |  | 33\% |
| Poland | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| Spain | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| UK | 2007 | 33\% | 33\% | 33\% | 17\% | 33\% |
|  | 2012 | 33\% | 33\% | 33\% | 17\% | 33\% |
|  | 2017 | 33\% | 33\% | 33\% | 17\% | 33\% |

Source: EY Survey results

## Light Commercial Vehicles

The table below presents the share per type of customer for LCV spare parts sales by SPMs in 12 MS in scope during 2007 - 2017. As per survey results ${ }^{199}$, part wholesalers and VMs were the top customers in all MS except Italy and France during 2007-2017. While 60\% - 70\% of the survey respondents in Belgium, Ireland and the Netherlands sold spare parts to part wholesalers, $40 \%-60 \%$ of respondents in Germany, Italy and UK sold to VMs during the entire timeframe. Respondents supplied all the customer groups analysed through the survey in Italy and France. Sale to repairers was relevant only in France and Italy during 2007-2017. We also observed that 5\% - 25\% of respondents in Greece, Italy and to some extent in France supplied directly to final customers.

Table 103-Share of customer segments for LCV spare parts sales by SPMs per country, 2007-2017200


Source: EY Survey results
The table below shows the share of innovative distribution channels for actual sales of LCV spare parts by SPMs in the 12 MS in scope during 2007-2017. At a country level, it was observed that $25 \%$ - $50 \%$ of survey respondents in all MS did not use any innovative channel for actual sales during 2007-2017. Use of their own websites for e-commerce increased in 2012 for respondents in all MS except Cyprus and the UK. In 2017, the share of respondents' own website was $25 \%-40 \%$ for all MS in scope. We also observed that the use of third-party platforms for e-commerce by respondents either remained constant or decreased for all MS except Germany and Italy during 2007 - 2017. Supermarkets were not a popular channel for spare parts distribution and were opted for by only $17 \%$ of respondents in France and Italy during 2007-2017. As per survey responses, $30 \%$ - $50 \%$ of respondents in all MS in scope used other distribution channels such as specialized distributors for turbocharger or engine parts and components in magazines.

Table 104 - Share of innovative distribution channels for actual sale of LCV spare parts by SPMs per country, 2007-2017 ${ }^{201}$

| Country | Year | E- commerce, direct sales through their own website | E-commerce, sales through third party platforms | No such channels | Supermarkets | Others |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| Belgium | 2007 | 17\% | 17\% | 50\% |  | 33\% |
|  | 2012 | 33\% | 17\% | 50\% |  | 33\% |
|  | 2017 | 33\% | 17\% | 50\% |  | 33\% |
| Cyprus | 2007 | 25\% | 25\% | 25\% |  | 50\% |
|  | 2012 | 25\% | 25\% | 25\% |  | 50\% |
|  | 2017 | 25\% | 25\% | 25\% |  | 50\% |
| France | 2007 | 17\% | 17\% | 33\% | 17\% | 33\% |
|  | 2012 | 33\% | 17\% | 33\% | 17\% | 33\% |
|  | 2017 | 50\% | 17\% | 17\% | 17\% | 33\% |
| Germany | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 33\% | 33\% | 33\% |  | 33\% |
| Greece | 2007 | 17\% | 17\% | 50\% |  | 33\% |
|  | 2012 | 17\% | 17\% | 50\% |  | 33\% |
|  | 2017 | 33\% | 17\% | 50\% |  | 33\% |
| Italy | 2007 | 17\% |  | 33\% | 17\% | 33\% |
|  | 2012 | 33\% | 17\% | 33\% | 17\% | 33\% |
|  | 2017 | 33\% | 33\% | 33\% | 17\% | 33\% |
| Ireland | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| Netherlands | 2007 | 17\% | 17\% | 50\% |  | 33\% |
|  | 2012 | 33\% | 17\% | 50\% |  | 33\% |
|  | 2017 | 57\% | 29\% | 43\% |  | 29\% |
| Poland | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 |  |  | 50\% |  | 50\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| Spain | 2007 | 20\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |
| UK | 2007 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2012 | 40\% | 20\% | 40\% |  | 40\% |
|  | 2017 | 40\% | 20\% | 40\% |  | 40\% |

Source: EY Survey results

## Trucks

The table below presents the share of types of customers for truck spare parts sales by SPMs in the 12 MS in scope during 2007-2017. As per survey responses, part wholesalers were the top customers for truck spare parts by respondents in all MS except Italy during 2007-2017. The proportion of respondents selling truck spare parts to part wholesalers was more than $50 \%$ in all MS except France, Italy and the UK during the entire timeframe. While VMs were a common customer segment for respondents in all MS, they constituted for more than $80 \%$ of truck spare parts sales in the UK. Respondents in Italy and France supplied to all the customer groups. We also see that $15 \%-25 \%$ of respondents in France, Greece and Italy supplied directly to the final customers.

Table 105-Share of customer segments for truck spare parts sales by SPMs per country, 2007-2017 202


The table below shows the share of innovative distribution channels for actual sales of truck spare parts by SPMs in 12 MS in scope during 2007-2017. At a country level, it was observed that 25\% - 50\% of respondents in all MS, except Cyprus, did not use any innovative channel for actual sales during 2007-2017. Use of their own website for e-commerce increased in 2012 for respondents in all MS except Cyprus and the UK. In 2017, the share of their own website for e-commerce was $25 \%-70 \%$ in all MS. We also observed that the use of third-party platforms for e-commerce by respondents either remained constant or decreased for all MS, except Germany, during 2007-2017. 30\% - 70\% of respondents in all MS in scope used other distribution channels such as specialized distributors for turbocharger or engine parts and components in magazines.

Table 106 - Share of innovative distribution channels for actual sale of truck spare parts by SPMs per country, 2007-2017203

| Country | Year | E- commerce, direct sales through their own website | E-commerce, sales through third party platforms | No such channels | Others |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 2007 | 25\% | 25\% | 25\% | 40\% |
|  | 2012 | 50\% | 25\% | 25\% | 40\% |
|  | 2017 | 50\% | 25\% | 25\% | 40\% |
| Belgium | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 40\% | 20\% | 40\% | 40\% |
|  | 2017 | 40\% | 20\% | 40\% | 40\% |
| Cyprus | 2007 | 33\% | 33\% |  | 67\% |
|  | 2012 | 33\% | 33\% |  | 67\% |
|  | 2017 | 33\% | 33\% |  | 67\% |
| France | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 40\% | 20\% | 40\% | 40\% |
|  | 2017 | 60\% | 20\% | 20\% | 40\% |
| Germany | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 40\% | 40\% | 20\% | 40\% |
| Greece | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 20\% | 20\% | 40\% | 40\% |
|  | 2017 | 40\% | 20\% | 40\% | 40\% |
| Italy | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 40\% | 20\% | 40\% | 40\% |
|  | 2017 | 40\% | 20\% | 40\% | 40\% |
| Ireland | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |
| Netherlands | 2007 | 50\% | 33\% | 33\% | 33\% |
|  | 2012 | 67\% | 33\% | 33\% | 33\% |
|  | 2017 | 67\% | 33\% | 33\% | 33\% |
| Poland | 2007 | 0\% | 0\% | 33\% | 67\% |
|  | 2012 | 25\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |
| Spain | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |
| UK | 2007 | 50\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 0\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |

Source: EY Survey results

## Buses

The table below presents the share of types of customers for bus spare parts sales by SPMs in 12 MS in scope during 2007 - 2017. As per survey responses, part wholesalers were the top customers for bus spare parts sales by respondents in all MS except Italy during 2007-2017. The proportion of respondents selling bus spare parts to part wholesalers was more than $50 \%$ in all MS expect Italy, France and the Netherlands during this period. VMs, with the second largest share, were a common customer group for respondents in all MS except Greece during 2007-2017. Respondents supplied to all customer groups in Italy. We also see 20\% - $25 \%$ of respondents in France, Greece and Italy supplied directly to the final customers.

Table 107 - Share of customer segments for bus spare parts sales by SPMs per country, 2007-2017204


Source: EY Survey results
The table below presents the share of innovative distribution channels for actual sales of bus spare parts by SPMs in 12 MS in scope during 2007-2017. At a country level, it was observed that 20\% - 40\% of respondents in all MS, except Cyprus, did not use any innovative channel for actual sales during 2007-2017. Use of their own website for e-commerce increased in 2012 in all MS, except Cyprus and the UK. In 2017, the share of respondents' own website for actual spare parts sales was $30 \%-80 \%$ for all MS in scope with the Netherlands constituting the highest share at $80 \%$. We also observed that the use of third-party platforms for e-commerce by respondents either remained constant or decreased for all MS, except Germany, during 2007-2017. 30\% - $50 \%$ of respondents in all MS in scope used other distribution channels such as specialized distributors for turbocharger or engine parts and components in magazines.

Table 108 - Share of innovative distribution channels for actual sale of bus spare parts by SPMs per country, 2007-2017 ${ }^{205}$

| Country | Year | E- commerce, direct sales through their own website | E-commerce, sales through third party platforms | No such channels | Others |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Austria | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |
| Belgium | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 40\% | 20\% | 40\% | 40\% |
|  | 2017 | 40\% | 20\% | 40\% | 40\% |
| Cyprus | 2007 | 33\% | 33\% |  | 67\% |
|  | 2012 | 33\% | 33\% |  | 67\% |
|  | 2017 | 33\% | 33\% |  | 67\% |
| France | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 40\% | 20\% | 40\% | 40\% |
|  | 2017 | 60\% | 20\% | 20\% | 40\% |
| Germany | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 40\% | 40\% | 20\% | 40\% |
| Greece | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 20\% | 20\% | 40\% | 40\% |
|  | 2017 | 40\% | 20\% | 40\% | 40\% |
| Italy | 2007 | 20\% | 20\% | 40\% | 40\% |
|  | 2012 | 40\% | 20\% | 40\% | 40\% |
|  | 2017 | 40\% | 20\% | 40\% | 40\% |
| Ireland | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |
| Netherlands | 2007 | 60\% | 40\% | 20\% | 40\% |
|  | 2012 | 60\% | 20\% | 20\% | 40\% |
|  | 2017 | 80\% | 40\% | 20\% | 40\% |
| Poland | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 25\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |
| Spain | 2007 | 25\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |
| UK | 2007 | 50\% | 25\% | 25\% | 50\% |
|  | 2012 | 50\% | 25\% | 25\% | 50\% |
|  | 2017 | 50\% | 25\% | 25\% | 50\% |

Source: EY Survey results

### 2.2.2 Contractual arrangements ${ }^{206}$

This sub-section analyses the contractual arrangements for the ownership and licensing of intellectual property (IP) rights between VMs and SPMs. The analyses are performed for the 12 MS in scope during 2007-2017. The agreements for the manufacturing of components include: (i) contribution of know-how, (ii) transfer/ licensing of design, and other IP rights, (iii) provision of tools necessary for component production and (iv) sharing of product development costs. Conditions offered by VMs to SPMs may include access to additional data, administrative/monetary support for sales and marketing and rebates on parts. The rebate and bonus schemes employed by VMs may depend on the contractual ties SPMs may apply to SPDs. These ties may rely on product/brand exclusivity and include volume or value-based discounts with SPDs.

### 2.2.2.1 Overview

This section examines the proportion of components sourced by VMs from SPMs and different agreements on the ownership and licensing of IP rights between them in 11 of 12 MS (data for CY are not available) in 2007, 2012 and 2017 based on survey responses. Note that the responses to the survey represent a low market share ( $11 \%$ on average only) as such the results hereafter report the survey and no major conclusions for the wider market should be drawn. ${ }^{207}$
The analysis, as is shown in the table below, revealed that during 2007-2017VMs sourced approximately $75 \%$ of components from upstream suppliers while the remaining components were produced in-house. The agreements between VMs and SPMs were mainly based on the following three schemes:

- sharing of product development costs (increased from 31.2\% in 2007 to $33.6 \%$ in 2017),
- contribution to know-how (declined from $32.1 \%$ in 2007 to $29.8 \%$ in 2017), and
- provision of tools necessary for component production by SPMs which maintained the third largest share ( $21 \%$ in 2007 to $23.6 \%$ in 2017).
Table 109-Ownership and licensing of intellectual property rights (according to VMs) in 2007, 2012 and $2017^{208}$

| Source of components used for first assembly (\%) | 2007 | 2012 | 2017 |
| :---: | :---: | :---: | :---: |
| Produced in-house | 25.7\% | 25.4\% | 25.5\% |
| Sourced from upstream suppliers | 74.3\% | 74.6\% | 74.6\% |
| Manufacturing agreements with upstream suppliers for souring components (\%) | 2007 | 2012 | 2017 |
| Contribution by VM of know-how | 32.1\% | 30.7\% | 29.8\% |
| Provision by VM of tools necessary for component production | 21.0\% | 26.2\% | 23.6\% |
| Sharing of product development costs | 31.2\% | 35.2\% | 33.6\% |
| Transfer / licensing by VM of design rights | 2.6\% | 0.0\% | 5.2\% |
| Transfer / licensing by VM of other intellectual property rights | 10.5\% | 7.9\% | 5.2\% |
| Other types of contribution | 2.6\% | 0.0\% | 2.6\% |

Source: EY Survey results
The analysis below examines the volume of sales of SPMs to supply components to VMs and the respective type of agreements, based on the responses of 10 selfidentifying SPMs in 11 of 12 MS in scope during 2007-2017. The SPMs jointly represent EUR 111 billion in global sales and employ 484,000 people according to their most recent financial data (2019). The results hereafter report the survey and no major conclusions for the wider market should be drawn

The analysis reveals that $54.9 \%$ of SPMs' sales in 2017 were directly sold as components to VMs, up from $50.7 \%$ in 2007, while the remaining portion was sold as spare parts into the aftersales market.

According to the SPMs responding to the survey, none of the predefined options with regards to the manufacturing agreements with VMs for sourcing components reflected the majority of the agreements as the option 'other' was selected for the majority of the responses.
The agreements based on transfer/licensing of other IP rights by VMs accounted for approximately $6 \%$ of total agreements, while agreements based on the contribution of know-how by VMs represented approximately $5 \%$ of the total agreements over the reported time period. According to survey responses, in some of the agreements the IP rights were owned entirely by SPMs, such as brake manufacturers, while in other agreements VMs partially pay the costs of tooling purchased by SPMs in exchange for a transfer of IP rights.
The reported proportion of agreements on sharing product development costs, provision by VMs of tools necessary for component production and transfer/licensing of design rights by VMs was minimal during the time period. This is significantly lower compared to the reported share for similar agreements for components sourced by VMs from upstream suppliers.

### 2.2.2.2 Country level

The majority of the components ( $64 \%-84 \%$ ) used by VMs for first assemply was outsourced to upstream suppliers while the remainder quota was produced in-house during the period 2007-2017.
Table 110 - Source of components used for first assembly (according to VMs) in 2007, 2012 and $2017^{209}$

| Country | Source of components used for first assembly (\%) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Produced in-house |  |  | Sourced from upstream suppliers |  |  |
|  | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |
| Austria | 22.8\% | 22.7\% | 22.6\% | 77.2\% | 77.3\% | 77.4\% |
| Belgium | 22.8\% | 22.6\% | 22.6\% | 77.2\% | 77.4\% | 77.4\% |
| Cyprus | 17.0\% | 17.0\% | 16.0\% | 83.0\% | 83.0\% | 84.0\% |
| France | 30.0\% | 29.5\% | 29.8\% | 70.0\% | 70.5\% | 70.2\% |
| Germany | 23.0\% | 22.4\% | 22.4\% | 77.0\% | 77.6\% | 77.6\% |
| Greece | 34.8\% | 34.7\% | 35.0\% | 65.2\% | 65.3\% | 65.0\% |
| Ireland | 35.7\% | 35.5\% | 35.5\% | 64.3\% | 64.5\% | 64.5\% |
| Italy | 22.8\% | 22.6\% | 22.6\% | 77.2\% | 77.4\% | 77.4\% |
| Netherlands | 20.8\% | 20.6\% | 20.6\% | 79.2\% | 79.4\% | 79.4\% |
| Poland | 22.8\% | 22.6\% | 22.6\% | 77.2\% | 77.4\% | 77.4\% |
| Spain | 22.8\% | 22.6\% | 22.6\% | 77.2\% | 77.4\% | 77.4\% |
| United Kingdom | 22.8\% | 22.6\% | 22.6\% | 77.2\% | 77.4\% | 77.4\% |

According to the VMs responding to the survey the majority of manufacturing agreements for components with upstream supplier were based on sharing the product development costs between them. This was the case in all countries except for Greece where $45 \%$ of the agreements were based on the provision of tools provided by VMs for product development by SPMs. This type of agreement, in the other MS, represented the third most frequently-used manufacturing agreement, while contribution of knowhow by SPMs represented the second most frequently-used agreement for all countries except for Greece.

Table 111 - Manufacturing agreements with upstream suppliers for souring components (\%, according to VMs), country view ${ }^{210}$

| Country | Contribution by you of knowhow |  |  | Provision by VM of tools necessary for component production |  |  | Sharing of product development costs |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |
| Austria | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| Belgium | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| France | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| Germany | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| Greece | 25.0\% | 25.0\% | 25.0\% | 40.0\% | 50.0\% | 45.0\% | 5.0\% | 10.0\% | 5.0\% |
| Ireland | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| Italy | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| Poland | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| Spain | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| The Netherlands | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| United Kingdom | 32.5\% | 31.0\% | 30.0\% | 20.0\% | 25.0\% | 22.5\% | 32.5\% | 36.5\% | 35.0\% |
| Country | Other types of contribution |  |  | Transfer/ licensing by VM of design rights |  |  | Transfer / licensing by VM of other IP rights |  |  |
|  | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |
| Austria | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| Belgium | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| France | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| Germany | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| Greece | 5.0\% | 0.0\% | 5.0\% | 5.0\% | 0.0\% | 10.0\% | 20.0\% | 15.0\% | 10.0\% |
| Ireland | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| Italy | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| Poland | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| Spain | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| The Netherlands | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |
| United Kingdom | 2.5\% | 0.0\% | 2.5\% | 2.5\% | 0.0\% | 5.0\% | 10.0\% | 7.5\% | 5.0\% |

Source: EY Survey results
The following table represents types of contractual ties between SPMs and independent SPDs in all MS in scope based on 11 self-identifying SPMs that jointly represent EUR 168 billion in global sales and employ 817,000 people based on their most recent financial data (2019). As such the results hereafter report the survey and no major conclusions for the wider market should be drawn These contractual relations were either volume/value-based discounts with independent SPDs or based on product/brand exclusivity.
As per the survey results, we see that $40 \%-70 \%$ of agreements between SPMs and SPDs were volume/value-based discounts in all MS in scope during 2007-2017. These agreements were most popular among SPMs in Netherlands, Cyprus and Germany. Agreements based on product/brand exclusivity constituted for 20\% - 35\% of the total agreements in Italy, Spain and Cyprus during the entire timeframe. It is also interesting to note that about $30-60 \%$ of SPMs in all MS in scope did not enter into any kind of contractual agreement with the SPDs between 2007-2017.

Table 112 - Share of type of contractual relations / agreements SPMs may have had with SPDs, per country, 2007-2017 ${ }^{211}$

| Country | Contractual relations / agreements |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No contractual relations / agreements with independent SPDs |  |  | Product/ brand exclusivity |  |  | Volume/ Value based discounts with independent SPDs |  |  |
|  | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 | 2007 | 2012 | 2017 |
| Austria | 50\% | 50\% | 50\% |  |  |  | 50\% | 50\% | 50\% |
| Belgium | 60\% | 60\% | 60\% |  |  |  | 40\% | 40\% | 40\% |
| Cyprus | 33\% | 33\% | 33\% | 33\% | 33\% | 33\% | 67\% | 67\% | 67\% |
| France | 43\% | 43\% | 43\% |  |  |  | 57\% | 57\% | 57\% |
| Germany | 60\% | 60\% | 60\% |  | 20\% | 20\% | 60\% | 60\% | 60\% |
| Greece | 40\% | 40\% | 40\% | 20\% |  |  | 40\% | 60\% | 60\% |
| Italy | 50\% | 50\% | 50\% |  | 25\% |  | 50\% | 50\% | 50\% |
| Ireland | 60\% | 40\% | 40\% | 20\% | 20\% | 20\% | 40\% | 60\% | 60\% |
| Netherlands | 50\% | 50\% | 50\% |  |  |  | 50\% | 50\% | 50\% |
| Poland | 50\% | 50\% | 50\% |  |  |  | 67\% | 67\% | 67\% |
| Spain | 50\% | 50\% | 50\% | 25\% | 25\% | 25\% | 50\% | 50\% | 50\% |
| UK | 60\% | 60\% | 40\% |  |  |  | 60\% | 60\% | 40\% |

Source: EY Survey results
The analysis below examines different rebate and bonus schemes employed by VMs with regards to their distributors' choice of source and brand in 12 MS during 2007 2017. VMs in all MS, except Cyprus, provided rebate and bonus schemes. In Cyprus, $14 \%$ of the total VMs did not provide any rebate or bonus schemes on their parts purchase. Rebates on vehicle/parts were the most popular scheme and were offered by $30 \%-45 \%$ of VMs, in 11 out of 12 MS, and $14 \%$ of VMs in Cyprus. Around $10 \%-20 \%$ of all VMs in all 12 MS provided monetary support for sales/marketing. According to survey responses, $45 \%-70 \%$ VMs in all MS in scope offered other rebate and bonus schemes such as volume bonuses based on purchase value, extra discounts on specific deals, quantitative rebates on parts, quarterly incentive schemes, a mix of financial incentives predominantly based on sales achievements, rebates linked to annual turnover, part credits from country budget to support sales and bonus system applicable to parts purchased from specific SPMs such as MINI/BMW National sales company. ${ }^{212}$
The following table presents the aggregate share of different rebate and bonus schemes offered by VMs while purchasing spare parts:

Table 113 - Share of rebates and bonus schemes employed by VMs, per country, 2007-2017 213

| $\begin{aligned} & \text { Countr } \\ & \text { y } \end{aligned}$ | Year | Rebates on vehicles/p arts | Monetary support for sales/ marke ting | Administrati ve support for sales/ marke ting | Access to addition al data | No such rebates/ bonuses | Other $\mathbf{s}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AT | 2007 | 45\% | 18\% |  |  |  | 45\% |
|  | 2012 | 45\% | 18\% | 9\% |  |  | 45\% |
|  | 2017 | 45\% | 18\% | 9\% |  |  | 45\% |
| BE | 2007 | 40\% | 20\% |  |  |  | 50\% |
|  | 2012 | 40\% | 20\% | 10\% |  |  | 50\% |
|  | 2017 | 40\% | 20\% | 10\% |  |  | 50\% |
| CY | 2007 | 14\% |  | 14\% |  | 14\% | 57\% |
|  | 2012 | 14\% |  | 14\% |  | 14\% | 57\% |
|  | 2017 | 14\% |  | 14\% |  | 14\% | 57\% |
| FR | 2007 | 33\% | 17\% |  |  |  | 50\% |
|  | 2012 | 33\% | 17\% | 8\% |  |  | 50\% |
|  | 2017 | 42\% | 17\% | 8\% |  |  | 50\% |
| DE | 2007 | 40\% | 20\% |  |  |  | 50\% |
|  | 2012 | 40\% | 20\% |  | 10\% |  | 50\% |
|  | 2017 | 40\% | 20\% |  | 10\% |  | 50\% |
| GR | 2007 | 33\% | 11\% |  |  |  | 56\% |
|  | 2012 | 33\% | 11\% | 11\% |  |  | 56\% |
|  | 2017 | 33\% | 11\% | 11\% |  |  | 67\% |
| IE | 2007 | 30\% | 20\% |  |  |  | 60\% |
|  | 2012 | 30\% | 20\% | 10\% |  |  | 60\% |
|  | 2017 | 30\% | 20\% | 10\% |  |  | 60\% |
| IT | 2007 | 45\% | 18\% |  |  |  | 45\% |
|  | 2012 | 45\% | 18\% | 9\% |  |  | 45\% |
|  | 2017 | 45\% | 27\% | 9\% |  |  | 45\% |
| NL | 2007 | 36\% | 18\% |  |  |  | 45\% |
|  | 2012 | 36\% | 18\% | 9\% |  |  | 45\% |
|  | 2017 | 36\% | 18\% | 9\% |  |  | 45\% |
| PL | 2007 | 30\% | 20\% |  |  |  | 50\% |
|  | 2012 | 30\% | 20\% | 10\% |  |  | 50\% |
|  | 2017 | 30\% | 20\% | 10\% |  |  | 50\% |
| ES | 2007 | 36\% | 18\% |  |  |  | 45\% |
|  | 2012 | 36\% | 18\% | 9\% |  |  | 45\% |
|  | 2017 | 36\% | 27\% | 9\% |  |  | 45\% |
| UK | 2007 | 40\% | 20\% |  |  |  | 50\% |
|  | 2012 | 40\% | 20\% | 10\% |  |  | 50\% |
|  | 2017 | 40\% | 20\% | 10\% |  |  | 50\% |

Source: EY Survey results

### 2.3 Financial information

This section provides an overview of the financial performance of SPMs by analysing their operating margin. The operating margin is used as measure for financial performance, since it indicates the profitability of the firm's core business. The average, median, $90 \%$-percentile and $10 \%$-percentile were calculated based on data of 1,120 global SPMs with potentially activities beyond the automotive industry.

### 2.3.1 Profitability of parts manufacturers

The SPMs included in this analysis comprise multi-line SPMs, with activities beyond the automotive industry and geographic coverage beyond the countries in scope of this study. Relevant financial information were not available at business line/geographic level Anayses are based on data available from Capital IQ. Note that data is expressed in fiscal years for which it is assumed these correspond to the years in scope 20072017.

Among the top-10 global SPMs (by revenue) ${ }^{214}$, Michelin had the highest operating margin during 2015-2017. Most of the SPMs recorded an increase in their operating margin during 2007-2017, while Continental AG, Robert Bosch GmbH and Benteler International AG experienced declines in the range of 100bps-200bps during the same period. Aptiv PLC's operating margin increased the most from -2\% in 2007 to $16 \%$ in 2017.

Table 114 - Evolution of operating margins of top-10 SPMs (based on revenue for which data was available for most of the 11 years ${ }^{215}$ ) (FY2007-FY2017)

| SPM Year | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Robert Bosch GmbH | 12.40\% | 8.50\% | 4.30\% | 12.10\% | 11.30\% | 9.60\% | 10,10\% | 8.80\% | 9.50\% | 10.10\% | 11.30\% |
| Continental Aktiengesellschaft | 15.60\% | 12.40\% | 12.60\% | 15.10\% | 13.70\% | 14.70\% | 14.80\% | 14.90\% | 15.40\% | 14.40\% | 13.80\% |
| ZF Friedrichshafen | 10.70\% | 9.80\% | 2.00\% | 9.10\% | 9.40\% | 8.80\% | 9.2\%\% | 8.70\% | 9.40\% | 10.00\% | 9.90\% |
| Companie Générale des Établissements Michelin | 14.40\% | 10.90\% | 11.20\% | 15.20\% | 13.80\% | 15.60\% | 15.40\% | 16.10\% | 18.00\% | 18.90\% | 18.30\% |
| Valeao SA | 9.20\% | 7.60\% | 7.10\% | 10.40\% | 9.70\% | 9.40\% | 9.80\% | 10.10\% | 10.70\% | 11.10\% | 11.30\% |
| Faurecia S.E. | 2.80\% | 3.10\% | 2.30\% | 5.40\% | 5.80\% | 4.70\% | 4.80\% | 5.30\% | 6.40\% | 7.30\% | 9. $20 \%$ |
| Mahle GmbH | - | 8.30\% | 6.80\% | 11.90\% | 12.30\% | 11.40\% | 10.80\% | 10.00\% | 9.30\% | 8.90\% | 7.80\% |
| Aptiv PLC | -2.00\% | 0.90\% | 0.00\% | 11.50\% | 13.40\% | 13.70\% | 15.00\% | 15.70\% | 14.90\% | 17.80\% | 16.00\% |
| Benteler International AG | 6.80\% | 5.80\% | 3.10\% | 5.30\% | 2.40\% | 3.50\% | 4.30\% | 5.30\% | 5.00\% | 4.90\% | 5.70\% |
| Hella GmbH \& Co KGaA | 7.90\% | 8.80\% | 8.80\% | 11.00\% | 12.20\% | 11.90\% | 10,10\% | 12.10\% | 12.30\% | 11.80\% | 13.20\% |
| Average | 8.70\% | 7.60\% | 5.80\% | 10.70\% | 10.40\% | 10.30\% | 10.40\% | 11.10\% | 11.10\% | 11.50\% | 11.7 |
| Source: Capital IQ |  |  |  |  |  |  |  |  |  |  |  |

In order to have a more thorough insight of the SPMs' profitability, the median, average, 90th-percentile and 10th-percentile were calculated based on data of 1,122 global SPMs with potentially activities beyond the automotive industry. The median and average operating margins appear to have remained stable over the years in scope, except for 2009, where the average dropped to $3.6 \%$ and 2017 where both the median value and average value amounted to 7.7\%.
The 90th-percentile indicates the minimum operating margin reported by the top 10 percent of firms based on operating margins. It is important to note that the topperforming SPMs have been able to increase their operating margin from $16.8 \%$ in 2007 to $18.6 \%$ in 2017 . Furthermore, they even managed to maintain an operating margin of $14.4 \%$ in 2009 during the banking crisis.

The 10th-percentile indicates the maximum operating margin reported by the $10 \%$ of firms with the lowest operating margins. These firms report negative operating margins in all but 2 years. In 2009, they observed a decrease of their operating margin to $-7 \%$ : a drop of 520 bps. In later years these companies were able to recover but remain operating almost consistently with negative operating margins.
Average operating margin by revenue ${ }^{216}$ increased from $7.0 \%$ in 2007 to $7.7 \%$ in 2017. It can be noted that the aggregate operating margin increased strongly by 330 bps YOY
in 2010 after decreasing by 270 bps YOY in 2009. Besides the drop in 2009, the average operating margin stayed within a range of $5.7 \%$ to $7.7 \%$.
The average and median operating margin of the 10th-percentile companies experienced a significant drop in 2008, whereas the decrease was limited for the 90thpercentile companies.

Table 115 - Median, Average, 90th-percentile and 10th-percentile of operating margins of global SPMs (FY2007-FY2017)

| SPM Year | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median | 7.40\% | 6.30\% | 5.70\% | 6.90\% | 6.60\% | 6.20\% | 6.50\% | 7.30\% | 7.40\% | 7.60\% | 7.70\% |
| Average | 7.00\% | 6.20\% | 3.60\% | 6.90\% | 6.30\% | 5.70\% | 6.10\% | 6.90\% | 7.30\% | 6.70\% | 7.70\% |
| 90\% - percentile | 16.80\% | 15.00\% | 14.40\% | 16.20\% | 15.90\% | 15.20\% | 16.20\% | 17.40\% | 17.60\% | 18.20\% | 18.60\% |
| Median | 21.10\% | 19.40\% | 18.30\% | 22.80\% | 19.10\% | 17.90\% | 21.80\% | 22.40\% | 23.70\% | 24.80\% | 25.90\% |
| Average | 25.50\% | 22.90\% | 22.80\% | 25.80\% | 23.20\% | 22.30\% | 25.50\% | 27.00\% | 29.10\% | 31.00\% | 33.40\% |
| 10\% -percentile | 0.50\% | - 1.80\% | -7.00\% | - 1.80\% | - 1.50\% | -2.50\% | -2.60\% | -1.40\% | -0.70\% | -0.70\% | 0.10\% |
| Median | -28.90\% | - 38.00\% | -25.40\% | - $34.10 \%$ | -35.70\% | -42.30\% | - 35.80\% | -34.10\% | - 31.60\% | -35.60\% | -37.40\% |
| Average | - 36.70\% | -46.10\% | -47.00\% | -42.30\% | -43.20\% | -47.70\% | -45.50\% | -41.80\% | -44.10\% | -55.20\% | -49.30\% |

Source: Capital IQ

## 3. Conclusions

The size of the parts market increased from 2009-2017 after witnessing a significant YOY drop of $25.4 \%$ in 2009, due to the adverse impact of the 2008 economic crisis on automobile sales. The growing complexity of vehicles and an increase in the average age of vehicle fleets contributed to the growth in the market for SPDs as well. Germany was by far the largest market for both SPMs and SPDs.

Most VM respondents reported using a qualitative selective distribution model for spare parts sales across all VCs. VM-owned distribution outlets accounted for only 10\% - 30\% of parts sales. Germany had the highest number of VM-owned outlets across all VCs. ${ }^{217}$

Parts wholesalers were the largest customer for SPMs during the period in scope, closely followed by VMs. Approximately 5\% - 15\% of SPM respondents catered directly to final customers. The use of innovative channels in spare parts distribution was prevalent in actual sales of spare parts for both VMs and SPMs. While these channels were seldom used by VMs (only for passenger car spare parts), SPMs mostly used third party platforms or their own websites for e-commerce of spare parts across all VCs. SPM respondents reported an increase in online sales to final customers during 2012-2017. Prior to this, between 2007 and 2011, responses indicate no online sales, reflecting the low level of penetration of e-commerce in spare parts distribution at that time. The Netherlands held the highest share of online sales to final customers, followed by the UK and Germany. ${ }^{218}$
VMs sourced approximately $75 \%$ of the parts used for first assembly from upstream suppliers. The agreements relating to the ownership and licensing of IP between VMs and SPMs were mainly based on the contribution of know-how by SPMs, sharing of product development costs and provision of tools used for component production. The share of components directly sold by SPMs to VMs increased from $\pm 51 \%$ to $\pm 55 \%$ between 2007 and 2017. It should also be noted that $40 \%-70 \%$ of the contractual arrangements between SPMs and SPDs included volume/value-based discounts. ${ }^{219}$

In all countries except Cyprus, approximately $30 \%-45 \%$ of VMs offered rebates on vehicle parts. In Cyprus, $14 \%$ of VMs did not provide any rebate or bonus schemes. ${ }^{220}$

The profitability of SPMs remained rather stable throughout the period examined, with a median value for their operating margin ranging between $5.7 \%$ and $7.7 \%$, with the exception of a significant decrease to $3.6 \%$ in 2009 due to the 2008 economic crisis and resulting downturn.

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## Annexes

## Annex I-List of indicators

The numbering below has been kept identical to that in the original list of indicators as per the Commission's tender specifications, hence some instances of discontinuity (indicators contained in the original list but not covered by the study).

| Distribution of new motor vehicles |  |
| :---: | :---: |
| Qualitative indicators |  |
| 1.A | Overview of mergers and acquisitions of vehicle manufacturers |
| 1.B | Overview of market entries and exits of vehicle manufacturers, broken down by category and segment |
| 1.C | Overview of the evolution of new vehicles brand range, broken down by category and segment |
| 1.D | Overview of the ways in which vehicles of each category are distributed, with a description of the prevalence of each type of distribution if more than one type is in place for each category (exclusive distribution, quantitative selective distribution, qualitative selective distribution, other specified types of distribution) |
| 1.E | Overview of innovative distribution channels (e.g. supermarkets) and their respective prevalence |
| 1.F | Overview of the role of intermediaries in new vehicle distribution |
| 1.H | Description of the main elements of dealer remuneration for vehicles of each category |
| 1.1 | Description of how sales targets for dealers are set/calculated, what steps are taken if the targets are not met and how the targets relate to the remuneration to which the dealer is entitled |
| Quantitative indicators |  |
| 1.1.1 | Size of the market for new vehicle sales in terms of volume, i.e. number of new vehicles sold (broken down by category and manufacturer) |
| 1.2.1 | Market shares of vehicle manufacturers in terms of volume (broken down by category) |
| 1.2.3 | Market concentration indices (e.g. HHI, CR4) in terms of volume (broken down by category) |
| 1.2.5 | Number of vehicle manufacturers ranked in top-4 in terms of volume (broken down by category) |
| 1.2.6 | Closeness of competitors (e.g. average distance between top-4 manufacturers, distance between 4th and 5th place) in terms of volume (broken down by category) |
| 1.2.7 | Volatility of market shares of vehicle manufacturers (e.g. CVar) in terms of volume (broken down by category) |
| 1.3.3 | Closeness of competitors (e.g. average distance between top-3 dealers, distance between 3rd and 4th place) in terms of volume |
| 1.3.4 | Average number of unit sales per dealer/dealer group (broken down by category) |
| 1.3 .5 | Average number of unit sales per outlet (broken down by category) |
| 1.4.1 | Number of vehicle manufacturers present in each category and segment |
| 1.5.1 | Percentage of new vehicle sales accounted for by (i) fossil-fuel powered vehicles, (ii) plug-in hybrid vehicles, (iii) non-plug-in hybrid vehicles and (iv) entirely electrically powered vehicles, in terms of volume |
| 1.5 .2 | R\&D expenditure of vehicle manufacturers (broken down by category) |
| 1.6 .4 | Percentage of stand-alone sales outlets (broken down by category) |
| 1.7.1 | Operating margins of vehicle manufacturers (broken down by category) |
| 1.9.2 | Operating margins of manufacturers (aggregate data per industry) in three comparable industries |


| 1.9 .3 | R\&D expenditure of manufacturers (aggregate data per industry) in three comparable <br> industries |
| :--- | :--- |
| 1.11 .1 | Number of dealers/dealer groups (broken down by category and manufacturer) |
| 1.11 .2 | Number of dealers' sales outlets (broken down by category and manufacturer) |
| 1.11 .3 | Dealer network density, i.e. number of dealers' sales outlets per 1,000 inhabitants (broken <br> down by category and manufacturer) |



| Provision of repair and maintenance services |  |
| :--- | :--- |
| Qualitative indicators |  |
| 2.C | Description of the typology of independent repairers in terms of their contractual ties (or lack <br> of) to spare parts manufacturers |
| 2.D | Overview of the range of repair services required by brand standards for authorised repairers |
| 2.F | Overview of the warranty schemes in terms of duration, coverage and dealers' <br> reimbursement |
| 2.G | Description of the types of vehicle-generated data that are provided by vehicle manufacturers <br> to authorised repairers and the extent and conditions of independent repairers' access to this <br> data |
| Quantitative indicators |  |
| 2.1 .2 | Overall size of vehicle parc (broken down by category) |
| 2.1 .3 | Age profile of vehicle parc (broken down by category) |
| 2.3 .2 | Percentage of stand-alone authorised repair outlets (broken down by category) |
| 2.7 .1 | Number of authorised repairers (broken down by category and manufacturer) |
| 2.7 .2 | Number of authorised repair outlets (broken down by category and manufacturer) |
| 2.7 .3 | Authorised repairers' network density, i.e. number of authorised repair outlets per 1,000 <br> inhabitants (broken down by category and manufacturer) |
| 2.8 .1 | Number of repair outlets owned by vehicle manufacturers (broken down by category and <br> manufacturer) |


| Provision of repair and maintenance services |  |  |  |
| :---: | :---: | :---: | :---: |
| Size and structure of the market for repair and maintenance services |  | Typology of services and service providers |  |
| Size and age of the vehicle parc | 2.1.2 | Typology of repair and maintenance services and warranty schemes | 2.D |
|  | 2.1.3 |  | 2.F |
| Network density of repairers for passenger cars | 2.7.1 | Typology of repairers | 2.C |
|  | 2.7.2 | Typology of technical information and vehicle data | $2 . \mathrm{G}$ |
|  | 2.7.3 |  |  |
|  | 2.3.2 |  |  |
|  | 2.8.1 |  |  |


| Distribution of spare parts |  |
| :--- | :--- |
| Qualitative indicators |  |
| 3.A | Overview of innovative distribution channels (e.g. supermarkets) and their respective <br> prevalence |
| 3.B | Overview of the various levels of the spare parts supply chain for vehicles of each category <br> (undertakings active at each level, distribution models used and prevalence thereof) |
| 3.C | Description of the typology of independent spare parts distributors in terms of their <br> contractual ties (or lack of) to spare parts manufacturers |
| 3.E | Overview of the arrangements for the ownership and licensing of intellectual property rights <br> between OES and vehicle manufacturers |
| 3.F | Overview of vehicle manufacturers' rebate and bonus schemes with regard to the authorised <br> repairers'/distributors' choice of source and brand for their parts requirements |
| Quantitative indicators |  |
| 3.1.1 | Market size for spare parts supply, i.e. total sales of parts manufacturers (OES or otherwise), <br> in terms of value |
| 3.1.2 | Market size for spare parts distribution, i.e. total sales of parts distributors (retail level), in <br> terms of value |
| 3.3.1 | Percentage of stand-alone authorised parts outlets (broken down by manufacturer) |
| 3.3.3 | Sales of spare parts made entirely online, as a percentage of the total sales of spare parts, in <br> terms of value (retail level) |
| 3.4.1 | Operating margins of parts manufacturers |
| 3.8.1 | Number of parts distribution outlets owned by vehicle manufacturers (broken down by <br> manufacturer) |
| 3.8.2 | Percentage of spare parts sales accounted for by vehicle manufacturer-owned distribution <br> outlets |


| Distribution of spare parts |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Size and structure of the market for sales of spare parts |  | Distribution patterns and networks |  | Financial information |  |
| Size of the market for spare parts supply and retail | 3.1.1 | Distribution patterns | $3 . \mathrm{B}$ | Profitability of parts manufacturers | 3.4.1 |
|  | 3.1.2 |  | 3.A |  |  |
|  |  |  | 3.3.3 |  |  |
|  |  |  | 3.3.1 |  |  |
|  |  |  | 3.8.1 |  |  |
|  |  |  | 3.8.2 |  |  |
|  |  |  | 3.E |  |  |
|  |  |  | 3.F |  |  |
|  |  |  | 3.C |  |  |

## Annex II-Online questionnaire

Service contract on Market developments in the distribution of new motor vehicles and spare parts and the provision of after-sales services under Regulation 461/2010 of 27 May 2010
Ref. COMP/2019/005

Final questionnaire for

- Dealers
- Dealers with repair \&maintenance activities
- Dealers with spare part distribution activities
- Dealers with repair, maintenance and spare part distribution activities
- Repairers
- Spare part distributors
- Repairers with spare part distribution activities
- Vehicle Manufacturers
- Spare part Manufacturers

Please answer the following questions for each of the specified years, countries and vehicle categories. Please elaborate on your replies if so requested ("please specify / explain / describe" or equivalent). For multiple-choice questions, unless indicated otherwise, you may select more than one answer.

Countries to be covered: Germany, France, UK, Italy, Spain, Poland, Netherlands, Belgium, Greece, Austria, Ireland, Cyprus

Vehicle categories to be covered: passenger cars, light commercial vehicles, buses, trucks
Legend for colour-code of questions:

|  | Dealer activities |  |
| :--- | :--- | :--- |
|  | Repair \& maintenance activities |  |
|  | Vehicle Manufacturers |  |

Note that for now all questions are included, however not all will be displayed when accessing the survey as this will depend on what the respondent selects in the identification sheet of the survey. The following options may occur (with for all a split between authorized and independent):

Dealers

- Dealers with repair \&maintenance activities
- Dealers with spare part distribution activities
- Dealers with repair, maintenance and spare part distribution activities
- Repairers
- Spare part distributors
- Repairers with spare part distribution activities
- Vehicle Manufacturers
- Spare Part Manufacturers

For an overview of which questions will be visible for the respective respondents, please see the additional matrix in excel.

1. Regarding your network of authorised partners, please fill in the number of the respective legal entities and outlets below, broken down by activity, for each of the specified years and relevant vehicle categories. Figures should only include entities/outlets for which the respective contract was in force throughout the respective calendar year. Figures should not include outlets owned by you (for such outlets, see question 2 below). Please note that options (a)-(c) pertain to entities/outlets engaging exclusively in one of the respective activities; for entities/outlets engaging in more than one activity, please use options (d)-(g), as appropriate.

## A. Legal entities:

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |


| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| g) Repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| Light Commercial Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |


B. Outlets

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of |  |  |  |  |  |  |  |  |  |  |  |


2. If you own any outlets yourself, please fill in their number below, broken down by activity, for each of the specified years and relevant vehicle categories. Figures should only include outlets that you operated throughout the respective calendar year. Please note that options (a)-(c) pertain to outlets engaging exclusively in one of the respective activities; for outlets engaging in more than one activity, please use options (d)-(g), as appropriate.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of |  |  |  |  |  |  |  |  |  |  |  |


| vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Light Commercial Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| a) Sale of new vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c) Sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| d) Sale of new vehicles, repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |
| e) Sale of new vehicles and repair and maintenance of vehicles |  |  |  |  |  |  |  |  |  |  |  |
| f) Sale of new vehicles and spare parts |  |  |  |  |  |  |  |  |  |  |  |
| g) Repair and maintenance of vehicles and sale of spare parts |  |  |  |  |  |  |  |  |  |  |  |

## A. Distribution of new motor vehicles

3. Please provide the number of sales outlets you operated in each of the specified years and for each of the relevant vehicle categories. Figures should only include outlets for which the respective contract was in force throughout the respective calendar year. Please also indicate how many of those outlets also offered repair and maintenance services and/or sold spare parts.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Number of sales outlets |  |  |  |  |  |  |  |  |  |  |  |
| b) Out of which also offering repair and maintenance services and/or selling spare parts |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a)Number of sales <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| b)Out of which also <br> offering repair and <br> maintenance services <br> and/or selling spare <br> parts |  |  |  |  |  |  |  |  |  |  |  |


| LIght Commerclal <br> Vehicles | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a)Number of sales <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| b)Out of which also <br> offering repair and <br> maintenance services <br> and/or selling spare <br> parts |  |  |  |  |  |  |  |  |  |  |  |


|  | Passenger Cars | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a)Number of sales <br> outlets |  |  |  |  |  |  |  |  |  |  |  |  |
| b)Out of which also <br> offering repair and <br> maintenance services <br> and/or selling spare <br> parts |  |  |  |  |  |  |  |  |  |  |  |  |

4. Please select which of the below distribution systems you used for the distribution of new vehicles, in each of the specified years and for each of the relevant vehicle categories (only one option per vehicle category can be selected).

| Trucks | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- |
| a) Exclusive distribution |  |  |  |
| b) Quantitative selective distribution |  |  |  |



| Buses | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- |
| a) Exclusive distribution |  |  |  |
| b) Quantitative selective distribution |  |  |  |
| c) Purely qualitative selective distribution |  |  |  |
| d) Other |  |  |  |
| If (d), please specify (max 20 words): |  |  |  |


| Light Commercial Vehicles | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- |
| a) Exclusive distribution |  |  |  |
| b) Quantitative selective distribution |  |  |  |
| c) Purely qualitative selective distribution |  |  |  |
| d) Other |  |  |  |
| If (d), please specify (max 20 words): |  |  |  |


| Passenger Cars | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- |
| a) Exclusive distribution |  |  |  |
| b) Quantitative selective distribution |  |  |  |
| c) Purely qualitative selective distribution |  |  |  |
| d) Other |  |  |  |
| If (d), plcasc spccify (max 20 words): |  |  |  |

5. Please provide the breakdown of new vehicle sales by vehicle powertrain (in terms of volume and in absolute figures, not \%), for each of the specified years. Please note that figures should include all sales, irrespective of whether they have been executed through your authorised dealers or your own outlets

|  |  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Fossil-fuel |  |  |  |  |  |  |  |  |  |  |  |
| b) Plug-in hybrid |  |  |  |  |  |  |  |  |  |  |  |
| c)Non plug-in <br> hybrid |  |  |  |  |  |  |  |  |  |  |  |
| d)Entirely <br> electrical |  |  |  |  |  |  |  |  |  |  |  |
| e) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |  |  |  |  |  |  |  |

6. Please provide the number of new vehicles sold online, for each of the specified years and relevant vehicle categories. Please note that (i) the question refers only to sales executed by you and not by your authorised dealers and (ii) "online" here means transactions concluded and not only commenced on the internet but also including sales where the contract was signed offline.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Online sales (in <br> volume) |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Online sales (in <br> volume) |  |  |  |  |  |  |  |  |  |  |  |


| Light Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Online sales (in <br> volume) |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Online sales (in <br> volume) |  |  |  |  |  |  |  |  |  |  |  |

7. Please provide the number of vehicles sold online, for each of the specified years and relevant vehicle categories. Please note that "online" here means transactions concluded and not only commenced on the internet but also including sales where the contract was signed offline.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Passenger cars |  |  |  |  |  |  |  |  |  |  |  |
| b) <br> Light <br> commercial <br> vehicles <br>  <br> c) |  |  |  |  |  |  |  |  |  |  |  |
| Trucks | Buses |  |  |  |  |  |  |  |  |  |  |

8. Please select which innovative channels, if any, you used for the sale of new vehicles in each of the specified years and for each of the relevant vehicle categories. Please also indicate whether these channels were used for actual sales or only for promotional purposes, by filling in the grid below.

| Trucks |  | 2007 |  | 2012 |  | 2017 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | (I) |  | (II) | (i) | (II) | (I) |  |
|  | Actual sales | Promotion <br> only | Actual sales | Promotion <br> only | Actual sales | Promotion <br> only |  |
| a)Experience centres |  |  |  |  |  |  |  |
| b)Mobile/pop-up stores |  |  |  |  |  |  |  |
| c)E-commerce, direct <br> sales through your <br> own website |  |  |  |  |  |  |  |


| d)E-commerce, sales <br> through third party <br> platforms |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| e) Supermarkets |  |  |  |  |  |  |
| f) Other |  |  |  |  |  |  |
| g) No such channels |  |  |  |  |  |  |
| If (f), please specify (max <br> 20 words): |  |  |  |  |  |  |


| Buses | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II) | (1) | (II) |
|  | Actual sales | Promotion only | Actual sales | Promotion only | Actual sales | Promotion only |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through your own website |  |  |  |  |  |  |
| d) E-commerce, sales through third party platforms |  |  |  |  |  |  |
| e) Supermarkets |  |  |  |  |  |  |
| f) Other |  |  |  |  |  |  |
| g) No such channels |  |  |  |  |  |  |
| If (f), please specify (max 20 words): |  |  |  |  |  |  |


| Light Commercial Vehicles | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (II) | (i) | (II) | (1) | (II) |
|  | Actual sales | Promotion only | Actual sales | Promotion only | Actual sales | Promotion only |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through your own website |  |  |  |  |  |  |
| d) E-commerce, sales through third party platforms |  |  |  |  |  |  |
| e) Supermarkets |  |  |  |  |  |  |
| f) Other |  |  |  |  |  |  |
| g) No such channels |  |  |  |  |  |  |
| If (f), please specify (max 20 words): |  |  |  |  |  |  |


| Passenger Cars | 2007 |  | 2012 |  | 2017 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II) | (I) | (II) |


|  | Actual sales | Promotion <br> only | Actual sales | Promotion <br> only | Actual sales | Promotion <br> only |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c)E-commerce, direct <br> sales through your <br> own website |  |  |  |  |  |  |
| d)E-commerce, sales <br> through third party <br> platforms |  |  |  |  |  |  |
| e) Supermarkets |  |  |  |  |  |  |
| f) Other |  |  |  |  |  |  |
| g) No such channels |  |  |  |  |  |  |
| If (f), please specify (max <br> 20 words): |  |  |  |  |  |  |

9. Please select which innovative channels, if any, you used for the sale of new vehicles in each of the specified years and for each of the relevant vehicle categories. Please also indicate whether these channels were used for actual sales or only for promotional purposes, by filling in the grid below.

| Trucks | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II) | (I) | (II) |
|  | Actual sales | Promotion only | Actual sales | Promotion only | Actual sales | Promotion only |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through your own website |  |  |  |  |  |  |
| d) E-commerce, sales through third party platforms |  |  |  |  |  |  |
| e) Other |  |  |  |  |  |  |
| f) No such channels |  |  |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |  |  |


| Buses | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II) | (I) | (II) |
|  | Actual sales | Promotion | Actual sales | Promotion | Actual sales | Promotion |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through own website |  |  |  |  |  |  |
| d) E-commerce, sales through third party platforms |  |  |  |  |  |  |


| e) Other |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| f) No such channels |  |  |  |  |  |  |
| If (e), please specify (max <br> 20 words): |  |  |  |  |  |  |


| Light Commercial Vehicles | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II | (1) | (II) |
|  | Actual sales | Promotion | Actual sales | Promotion | Actual sales | Promotion |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through own website |  |  |  |  |  |  |
| d) E-commerce, sales through third party platforms |  |  |  |  |  |  |
| e) Other |  |  |  |  |  |  |
| f) No such channels |  |  |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |  |  |


| Passenger Cars | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (II) | (i) | (II | (1) | (II) |
|  | Actual sales | Promotion | Actual sales | Promotion | Actual sales | Promotion |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through own website |  |  |  |  |  |  |
| d) E-commerce, sales through third-party platforms |  |  |  |  |  |  |
| e) Other |  |  |  |  |  |  |
| f) No such channels |  |  |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |  |  |

10. Please provide the breakdown of new vehicle sales by sales outlet (in terms of volume and in absolute figures, not \%), for each of the specified years and relevant vehicle categories.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Authorised <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| b) Your own <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| c) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |  |  |  |  |  |  |  |


| Buses | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Authorized <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| b)Your own <br> outlets <br> c) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |


| Light <br> Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Authorised outlets |  |  |  |  |  |  |  |  |  |  |  |
| b) Your own outlets |  |  |  |  |  |  |  |  |  |  |  |
| c) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |  |  |  |  |  |  |  |


| Passenger <br> Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Authorised outlets |  |  |  |  |  |  |  |  |  |  |  |
| b) Your own outlets |  |  |  |  |  |  |  |  |  |  |  |
| c) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |  |  |  |  |  |  |  |

11. Please provide the breakdown of new vehicle sales executed through your own outlets, if any, by type of customer (in terms of both value and volume and in absolute figures, not \%), for each of the specified years and relevant vehicle categories.

| Trucks | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (I) | (II) |
|  | Value | volume | Value | volume | Value | volume | Value | volume | Value | volume | Value | volume | Value | volume | Value | volume | Value | volume | Value | volume | Value | volume |
| a) Individual motorists |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b) Fleet owners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (I) | (II) | (1) | (II) | (1) | (II) | (I) | (II) |
|  | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume |
| a) Individual motorists |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b) Fleet owners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Light <br> Commercial Vehicles | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (1) | (II) | (I) | (II) | (I) | (II) | (1) | (II) | (I) | (II) | (1) | (II) | (I) | (II) | (1) | (II) | (1) | (II) | (I) | (II) |
|  | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | volume | Value | volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume |
| a) Individual motorists |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b) Fleet owners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Passenger <br> Cars | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) |
|  | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume |
| a) Individual motorists |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b) Fleet owners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

12. Please identify your 10 largest authorised dealers by volume of new vehicle sales (irrespective of which specific brands those dealers were authorised to sell), by filling in below the names of the respective legal entities, as well as their sales figures, in terms of volume, for each of the specified years and relevant vehicle categories.

| Trucks |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |


| Buses |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |


| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |  |


| Light Commercial Vehicles |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |

## Passenger Cars

| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Volume |  |  |  |  |  |  |  |  |  |  |  |

13. Please identify your 10 largest authorised dealers by value of new vehicle sales (irrespective of which specific brands those dealers were authorised to sell), by filling in below the names of the respective legal entities, as well as their sales figures, in terms of value, for each of the specified years and relevant vehicle categories.

| Trucks |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |


| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | Value |  |  |  |  |  |  |  |  |  |  |  |
|  | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |


| Buses |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |


| Light Commercial Vehicles |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |


| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 6 | Value |  |  |  |  |  |  |  |  |  |  |  |
|  | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
|  | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |

14. Please select and briefly describe which elements were part of dealer remuneration, for each of the specified years and relevant vehicle categories.

| Trucks | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | Description (max $\mathbf{3 0}$ words) |
| :--- | ---: | :--- | :--- | :--- |
| a) | Factory-to-dealer incentive | x |  |  |
| b) | Fixed volume-based bonus |  |  |  |
| c)Increasing volume-based bonus (e.g. <br> stair-step programme) |  |  |  |  |
| d) <br> Vehicle financing share (e.g. dealer bonus <br> on financing by banks with whom you <br> have an agreement) |  | x |  |  |
| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |
| f) | Other |  |  |  |


| Buses | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | Description (max 30 words) |  |
| :--- | :--- | ---: | ---: | ---: | :--- |
| a) | Factory-to-dealer incentive | $X$ |  |  |  |
| b) | Fixed volume-based bonus |  |  |  |  |
| c)Increasing volume-based bonus (e.g. <br> Stair-step programme) |  |  |  |  |  |
| d)Vehicle financing share (e.g. dealer bonus <br> on financing by banks with whom you <br> have an agreement) |  | $\times$ |  |  |  |
| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |  |
| f) | Other |  |  |  |  |


| Light Commercial Vehicles | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | Description (max 30 words) |
| :--- | ---: | :--- | :--- | :--- |
| a) Factory-to-dealer incentive | X |  |  |  |
| b) Fixed volume-based bonus |  |  |  |  |
| c)Increasing volume-based bonus (e.g. <br> stair-step programme) |  |  |  |  |
| d)Vehicle financing share (e.g. dealer bonus <br> on financing by banks with whom you <br> have an agreement) |  | X |  |  |
| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |
| f)Other |  |  |  |  |


| Passenger cars | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | Description (max 30 words) |
| :--- | ---: | ---: | ---: | :--- |
| a) Factory-to-dealer incentive | X |  |  |  |
| b) | Fixed volume-based bonus |  |  |  |
| c) <br> Increasing volume-based bonus (e.g. <br> stair-step programme) |  |  |  |  |
| d)Vehicle financing share (e.g. dealer bonus <br> on financing banks with whom you have <br> an agreement) |  | X |  |  |


| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| f) Other |  |  |  |  |

15. Please select and briefly describe which elements were part of your remuneration in each of the specified years and for each of the relevant vehicle categories.

| Trucks | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | Description (max $\mathbf{3 0}$ words) |
| :--- | ---: | :--- | :--- | :--- |
| a) | Factory-to-dealer incentive | X |  |  |
| b) | Fixed volume-based bonus |  |  |  |
| c)Increasing volume-based bonus (e.g. <br> stair-step programme) |  |  |  |  |
| d)Vehicle financing share (e.g. dealer bonus <br> on financing by vehicle manufacturer <br> banks) |  | X |  |  |
| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |
| f)Other |  |  |  |  |


| Buses | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | Description (max 30 words) |  |
| :--- | :--- | ---: | :--- | :--- | :--- |
| a) | Factory-to-dealer incentive | X |  |  |  |
| b) | Fixed volume-based bonus |  |  |  |  |
| c)Increasing volume-based bonus (e.g. <br> stair-step programme) |  |  |  |  |  |
| d)Vehicle financing share (e.g. dealer bonus <br> on financing by vehicle manufacturer <br> banks) |  | $X$ |  |  |  |
| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |  |
| f) | Other |  |  |  |  |


| Light Commercial Vehicles | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ | Description (max $\mathbf{3 0}$ words) |
| :--- | ---: | :--- | :--- | :--- |
| a) Factory-to-dealer incentive | X |  |  |  |
| b) | Fixed volume-based bonus |  |  |  |
| c)Increasing volume-based bonus (e.g. <br> stair-step programme) |  |  |  |  |
| d)Vehicle financing share (e.g. dealer bonus <br> on financing by vehicle manufacturer <br> banks) |  | X |  |  |
| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |
| f)Other |  |  |  |  |


| a) | Factory-to-dealer incentive | X |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| b) | Fixed volume-based bonus |  |  |  |  |
| c)Increasing volume-based bonus (e.g. <br> stair-step programme) |  |  |  |  |  |
| d)Vehicle financing share (e.g. dealer bonus <br> on financing by vehicle manufacturer <br> banks) |  | $X$ |  |  |  |
| e)Special bonus for specific vehicle <br> model/engine type |  |  |  |  |  |
| f)Other |  |  |  |  |  |

16. Sales targets for dealers
A. Please elaborate on how sales targets were set for your dealers in each of the specified years.

| A.1 | The targets were set by the: | 2007 | 2012 | 2017 |
| :--- | :--- | :---: | :---: | :---: |
| a) | Vehicle manufacturer |  |  |  |
| b) | National importer (if applicable and if <br> independent from the vehicle manufacturer) |  |  |  |
| c) | Dealership management |  |  |  |


| A.2 | The targets were expressed in terms of: | 2007 | 2012 | 2017 |
| :--- | :--- | :---: | :---: | :---: |
| a) | Volume |  |  |  |
| b) | Value |  |  |  |


| A. 3 | The targets were: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Aggregated |  |  |  |
| b) | Model-specific |  |  |  |
| c) | Other |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |


| A. 4 | The targets were: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Monthly |  |  |  |
| b) | Quarterly |  |  |  |
| c) | Annual |  |  |  |
| d) | Other |  |  |  |
| If (d), please specify (max 10 words): |  |  |  |  |


| A. 5 | The targets were adjusted during the year: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Yes |  |  |  |
| b) | No |  |  |  |


| A. 6 | The main parameters used for the <br> calculation of targets were: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |


| a) | Past market performance |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| b) | Forecast market performance |  |  |  |
| c) | Respective dealer's past performance |  |  |  |
| d) | Generic marketing activities |  |  |  |
| e) | Model-specific marketing activities |  |  |  |
| f) | Other |  |  |  |
| If (f), please specify (max 30 words): |  |  |  |  |


| A.7 | The methodology for calculating the <br> targets was disclosed to your dealers: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Yes |  |  |  |
| b) | No |  |  |  |

B. Please elaborate on the possible consequences of a dealer's failure to meet the set targets, for each of the specified years.

|  |  | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Limited access to specific models |  |  |  |
| b) | Limited access to new models |  |  |  |
| c) | Limited marketing/branding materials/budget |  |  |  |
| d) | Lower margins/premium for new vehicles |  |  |  |
| e) | Termination of contract |  |  |  |
| f) | Other |  |  |  |

C. Please indicate how your dealers performed against the set targets, in each of the specified years, by filling in below the $\%$ of them that:

|  |  | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Achieved the target (within a $+/-5 \%$ tolerance <br> band) |  |  |  |
| b) | Exceeded the target (by more than 5\%) |  |  |  |
| c) | Missed the target (by more than 5\%) |  |  |  |

## 17. Sales targets for dealers

A. Please elaborate on how your sales targets were set in each of the specified years.

| A.1 | The targets were set by the: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Vehicle manufacturer |  |  |  |
| b) | National importer (if applicable and if <br> independent from the vehicle manufacturer) |  |  |  |
| c) | Your management |  |  |  |


| A.2 | The targets were expressed in terms of: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Volume |  |  |  |
| b) | Value |  |  |  |


| A.3 | The targets were: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Aggregated |  |  |  |
| b) | Model-specific |  |  |  |
| c) | Other |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |


| A. 4 | The targets were: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Monthly |  |  |  |
| b) | Quarterly |  |  |  |
| c) | Annual |  |  |  |
| d) | Other |  |  |  |
| If (d), please specify (max 10 words): |  |  |  |  |


| A. 5 | The targets were adjusted during the year: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Yes |  |  |  |
| b) | No |  |  |  |


| A.6 | The main parameters used for the <br> calculation of targets were: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :---: |
| a) | Past market performance |  |  |  |
| b) | Forecast market performance |  |  |  |
| c) | Your past performance |  |  |  |
| d) | Generic marketing activities |  |  |  |
| e) | Model-specific marketing activities |  |  |  |
| f) | Other |  |  |  |
| If (f), please specify (max 30 words): |  |  |  |  |


| A. 7 | The methodology used for calculating the <br> targets was disclosed to you: | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Yes |  |  |  |
| b) | No |  |  |  |

B. Please indicate the possible consequences of your failure to meet the set targets, for each of the specified years:

|  |  | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Limited access to specific models |  |  |  |
| b) | Limited access to new models |  |  |  |
| c) | Limited marketing/branding materials/budget |  |  |  |
| d) | Lower margins/premium for new vehicles |  |  |  |
| e) | Termination of contract |  |  |  |
| f) | Other |  |  |  |

C. Please indicate how you performed against the set targets, in each of the specified years (only one option per year can be selected):

|  |  | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Achieved the target (within a +/- 5\% tolerance <br> band) |  |  |  |
| b) | Exceeded the target (by more than 5\%) |  |  |  |
| c) | Missed the target (by more than 5\%) |  |  |  |

18. Please indicate whether you were authorised to sell brands of more than one vehicle manufacturer. To this effect, please fill in below the number of vehicle manufacturers whose brands you were authorised to sell in each of the specified years and for each of the relevant vehicle categories.

| Trucks |  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of vehicle <br> manufacturers whose <br> brands you were <br> authorised to sell |  |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of vehicle <br> manufacturers whose <br> brands you were <br> authorised to sell |  |  |  |  |  |  |  |  |  |  |  |


| Light Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of vehicle <br> manufacturers whose <br> brands you were <br> authorised to sell |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of vehicle <br> manufacturers whose <br> brands you were <br> authorised to sell |  |  |  |  |  |  |  |  |  |  |  |

19. Please provide your revenue and cost structure by filling in the required information in the tables below, for each of the specified years and relevant vehicle categories.

Please note that the tables regarding your revenue structure also include columns asking for figures in terms of volume. Please fill in the respective columns by providing:

- For new vehicle sales, the number of new vehicles sold;
- For repair and maintenance services, the number of visits;
- For sales of spare parts, the number of parts sold (irrespective of type, size etc.).


## A. Revenue structure

| Trucks | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (I) | (II) |
|  | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | volume | Value | Volume | Value | volume | Value | Volume | Value | Volume | Value | Volume |
| a) New vehicle sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a1) of which to individual motorists |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a2) of which to fleet owners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c) Sales of spare parts (standalone sales, not including parts incorporated in the price of repair and maintenance services) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| d) Other <br> Total revenue |  |  |  | $\%$ |  |  |  |  |  | $\%$ |  |  |  |  |  |  |  | P |  |  |  |  |



| Light | (I) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) | (1) | (II) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vehicles | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume |
| a) New vehicle sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a1) of which to individual motorists |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a2) of which to fleet owners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c) Sales of spare parts (standalone sales, not including parts incorporated in price of repair and maintenance) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| d) Other <br> Total revenue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars | 2007 |  | 2008 |  | 2009 |  | 2010 |  | 2011 |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (1) | (II) | (I) | (II) | (1) | (II) | (I) | (II) | (I) | (II) | (I) | (II) | (I) | (II) | (I) | (II) | (1) | (II) | (I) | (II) |
|  | Value | Volume | Value | volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume | Value | Volume |
| a) New vehicle sales |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a1) of which to individual motorists |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a2) of which to fleet owners |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b) Repair and maintenance services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c) Sales of spare parts (standalone sales, not including parts incorporated in price of repair and maintenance) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| d) Other |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total revenue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

B. Cost structure

|  |  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a)Capital <br> expenses |  |  |  |  |  |  |  |  |  |  |  |
| b) <br> Salaries and <br> wages |  |  |  |  |  |  |  |  |  |  |  |
| Other <br> operational <br> expenses <br> (other than |  |  |  |  |  |  |  |  |  |  |  |


| salaries and <br> wages) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total costs (value) |  |  |  |  |  |  |  |  |  |  |  |

20. Please provide your operating margin \% from sales of new vehicles (irrespective of any other types of activities you may have engaged in), for each of the specified years and relevant vehicle categories. If you have also engaged in repair and maintenance or spare part distribution activities, a separate question is foreseen for you.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Light Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |

## B. Provision of repair and maintenance services

21. Please advise the \% breakdown of repair and maintenance visits, as per the table below, for each of the specified years

| Year | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Warranty-covered <br> services |  |  |  |  |  |  |  |  |  |  |  |
| b) Non warranty- <br> covered services |  |  |  |  |  |  |  |  |  |  |  |

22. Please advise the \% breakdown of repair and maintenance visits, as per the table below, for each of the specified years.

|  |  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a)Fossil-fuel <br> vehicles |  |  |  |  |  |  |  |  |  |  |  |
| b)Plug-in <br> hybrid <br> vehicles |  |  |  |  |  |  |  |  |  |  |  |
| c)Non plug-in <br> hybrid <br> vehicles |  |  |  |  |  |  |  |  |  |  |  |
| d)Entirely <br> electrical <br> vehicles |  |  |  |  |  |  |  |  |  |  |  |

23. Please indicate whether you were authorised to provide repair and maintenance services for brands of more than one vehicle manufacturer. To this effect, please fill in below the number of vehicle manufacturers whose brands you were authorised to service in each of the specified years.

|  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Number of <br> vehicle <br> manufacturers <br> whose brands <br> you were <br> authorsed to <br> service |  |  |  |  |  |  |  |  |  |  |  |

24. Please select the types of contractual relations / agreements you may have had with spare parts manufacturers for each of the specified years

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | 2017 |
| :--- | :---: | :---: | :---: |
| a) | Product/brand exclusivity |  |  |
| b)Volume/value based discounts with selected preferred spare parts <br> manufacturers |  |  |  |


25. Please select the types of contractual relations / agreements you may have had with independent repairers in each of the specified years.

|  | 2007 | 2012 | 2017 |
| :--- | :---: | :---: | :---: |
| a) Product/brand exclusivity |  |  |  |
| b) Volume/value based discounts |  |  |  |
| c) Other |  |  |  |
| d) No contractual relations / agreements with independent repairers |  |  |  |
| If (c), please specify (max 30 words): |  |  |  |

26. Please indicate the types of repair and maintenance services you were required to perform by brand standards for each of the specified years.

|  | 2007 | 2012 | 2017 |
| :--- | :---: | :---: | :---: |
| a) | Body repair (e.g. chassis works, painting) |  |  |
| b) | Fast-fitters / basis repairs (e.g. oil, filter change, glasses, breaks, shock |  |  |
| absorbers) |  |  |  |$\quad$| c) | Full-range repairs |  |
| :--- | :--- | :--- |
| d) | Other |  |
|  | If (d), please specify (max 30 words): |  |

27. Please indicate the types of repair and maintenance services you required your authorised repairers to perform by filling in below the approximate \% breakdown of the respective outlets for each of the specified years.

|  | 2007 | 2012 | 2017 |  |
| :--- | :--- | :--- | :--- | :--- |
| a) | Body repair (e.g. chassis works, painting) |  |  |  |
| b)Fast-fitters / basis repairs (e.g. oil, filter change, <br> glasses, breaks, shock absorbers) |  |  |  |  |
| c) | Full-range repairs |  |  |  |
| d) | Other |  |  |  |
| If (d), please specify (max 30 words): |  |  |  |  |

28. Please identify your 10 largest authorised repairers by turnover (irrespective of which specific brands those repairers were authorised to service), by filling in below the names of the respective legal entities, as well as the value of their repair and maintenance services, for each of the specified years and relevant vehicle categories.

| Trucks |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |



| Buses |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |


| Light Commercial Vehicles |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |


|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rank | Name | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| 1 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Name |  |  |  |  |  |  |  |  |  |  |  |
|  | Value |  |  |  |  |  |  |  |  |  |  |  |

29. Warranty schemes
A. Please select and briefly describe (in terms of duration and coverage) which manufacturer warranty schemes you offered in each of the specified years

| 2007 | Offered (X) | Duration | Coverage |
| :---: | :---: | :---: | :---: |


|  |  |  | Years | Mileage <br> (km) | (max 20 words) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Overall warranty |  |  |  |  |
| b) | Powertrain warranty |  |  |  |  |
| c) | Anti-corrosion warranty |  |  |  |  |
| d) | Other factory warranties |  |  |  |  |
|  | If (d), please specify ... |  |  |  |  |
| e) | Extended warranty | X |  |  |  |
| f) | Other warranty schemes | If (f), please specify ... |  |  |  |


| 2012 |  | Offered (X) | Duration |  | $\begin{gathered} \text { Coverage } \\ \text { (max } 20 \text { words) } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Years | Mileage (km) |  |
| a) | Overall warranty |  |  |  |  |  |
| b) | Powertrain warranty |  |  |  |  |
| c) | Anti-corrosion warranty |  |  |  |  |
| d) | Other factory warranties |  |  |  |  |
|  | If (d), please specify ... |  |  |  |  |
| e) | Extended warranty |  |  |  |  |
| f) | Other warranty schemes | x |  |  |  |
|  | If (f), please specify ... |  |  |  |  |


| 2017 |  | Offered (X) | Duration |  | Coverage (max 20 words) |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Years | Mileage (km) |  |
| a) | Overall warranty |  |  |  |  |  |
| b) | Powertrain warranty |  |  |  |  |
| c) | Anti-corrosion warranty |  |  |  |  |
| d) | Other factory warranties |  |  |  |  |
|  | If (d), please specify ... |  |  |  |  |
| e) | Extended warranty |  |  |  |  |
| f) | Other warranty schemes | X |  |  |  |
|  | If (f), please specify ... |  |  |  |  |

B. Please select how your authorised repairers were compensated for repairs and maintenance under warranty in each of the specified years.

|  |  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :---: | :---: | :---: |
| a) | Fixed amount for labour costs by service type |  |  |  |
| b) | Actual labour cost |  |  |  |
| c) | Fixed amount for spare parts by service type |  |  |  |
| d) | Actual cost of spare parts |  |  |  |
| e) | Other |  |  |  |
| If (e), please specify (max 30 words): |  |  |  |  |

30. Please indicate the types of repair and maintenance services you provided in each of the specified years.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: |
| a) | Body repair (e.g. chassis works, painting) |  |  |
| b)Fast-fitters / basis repairs (e.g. oil, filter change, glasses, breaks, shock <br> absorbers) |  |  |  |
| c) | Full-range repairs |  |  |
| d) | Other |  |  |
|  | If (d), please specify (max 30 words): |  |  |

31. Please indicate the type of in-vehicle data and means of access provided by you to repairers (independent or authorised) for each of the specified years, by filling in the grid below.
A. 2007

|  |  | (i) | (ii) | (iii) | (iv) | (v) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | 2007 - authorised <br> repairers | Docu- <br> ments | Your <br> website | Your <br> server | Plug-in <br> devices | Other means of access <br> (please specify, max 20 <br> words) |
| a) | Vehicle-specific <br> technical data, e.g. <br> engine status, sensor <br> data, error messages |  |  |  |  |  |
| b) | Vehicle-specific usage <br> data, e.g. mileage |  |  |  |  |  |
| c) | Driver-specific data, e.g. <br> location, navigation <br> history, infotainment <br> preferences |  |  |  |  |  |
| d) | Aggregated data from <br> many vehicles |  |  |  |  |  |
| e) | Aggregated driver data |  |  |  |  |  |
| f) | Traffic/road data, e.g. <br> traffic flow, road <br> conditions |  |  |  |  |  |
| g) | Other |  |  |  |  |  |
| If (g), please specify (max 20 words): |  |  |  |  |  |  |


|  |  | (i) | (ii) | (iii) | (iv) | (v) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 2007 - independent <br> repairers | Docu- <br> ments | Your <br> website | Your <br> server | Plug-in <br> devices | Other means of access <br> (please specify, max 20 <br> words) |  |
| a) | Vehicle-specific <br> technical data, e.g. |  |  |  |  |  |


|  | engine status, sensor <br> data, error messages |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| b) | Vehicle-specific usage <br> data, e.g. mileage |  |  |  |  |  |
| c) | Driver-specific data, e.g. <br> location, navigation <br> history, infotainment <br> preferences |  |  |  |  |  |
| d) | Aggregated data from <br> many vehicles |  |  |  |  |  |
| e) | Aggregated driver data |  |  |  |  |  |
| f) | Traffic/road data, e.g. <br> traffic flow, road <br> conditions |  |  |  |  |  |
| g) |  |  |  |  |  |  |
| If (g), please specify (max 20 words): |  |  |  |  |  |  |

B. 2017

|  |  | (i) | (ii) | (iii) | (iv) | (v) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | 2017 - authorised <br> repairers | Docu- <br> ments | Your <br> website | Your <br> server | Plug-in <br> devices | Other means of access <br> (please specify, max 20 <br> words) |
| a) | Vehicle-specific <br> technical data, e.g. <br> engine status, sensor <br> data, error messages |  |  |  |  |  |
| b) | Vehicle-specific usage <br> data, e.g. mileage |  |  |  |  |  |
| c) | Driver-specific data, e.g. <br> location, navigation <br> history, infotainment <br> preferences |  |  |  |  |  |
| d) | Aggregated data from <br> many vehicles |  |  |  |  |  |
| e) | Aggregated driver data |  |  |  |  |  |
| f) | Traffic/road data, e.g. <br> traffic flow, road <br> conditions |  |  |  |  |  |
| g) | Other |  |  |  |  |  |
| If (g), please specify (max 20 words): |  |  |  |  |  |  |


|  |  | (i) | (ii) | (iii) | (iv) | (v) |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| 2017 - independent <br> repairers | Docu- <br> ments | Your <br> website | Your <br> server | Plug-in <br> devices | Other means of access <br> (please specify, max 20 <br> words) |  |


| a) | Vehicle-specific <br> technical data, e.g. <br> engine status, sensor <br> data, error messages |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| b) | Vehicle-specific usage <br> data, e.g. mileage |  |  |  |  |  |
| c) | Driver-specific data, e.g. <br> location, navigation <br> history, infotainment <br> preferences |  |  |  |  |  |
| d) | Aggregated data from <br> many vehicles |  |  |  |  |  |
| e) |  |  |  |  |  |  |
| Aggregated driver data |  |  |  |  |  |  |
| f) | Traffic/road data, e.g. <br> traffic flow, road <br> conditions |  |  |  |  |  |
| g) |  |  |  |  |  |  |
| Other |  |  |  |  |  |  |
| If), please specify (max 20 words): |  |  |  |  |  |  |

32. Please select the type of in-vehicle data as well as the means of access to such data provided by the vehicle manufacturer for each of the specified years.

|  |  | (i) | (ii) | (iii) | (iv) | (v) | (vi) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 | Documents | Manufactur er's website | Manufactur er's server | Plug-in devices | Other means of access (please specify, max 20 words) | Potential differences between manufacturers, if applicable (please specify, max 50 words) |
| a) | Vehicle-specific technical data, e.g. engine status, sensor data, error messages |  |  |  |  |  |  |
| b) | Vehicle-specific usage data, e.g. mileage |  |  |  |  |  |  |
| c) | Driver-specific data, e.g. location, navigation history, infotainment preferences |  |  |  |  |  |  |
| d) | Aggregated data from many vehicles |  |  |  |  |  |  |
| e) | Aggregated driver data |  |  |  |  |  |  |
| t) | Trattic/road data, e.g. traffic flow, road conditions |  |  |  |  |  |  |
| g) | Other |  |  |  |  |  |  |
| If (g), please specify (max 20 words): |  |  |  |  |  |  |  |
|  |  | (i) | (ii) | (iii) | (iv) | (v) | (vi) |


| 2017 | Docu- <br> ments | Manufactur Manufactur <br> er's website er's server | Plug-in <br> devices | Other means of <br> access (please <br> specify, max 20 <br> words) | Potential differences <br> between manufacturers, <br> if applicable (please <br> specify, max 50 words) |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Vehicle-specific <br> technical data, e.g. <br> engine status, sensor <br> data, error messages |  |  |  |  |  |
| b) | Vehicle-specific usage <br> data, e.g. mileage |  |  |  |  |  |
| c) | Driver-specific data, <br> e.g. location, <br> navigation history, <br> infotainment <br> preferences |  |  |  |  |  |
| d) | Aggregated data from <br> many vehicles |  |  |  |  |  |
| e) | Aggregated driver <br> data |  |  |  |  |  |
| f) | Traffic/road data, e.g. <br> traffic flow, road <br> conditions |  |  |  |  |  |
| g) | Other |  |  |  |  |  |
| If (g), please specify (max 20 words): |  |  |  |  |  |  |

33. Please advise the \% breakdown of repair and maintenance visits, as per the table below, for each of the specified years.

| Year | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Routine <br> regular <br> servicing |  |  |  |  |  |  |  |  |  |  |  |
| b) Mechanical <br> malfunctions |  |  |  |  |  |  |  |  |  |  |  |
| c) Electronic <br> malfunctions |  |  |  |  |  |  |  |  |  |  |  |
| d) Crash (body) <br> repair |  |  |  |  |  |  |  |  |  |  |  |
| e) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (e), please <br> specify (max 10 <br> words): |  |  |  |  |  |  |  |  |  |  |  |

34. Please select the type(s) and source(s) of technical information used to conduct repair and maintenance services, for each of the specified years and relevant vehicle categories.

| Trucks | 2007 |  |  |  | 2017 |  |  |  | Other <br> types of inform ation (please specify, |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) | (II) | (III) | (IV) | (I) | (II) | (III) | (IV) |  |
|  | Informatio n on the vehicle condition | Informatio n on parts | Informatio n on the execution of repair works | Maintenan <br> ce plans (service intervals) | Informatio n on the vehicle condition | Informatio n on parts | Informatio n on the execution of repair works | Maintenan ce plans (service intervals) |  |



|  | Informatio n on the vehicle condition | Informatio n parts | Informatio n on the execution of repair works | Maintenan <br> ce plans (service intervals) | Informatio n on the vehicle condition | Informatio n on parts | Informatio n on the execution of repair works | Maintenan <br> ce plans (service intervals) | of inform ation (please specify, max 20 words) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Vehicle manufacturer |  |  |  |  |  |  |  |  |  |
| b) Component/parts manufacturer |  |  |  |  |  |  |  |  |  |
| c) Technical expertise in product assortment and logistics |  |  |  |  |  |  |  |  |  |
| d) In-house expertise |  |  |  |  |  |  |  |  |  |
| e) Online training/tools |  |  |  |  |  |  |  |  |  |
| f) OBD-port |  |  |  |  |  |  |  |  |  |
| g) No access |  |  |  |  |  |  |  |  |  |
| h) Other sources (please specify, max 20 words) |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | 007 |  |  |  | 017 |  | er |
|  | (1) | (II) | (III) | (IV) | (1) | (II) | (III) | (IV) | ypes |
| Passenger Cars | Informatio n on the vehicle condition | Informatio n parts | Informatio n on the execution of repair works | Maintenan <br> ce plans (service intervals) | Informatio n on the vehicle condition | Informatio n on parts | Informatio no un the execution of repair works | Maintenan ce plans (service intervals) | inform <br> ation <br> (please <br> specify, <br> max 20 <br> words) |
| a) Vehicle manufacturer |  |  |  |  |  |  |  |  |  |
| b) Component/parts manufacturer |  |  |  |  |  |  |  |  |  |
| c) Technical expertise in product assortment and logistics |  |  |  |  |  |  |  |  |  |
| d) In-house expertise |  |  |  |  |  |  |  |  |  |
| e) Online training/tools |  |  |  |  |  |  |  |  |  |
| f) OBD-port |  |  |  |  |  |  |  |  |  |
| g) No access |  |  |  |  |  |  |  |  |  |
| h) Other sources (please specify, max 20 words) |  |  |  |  |  |  |  |  |  |

35. Please provide your operating margin \% from the provision of repair and maintenance services (irrespective of any other types of activities you may have engaged in), for each of the specified years and relevant vehicle categories. If you have also engaged in dealer or spare parts distribution activities, a separate question is foreseen for you.


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a)Authorised <br> brands |  |  |  |  |  |  |  |  |  |  |  |
| b)Non- <br> Authorised <br> brands |  |  |  |  |  |  |  |  |  |  |  |


| Light <br> Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a)Authorised <br> brands |  |  |  |  |  |  |  |  |  |  |  |
| b)Non- <br> Authorised <br> brands |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a) Authorised brands |  |  |  |  |  |  |  |  |  |  |  |
| b) Non- <br> Authorised brands |  |  |  |  |  |  |  |  |  |  |  |

36. Please provide your operating margin \% from the provision of repair and maintenance services (irrespective of any other types of activities you may have engaged in), for each of the specified years and relevant vehicle categories. If you have also engaged in dealer or spare parts distribution activities, a separate question is foreseen for you.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Light <br> Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |

## C. Distribution of spare parts

37. Please provide your turnover from the sale of components / spare parts, for each of the specified years.

|  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sales of <br> components / <br> spare parts |  |  |  |  |  |  |  |  |  |  |  |

38. Please provide the breakdown of spare parts sales by sales outlet (in terms of value and in absolute figures, not \%), for each of the specified years and relevant vehicle categories

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Authorised <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| b) Your own <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| c) Other <br> If (c), please specify (max 10 words): |  |  |  |  |  |  |  |  |  |  |  |


| Buses |
| :--- |
| a) Authorised <br> outlets |


| Light <br> Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Authorised <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| b) Your own <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| c) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |  |  |  |  |  |  |  |


| Passenger <br> Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| a) Authorised <br> outlets |  |  |  |  |  |  |  |  |  |  |  |
| b)Your own <br> outlets <br> c) Other |  |  |  |  |  |  |  |  |  |  |  |
| If (c), please specify (max 10 words): |  |  |  |  |  |  |  |  |  |  |  |

39. Ownership and licensing of intellectual property rights
A. Please indicate, for each of the specified years, what \% (estimate, in terms of value) of the components used for first assembly was:

|  |  | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- | :--- |
| a) | Produced in-house |  |  |  |
| b) | Sourced from upstream suppliers |  |  |  |

B. Please indicate, for each of the specified years, what \% (estimate, in terms of value) of the components sourced from upstream suppliers was manufactured on the basis of agreements that contained:

|  |  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| a) | Contribution by you of know-how |  |  |  |
| b) | Transfer / licensing by you of design rights |  |  |  |
| c) | Transfer / licensing by you of other intellectual <br> property rights |  |  |  |
| d) | Provision by you of tools necessary for component <br> production |  |  |  |
| e) | Sharing of product development costs |  |  |  |
| f) | Other types of contribution |  |  |  |
| If (f), please specify (max 30 words): |  |  |  |  |

40. Ownership and licensing of intellectual property rights
A. Please indicate what percentage (estimate, in value terms) in 2007, 2012 and 2017 of the components/parts supplied to:

|  | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- |
| a) Vehicle Manufacturers |  |  |  |
| b) The aftermarkets (directly) |  |  |  |

B. Please indicate, for each of the specified years, what \% (estimate, in terms of value) of the components was produced on the basis of agreements with vehicle manufacturers that contained:

|  |  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| a) | Contribution of know-how by the vehicle <br> manufacturer |  |  |  |
| b) | Transfer / licensing of design rights by the vehicle <br> manufacturer |  |  |  |
| c) | Transfer / licensing of other intellectual property <br> rights by the vehicle manufacturer |  |  |  |
| d) | Provision by the vehicle manufacturer of tools <br> necessary for component production |  |  |  |
| e) | Sharing of product development costs |  |  |  |


| f) | Other types of contribution by the vehicle <br> manufacturer |  |  |
| :--- | :--- | :--- | :--- |
| If (f), please specify (max 30 words): |  |  |  |

41. Please select and briefly describe the type(s) of rebate and bonus schemes - if any - regarding your authorised partners' choice of source and brand for their spare parts requirements for each of the specified years

|  |  | 2007 | 2012 | 2017 | Description <br> (max 30 words) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Access to additional data |  |  |  |  |
| b) | Administrative support for <br> sales/marketing |  |  |  |  |
| c) | Monetary support for <br> sales/marketing |  |  |  |  |
| d) | Rebates on vehicles/parts |  |  |  |  |
| e) | Other |  |  |  |  |
| f) | No such rebates/bonuses |  |  |  |  |

42. Please select and briefly describe the type(s) of rebate and bonus schemes - if any - applied by the vehicle manufacturer regarding your choice of source and brand for your spare parts requirements for each of the specified years.

|  |  | 2007 | 2012 | 2017 | Description <br> (max 30 words) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Access to additional data |  |  |  |  |
| b) | Administrative support for <br> sales/marketing |  |  |  |  |
| c) | Monetary support for <br> sales/marketing |  |  |  |  |
| d) | Rebates on vehicles/parts |  |  |  |  |
| e) | Other |  |  |  |  |
| f) | No such rebates/bonuses |  |  |  |  |

43. Please select and briefly describe the type(s) of rebate and bonus schemes - if any - applied by the vehicle manufacturer regarding your choice of source and brand for your spare parts requirements for each of the specified years.

|  |  | 2007 | 2012 | 2017 | Description <br> (max 30 words) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| a) | Access to additional data |  |  |  |  |
| b) | Administrative support for <br> sales/marketing |  |  |  |  |
| c) | Monetary support for <br> sales/marketing |  |  |  |  |


| d) | Rebates on vehicles/parts |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| e) | Other |  |  |  |  |
| f) | No such rebates/bonuses |  |  |  |  |

44. Please select which of the below distribution systems you used for the distribution of spare parts, in each of the specified years and for each of the relevant vehicle categories (only one option per vehicle category can be selected)

| Trucks |  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| a) | Exclusive distribution |  |  |  |
| b) | Quantitative selective distribution |  |  |  |
| c) | Purely qualitative selective distribution |  |  |  |
| d) | Other |  |  |  |
| If (d), please specify (max 20 words): |  |  |  |  |


| Buses |  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| a) | Exclusive distribution |  |  |  |
| b) | Quantitative selective distribution |  |  |  |
| c) | Purely qualitative selective distribution |  |  |  |
| d) | Other |  |  |  |
| If (d), please specify (max 20 words): |  |  |  |  |


| Light Commercial Vehicles |  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| a) | Exclusive distribution |  |  |  |
| b) | Quantitative selective distribution |  |  |  |
| c) | Purely qualitative selective distribution |  |  |  |
| d) | Other |  |  |  |
| If (d), please specify (max 20 words): |  |  |  |  |


| Passenger Cars |  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| a) | Exclusive distribution |  |  |  |
| b) | Quantitative selective distribution |  |  |  |
| c) | Purely qualitative selective distribution |  |  |  |
| d) | Other |  |  |  |
| If (d), please specify (max 20 words): |  |  |  |  |

45. Please indicate where you sourced your spare parts from, as \% of your yearly parts purchases (estimate, in terms of value), in each of the specified years and for each of the relevant vehicle categories.

| Trucks | 2007 | 2012 | 2017 |
| :--- | :---: | :---: | :---: |
| a) Vehicle manufacturers |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |
| c) Parts manufacturers |  |  |  |



| Buses | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- |
| a) Vehicle manufacturers |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |
| c) Parts manufacturers |  |  |  |
| d) Parts wholesalers |  |  |  |
| e) Other |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |


| Light Commercial Vehicles | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- |
| a) Vehicle manufacturers |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |
| c) Parts manufacturers |  |  |  |
| d) Parts wholesalers |  |  |  |
| e) Other |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |


| Passenger Cars | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: |
| a) Vehicle marıufaclurers |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |
| c) Parts manufacturers |  |  |  |
| d) Parts wholesalers |  |  |  |
| e) Other |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |

46. Please indicate where you sourced your spare parts from, as \% of your yearly parts purchases (estimate, in terms of value), in each of the specified years and for each of the relevant vehicle categories.

| Trucks | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| a) Vehicle manufacturers |  |  |  |  |  |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |  |  |  |  |  |
| c) Parts manufacturers |  |  |  |  |  |  |  |  |
| d) Parts wholesalers |  |  |  |  |  |  |  |  |
| e) Other |  |  |  |  |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2012 | 2017 |
| :--- | :---: | :---: | :---: |
| a) Vehicle manufacturers |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |


| c) Parts manufacturers |  |  |  |
| :--- | :--- | :--- | :--- |
| d) Parts wholesalers |  |  |  |
| e) Other |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |


| Light Commercial Vehicles | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |  |
| :--- | :--- | :--- | :--- | :---: |
| a) Vehicle manufacturers |  |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |  |
| c) Parts manufacturers |  |  |  |  |
| d) Parts wholesalers |  |  |  |  |
| e) Other |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |


| Passenger Cars | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: |
| a) Vehicle manufacturers |  |  |  |
| b) Vehicle manufacturers' authorised networks |  |  |  |
| c) Original equipment suppliers |  |  |  |
| d) Parts wholesalers |  |  |  |
| e) Other |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |

47. Please advise the \% breakdown of your components/parts sales (in terms of value) by type of customer, for each of the specified years and relevant vehicle categories.

| Trucks | 2007 | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |  |
| :--- | :--- | :--- | :--- | :---: |
| a) Sales to vehicle manufacturers |  |  |  |  |
| b) Sales to parts wholesalers |  |  |  |  |
| c) Sales to repairers / parts retailers |  |  |  |  |
| d) Sales to final customers |  |  |  |  |
| e) Other |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |


| Buses | 2007 | $\mathbf{2 0 1 2}$ | 2017 |  |
| :--- | :--- | :--- | :--- | :---: |
| a) Sales to vehicle manufacturers |  |  |  |  |
| b) Sales to parts wholesalers |  |  |  |  |
| c) Sales to repairers / parts retailers |  |  |  |  |
| d) Sales to final customers |  |  |  |  |
| e) Other |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |


| Light Commercial Vehicles | 2007 | 2012 | 2017 |
| :--- | :--- | :--- | :--- |
| a) Sales to vehicle manufacturers |  |  |  |


| b) Sales to parts wholesalers |  |  |  |
| :--- | :--- | :--- | :--- |
| c) Sales to repairers / parts retailers |  |  |  |
| d) Sales to final customers |  |  |  |
| e) Other |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |


| Passenger Cars | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |  |
| :--- | :--- | :--- | :--- | :---: |
| a) Sales to vehicle manufacturers |  |  |  |  |
| b) Sales to parts wholesalers |  |  |  |  |
| c) Sales to repairers / parts retailers |  |  |  |  |
| d) Sales to final customers |  |  |  |  |
| e) Other |  |  |  |  |
| If (e), please specify (max 20 words): |  |  |  |  |

48. Please select the means you used to identify which part fits which individual vehicle in each of the specified years.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| a) Component/parts manufacturer's logo displayed on the component/part |  |  |  |
| b) Data published information |  |  |  |
| c) In-house experience |  |  |  |
| d) Oriline learning touls from the vehicle manufaclurer |  |  |  |
| e) Online learning tools from the component / spare parts manufacturer |  |  |  |
| f)Online learning tools from third parties (e.g. independent data publishers, <br> aggregators, insurance companies) |  |  |  |
| g) Vehicle manufacturer electronic downloadable data |  |  |  |
| h) Parts manufacturer electronic downloadable data |  |  |  |
| i) Tech specification manual from vehicle manufacturer |  |  |  |
| j) Other | If (i), please specify (max 30 words): |  |  |

49. Please select the means you used to identify which part fits which individual vehicle in each of the specified years.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- |
| a) Component/part manufacturer's logo displayed on the component/part |  |  |  |
| b) Data published information |  |  |  |
| c) In-house experience |  |  |  |
| d) Online learning tools from the vehicle manufacturer |  |  |  |
| e) Online learning tools from the component / spare parts manufacturer |  |  |  |
| f)Online learning tools from third parties (e.g. independent data publishers, <br> aggregators, insurance companies, ...) |  |  |  |
| g) Vehicle manufacturer electronic downloadable data |  |  |  |
| h) Parts manufacturer electronic downloadable data |  |  |  |
| i) Tech specification manual from vehicle manufacturer |  |  |  |

j) Other
If (i), please specify (max 30 words):
50. Please select the means you used to identify which part fits which individual vehicle in each of the specified years.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- |
| a) Component/part manufacturer's logo displayed on the component/part |  |  |  |
| h) Data published information |  |  |  |
| c) In-house experience |  |  |  |
| d) Online learning tools from the vehicle manufacturer |  |  |  |
| e) Online learning tools from the component/parts manufacturer |  |  |  |
| f) Online learning tools from third parties (e.g. independent data |  |  |  |
| g) Vehicle manufacturer electronic downloadable data |  |  |  |
| h) Parts manufacturer electronic downloadable data |  |  |  |
| i) Tech specification manual from vehicle manufacturer |  |  |  |
| j) Other |  |  |  |

51. Please select which innovative channels, if any, you used for the sale of spare parts in each of the specified years. Please also indicate whether these channels were used for actual sales or only for promotional purposes, by filling in the grid below.

|  | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II) | (I) | (II) |
|  | Actual sales | Promotion only | Actual sales | Promotion only | Actual sales | Promotion only |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through your own website |  |  |  |  |  |  |
| d) E-commerce, sales through third party platforms |  |  |  |  |  |  |
| e) Supermarkets |  |  |  |  |  |  |
| f) Other |  |  |  |  |  |  |
| g) No such channels |  |  |  |  |  |  |
| If (f), please specify (max 20 words): |  |  |  |  |  |  |

52. Please select which innovative channels, if any, you used for the sale of spare parts in each of the specified years. Please also indicate whether these channels were used for actual sales or only for promotional purposes, by filling in the grid below.

|  | 2007 |  | 2012 |  | 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II) | (I) | (II) |
|  | Actual sales | Promotion only | Actual sales | Promotion only | Actual sales | Promotion only |
| a) Experience centres |  |  |  |  |  |  |
| b) Mobile/pop-up stores |  |  |  |  |  |  |
| c) E-commerce, direct sales through your own website |  |  |  |  |  |  |
| d) E-commerce, sales through third party platforms |  |  |  |  |  |  |
| e) Supermarkets |  |  |  |  |  |  |
| f) Other |  |  |  |  |  |  |
| g) No such channels |  |  |  |  |  |  |
| If (f), please specify (max 20 words): |  |  |  |  |  |  |

53. Please select which innovative channels, if any, you used for the sale of spare parts in each of the specified years. Please also indicate whether these channels were used for actual sales or only for promotional purposes, by filling in the grid below.

|  | 2007 |  | 2012 |  | 2017 |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | (I) | (II) | (i) | (II) | (I) | (II) |
|  | Actual sales | Promotion <br> only | Actual sales | Promotion <br> only | Actual sales | Promotion <br> only |
| a) Experience centres |  |  |  |  |  |  |
| b) <br> Mobile/pop-up <br> stores |  |  |  |  |  |  |
| c)E-commerce, direct <br> sales through your <br> own website |  |  |  |  |  |  |
| d)E-commerce, sales <br> through third party <br> platforms |  |  |  |  |  |  |
| e) Supermarkets |  |  |  |  |  |  |
| f) Other |  |  |  |  |  |  |
| g) No such channel |  |  |  |  |  |  |
| If (f), please specify (max <br> 20 words) |  |  |  |  |  |  |

54. Please select the type(s) of contractual relations / agreements you may have had with spare parts manufacturers in each of the specified years.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |  |
| :--- | :--- | :--- | :--- | :--- |
| a) | Product/brand exclusivity |  |  |  |
| b)Volume/value based discounts with selected preferred spare parts <br> manufacturers |  |  |  |  |
| c)Other |  |  |  |  |
| d) No contractual ties with spare parts manufacturers |  |  |  |  |
| If (c), please specify (max 30 words): |  |  |  |  |

55. Please select the type(s) of contractual relations / agreements you may have had with independent spare parts distributors in each of the specified years.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 7}$ |
| :--- | :---: | :---: | :---: |
| a) Product/brand exclusivity |  |  |  |
| b) Volume/value based discounts |  |  |  |
| c) Other |  |  |  |
| d) No contractual relations / agreements with independent repairers |  |  |  |
| If (c), please specify (max 30 words): |  |  |  |

56. Please advise what \% of your parts sales to final customers (in terms of value) was executed online, through either your own website or a third party's website, in each of the specified years

|  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| \% of sales to final <br> customers executed <br> online |  |  |  |  |  |  |  |  |  |  |  |

57. Please advise what \% of your parts sales to final customers (in terms of value) was executed online, through either your own website or a third party's website, in each of the specified years. Please note that this question does not cover sales to vehicle manufacturers and / or to parts wholesalers / retailers.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| \% of sales to final <br> customers <br> executed online |  |  |  |  |  |  |  |  |  |  |  |

58. Please provide your operating margin \% from the sale of spare parts (irrespective of any other types of activities you may have engaged in), for each of the specified years. If you have also engaged in dealer or repair and maintenance activities, a separate question is foreseen for you.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |
| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |
| Light Commercial Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |
| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Operating margin \% |  |  |  |  |  |  |  |  |  |  |  |

59. Please provide your operating margin \% from the sale of spare parts (irrespective of any other types of activities you may have engaged in), for each of the specified years. If you also have also engaged in dealer or repair and maintenance activities, a separate question is foreseen for you.

| Trucks | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Buses | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Light <br> Commercial <br> Vehicles | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |


| Passenger Cars | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Operating <br> margin \% |  |  |  |  |  |  |  |  |  |  |  |

60. Captive spare parts might become non-captive during their lifecycle and vice versa.
A. Please indicate the average price difference (as estimated \%) observed for the following spare parts when they changed status (captive / non-captive) over the last decade.

B. Please advise if, over the last decade, this price difference has:

|  | Battery | Air filter | Windshield <br> wipers | Brake pads |
| :---: | :--- | :--- | :--- | :--- |
| a) Increased |  |  |  |  |
| b) Decreased |  |  |  |  |
| c) Remained stable |  |  |  |  |

61. Captive spare parts might become non-captive during their lifecycle and vice versa.
A. Please indicate the average price difference (as estimated \%) observed for the following spare parts when they changed status (captive / non-captive) over the last decade.

B. Please advise if, over the last decade, this price difference has:

|  | Battery | Air filter | Windshield <br> wipers | Brake pads |
| :---: | :--- | :--- | :--- | :--- |
| a) Increased |  |  |  |  |
| b) Decreased |  |  |  |  |
| c) Remained stable |  |  |  |  |

62. Please provide your operating margin \% from the sale of components / spare parts, for each of the specified years. Note that this question is relevant for all countries in which you are operational. No need to make a distinction per country.

|  | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | 2017 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Operating margin <br> $\%$ |  |  |  |  |  |  |  |  |  |  |  |

## Annex III-Glossary and end notes

$\left.$| Authorised |
| :--- | :--- |
| repairer |\(\left|\begin{array}{l}A provider of repair and maintenance services for motor vehicles <br>

operating within the distribution system set up by a supplier of <br>
motor vehicles. For the purposes of this study, each repair <br>
agreement corresponds to a single authorised repairer, regardless <br>
of the number of outlets that the latter may operate. Wherever the <br>
study refers to the number of outlets (as opposed to the number <br>
of repairers), a clear distinction is made to that effect. The concept <br>
of authorised repairer also includes dealers and/or spare parts <br>
distributors that are authorised to repair motor vehicles of the <br>

brand in question.\end{array}\right|\)| A distributor of spare parts for motor vehicles operating within the |
| :--- |
| distribution system set up by a supplier of motor vehicles. For the |
| purposes of this study, each distribution agreement corresponds to |
| a single authorised distributor, regardless of the number of outlets |
| that the latter may operate. Wherever this study refers to the |
| number of outlets (as opposed to the number of distributors), a |
| clear distinction is made to that effect. The concept of authorised |
| distributor also includes dealers and/or repairers that are |
| authorised to distribute spare parts. | \right\rvert\, | spare parts |
| :--- |
| distributor |


| Factory-todealer incentives | Factory-to-dealer incentives reduce the dealer's true cost to buy the vehicle from the factory |
| :---: | :---: |
| Fossil-fuel powered vehicles | Vehicles that can only be powered with fossil fuels |
| Heavy truck | Type of trucks typically above 12 mertic tonnes |
| Independent aftermarket supplier | A spare parts manufacturer of that does not manufacture components for first assembly or original parts according to vehicle manufacturers' specifications, but matching quality parts which are sold directly to the aftermarket |
| Independent spare parts distributor | A distributor of spare parts for motor vehicles not operating within the distribution system set up by the supplier of the motor vehicles for which it distributes spare parts or an authorised distributor within the distribution system of a given supplier to the extent that it distributes spare parts for motor vehicles in respect of which it is not a member of the respective supplier's distribution system. For the purposes of this study, the concept of independent distributor is based on the lack of affiliation with motor vehicle manufacturers, regardless of any affiliation with spare parts manufacturers. |
| Intermediary | A person or an undertaking which purchases a new motor vehicle on behalf of a named consumer without being member of a distribution network |
| Medium truck | Type of trucks typically between 4,5 and 12 metric tonnes |
| New vehicle sales | First time sale of newly produced vehicles |
| Nominal value | The current face value of an item as published price in a given year or as monetary value from companys' statutory accounts without considering adjustments for inflation or cost of living |
| Original equipment manufacturer | A manufacturer of motor vehicles |
| Operating margin | Earnings and losses before taxes and interest divided by turnover |
| Operational expenditure | Expenses a business incurs through its normal business operations, such as rent, inventory costs, marketing, insurance et. |
| Original equipment supplier | A spare parts manufacturer that produces parts or equipment according to the specifications and production standards provided by the motor vehicle manufacturer for the production of components or equipment for the assembly of the motor vehicle in question |
| Parts sales | The sale of components/parts and equipment used in the manufacture of the vehicle, or at the time of repair and maintenance |
| Plug-in hybrid vehicles | Hybrid vehicles use a combination of gasoline-fuelled engines and electric motors. Plug-in hybrid vehicles have larger batteries than |


|  | non-plug-in hybrid vehicles. They have the ability to recharge via <br> charging stations |
| :--- | :--- |
| Primary data <br> sources | An original data source, that is, one in which the data are collected <br> firsthand for a specific research or project. |
| Qualitative <br> selective <br> distribution <br> system | A distribution system where suppliers choose their authorised <br> partners based on objective criteria, which have to be necessary <br> for the purpose of the agreement (i.e. the selling of new cars), are <br> applied in a non-discriminatory manner and do not directly limit <br> the number of distributors |
| Quantitative <br> selective <br> distribution <br> system | A distribution system where suppliers choose their authorised <br> partners based on criteria that directly limit the number of <br> distributors |
|  <br> wages | The total remuneration, in cash or in kind, payable to all persons <br> counted on the payroll, in return for work done during the <br> accounting period. |
| Secondary data <br> sources | Consists of datasets made available through previous research, <br> normally available in publications (open and/or restricted). |
| Spare parts | Goods which are to be installed in or upon a motor vehicle so as to <br> replace components of that vehicle, including goods such as <br> lubricants which are necessary for the use of the motor vehicle, <br> with the exception of fuel |
| Stand-alone <br> dealer | A distributor of motor vehicles without any repair or spare parts <br> distribution activity |
| Stair step <br> programme | Stair-step programs are basically incentives to dealers that are tied <br> to sales quotas. These quotas are generally based on prior sales, <br> but this can vary. The key point is that the quotas are usually <br> different for each dealership. The way the programs work is this: <br> As sales increase, the incentive amounts increase as well. |
| Stand-alone <br> repairer | A provider of repair and maintenance services for motor vehicles <br> without any vehicle or spare parts distribution activity |
| Stand-alone <br> spare parts <br> distributor | A distributor of spare parts for motor vehicles without any vehicle <br> distribution or repair activity |
| Vehicle <br> financing share | Support in financing the inventory of a dealership |

${ }^{1}$ The database was assembled using information from Amadeus, desk research, CECRA, CLEPA, ACEA, AECDR, UEIL and the authorised networks provided by the vehicle manufacturers. The database of stakeholders to receive the survey consisted of more than 40,000 stakeholders, of which the main part were dealers, repairers and spare part distributors. The trade associations have been instrumental in providing additional undertakings' contact details. In the case of vehicle manufacturers, given the number of survey targets is in the range of dozens and not of thousands, a SPOC (Single Point of Contact) for each company has been identified by ACEA. In order to get a higher rate of reliable contact details of survey targets among the dealers and repairers, SPOC have been asked to provide their lists of authorised partners active in vehicle sales and repair on behalf of their brands.
${ }^{2}$ Breakdown of passenger car volume sales by manufacturers not available for Cyprus, therefore not taken into account
${ }^{3}$ Breakdown of light commercial vehicle volume sales by manufacturers not available for Cyprus
${ }^{4}$ Breakdown of truck volume sales by manufacturers not available for Cyprus
${ }^{5}$ Breakdown of bus sales by manufacturers not available for Cyprus because all sales within the country are done through one importer. In the analysis, this is categorised under the group 'other'. No data for Poland in 2007.
${ }^{6}$ No data is available for buses for Cyprus for years 2007-2017
7 No data is available for buses for Cyprus for years 2007-2017, no data for buses in Poland available for the year 2007.
${ }^{8}$ No data available for Cyprus
${ }^{9}$ Hybrid electric vehicles (HEV) are full hybrids and mild hybrids
${ }^{10}$ Electric chargeable vehicles (ECV) are battery electric vehicles (BEV), extended-range electric vehicles (EREV), plug-in hybrid electric vehicles (PHEV) and fuel cell electric vehicles (FCEV).
${ }^{11}$ Other alternative fuel vehicles are vehicles other than electric: natural gas vehicles (NGV), LPG-fuelled vehicles and ethanol (E85) vehicles.
12 No data available for Cyprus
${ }^{13}$ For this study, when reference is made to vehicle segments, these segments are based on the taxonomy of segments by LMC, which makes several distinctions. LMC reports two types of vehicles, being Personal Vehicles (PV) and Commercial Vehicles (CV), which is typically based on how the vehicle is registered in the market/geography. Next to the type, a distinction is made based on the vehicle body type (LMC Automotive regional vehicle body type segment), which could be: Sporty; Conventional; Multi Activity Vehicles (MAV); SUV; Van; Pickup; Bus; Unclassified. And on the body size (LMC Automotive regional vehicle size segment): A, B, C, D, E, F, Unclassified. All these vehicles could be used for commercial or personal use basis, therefore, when the study refers to the vehicle segments there might be an overlap of segments within both the category of passenger cars and light commercial vehicles.
${ }^{14}$ No data is available for Cyprus
${ }^{15}$ For this study, when reference is made to vehicle segments, these segments are based on the taxonomy of segments by LMC, which makes several distinctions. LMC reports two types of vehicles, being Personal Vehicles (PV) and Commercial Vehicles (CV), which is typically based on how the vehicle is registered in the market/geography. Next to the type, a distinction is made based on the vehicle body type (LMC Automotive regional vehicle body type segment), which could be: Sporty; Conventional; MAV; SUV; Van; Pickup; Bus; Unclassified. And on the body size (LMC Automotive regional vehicle size segment): A, B, C, D, E, F, Unclassified. All these vehicles could be used for commercial or personal use basis, therefore, when the study refers to the vehicle segments there might be an overlap of segments within both the category of passenger cars and light commercial vehicles.
${ }^{16}$ No data is available for Cyprus average number of passenger cars manufacturers in each segment
${ }^{17}$ No data is available for Cyprus on the entry and exit of vehicle manufacturers under light commercial vehicle category
${ }^{18}$ No data is available for Cyprus average number LCV manufacturers in each segment
${ }^{19}$ No data is available for Cyprus on the entry and exit of vehicle manufacturers under trucks category
${ }^{20}$ For this study, when reference is made to vehicle segments, these segments are based on the taxonomy of segments by LMC, which makes several distinctions. LMC reports two types of vehicles, being Personal Vehicles (PV) and Commercial Vehicles (CV), which is typically based on how the vehicle is registered in the market/geography. Next to the type, a distinction is made based on the vehicle body type (LMC Automotive regional vehicle body type segment), which could be: Sporty; Conventional; MAV; SUV; Van; Pickup; Bus; Unclassified. And on the body size (LMC Automotive regional vehicle size segment): A, B, C, D, E, F, Unclassified. All these vehicles could be used for commercial or personal use basis, therefore, when the study refers to the vehicle segments there might be an overlap of segments within both the category of passenger cars and light commercial vehicles.
${ }^{21}$ No data is available for Cyprus
${ }^{22}$ No data is available for Cyprus, Germany and Italy on the entry and exit of vehicle manufacturers under bus category
${ }^{23}$ No data is available for Cyprus
${ }^{24}$ No data is available for Cyprus
${ }^{25}$ Note that the amount of VMs per segment are visualised using a stacked bar chart, while a VM can be present in several segments. Therefore, the summation (total) of the VMs present in each country does not have any meaning; no data is available for Cyprus
${ }^{26}$ No data is available for Cyprus, Germany and Italy on the entry and exit of vehicle manufacturers under bus category
${ }^{27}$ No data is available for Cyprus, Germany and Italy on the entry and exit of vehicle manufacturers under bus category
${ }^{28}$ Note that the amount of VMs per segment are visualised using a stacked bar chart, while a VM can be present in several segments. Therefore, the summation (total) of the VMs present in each country does not have any meaning; no data is available for Cyprus
${ }^{29}$ No data is available for Cyprus on the entry of VMs under truck category, no entries were reported in France
${ }^{30}$ No data is available for Cyprus on the exit of VMs under truck category
${ }^{31}$ No data is available for Cyprus
${ }^{32}$ No data is available for Cyprus, Germany and Italy on the entry of VMs under bus category, no entries in the Netherlands
${ }^{33}$ No data is available for Cyprus, Germany and Italy on the exit of VMs under bus category
${ }^{34}$ No data is available for Cyprus
${ }^{35} M \& A$ deals where deal value is not available has not been considered; spin-off deals not included
${ }^{37}$ No data available for Cyprus
${ }^{38}$ No data is available for Cyprus on the market share (by volume) of VMs for passenger cars
${ }^{39}$ The countries in scope are treated as one market
${ }^{40}$ No data is available for Cyprus on the market share (by volume) of VMs for passenger cars
${ }^{41}$ The HHI is calculated by summing the squares of the individual market shares of all the firms in the market. The HHI gives proportionately greater weight to the market shares of the larger firms. Although it is best to include all firms in the calculation, lack of information about very small firms may not be important because such firms do not affect the HHI significantly. For the calculation of the HHI , the standard HHI has been calculated and not the modified one that would take account of cross-ownerships.
${ }^{42}$ No data is available for Cyprus for HHI index of VMs for passenger cars
${ }^{43}$ No data is available for Cyprus for VMs by vehicle categories as sales within the country are conducted through one importer
${ }^{44}$ Considering the countries in scope as one market
${ }^{45}$ No data is available for Cyprus on the market share (by volume) of VMs for LCVs
${ }^{46}$ No data is available for Cyprus on the market share (by volume) of VMs for LCVs
${ }^{47}$ No data is available for Cyprus on the HHI of VMs for LCVs
${ }^{48}$ No data is available for Cyprus for VMs by vehicle categories as sales within the country are conducted through one importer
${ }^{49}$ No data is available for Cyprus on the market share (by volume) of VMs for trucks
${ }^{50}$ No data is available for Cyprus on the market share (by volume) of VMs for trucks
${ }^{51}$ No data is available for Cyprus for HHI index of VMs for trucks
52 No data is available for Cyprus for VMs by vehicle categories as sales within the country are conducted through one importer
${ }^{53}$ No data is available for Cyprus on the market share (by volume) of VMs for buses and for Poland in 2007
${ }^{54}$ When reference is made to TRATON Group before 2015, this consist of its predecessor Volkswagen Group's heavy vehicle operations
${ }^{55}$ No data is available for Cyprus on the market share (by volume) of VMs for buses and for Poland in 2007
${ }^{56}$ When reference is made to TRATON Group before 2015, this consist of its predecessor Volkswagen Group's heavy vehicle operations
${ }^{57}$ No data is available for Cyprus on the market share (by volume) of VMs for buses and for Poland in 2007
${ }^{58}$ No data is available for Cyprus for HHI index of VMs for buses
${ }^{59}$ No data is available for Cyprus for VMs by vehicle categories as sales within the country are conducted through one importer
${ }^{60}$ No data is available for Cyprus on the market share (by volume) of VMs for passenger cars
${ }^{61}$ No data is available for Cyprus for CR4 of VMs for passenger cars
${ }^{62}$ The HHI is calculated by summing the squares of the individual market shares of all the firms in the market. The HHI gives proportionately greater weight to the market shares of the larger firms. Although it is best to include all firms in the calculation, lack of information about very small firms may not be important because such firms do not affect the HHI significantly. For the calculation of the HHI , the standard HHI has been calculated and not the modified one that would take account of cross-ownerships.
${ }^{63}$ No data is available for Cyprus for HHI index of VMs for passenger cars
${ }^{64}$ No VM breakdown is available for Cyprus
${ }^{65}$ No VM breakdown is available for Cyprus
${ }^{66}$ No VM breakdown is available for Cyprus
${ }^{67}$ No data is available for Cyprus on the market share (by volume) of VMs for LCVs
${ }^{68}$ No data is available for Cyprus on the market share (by volume) of VMs for LCVs
${ }^{69}$ No data is available for Cyprus for HHI index of VMs for LCVs
${ }^{70}$ No VM breakdown is available for Cyprus
${ }^{71}$ No VM breakdown is available for Cyprus
${ }_{72}$ No VM breakdown is available for Cyprus
${ }^{73}$ No data is available for Cyprus for HHI index of VMs for trucks
${ }^{74}$ No VM breakdown is available for Cyprus
${ }^{75}$ No VM breakdown is available for Cyprus
${ }^{76}$ No VM breakdown is available for Cyprus
${ }^{77}$ No VM breakdown is available for Cyprus, no data available for Poland in 2007 for buses
${ }^{78}$ No data is available for Cyprus for HHI index of VMs for buses
${ }^{79}$ No VM breakdown is available for Cyprus
${ }^{80}$ No VM breakdown is available for Cyprus
${ }^{81}$ No VM breakdown is available for Cyprus
${ }^{82}$ The market shares of the VMs represent on average for passenger cars respectively $37 \%$ in 2007 (with a minimum share of $11 \%$ in Ireland and $14 \%$ in Poland and $16 \%$ in Greece), 34\% in 2012 (with a minimum share of $10 \%$ in Ireland and $12 \%$ in Poland and $17 \%$ in Greece) and $34 \%$ in 2017 (with a minimum share of $10 \%$ in Ireland and $13 \%$ in Poland and $21 \%$ in Greece) (with a minimum share of $20 \%$ in Ireland). For LCVs' the average market share for all countries was respectively $21 \%$ in 2007 (with a minimum share of $9 \%$ in Ireland), $21 \%$ in 2012 (with a minimum share of $8 \%$ in Ireland) and $20 \%$ in 2017 (with a minimum share of $7 \%$ in Ireland). For trucks the average market share for all countries was respectively $38 \%$ in 2007 (with a minimum share of $13 \%$ in Poland), $37 \%$ in 2012 (with a minimum share of $17 \%$ in Poland) and $39 \%$ in 2017 (with a minimum share of $18 \%$ in Poland). For buses the average market share for all countries was respectively $35 \%$ in 2007 (with a minimum share of $6 \%$ in the U), 38\% in 2012 (with a minimum share of $4 \%$ in the UK) and $32 \%$ in 2017 (with a minimum share of $9 \%$ in the UK).
${ }^{83}$ Based on survey responses from VMs. Number of VMs: AT (9), BE (10), CY (7), FR (12), DE (10), GR (7), IR (9), IT (10), PL (9), ES (11), NL (11), UK (10). Average market share per VC: PC (35), LCV (21\%), trucks (38\%), buses (35\%).
${ }^{84}$ Based on survey responses from VMs. Number of VMs: AT (9), BE (10), CY (7), FR (12), DE (10), GR (7), IR (9), IT (10), PL (9), ES (11), NL (11), UK (10). Average market share per VC: PC (35), LCV (21\%), trucks (38\%), buses (35\%).
${ }^{85}$ Based on survey responses from VMs. Number of VMs: AT (9), BE (10), CY (7), FR (12), DE (10), GR (7), IR (9), IT (10), PL (9), ES (11), NL (11), UK (10). Average market share per VC: PC (35), LCV (21\%), trucks (38\%), buses (35\%)
${ }^{86}$ No data is available for Belgium during 2007-2014, the Netherlands during 2007-2013 and Poland during 2007 - 2012 on the share of stand-alone outlets for passenger car sales
${ }^{87}$ No data is available for Belgium, the Netherlands and Poland during 2007-2014, and Ireland during 2013 - 2014 on the share of stand-alone outlets for LCV sales
${ }^{88}$ Data on total number of dealer groups and dealer sales outlets for LCVs, buses and trucks is not available. Dealer density for LCVs, buses and trucks hence cannot be calculated
89 The table for aggregate dealer groups (dealer sales contracts) for passenger car distribution has been excluded due to data limitations which could have made the top 10 dealer group by manufacturer (e.g. Nissan, Fiat etc in 2017). Analysis of aggregate dealer groups has been conducted based on a broader trend prevalent ${ }^{90}$ Note is that this data reflects brand franchise points, therefore convergencies between Dacia-Renault and Peugeot-Citroen brands might be present.
${ }^{91}$ Stand-alone dealer outlet data for passenger car dealers for Belgium was not available, used in conjunction with Luxembourg's data; data for Dacia's outlets in 2007 was not available
${ }^{92}$ Stand-alone dealer outlet data used to calculate network density for passenger car dealers for Belgium was not available, used in conjunction with Luxembourg's data; data for Dacia's outlets in 2007 was not available
${ }^{93}$ No data on legal entities is available for 2007
${ }^{94}$ No data is available for the percentage difference in the average market shares of the top three, and their difference with the top fourth dealer for LCV, trucks and buses; Limited data is available for the average unit bus sales per dealer group, average unit bus sales per dealer outlet is only available for Greece
${ }^{95}$ Based on survey responses from VMs. Average number of passenger car VMs and their market share: AT (2-9\%), BE (2-15\%), FR (4-23\%), DE (3-14\%), GR (2-13\%), IR (4-19\%), IT (4-18\%), PL (1$3 \%)$, ES (2-10\%), NL (2-16\%), UK (3-19\%).
${ }^{96}$ No data for the UK in 2007 and Cyprus is available on the average difference between the market share of top three passenger car dealers
${ }^{97}$ Based on survey responses from VMs. Average number of passenger car VMs and their market share: AT (2-9\%), BE (2-15\%), FR (4-23\%), DE (3-14\%), GR (2-13\%), IR (4-19\%), IT (4-18\%), PL (13\%), ES (2-10\%), NL (2-16\%), UK (3-19\%).
${ }^{98}$ No data for the UK in 2007 is available on the average difference between the market share of top three passenger car dealers, data for Cyprus is excluded as there is one legal importer
${ }^{99}$ Based on survey responses from VMs. Average number of passenger car VMs and their market share: AT (2-9\%), BE (2-15\%), FR (4-23\%), DE (3-14\%), GR (2-13\%), IR (4-19\%), IT (4-18\%), PL (1$3 \%)$, ES (2-10\%), NL (2-16\%), UK (3-19\%).

100 Note that the average market share for respondents is below $30 \%$ and averages around $22 \%$ for the whole period and countries. As such these observations are provided as factual findings but should not be extrapolated to represent the wider market.
${ }^{101}$ No data is available for Cyprus on average unit passenger car sales per dealer group as there is no dealer or sales breakdown available for Cyprus. Note that the intertemporal comparison is of very low (if any) value, given the limited number and different distribution of the replies. The market shares of the respondents per country range, from 2007 - 2017 between: AT (2-7; 6\%-33\% \% ), BE (2-6; 7\%-43\%), CY (2-5; N.A), FR (25; 12\% - 49\%), DE (4-6; 22\% - 35\%), GR (3-6; 17\% - 32\%), IR (5-6; 26\% - 20\%), IT (2-7; 7\% - 57\%), NL (3-7; 17\% - 42\%), PL (2-5; $3 \%-13 \%)$, ES (3-6; 11\% - 42\%), UK (2-4; 5\%-25\%). Any intertemporal comparison is of very low (if any) value, given the limited number and different distribution of the replies.
102 The average market share for respondents is below $30 \%$ and averages around $21 \%$ for the whole period and countries. As such these observations are provided as factual findings but should not be extrapolated to represent the wider market.
${ }^{103}$ No data is available for Cyprus on average unit passenger car sales per dealer outlet as there is no dealer or sales breakdown available for Cyprus
Based on survey responses from VMs. Number of passenger car VMs (in 2007 and 2017) and their respective market shares: AT (2-7; 6\%-33\%), BE (2-6; 7\%-43\% \%), CY (2-5 - N.A.) FR (5-8; 12\%-49\%), DE (4-6; $22 \%-35 \%)$, GR (3-6; 17\%-32), IR (5-6; 26\%-20\%), IT (2-7; 7\%-57\%), PL (2-5; 3\%-13\%), ES (1-5; 1\%37\%), NL (4-7; 17\%-42\%), UK (2-6; 5\%-35\%)
${ }^{104}$ Note that the average market share for respondents is below $30 \%$ and averages around $15 \%$ for the whole period and countries. As such these observations are provided as factual findings but should not be extrapolated to represent the wider market.
${ }^{105}$ No data is available for Cyprus on average unit LCV sales per dealer group as there is no dealer or sales breakdown available for Cyprus
The number of respondents and their respective market shares of the respondents per country range, from 2007 - 2017 between: AT (1-2; 10\%-24\%), BE (1-2; 10\%-19\%), CY (2-3; N.A), FR (1-2; 5\% -10\%), DE (1-2; $21 \%-29 \%)$, GR (2-3; 21\%-34\%), IR (2-3; 18\% - 15\%), IT (1-3; 0\% - 35\%), NL (1-3; 2\% - 24\%), PL (1-2; 9\%-26\%), ES (1-3; 2\% - 16\%), UK (1-2; 8\%-13\%). Any intertemporal comparison is of very low (if any) value, given the limited number and different distribution of the replies.
106 The average market share for respondents is below $30 \%$ and averages around $15 \%$ for the whole period and countries. As such these observations are provided as factual findings but should not be extrapolated to represent the wider market.
107 No data is available for Cyprus on average unit LCV sales per dealer outlet as there is no dealer or sales breakdown available for Cyprus, data for Spain during 2007-2011 is not available
The number of respondents and their respective market shares of the respondents per country range, from 2007 - 2017 between: AT (2-3; 10\%-24\%), BE (1-2; 10\%-19\%), CY (3-4; N.A), FR (2-3; 5\% -10\%), DE (4-5; 21\%-29\%), GR (3-4; 21\%-34\%), IR (4-5; 18\% - 15\%), IT (2-4; 0\% - 35\%), NL (1-3; 2\% - 24\%), PL (1-2; $9 \%-26 \%)$, ES (1-4; 7\% (2012) - 16\%), UK (1-2; 8\%-13\%). Any intertemporal comparison is of very low (if any) value, given the limited number and different distribution of the replies.
108 The average market share for respondents is below $30 \%$ and averages around $17 \%$ for the whole period and countries. As such these observations are provided as factual findings but should not be extrapolated to represent the wider market.
${ }^{109}$ No data is available for Cyprus on average unit truck sales per dealer group as there is no dealer or sales breakdown available for Cyprus; data for Spain is not available for years 2007 - 2011, Italy and the Netherlands for 2007, and Germany for 2007-2008
The market shares of the respondents per country range, from 2007 - 2017 between: AT ( $15 \%-14 \%$ ), BE (15\%-14\%), FR (17\%-15\%), DE (42\% (2009)-35\%), IR (17\%-13\%), IT (12\% (2008)-11\%), NL (12\% (2009)-17\%), PL (13\%-18\%), ES (15\% (2012)-13\%), UK ( $16 \%-21 \%$ Any intertemporal comparison is of very low (if any) value, given the limited number and different distribution of the replies.
${ }^{110}$ The average market share for respondents is slightly below $30 \%$ and averages around $29 \%$ for the whole period and countries discussed as such these observations should not be extrapolated.
${ }^{111}$ No data is available for Cyprus on average unit truck sales per dealer outlet as there is no dealer or sales breakdown available for Cyprus. The number of respondents and their respective market shares of the respondents per country range, from 2007 - 2017 between: AT (3; 15\%-14\%), BE (4; 39\%-43\%), CY (3; N.A), FR (3; 17\%-15\%), DE (4-5; 8\% - 44\%), GR (2; 12\% - 4\%), IR (5; 36\% - 49\%), IT (4-5; 19\% - 33\%), NL (3-4; 21\% - 40\%), PL (3; 13\%-18\%), ES (4-5; 26\%-39\%), UK (4; 31\%-38\%). Any intertemporal comparison is of very low (if any) value, given the limited number and different distribution of the replies
${ }^{112}$ No data is available on dealer remuneration for vehicles in trucks and buses category
${ }^{113}$ Based on survey responses from VMs. Average (over the years 2007/2012/2017) number of passenger car VMs and their respective market share: AT (7-20\%), BE (6-21\%), CY (5-N.A.) FR (8-23\%), DE (6$17 \%$ ), GR ( $6-25 \%$ ), IR ( $6-20 \%$ ), IT ( $7-43 \%$ ), PL ( $6-21 \%$ ), ES ( $7-30 \%$ ), NL ( $7-27 \%$ ), UK (6-17\%) 114 Stair-step programme is a programme in which the manufacturer retroactively pays a bonus for each vehicle sold within certain volume thresholds

[^29]148 ICDP database does not provide any numbers for 2017. Underlying data (by brand) can be found in the 'Confidential annex with raw data'. Note that table 70 includes data from Luxembourg
${ }^{149}$ Note that table 71 includes data from Luxembourg
150 Note that table 72 includes data from Luxembourg
${ }^{151}$ Note that table 73 includes data from Luxembourg
152 Data for Belgium has been used in conjunction with Luxembourg as standalone data for Belgium was not available
${ }^{153}$ Note that table 74 includes data from Luxembourg
${ }^{154}$ Note that table 75 includes data from Luxembourg
155 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: 41\% in 2007 (with a minimum share of $26 \%$ in Poland), 37\% in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs the average market share for all countries was $41 \%$. For trucks: the minimum share at country level was $21 \%$ and an average of $41 \%$ in $2007,39 \%$ in 2012 and $41 \%$ in 2017 was achieved at aggregate level (considering all countries). For buses: the minimum share at country level was $24 \%$ and the average of $35 \%$ was achieved at aggregate level. No significant data were available for Poland.
156 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland), $37 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs the average market share for all countries was $41 \%$. For trucks: the minimum share at country level was $21 \%$ and an average of $41 \%$ in $2007,39 \%$ in 2012 and $41 \%$ in 2017 was achieved at aggregate level (considering all countries). For buses: the minimum share at country level was $24 \%$ and the average of $35 \%$ was achieved at aggregate level. No significant data were available for Poland..
157 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For trucks: $39 \%$ in 2007 (with a minimum of $26 \%$ in Ireland), $37 \%$ in 2012 (with a minimum share of $18 \%$ in Ireland, $21 \%$ in Greece and $29 \%$ in Italy) and $38 \%$ in 2017 (with a minimum share of $14 \%$ in Ireland and $26 \%$ in Austria). For buses: a minimum of $31 \%$ at country level was achieved, with the exception of Poland in 2007 when no significant data were available.
158 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For trucks: 39\% in 2007 (with a minimum of $26 \%$ in Ireland), $37 \%$ in 2012 (with a minimum share of $18 \%$ in Ireland, $21 \%$ in Greece and $29 \%$ in Italy) and $38 \%$ in 2017 (with a minimum share of $14 \%$ in Ireland and $26 \%$ in Austria). For buses: a minimum of $31 \%$ at country level was achieved, with the exception of Poland in 2007 when no significant data were available.
${ }^{159}$ The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: 42\% in 2007 (with a minimum share of $22 \%$ in Ireland), 43\% in 2012 (with a minimum share of $17 \%$ in Ireland) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For trucks: 39\% in 2007 (with a minimum of $26 \%$ in Ireland), $37 \%$ in 2012 (with a minimum share of $18 \%$ in Ireland, $21 \%$ in Greece and $29 \%$ in Italy) and $38 \%$ in 2017 (with a minimum share of $14 \%$ in Ireland and $26 \%$ in Austria). For buses: a minimum of $31 \%$ at country level was achieved, with the exception of Poland in 2007 when no significant data were available.
160 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of 19\% in Poland) and $37 \%$ in 2017 (with a minimum share of 20\% in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For trucks: $39 \%$ in 2007 (with a minimum of $26 \%$ in Ireland), $37 \%$ in 2012 (with a minimum share of $18 \%$ in Ireland, $21 \%$ in Greece and $29 \%$ in Italy) and $38 \%$ in 2017 (with a minimum share of $14 \%$ in Ireland and $26 \%$ in Austria). For buses: a minimum of $31 \%$ at country level was achieved, with the exception of Poland in 2007 when no significant data were available.
${ }^{161}$ The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland and $29 \%$ in Greece) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland and $29 \%$ in Poland). For trucks: $20 \%$ in 2007, $18 \%$ in 2012 and $19 \%$ in 2017 . For buses: $36 \%$ in 2007 (with a
minimum share of $13 \%$ in Ireland, 18\% in France and 26\% in the Netherlands), 37\% in 2012 (with a minimum share of $11 \%$ in Ireland, $24 \%$ in Italy and Poland and $26 \%$ in the Netherlands) and $31 \%$ in 2017 (with a minimum share of $9 \%$ in Ireland, $25 \%$ in Belgium and the Netherlands and 29\% in France).
162 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland and $29 \%$ in Greece) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland and $29 \%$ in Poland). For trucks: 20\% in 2007, 18\% in 2012 and 19\% in 2017. For buses: 36\% in 2007 (with a minimum share of $13 \%$ in Ireland, $18 \%$ in France and $26 \%$ in the Netherlands), $37 \%$ in 2012 (with a minimum share of $11 \%$ in Ireland, $24 \%$ in Italy and Poland and $26 \%$ in the Netherlands) and $31 \%$ in 2017 (with a minimum share of $9 \%$ in Ireland, $25 \%$ in Belgium and the Netherlands and $29 \%$ in France).
163 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of 19\% in Poland) and $37 \%$ in 2017 (with a minimum share of 20\% in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland and $29 \%$ in Greece) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland and $29 \%$ in Poland). For trucks: 20\% in 2007, 18\% in 2012 and 19\% in 2017. For buses: 36\% in 2007 (with a minimum share of $13 \%$ in Ireland, 18\% in France and 26\% in the Netherlands), 37\% in 2012 (with a minimum share of $11 \%$ in Ireland, $24 \%$ in Italy and Poland and $26 \%$ in the Netherlands) and 31\% in 2017 (with a minimum share of $9 \%$ in Ireland, $25 \%$ in Belgium and the Netherlands and $29 \%$ in France).
${ }^{164}$ A total of 15 self-identifying SPMs responded to the survey. They jointly represent EUR224 billion in global sales (among which spare parts manufacturing) and employ 1.083 M people based on their most recent financial data (2019).
165 Stakeholder consultations conducted with CECRA and its national members
${ }^{166}$ Given the lack of statistically significant coverage for individual countries only the EU aggregate view is presented
167 Given the lack of statistically significant coverage for individual countries only the EU aggregate view is presented
168 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland and $29 \%$ in Spain). For trucks: $41 \%$ in 2007 and $41 \%$ in 2017 (with a minimum share of $26 \%$ in Austria). For buses: 39\% in 2007 (with a minimum share of $18 \%$ in France and $26 \%$ in Poland) and $36 \%$ in 2017 (with a minimum share of $25 \%$ in Belgium and Poland and 29\% in France)
${ }^{169}$ Given the lack of statistically significant coverage for individual countries only the EU aggregate view is presented
${ }^{170}$ In the category other, additional sources include DVDs and CDs provided in addition to paper documents, data access through on-board diagnosis, global technology streams, toll collect systems, traffic message channels and entry portals.
${ }^{171}$ Data before 2015 is incomplete and not available for all countries and vehicle categories.
172 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland), $37 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs the average market share for all countries was $41 \%$. For trucks: $41 \%$ in $2007,39 \%$ in 2012 and $41 \%$ in 2017. For buses: a minimum of $24 \%$ was achieved at country level, with the exception of Poland in 2007 when no significant data were available. Table 70 includes data from Luxemburg.
173 The VMs responding to this section of survey represent the following market shares on average. For passenger cars respectively $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For trucks: $39 \%$ in 2007 (with a minimum of $26 \%$ in Ireland), $37 \%$ in 2012 (with a minimum share of $18 \%$ in Ireland, $21 \%$ in Greece and $29 \%$ in Italy) and $38 \%$ in 2017 (with a minimum share of $14 \%$ in Ireland and $26 \%$ in Austria). For buses: a minimum of $31 \%$ was achieved at country level, with the exception of Poland in 2007 when no significant data were available.
174 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum share of $26 \%$ in Poland and $27.5 \%$ in Greece and Ireland), $36 \%$ in 2012 (with a minimum share of $19 \%$ in Poland) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland). For LCVs: $42 \%$ in 2007 (with a minimum share of $22 \%$ in Ireland), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland) and $41 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For trucks: 39\% in 2007 (with a minimum of $26 \%$ in Ireland), $37 \%$ in 2012 (with a minimum share of $18 \%$ in Ireland, $21 \%$ in Greece and $29 \%$ in Italy) and $38 \%$ in 2017 (with a minimum share of $14 \%$ in Ireland and $26 \%$ in Austria).

For buses: a minimum of $31 \%$ at country level was achieved, with the exception of Poland in 2007 when no significant data were available.
${ }^{175}$ A total of 15 self-identifying SPMs responded to the survey. They jointly represent EUR224 billion in global sales (among which spare parts manufacturing) and employ 1.083 M people based on their most recent financial data (2019).
${ }^{176}$ Given the lack of statistically significant coverage for individual countries only the EU aggregate view is presented
177 Data related to 2007 is not available for any of the MS
178 Data used here is sourced from Eurostat (data on all MSs for 2007, on the Netherlands for 2008 and 2013, Ireland for 2008, 2010, 2011 and 2013, Greece for 2011 and Cyprus for 2017 is not available)
${ }^{179}$ Data used here is sourced from Eurostat, data on Belgium for 2008, France for 2008, Ireland for 2009, 2010 and 2011, the Netherlands for 2007-2017 and Spain for 2007-2015 is not available
180 Data used here represent Eurostat's Annual detailed enterprise statistics for industry under NACE 45.32 (Retail trade of motor vehicle parts and accessories). Accessories do not qualify for the purpose of the study. Data is not available for all countries for year 2007, Belgium (2008), France (2008), Ireland (2009-2011), Netherlands (2007-2017), Spain (2007-2015)
${ }^{181}$ Data used is sourced from Eurostat, data on the Netherlands for 2008 and 2013, Ireland for 2008, 2010, 2011 and 2013, Greece for 2011 and Cyprus for 2017 is not available.
182 Data used here represent Eurostat's Annual detailed enterprise statistics for industry under NACE C293 (Manufacture of parts and accessories for motor vehicles). Accessories do not qualify for the purpose of the study. Data is not available for all countries for year 2007, Cyprus (2007), Greece (2011), Ireland (2008, 2010, 2011, 2013) and Netherlands (2008, 2013)
${ }^{183}$ Data used is sourced from Eurostat, (data on Belgium for 2008, France for 2008, Ireland for 2009, 2010 and 2011, the Netherlands for 2007-2017 and Spain for 2007-2015 is not available)
184 Data used here represent Eurostat's Annual detailed enterprise statistics for industry under NACE 45.32 (Retail trade of motor vehicle parts and accessories). Accessories do not qualify for the purpose of the study. Data is not available for all countries for year 2007, Belgium (2008), France (2008), Ireland (2009-2011), Netherlands (2007-2017), Spain (2007-2015)
185 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $46 \%$ in 2007 (with a minimum share of $24 \%$ in Ireland), $44 \%$ in 2012 (with a minimum share of $20 \%$ in Ireland and $28 \%$ in Greece) and $43 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For LCVs': 25\% in 2007, 23 \% in 2012 and 23\% in 2017. For trucks: 30\% in 2007 (with a minimum share of 22\% in Austria, $27 \%$ in Italy and $28 \%$ in the UK), $24 \%$ in 2012 and $29 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For buses: 30\% in 2007 (with a minimum share of $22 \%$ in Austria, $27 \%$, 28\% and 29\% in respectively Italy, the UK and the Netherlands), 24 \% in 2012 and 29\% in 2017.
186 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $32 \%$ in 2007 (with a minimum share of $8 \%$ in Ireland, $19 \%$ in Germany and Greece, $23 \%$ in Poland and $29 \%$ in the UK), $29 \%$ in 2012 (only for Belgium, France, Italy and the Netherlands the market share is above $30 \%$ ) and $27 \%$ in 2017 (only for Belgium, Italy and the Netherlands the market share is above $30 \%$ ). For LCVs: $14 \%$ in 2007, $14 \%$ in 2012 and $12 \%$ in 2017 (only the market share of Italy is above $30 \%$ in the reported years). No data for trucks and buses.
187 Data related to the average number of passenger car spare parts distribution outlets owned by VMs is not available for Austria, Italy and Spain for the period 2007-2017.
188 No data is available for distribution outlets owned by VMs for passenger car spare parts distribution on Austria, Italy and Spain for years 2007-2017
189 Data regarding the share of sales of VM-owned distribution outlets of passenger car spare parts manufacturers is not available for: Austria (2007-2010), Italy and Ireland (2007-2017 and the UK (20072011)

190 No data is available for distribution outlets owned by VMs for LCV spare parts distribution on Austria and the Netherlands for years 2007-2017
${ }^{191}$ Data regarding the share of sales of VM-owned outlets of LCV spare parts sale is not available for Cyprus (2007-2014), Ireland (2007-2014 and Poland (2007-2009)
192 Some respondents to the survey have selected the option 'other' in the survey while referring to the selective distribution according to the (MV)BER.
${ }^{193}$ No data is available for distribution outlets owned by VMs for truck spare parts distribution on Greece for years 2007-2017
194 No data is available for percentage of spare parts sales accounted for by distribution outlets owned by VMs for buses on Austria, Belgium, Cyprus, Germany, Greece, Italy, Ireland, Poland, Spain, Netherlands and UK for years 2007-2017
195 The average number of SPMs replying to the survey are, per country: AT (4), BE (5), CY (3), FR (7), DE (7), GR (5), IR (4), IT (5), IT (4), PL (4), NL (6), UK (5).

The responses of eight self-identifying SPMs formed the basis for our analysis. They jointly represent EUR 104 billion in global sales and employ 445,000 people based on their most recent financial data (2019).
${ }^{196}$ The average number of SPMs replying to the survey are, per country: AT (4), BE (5), CY (3), FR (7), DE (7), GR (5), IR (4), IT (5), IT (4), PL (4), NL (6), UK (5).

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${ }^{200}$ The average number of SPMs replying to the survey are, per country: AT (4), BE (5), CY (3), FR (7), DE (7), GR (5), IR (4), IT (5), IT (4), PL (4), NL (6), UK (5).

The responses of eight self-identifying SPMs formed the basis for our analysis. They jointly represent EUR 104 billion in global sales and employ 445,000 people based on their most recent financial data (2019).
${ }^{201}$ The average number of SPMs replying to the survey are, per country: AT (4), BE (5), CY (3), FR (7), DE (7), GR (5), IR (4), IT (5), IT (4), PL (4), NL (6), UK (5).

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202 The average number of SPMs replying to the survey are, per country: AT (4), BE (5), CY (3), FR (7), DE (7), GR (5), IR (4), IT (5), IT (4), PL (4), NL (6), UK (5)

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The responses of eight self-identifying SPMs formed the basis for our analysis. They jointly represent EUR 104 billion in global sales and employ 445,000 people based on their most recent financial data (2019).
206 For the indicator on description of the means used by (i) parts manufacturers, (ii) authorised and independent parts distributors and (iii) authorised and independent repairers for identifying which parts (OES or otherwise) fit which individual vehicles, the following limitations apply- SPMs cover all years and countries. No authorised SPDs in Cyprus, Italy, Poland, UK
No data is available for authorised SPDs in either of the countries, independent SPDs for Cyprus and Greece, repairers for Cyprus and Poland, independent repairers for Greece and Ireland and authorised repairer from Italy
207 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $8.74 \%$ in 2007, $9.10 \%$ in 2012 and $9.63 \%$ in 2017. For LCVs: $3 \%$ in 2007, $2 \%$ in 2012 and $2 \%$ in 2017. For trucks: $21.62 \%$ in $2007,22.16 \%$ in 2012 and $21.86 \%$ in 2017 . For buses: $11.86 \%$ in 2007 , $11.12 \%$ in 2012 and $10.17 \%$ in 2017. The number of VMs responding to this question in the survey are: AT (6), BE (6) , CY (2), FR (7), DE (6), GR (6), IR(7), IT (6), PL (6), ES (6), NL (6), UK (6).

208 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $8.74 \%$ in 2007, $9.10 \%$ in 2012 and $9.63 \%$ in 2017. For LCVs: $3 \%$ in 2007, $2 \%$ in 2012 and $2 \%$ in 2017. For trucks: 21.62\% in 2007, 22.16\% in 2012 and 21.86\% in 2017. For buses: 11.86\% in 2007, $11.12 \%$ in 2012 and $10.17 \%$ in 2017 . The number of VMs responding to this question in the survey are: AT (6), BE (6) , CY (2), FR (7), DE (6), GR (6), IR(7), IT (6), PL (6), ES (6), NL (6), UK (6).

209 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $8.74 \%$ in 2007, $9.10 \%$ in 2012 and $9.63 \%$ in 2017. For LCVs: $3 \%$ in 2007, $2 \%$ in 2012 and $2 \%$ in 2017. For trucks: $21.62 \%$ in $2007,22.16 \%$ in 2012 and $21.86 \%$ in 2017 . For buses: $11.86 \%$ in 2007, $11.12 \%$ in 2012 and $10.17 \%$ in 2017 . The number of VMs responding to this question in the survey are: AT (6), BE (6), CY (2), FR (7), DE (6), GR (6), IR(7), IT (6), PL (6), ES (6), NL (6), UK (6).
${ }^{210}$ The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $8.74 \%$ in 2007, $9.10 \%$ in 2012 and $9.63 \%$ in 2017. For LCVs: $3 \%$ in 2007, $2 \%$ in 2012 and $2 \%$ in 2017. For trucks: $21.62 \%$ in $2007,22.16 \%$ in 2012 and $21.86 \%$ in 2017 . For buses: $11.86 \%$ in 2007, $11.12 \%$ in 2012 and $10.17 \%$ in 2017. The number of VMs responding to this question in the survey are: AT (6), BE (6) , CY (2), FR (7), DE (6), GR (6), IR(7), IT (6), PL (6), ES (6), NL (6), UK (6).
${ }^{212}$ The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum market share of $26 \%$ in Poland and $27 \%$ and $28 \%$ in Ireland and Greece respectively), $37 \%$ in 2012 (with a mimum share of $19 \%$ in Poland and $23 \%$ and $27 \%$ in Ireland and Greece respectively) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland and $24 \%$ in Poland. For LCVs: $42 \%$ in 2007 (with a minimum share of $23 \%$ in Irealnd), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland and 29\% in Greece) and 42\% in 2017 (with a minimum share of 15\% in Ireland and 29\% in Poland). For trucks: $41 \%$ in $2007,39 \%$ in 2012 (with a minimum share of $21 \%$ In Greece, $27 \%$ in Austria and $29 \%$ in Italy) and $41 \%$ in 2017 (with a minimum share of $26 \%$ in Austria). For buses: 39\% in 2007 (with a minimum share of $18 \%$ in France and $26 \%$ in the Netherlands), $42 \%$ in 2012 (with a minimum share of $24 \%$ in Italy and Poland and $26 \%$ in the Netherlands) and $36 \%$ in 2017 (with a minimum share of $25 \%$ in Belgium, 26\% in the Netherlands, $27 \%$ in Greece and 29\% in France).
${ }^{213}$ The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum market share of $26 \%$ in Poland and $27 \%$ and $28 \%$ in Ireland and Greece respectively), $37 \%$ in 2012 (with a mimum share of $19 \%$ in Poland and $23 \%$ and $27 \%$ in Ireland and Greece respectively) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland and $24 \%$ in Poland. For LCVs: $42 \%$ in 2007 (with a minimum share of $23 \%$ in Irealnd), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland and 29\% in Greece) and $42 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland and 29\% in Poland). For trucks: $41 \%$ in $2007,39 \%$ in 2012 (with a minimum share of $21 \%$ in Greece, $27 \%$ in Austria and $29 \%$ in Italy) and $41 \%$ in 2017 (with a minimum share of $26 \%$ in Austria). For buses: 39\% in 2007 (with a minimum share of $18 \%$ in France and $26 \%$ in the Netherlands), $42 \%$ in 2012 (with a minimum share of $24 \%$ in Italy and Poland and $26 \%$ in the Netherlands) and $36 \%$ in 2017 (with a minimum share of $25 \%$ in Belgium, $26 \%$ in the Netherlands, $27 \%$ in Greece and 29\% in France).
${ }^{214}$ The top 10 manufacturers by revenue were identified, excluding Schaeffler and Adient due to missing data for the years 2007 till 2012. GKN Holding and GKN limited were also not considered in the Top 10
${ }^{215}$ Schaeffler AG and Adient plc were excluded form the top ten, since data for several years are missing.
${ }^{216}$ Calculated average operating margin for top-100 global SPMs. Category wise and country wise data not available
217 The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $46 \%$ in 2007 (with a minimum share of $24 \%$ in Ireland), $44 \%$ in 2012 (with a minimum share of $20 \%$ in Ireland and $28 \%$ in Greece) and $43 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For LCVs: $25 \%$ in $2007,23 \%$ in 2012 and $23 \%$ in 2017 . For trucks: $30 \%$ in 2007 (with a minimum share of $22 \%$ in Austria, $27 \%$ in Italy and $28 \%$ in the UK), $24 \%$ in 2012 and $29 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland). For buses: $30 \%$ in 2007 (with a minimum share of $22 \%$ in Austria, $27 \%, 28 \%$ and $29 \%$ in respectively Italy, the UK and the Netherlands), $24 \%$ in 2012 and 29\% in 2017.
${ }^{218}$ Eight self-identifying SPMs formed the basis for our analysis. They jointly represent EUR 104 billion in global sales and employ 445,000 people based on their most recent financial data (2019).
219 The VMs responding to this section of survey represent the following market shares on average. For passenger cars respectively $8.74 \%$ in $2007,9.10 \%$ in 2012 and $9.63 \%$ in 2017 . For LCVs: $3 \%$ in 2007, $2 \%$ in 2012 and $2 \%$ in 2017. For trucks: $21.62 \%$ in $2007,22.16 \%$ in 2012 and $21.86 \%$ in 2017. For buses: $11.86 \%$ in $2007,11.12 \%$ in 2012 and $10.17 \%$ in 2017. The number of VMs responding to this question in the survey are: AT (6), BE (6), CY (2), FR (7), DE (6), GR (6), IR(7), IT (6), PL (6), ES (6), NL (6), UK (6).
${ }^{220}$ The VMs responding to this section of survey represent the following market shares on average. For passenger cars: $41 \%$ in 2007 (with a minimum market share of $26 \%$ in Poland and $27 \%$ and $28 \%$ in Ireland and Greece respectively), $37 \%$ in 2012 (with a mimum share of $19 \%$ in Poland and $23 \%$ and $27 \%$ in Ireland and Greece respectively) and $37 \%$ in 2017 (with a minimum share of $20 \%$ in Ireland and $24 \%$ in Poland. For LCVs: $42 \%$ in 2007 (with a minimum share of $23 \%$ in Irealnd), $43 \%$ in 2012 (with a minimum share of $17 \%$ in Ireland and $29 \%$ in Greece) and $42 \%$ in 2017 (with a minimum share of $15 \%$ in Ireland and $29 \%$ in Poland). For trucks: $41 \%$ in $2007,39 \%$ in 2012 (with a minimum share of $21 \%$ In Greece, $27 \%$ in Austria and $29 \%$ in Italy) and $41 \%$ in 2017 (with a minimum share of $26 \%$ in Austria). For buses: 39\% in 2007 (with a minimum share of $18 \%$ in France and $26 \%$ in the Netherlands), $42 \%$ in 2012 (with a minimum share of $24 \%$ in Italy and Poland and $26 \%$ in the Netherlands) and $36 \%$ in 2017 (with a minimum share of $25 \%$ in Belgium, $26 \%$ in the Netherlands, 27\% in Greece and 29\% in France).

Market developments in the distribution of new motor vehicles and spare parts and the provision of after-sales services under Regulation 461/ 2010 of 27 May 2010

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#### Abstract

A study to assess the market developments, in 12 EU Member States and from 2007 to 2017, in the distribution of new motor vehicles, provision of repair and maintenance services and distribution of spare parts. A large data collection to provide factual information about evolution of sales, profitability, R\&D, market concentration, patterns for products' distribution and relations between manufacturers and after-sales service providers. Analyses of data conducted also at country level and using in great part primary data.


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[^29]:    ${ }^{115}$ Based on survey responses from VMs. Average (over the years 2007/2012/2017) number of passenger car VMs and their respective market share: AT (7-20\%), BE (6-21\%), CY (5-N.A.) FR (8-23\%), DE (6$17 \%$ ), GR ( $6-25 \%$ ), IR (6-20\%), IT (7-43\%), PL (6-21\%), ES (7-30\%), NL (7-27\%), UK (6-17\%) ${ }^{116}$ Based on survey responses from VMs. Average (over the years 2007/2012/2017) number of passenger car VMs and their respective market share: AT (6-20\%), BE (7-21\%), CY (4-N.A.), FR (7-23\%), DE (6$26 \%$ ), GR ( $5-25 \%$ ), IR ( $6-20 \%$ ), IT ( $5-40 \%$ ), PL ( $6-21 \%$ ), ES ( $7-22 \%$ ), NL ( $8-27 \%$ ), UK (5-18\%) ${ }^{117}$ Based on survey responses from LCV VMs. Average (over the years 2007/2012/2017) number of passenger car VMs and their respective market share: AT (5-12\%), BE (4-8\%), CY (4-N.A.), FR (5-9\%), DE (58\%), GR (5-27\%), IR (5-13\%), IT (5-38\%), PL (5-22\%), ES (5-9\%), NL (5-7\%), UK (5-4\%)
    ${ }^{118}$ Data of TRATON Group is missing for the period between 2007 and 2015 . The former Volkswagen Truck \& Bus AG was founded in 2013 and added MAN and Scania in the following years. Hence, there is no comprehensive report for the company throughout the years in scope
    ${ }^{119}$ Data of TRATON Group is missing for the period between 2007 and 2015 . The former Volkswagen Truck \& Bus AG was founded in 2013 and added MAN and Scania in the following years. Hence, there is no comprehensive report for the company throughout the years in scope
    120 The average operating margin per comparable industry was calculated based on 4-5 companies per comparable industry. For manufacturers of computers and peripheral equipment Dell, HP Inc, International Business Machines Corporation (IBM), Canon Lenovo Group Ltd were selected. Garmin, Cisco, Juniper Networks and Huawei investment \& Holding CO, Ltd were the selected manufacturers of communication equipment. Panasonic, LG Electronics, Siemens and Bosch represent the industry of consumer electronics manufacturers
    ${ }^{121}$ Data of TRATON Group are missing for the period between 2007 and 2015. The former Volkswagen Truck \& Bus AG was founded in 2013 and added MAN and Scania in the following years. Hence, there is no comprehensive report for the company throughout the years in scope.
    122 The average operating margin per comparable industry was calculated based on 4-5 companies per comparable industry. For manufacturers of computers and peripheral equipment Dell, HP Inc, International Business Machines Corporation (IBM), Canon and Lenovo Group Ltd were selected. Garmin, Cisco, Juniper Networks, Vodafone and Huawei investment \& Holding CO, Ltd were the selected manufacturers of communication equipment. Panasonic, LG Electronics, Siemens and Bosch represent the industry of consumer electronics manufacturers
    ${ }^{123}$ Note that this indicator only covers 11 countries in scope, as no data is available for Cyprus. Furthermore, data on the size of the vehicle parc of buses in Ireland is only available starting as of 2011
    ${ }^{124}$ Eurostat data, expressed in nominal value
    ${ }^{125}$ Data for Cyprus are not available. Data related to the category of buses is not available for Ireland before 2011
    ${ }^{126}$ Data for Cyprus are not available. Data related to the category of buses is not available for Ireland before 2011
    127 Data for Cyprus are not available
    128 Data for Cyprus are not available
    ${ }^{129}$ No data for Cyprus available, therefore not considered
    ${ }^{130}$ Note that Cyprus is not taken into consideration. Note that the dataset has many caveats and therefore no major conclusions should be drawn from the presented averages.
    ${ }^{131}$ No data available on the average age of the passenger cars in Cyprus
    ${ }^{132}$ Note that there are several gaps in the data of the average vehicle parc in years and in the countries.
    ${ }^{133}$ Eurostat provides data for Cyprus, and therefore the country is included into the analysis, opposite to the other paragraphs in the chapter.
    ${ }^{134}$ Note that no data are available for: Greece in all years, France 2008-2009, Italy 2017, United Kingdom 2007, 2013-2014
    135 Data for Cyprus are not available
    ${ }^{136}$ Note that Cyprus is not taken into consideration. Since the database from 2007-2017 has many caveats, 2018 was added to the data to provide a better insight. For 2018 all data were available
    ${ }^{137}$ No data available for Cyprus
    ${ }^{138}$ Data for Cyprus are not available
    ${ }^{139}$ Note that Cyprus is not taken into consideration.
    ${ }^{140}$ No data available for Cyprus, data related to the "heavy commercial vehicles" presented in the ACEA Pocked Guide has been used
    ${ }^{141}$ Data for Cyprus are not available. Note that the ACEA Tax Guide only provides data on the size of the vehicle parc for buses as of 2011
    142 Data for Cyprus are not available
    143 Data on legal entities for 2007 are not available
    144 Data on legal entities for 2007 are not available
    145 Data on legal entities for 2007 are not available
    ${ }^{146}$ Data on legal entities for 2007 are not available, no data available for Cyprus
    147 ICDP database does not provide any numbers for 2017 . Underlying data (by brand) can be found in the 'Confidential annex with raw data'. Table 69 includes data from Luxemburg.

